## BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Implementation and Administration, and Consider Further Development, of California Renewables Portfolio Standard Program. Rulemaking 24-01-017

## SAN DIEGO GAS & ELECTRIC COMPANY (U 902 E) DRAFT 2024 RENEWABLES PORTFOLIO STANDARD PROCUREMENT PLAN

#### **PUBLIC VERSION**

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In accordance with the Rules of Practice and Procedure of the California Public Utilities Commission (the "Commission"), the Assigned Commissioner and Assigned Administrative Law Judge's Ruling ("the ACR"), issued in the above-captioned docket on May 20, 2024, San Diego Gas & Electric Company ("SDG&E"), hereby submits its Draft 2024 Renewables Portfolio Standard ("RPS") Procurement Plan and related appendices (together, the "Plan").

In the ACR, the Commission established a schedule for submission of the Draft 2024 Plans. In accordance with the direction set forth in the ACR, SDG&E's Plan is attached hereto as Attachment A. The Plan includes the following Appendices:

- Appendix 1 2024 Renewable Net Short (Conforming and Alternative Scenarios) and Project Development Status Update CONFIDENTIAL
- Appendix 2 2024 Quantitative Information CONFIDENTIAL
- Appendix 3 TOD Factor Workpapers CONFIDENTIAL
- Appendix 4 2024 Safety Considerations
- Appendix 5 2024 RPS Long-Term Model PPA
- Appendix 6 2024 RPS Short-Term Model PPA
- Appendix 7 2024 Hybrid Renewable Plus Storage PPA
- Appendix 8 2024 RPS REC Agreement

- Appendix 9 2024 Least-Cost Best-Fit ("LCBF")
- Appendix 10 2024 RPS Procurement Protocols
- Appendix 11 2024 RPS Sales RFP
- Appendix 12 2024 RPS Sales Model PPA (Bundled Product)
- Appendix 13 20243RPS Sales Model PPA (Unbundled Product)
- Appendix 14 2024 RPS Sales Offer Form
- Appendix 15 2024 Framework for Assessing Potential RPS Sales CONFIDENTIAL
- Appendix 16 2024 TMNBC/BioRAM RPS REC Sales Pro Forma
- Appendix 17 2024 Request for Information Status CONFIDENTIAL
- Appendix 18 2024 Achievable, Upfront Standards & Criteria
- Appendix 19 2024 RPS Procurement Offer Form
- Appendix 20 2024 SB 1174 Data Reporting Template CONFIDENTIAL
- Appendix A Redline Version of Draft 2024 RPS Plan as compared to Final 2023 RPS Plan

Respectfully submitted,

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#### **OFFICER VERIFICATION**

I am an officer of the reporting organization herein and am authorized to make this verification on its behalf. The statements in the foregoing document are true of my own knowledge, except as to matters which are therein stated on information or belief, and as to those matters, I believe them to be true. The spreadsheet templates used within this filing have not been altered from the version issued or approved by Energy Division.

Executed on the 22<sup>nd</sup> day of July 2024 at San Diego, CA.

/s/ Adam Pierce

**Adam Pierce** 

Vice President – Energy Procurement & Rates

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## 2024 RPS Procurement Plan Checklist- Task Completed

	San Diego Gas & Electric	Yes/No		
I.	Summary of Major Changes to SDG&E's RPS Plan			
II.	Executive Summary			
III.	Summary of Recent Legislation and/or Regulatory Changes Affecting this Plan			
IV.	Assessment of RPS Portfolio Supply and Demand			
IV. A.	Overview of Portfolio Supply & Demand Assessments	Yes		
IV. A. 1.	Portfolio Optimization	Yes		
IV. B.	Responsiveness to LSE Policies & Goals, Statutes, & Commission Policies	Yes		
IV. B. 1.	Long-Term Procurement	Yes		
IV. C.	Portfolio Diversity and Reliability	Yes		
IV. D.	Lessons Learned & Trends	Yes		
V.	Project Development Status Update	Yes		
VI.	Potential Compliance Delays	Yes		
VII.	Risk Assessment			
VIII.	Renewable Net Short			
IX.	Minimum Margin of Over Procurement	Yes		
IX. A.	Methodology & Inputs			
IX. B.	Scenarios			
X.	Bid Selection Protocol	Yes		
X. A.	Solicitation Protocols for Renewables Transactions			
X. B.	Bid Selection Protocols	Yes		
X. C.	LCBF Criteria	Yes		
XI.	Safety Considerations	Yes		
XII.	Consideration of Price Adjustment Mechanisms	Yes		
XIII.	Economic Curtailment Frequency, Costs & Forecasting			
XIV.	Cost Quantification			
XV.	Coordination with the IRP Proceeding			
XVI.	Impact of Transmission and Interconnection Delays			
XVII.	Other RPS Planning Considerations and Issues	Yes		
Appendix A	Redlined Version of the Draft 2024 RPS Plan	Yes		
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## ATTACHMENT A

### SDG&E' 2024 DRAFT RENEWABLES PORTFOLIO STANDARD PROCUREMENT PLAN

**JULY 22, 2024** 

**PUBLIC VERSION** 



# SDG&E's 2024 Draft Renewables Portfolio Standard Procurement Plan

July 22, 2024

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		3.	Experience With Managing Exposure to Negative Market Prices and/or Lessons Learned from Other Retail Sellers				

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#### I. SUMMARY OF MAJOR CHANGES TO SDG&E'S RPS PLAN

The table in this section describes significant changes between San Diego Gas & Electric Company's ("SDG&E") Final 2023 Renewables Portfolio Standard ("RPS") Plan and its 2024 Draft RPS Plan (hereafter, "Plan" or "Draft Plan"). SDG&E modified this Plan per the Assigned Commissioner and Administrative Law Judge's Ruling Identifying Issues and Schedule of Review for 2024 Renewables Portfolio Standard Procurement Plans ("ACR"). The summary of changes is provided below.

SDG&E's Draft RPS Plan includes SDG&E's alternative Renewable Net Short ("RNS") scenario. The scenario, included as Appendix 1b, reflects SDG&E's internal forecast of its bundled retail sales, along with volumes from RPS-eligible resources that will count towards SDG&E's RPS percentage, procured through the Integrated Resource Plan ("IRP") Mid-Term Reliability Procurement Order, Decision ("D.") 21-06-035, as modified by D.23-02-040 ("MTR" or "MTR Procurement Order").

SDG&E's Draft Plan also includes a proposal for an updated approval process of short-term transactions via counterparties, brokers and exchanges. Details are discussed further in Section XVII.

Plan Reference	Plan Section	Summary/Justification
Attachment A Draft RPS Plan	II. Executive Summary	- Updated to include critical issues within SDG&E's 2024 Draft RPS Plan.
Attachment A Draft RPS Plan	III. Summary of Recent Legislative and/or Regulatory Changes	- Updated IRP and PCIA discussions.
Attachment A Draft RPS Plan	IV. Assessment of RPS Portfolio Supply and Demand	<ul> <li>As directed by the ACR, the discussion of Voluntary Allocation Market Offer ("VAMO") was removed.</li> <li>Provided status updates on SDG&amp;E's 2023 Request of Information ("RFI") process.</li> <li>Moved the RFI discussion to the Portfolio Optimization subsection.</li> <li>Updated discussions on Demand and Demand Assessments Lessons Learned and Trends subsections.</li> <li>Updated discussion on Green Tariff Shared Renewables Program ("GTSR") and Energy Storage subsections.</li> </ul>

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<sup>&</sup>lt;sup>1</sup> SDG&E's Final 2023 RPS Plan was filed on January 22, 2024.

		-	Added other sales considerations to the discussion in the Portfolio Optimization subsection. Updated Table 4-1, SDG&E's Procurement Summary.
Attachment A Draft RPS Plan	V. Projects Development Status Updates	_	Updated the discussion on the number of projects that are under development as of July 2024, consistent with Appendix 1.
Attachment A Draft RPS Plan	VI. Potential Compliance Delays	-	Updated discussion on Transmission Interconnection/Coordination with CAISO and Debt and Equivalence Accounting subsections.
Attachment A Draft RPS Plan	VIII. Risk Assessment	-	Updated discussion on the projects failure rate assignments.
Attachment A Draft RPS Plan	VIII. Renewable Net Short	-	Updated RNS discussion; SDG&E provides two RNS scenarios in Appendix 1.
Attachment A Draft RPS Plan Attachment A	X. Bid Solicitation Protocols XI. Safety	-	Updated list of appendices related to RPS sales and procurement solicitations documents.  Updated discussions on vegetation management and
Draft RPS Plan	Considerations		customer impacts due to Public Safety Power Shutoff ("PSPS").
Attachment A Draft RPS Plan	XIII. Economic Curtailment Frequency, Costs, and Forecasting	-	Updated discussions on quantitative analysis of the forecast of the number of hours per year of negative market pricing for the next ten years and costs incurred, to date, for incidences of overgeneration and associated negative market prices.
Attachment A Draft RPS Plan	XIV. Cost Quantification	-	Updated Cost Quantification discussion.
Attachment A Draft RPS Plan	XV. Coordination with the IRP Proceeding		Updated MTR and Summer Reliability procurement status to comply with the ACR. Added table requirements from Table 3 of the ACR.
Attachment A Draft RPS Plan	XVI. Impact of Transmission and Interconnection Delays	-	Updated the narrative section of the Impact of Transmission and Interconnection Delays to comply with the ACR
Attachment A Draft RPS Plan	XVII. Other RPS Planning Considerations and Issues	-	SDG&E is utilizing this section to request for an updated short-term RPS transaction approval process.
Appendix 1	2024 RNS and Project Development Status Update	-	Updated Narrative, RNS, and Projects Under Development tables

Appendix 2	2024 Quantitative Information	-	Updated Cost Quantification tables.
Appendix 3	TOD Factor Workpapers	-	Updated TOD Factors Workpapers.
Appendix 9	2024 Least-Cost Best-Fit	-	Updated and reorganized the subsections of the Least Cost Best Fit ("LCBF') methodology document to align with the RPS procurement protocol.
Appendix 10	2024 RPS Procurement Protocol	-	Updated evaluation steps to align with LCBF methodology.
Appendix 11	2024 RPS Sales RFP	-	Updated acceptable product types table to be consistent with SDG&E's proposed sales strategy.
Appendix 14	2024 RPS Sales Offer Form	-	Updated the offer form to be consistent with SDG&E's proposed sales strategy.
Appendix 15	2024 Framework for Assessing Potential Sales	-	Updated buyers section to align with SDG&E's requested authorizations.
Appendix 17	Request for Information ("RFI")	-	Updated 2023 RFI summary table.
Appendix 18	Achievable, Upfront Standards and Criteria	-	Along with SDG&E's request for an updated short- term-approval process, SDG&E is proposing an achievable, upfront standard & criteria necessary for the updated contract approval process.
Appendix 19	2024 RPS Procurement Offer Form	ı	Added SDG&E's RPS procurement offer form as part of its solicitation documents
Appendix 20	2024 SB 1174 Data Reporting Template	-	As required by the ACR, SDG&E is providing the 2024 SB1174 Data Reporting Template

#### II. EXECUTIVE SUMMARY – KEY ISSUES

SDG&E's Draft 2024 RPS Plan describes, among other things, the processes used by SDG&E to determine any RPS procurement need or excess, as well as the methods SDG&E will use to manage its RPS portfolio to meet RPS program compliance targets in a cost-effective manner. <sup>2</sup> From 2017 to 2022, SDG&E procured well above the State's statutory and the California Public Utilities Commission's ("Commission" or "CPUC") RPS program requirements. <sup>3</sup> Beginning in 2023, SDG&E's RPS portfolio is limited to its elected and vintaged load share of RPS volumes, as directed by the Portfolio Optimization Decision ("D.21-05-030"). This Plan offers SDG&E's projected needs through 2034. Key factors currently affecting SDG&E's RPS position include

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impacts from the completed Voluntary Allocation and Market Offer ("VAMO") process and impacts from the on-going mid-term reliability procurement process ("D.21-06-035").

SDG&E's analysis includes two RNS scenarios that show SDG&E's RPS position through 2034. SDG&E provides a conforming and alternative scenario of its RNS in Appendix 1. The difference between the two scenarios is the bundled retail sales forecast. Appendix 1a, the conforming scenario, is based on the CEC's 2023 California Demand Forecast, and Appendix 1b, the alternative scenario, uses SDG&E's internal bundled retail sales forecast. As recently mentioned, both versions are limited to SDG&E's elected load-share allocation of RPS product from its PCIA-eligible portfolio, and both versions use the Commission-required RNS methodology. According to SDG&E's forecasts, SDG&E will be in a short position beginning in Compliance Period ("CP") 5. In Appendix 1's narrative section, SDG&E summarizes the REC volumes that were transacted short-term with eligible load-serving entities through the end of 2024 in the VAMO process and are now available for SDG&E to utilize for compliance.

In this Draft Plan, SDG&E seeks authorization for the following:

#### 1. Utilize the bank

Because of SDG&E's RPS short position commencing in CP 5, as illustrated in the RNS table in Appendix 1b, SDG&E seeks the authority to utilize the value of SDG&E's banked Renewable Energy Credits ("RECs") procured pre-2023 from the year SDG&E begins a short position through 2034 when needed to limit additional costs for RPS compliance and potentially protect bundled customers from rate impacts. SDG&E may meet compliance through 2034 by utilizing the RECs in its bank.

#### 2. Option to procure RECs for compliance

As an alternative to utilizing its RECs in its RPS bank, SDG&E is seeking authority to conduct optional RPS procurement to buy RECs from new or existing resources, short-term or long-term, if it is more advantageous to the portfolio considering costs and needs in the 2024 RPS Plan cycle. SDG&E expects to meet its compliance requirements through 2034 by either utilizing its bank and/or additional procurement in this RPS Plan cycle. Using the alternative RNS forecast scenario (Appendix 1b), SDG&E has established a volumetric cap and a capacity cap of the amount of new eligible renewable resources it may procure if it exercises its option to hold a solicitation. Supporting information on SDG&E's volumetric and capacity cap for the 2024 RPS Plan cycle can be found in Section IV under Determination of Compliance Needs for Each Compliance Period and Appendix 1 – RNS Narrative.

#### 3. Authorization to sell RPS volumes

SDG&E requests authorization for the option to sell RPS volumes from (i) the PCIA-eligible RPS portfolio, (ii) SDG&E's PCIA-eligible portfolio allocation, and (iii) the available RECs that were not required to be offered and not allocated in the D.21-05-030 transactions, in accordance with SDG&E's RECs Sales Framework, to provide benefits to customers while maintaining RPS compliance. To further balance SDG&E's RPS portfolio, SDG&E will consider opportunities to

sell REC volumes from the projects in the PCIA-eligible portfolio prior to the distribution of the VAMO transactions. As set forth in Advice letter 4345-E, SDG&E is not planning to hold a future VAMO process.<sup>4</sup> SDG&E is providing a summary of RECs not allocated or sold in the VAMO process beginning in 2025, as illustrated in Appendix 1's narrative section. To benefit its customers, SDG&E will consider selling the RPS volumes not allocated in the VAMO process if it does not use these volumes towards its compliance. If allowed, the potential RPS sales revenue may promote affordability for both bundled and unbundled customers. Sales considerations are further discussed below in Section IV. A.1., Portfolio Optimization.

#### 4. Flexibility to buy and sell RECs in the same year and/or compliance period

SDG&E seeks flexibility to manage its RPS portfolio by buying and selling both long-term and short-term products in the same year and/or compliance period to meet compliance, counter increased competition, adapt to the fast-changing market, and find the most economical option for its bundled customers, for the reasons stated above. This authority will allow SDG&E to react quickly to the rapidly changing RPS market and manage its portfolio in the most cost-effective way.

#### 5. Authorization to utilize both brokers and exchanges

SDG&E requests that its authorization to transact with brokers be extended to exchanges. In the previous RPS Plan Decision (D.23-12-008), SDG&E was given authorization to transact with brokers. To ensure a level playing field for SDG&E, SDG&E requests authorization to procure or sell RECS through both brokers and exchanges.

#### 6. Updated approval process for short-term transactions

In order to exercise the authorization to transact with brokers given to SDG&E in D.23-12-008 and potentially the authorization to transact through exchanges as requested in this Plan, SDG&E proposes an updated approval process for short-term transactions (contract term of less than 5 years) with counterparties, brokers, and exchanges. The proposed streamlined approval process will enable SDG&E to preserve the value of PCC1 RECs by delivering the RPS products timely, improve competition by adding three large IOUs to the REC market run by brokers and exchanges, and allow SDG&E to compete in the REC market fairly. The proposed RPS transaction approval framework was coordinated with the other IOUs. More information on the proposed updated approval process for short-term transactions can be found in Section XVII, and SDG&E's Upfront, Achievable Standards and Criteria table can be found in Appendix 18

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On May 9, 2024, the Commission approved Advice Letter 4345-E, granting SDG&E's Request not to hold future Voluntary Allocation and Market Offer Processes pursuant to D.21-05-030 Ordering Paragraph 4,.

## III. SUMMARY OF RECENT LEGISLATIVE AND/OR REGULATORY CHANGES AFFECTING THIS PLAN

This Plan accounts for relatively recent RPS-related legislation, specifically California Senate Bill ("SB") 350 (2015), <sup>5</sup> SB 100 (2018), <sup>6</sup> and SB 901 (2018), <sup>7</sup> as well as associated Commission proceedings, such as the IRP and Power Charge Indifference Adjustment ("PCIA") Order Instituting Rulemakings ("OIRs").

#### **SB 350**

SB 350 led to D.17-06-026, which adopted new RPS procurement requirements. Notably, beginning January 1, 2021, at least 65 percent of a retail seller's RPS procurement must be from long-term contracts. SDG&E elected early compliance with this requirement and was subject to the new requirements beginning in CP 3 (2017-2020). In addition, SB 350 initiated the Commission's new IRP proceeding and associated processes, which are intended to be a widescale planning process that SDG&E anticipates will optimize RPS planning and procurement within a larger framework. The IRP seeks to implement policies that will achieve the State's greenhouse gas ("GHG") emissions reduction goals while maintaining reliability and affordability. The IRP process will inherently impact RPS procurement planning because some resources planned for procurement in the IRP may also count towards RPS compliance requirements. For example, the MTR IRP ordered a total of 15,500 MW of resource procurement, with required online dates between 2023 and 2028 and with certain portions of procurement being ordered from limited resources, such as from zero-emitting and firm zeroemitting generation resources. SDG&E has incorporated RPS resources procured through these IRP mandates in its RNS. This process is a marked shift away from the historically siloed approach to procurement, in which resource procurement mandates are imposed individually on a program-by-program basis, without regard to the consideration of other potential forms of supply and/or demand-side procurement. The holistic process built into the IRP processes will evaluate the costs and benefits of all available resources when developing portfolios that comply with renewable and clean energy standards.

#### **SB 100**

SB 100 increased the State's RPS procurement percentages to 44 percent by 2024, 52 percent by 2027, and 60 percent by 2030. SB 100 also calls for the State's RPS requirement to be 100 percent clean energy by 2045. D.19-06-023 implemented these new requirements for the RPS

Signed by Governor Brown on October 7, 2015.

<sup>&</sup>lt;sup>6</sup> Signed by Governor Brown on September 10, 2018.

<sup>&</sup>lt;sup>7</sup> Signed by Governor Brown on September 21, 2018.

Note that SB 1020, signed by Governor Newsom on September 16, 2022, adds further detail to the SB 100 policy stating that "It is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035, 95 percent of all retail sales of electricity to California end-use

program. On March 15, 2021, the California Energy Commission ("CEC"), Commission, and California Air Resources Board ("CARB") (together, the "Joint Agencies"), issued a report on SB 100 which indicated that the report is directional only and intended to inform and complement ongoing analysis within the Joint Agencies.<sup>9</sup>

#### **SB 901**

As further discussed below in Section IV, SDG&E has fulfilled its BioRAM obligation, including its SB 901 obligation. RECs from BioRAM facilities have no impact on SDG&E's RPS procurement planning as SDG&E is prohibited from using RECs from BioRAM facilities for compliance. <sup>10</sup>

#### **Integrated Resource Planning Proceeding**

Clean energy goals are considered and addressed in the IRP proceeding. The Commission issued D.19-11-016 which ordered load-serving entities ("LSEs") to procure 3,300 MW of new capacity to alleviate a reliability need in the near term 2021-2023. In the IRP MTR Procurement Order, D.21-06-035, <sup>11</sup> the Commission ordered 11,500 MW of incremental capacity and in the Supplemental MTR Procurement Order, D.23-02-040, <sup>12</sup> the Commission ordered additional 4,000 MW. These recent mandates will likely result in the procurement of additional RPS eligible resources. Additionally, the Commission recently issued its 2023 Preferred System Plan decision, which authorizes SDG&E to procure to meet the resource needs identified in its 2022 individual IRP.<sup>13</sup> The Commission is also in the process of collecting party feedback on AB 1373, which, among other things, authorizes the Commission to request that the Department of Water Resources ("DWR") act as a central procurement entity, and requires the Commission to make an initial need determination regarding DWR centralized procurement by September 1, 2024. <sup>14</sup> These authorizations may result in the procurement of additional RPS-eligible resources. SDG&E includes volumes from RPS-eligible IRP procurement in its RNS. SDG&E remains focused on effective cost and risk management and utilizing a holistic approach in

customers by December 31, 2040, 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045, and 100 percent of electricity procured to serve all state agencies by December 31, 2035."

See, the Joint Agencies, 2021 SB 100 Joint Agency Report, Achieving 100 Percent Clean Electricity in California: An Initial Assessment (March 15, 2021), available at <a href="https://efiling.energy.ca.gov/EFiling/GetFile.aspx?tn=237167&DocumentContentId=70349">https://efiling.energy.ca.gov/EFiling/GetFile.aspx?tn=237167&DocumentContentId=70349</a>.

<sup>&</sup>lt;sup>10</sup> D.18-12-003, Ordering Paragraph 3 at 25-26.

<sup>&</sup>lt;sup>11</sup> D.21-06-035 at 58.

D.23-02-040 at 32.

<sup>&</sup>lt;sup>13</sup> D.24-02-047, Ordering paragraph 9, at 138.

See, ALJ's Ruling Seeking Comments on Need and Process for Centralized Procurement of Specified Long Lead-Time Resources (April 26, 2024), available at https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M530/K323/530323853.PDF.

evaluating how resource needs are met. SDG&E will continue to include impacts of the IRP, including other relevant proceedings, such as summer reliability, <sup>15</sup> in its RPS procurement planning processes.

#### **Power Charge Indifference Adjustment**

Carrying out the mandates of D.21-05-030 impacts SDG&E's portfolio. According to the Optimization Decision, SDG&E must allocate RPS resources to CCAs and ESPs serving Direct Access ("DA") customers in the Voluntary Allocation process, offer unallocated renewable energy to the market through sales solicitations in the Market Offer process, and attempt to further optimize IOU portfolios through an RFI process. The Joint IOUs submitted AL 3835-E on August 23, 2021, which set forth the methodology to "slice" the IOUs' RPS portfolios, which was approved on October 25, 2021. SDG&E used this methodology to establish its eligible RPS generation based on its load share allocation. As described in the approved Advice Letter 4345-E, SDG&E has completed the Voluntary Allocation process, and does not anticipate any further impact. SDG&E's RNS tables incorporate the results of this process. If a newly formed LSE requests a voluntary allocation, SDG&E will include the results in its RNS calculations. <sup>16</sup>

#### **ReMAT**

In D.21-12-032, the Commission reopened SDG&E's Renewable Market Adjusting Tariff ("ReMAT") program and required that SDG&E procure an additional 20.9 MW of ReMAT-eligible resources. Any procurement that occurs in the ReMAT program, once it re-opened in late 2022, will count towards SDG&E's RPS compliance needs and can be banked. It is unknown whether and how soon new RPS-eligible supply from ReMAT can be procured, so SDG&E has not included RPS from additional ReMAT facilities in its RNS calculation but may consider doing so if it sees market interest in the program.

#### IV. ASSESSMENT OF RPS PORTFOLIO SUPPLY AND DEMAND

#### A. Overview of Portfolio Supply & Demand Assessments

SDG&E makes RPS procurement decisions based on how its risk-adjusted RPS position forecast (referred to herein as its "RPS Position") compares to its RPS program compliance requirements, the result of which is its probability-weighted procurement need or RNS. To calculate its RPS Position, SDG&E conducts a qualitative and quantitative assessment and assigns a probability of success to the expected deliveries for each project that is not yet online in its portfolio; and then it adds the risk-adjusted expected deliveries across all projects in its entire RPS portfolio. These risks include approval (e.g., Commission approval and the timing of

D.23-06-029 adopted an effective planning reserve margin procurement target of 170-320 MW for SDG&E for 2024 and 2025 resource adequacy compliance years.

<sup>&</sup>lt;sup>16</sup> D.21-05-030, Ordering Paragraph 10 allows newly formed LSEs to request a voluntary allocation via Tier 1 advice letter

such), development (e.g., permitting, financing, or transmission interconnection), delivery (e.g., generation fluctuations given the variant-intermittent nature of some renewable resources or operational challenges), and other factors (e.g., under-development of transmission infrastructure common to a group of projects). SDG&E then subtracts the quantity of RECs committed in forward sales agreements, if any, from the total expected generation to determine its RNS.

In general, if SDG&E's RPS Position is less than its RPS Procurement Quantity Requirement, SDG&E will need to use the RECs in RPS bank procured prior to 2023, or plan to procure additional RPS resources on a schedule that will allow for the procurement and development of resources in time to provide adequate deliveries, to meet anticipated shortfalls. SDG&E's assessment also includes current and expected load departure. If, on the other hand, its RPS Position is greater than its RPS requirements, SDG&E will consider opportunities to bank or sell bundled and/or unbundled RECs. In addition, to optimize the relative value of renewable energy across compliance periods, SDG&E further considers short-term contracts when, for example, it is short in the most immediate CP but long in the subsequent CP. 17 Overall, SDG&E will also consider procurement strategies that are in the best interest of its customers across compliance periods to secure greater value from approved RPS expenditures. For example, SDG&E strives to have a well-diversified RPS portfolio so that its RPS compliance, particularly in the most immediate compliance period, is not unduly exposed to any given risk (e.g., a)particular technology, region, counterparty, etc.). SDG&E's RPS portfolio management strategy involves identifying needs and risks and managing them in a cost-effective manner in the best interest of its customers.

In the Portfolio Optimization Decision, the Commission directed SDG&E, among other things, to optimize its RPS portfolio, specifically utilizing (i) a Request for Information process for Contract Assignments and Contract Modifications to right-size its supply portfolio, <sup>18</sup> (ii) a Voluntary Allocation in load share proportions to LSEs that serve departed load, <sup>19</sup> and (iii) a Market Offer process to sell portions of LSE allocations that were rejected in the allocation process. <sup>20</sup> SDG&E's assessment of its RPS Position resulting from these D.21-05-030 mandates through 2034 is incorporated in SDG&E's RNS table.

The following sections explain SDG&E's methodology for determining its RNS, which includes considerations related to RPS supply and customer demand. First, the process used to compute

The term "short" is used herein to refer to an RPS Position that is lower than the relevant RPS program requirements. The term "long" is used to refer to an RPS Position that is higher than relevant RPS program requirements.

<sup>&</sup>lt;sup>18</sup> D.21-05-030, Ordering Paragraph 6 at 65-66.

<sup>19</sup> *Id.*, Ordering Paragraph 2 at 63-64.

<sup>&</sup>lt;sup>20</sup> *Id.*, Ordering Paragraph 3 at 64.

the RPS Position is explained. Then, procurement needs by compliance periods are inferred by comparing RPS requirements to RPS Positions.

#### **SUPPLY**

## Assessment of Probability of Success for Various Project Types as a Key Component of Calculating the Probability-Weighted RPS Position Forecast

SDG&E must assess the probability of success and/or expected generation of the following main types of projects: (a) delivering; (b) approved but not yet delivering; and (c) not yet approved. SDG&E frequently evaluates the probability of success for each project in its portfolio to calculate its RNS, which is the basis for its procurement need. To do this, SDG&E conducts reviews with an interdisciplinary team and uses the most up-to-date qualitative and quantitative information to assign a probability of success and/or determine the expected generation of each individual project. SDG&E applies the following methodology to analyze each project type:

Assessment of Performance of Delivering Projects: Projects that have already achieved commercial operation and have begun delivering energy provide the most stable source of RPS deliveries when forecasting RPS procurement need. These projects have overcome development hurdles and are supported by steady revenues under executed PPAs. However, it is crucial to consider the potential fluctuations in deliveries that these projects can experience and the impact that such fluctuations could have on SDG&E's need to procure additional resources to meet its RPS goals. 21 As discussed further in Section VII, asavailable deliveries from these variable resource projects can be impacted by resource availability, regulatory changes, economic environment, evolving technologies, and third-party systems. To ensure RPS compliance, SDG&E must consider potential fluctuations in the amount delivered (while recognizing that swings in production could be more than expected). The monitoring of performance of delivering contracts and the assessment of probabilities focuses on: (i) understanding the historical generation profile of each project and how it has differed year-over-year and relative to forecasts; and (ii) the operational track record of any given project. SDG&E has found that a weighting of 100 percent is typically appropriate for delivering contracts. The forecast of future deliveries for on-line RPS contracts is based on historical deliveries (the average of the most recent three years, if available; if not available, the project's expected generation is used), which SDG&E will revise as appropriate. Adjusting

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For example, contracts with solar photovoltaic ("PV") developers incorporate a degradation factor that is used to forecast the project's performance over time as the panels age and become less efficient. SDG&E utilizes this factor in its Least-Cost Best-Fit ("LCBF") evaluation, and when calculating project deliveries for its RPS Position calculation on both a nominal (assumes deliveries from contracts will occur as expected) and probability-weighted basis. To the extent deliveries are different than the provided estimates, SDG&E will adjust its RPS Position calculation accordingly.

forecasts when necessary is a crucial component of SDG&E's need assessment methodology.

Assessment of the Development Progress of Approved Projects that Have Not Yet Begun Delivering: Another important aspect of SDG&E's need assessment methodology is evaluating the development status of projects approved by the Commission but not yet delivering energy. These projects are typically riskier than projects that have begun delivering due to the challenges that can arise during the development process that might prevent a project from completing construction and achieving commercial operation. Permitting, interconnection, regulatory factors, and other development issues are discussed further in Section VI. SDG&E must account for development risks when determining its procurement need, and the monitoring of development status is a critical aspect of SDG&E's need assessment methodology. Because SDG&E has a substantial REC bank, there is very little risk that any particular project failure will impact SDG&E's ability to meet its RPS compliance obligations. SDG&E assigns a probability of success to each of its developing projects. This factor is then applied to the expected deliveries stated in the contracts.

Assessment of the Approval Queue for Projects that Have Been Submitted to the Commission But Are Not Yet Approved: SDG&E typically meets monthly with its Procurement Review Group ("PRG"), which includes Energy Division staff, to discuss, among other things, the likely approval timetable of projects that SDG&E has submitted to the Commission for approval. The discussion covers expected timing of Commission action and any potential constraints that might necessitate expedited Commission action or require additional information. SDG&E works collaboratively with the Commission to develop a work plan that results in timely approval. It is possible, however, that the shortage of Energy Division staff or other procedural challenges can result in approval delays that can impact a project's ability to achieve milestones. SDG&E must monitor this process closely to determine what impact, if any, delays may have on the timing of expected deliveries or sales.

#### **Project Viability Supply Considerations**

Renewable project developers continue to face a challenging environment. For example, studying and constructing generator interconnection upgrades continue to take years to complete and can significantly influence project costs. In addition, as more projects are proposed, especially in desert regions, permitting approval timelines may extend due to increased scrutiny of environmental issues and permitting agency coordination efforts. SDG&E closely monitors project viability factors, and any effects they may have on its portfolio.

Impact of Key Transmission Upgrades and/or Infrastructure: Transmission availability has long been recognized as a potential barrier to achieving RPS

goals, and SDG&E continues to monitor the progress of transmission upgrades on which SDG&E's RPS projects depend in order to assess potential delays and possible impacts. A more detailed discussion of transmission is provided under Section VI.

**Impact of Permitting Delays:** Many projects have experienced local agency permitting delays. Delays can occur when projects require ministerial or discretionary permits, which in turn may trigger environmental review such as under the California Environmental Quality Act ("CEQA") or are challenged by individuals and community groups. These requirements and public controversy can result in project conditions, increased costs to the developer, and significant project delays that can jeopardize project viability and potentially lead to project cancellation. A more detailed discussion of permitting is provided under Section VI.

#### **Existing RPS Contracts Supply Considerations**

The contracts within SDG&E's portfolio may be renewed at existing price terms, renegotiated via "blend and extend," <sup>22</sup> assigned or novated, or allowed to expire or terminated pursuant to the term therein; additionally, SDG&E may solicit to re-sell bundled or unbundled REC attributes from its portfolio. D.21-05-030, which required SDG&E to allocate a portion of its RPS portfolio to eligible LSEs serving departed customers, impacted SDG&E's RPS portfolio as illustrated in SDG&E's conforming and alternative RNS tables.

**Impact of VAMO:** As required by the Portfolio Optimization Decision, SDG&E implemented Voluntary Allocations by allocating portions of its RPS portfolio to departed customers and offering any excess to the market in the Market Offer process. SDG&E's RNS table illustrates the impacts on SDG&E's RPS portfolio when retail sales and its PCIA-eligible RPS portfolio are reduced based on SDG&E's load share allocation, and the effects on SDG&E's RPS position of the IRP MTR Procurement Order.

**Impact of Contract Renewal or Renegotiation:** SDG&E began signing RPS contracts in 2003, most of which had terms of 20 years. As part of its RPS Position calculation, and in accordance with Commission direction, <sup>23</sup> SDG&E does not assume in its RNS calculation that these contracts will be renewed.

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Renegotiation via "blend and extend" refers to an agreement made by parties to extend a contract at either a blended price lower than the original contract pricing terms, commencing at the time the contract is renegotiated, or at a lower price commencing at the start of the amended delivery term of the contract.

<sup>&</sup>lt;sup>23</sup> Rulemaking ("R.") 11-05-005; *Administrative Law Judge's Ruling on Renewable Net Short* (May 21, 2014).

Owners of these projects may be asked to bid such projects into future Request for Offers ("RFO"), if there is an RPS need, and these bids will be required to conform with the need identified in the then-current RFO. The benefits of this process are twofold: competition will be enhanced, and these facilities will have the opportunity to bid to extend their contracts past the original termination dates into later years, if and when SDG&E has a need. SDG&E continues to reassess its position to determine if contract renewal could add value to SDG&E's portfolio. Additionally, SDG&E may re-negotiate outside of an RFO process to – for example – "blend and extend" a contract at a new competitive price over a new delivery term, which may result in reduced administrative costs for the RFO process as well as in some cases preserve the long-term classification of the original agreement.

Impact of Contract Termination: As part of its contract administration process, SDG&E actively monitors contractual requirements including conditions precedent and project development terms that must be met (or waived) in order for the contract to be viable. When a condition precedent or development milestone has not been met, SDG&E may consider terminating the contract, or the parties can mutually agree to a termination, if it is in the best interest of customers. Contract termination could also include instances where parties could agree to terminate a contract with a buyout option. Contracts may also expire or terminate in accordance with their terms (*i.e.*, events of default).

Impact of the Resale Market: SDG&E will closely monitor opportunities to optimize the value of its portfolio, including opportunities to sell excess procurement, if excess procurement exists, or to use such excess towards future compliance if SDG&E determines this to be the best option for its customers. If SDG&E believes that the current market is favorable and expects that it will be able to fulfill any future needs with more economic options, SDG&E will first consider offering to solicit the excess to determine if the market is interested. More detail is provided below and in Appendix 9, attached hereto.

#### **DEMAND**

RPS compliance is based on an energy target (as opposed to a capacity target) and is calculated using a percentage of retail sales. Various factors (*e.g.*, departing load) impact retail sales, and these factors are reflected in the forecast. SDG&E's most recent retail sales forecast is provided within the RNS table in Appendix 1.

**Impact of CEC Forecast:** In accordance with Commission guidance, SDG&E uses the latest CEC forecast consistent with the standardized planning assumptions authorized in D.12-01-033 as a component in SDG&E's RNS. To determine its retail sales, SDG&E is using the most recently approved Integrated Energy Policy Report ("IEPR") forecast update issued on February 14, 2024 that reflects load

departure.<sup>24</sup> SDG&E monitors its retail sales forecasts and actuals on a quarterly basis to identify potential fluctuations and their impact on its RPS requirements.

Impact of Transportation Electrification: The sales forecast that supports SDG&E's RPS filing is the CEC's 2023 IEPR demand forecast, also known as California Energy Demand Update ("CEDU") 2023, adopted by the CEC Commissioners at the CEC's February 14, 2024, business meeting. For RPS purposes, SDG&E used the CEC's 2023 IEPR planning forecast, with mid-case Additional Achievable Energy Efficiency ("AAEE"), Additional Achievable Fuel Substitution ("AAFS") and Additional Achievable Transportation Electrification ("AATE") as the basis. SDG&E reformatted the forecast to partition it into sales to bundled customers and sales to DA and CCA customers. SDG&E also incorporated updated DA and CCA customer enrollment schedules that became available after the CEC adopted the 2023 IEPR. SDG&E's forecast accounts for electric vehicle ("EV") charging within the Mid-Demand base-line segment of the scenario. SDG&E's RPS forecast includes an incremental 4,861 GWhs of electric consumption due to light-duty EV charging activity in SDG&E's service territory by 2035. The impact of adding more EVs is that retail sales will increase to account for more EV charging, thus more RPS energy may be needed to meet the compliance requirement. A description of the modeling approach and input assumptions made regarding forecasting EV charging can be found in CEDU publications that document CEDU 2023.<sup>25</sup>

**Impact of Departing Load:** Load departure has reduced SDG&E's retail sales significantly, thereby impacting its RPS Position in comparison to its RPS requirements. The Commission authorized SDG&E's option to hold a procurement solicitation to maintain a reasonable RPS forecast in light of these impacts. Currently, there are two CCAs in SDG&E's service territory: San Diego Community Power and Clean Energy Alliance.

D.21-05-030's VAMO implementation reduced the size of SDG&E's RPS portfolio proportionally as RPS volumes were voluntarily allocated to departed load customers, sold in the market offer, and the RFI process ordered in D.21-05-030<sup>26</sup> may further reduce SDG&E's portfolio if contracts are assigned, modified or terminated. Delivery of allocated RPS volumes and delivery of Market Offer RPS volumes began in 2023. The Commission "expect[s] that IOUs should generally be able to procure replacement RPS contracts with lower costs, while

<sup>&</sup>lt;sup>24</sup> CEC, Orders and Resolutions of the February 14, 2024 business meeting, available at https://efiling.energy.ca.gov/GetDocument.aspx?tn=254491&DocumentContentId=89891.

<sup>&</sup>lt;sup>25</sup> CEC, 2023 Integrated Energy Policy Report Update, available at <a href="https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2023-integrated-energy-policy-report">https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2023-integrated-energy-policy-report</a>.

<sup>&</sup>lt;sup>26</sup> D.21-05-030, Ordering Paragraph 6 at 65-66.

acknowledging that replacing resources could still increase costs for bundled ratepayers."<sup>27</sup>

It is also possible that customers who departed SDG&E's bundled service may return at some point. If this occurs, SDG&E may need additional RPS to accommodate those returning customers. SDG&E will monitor this situation and will work to help mitigate any disruptions or unexpected surprises.

#### **Determination of the Compliance Needs for Each Compliance Period**

SDG&E met its CP 3 RPS requirements by achieving 42 percent renewable energy. As SDG&E looks ahead to CP 4 and beyond, it will continue to manage its portfolio to ensure RPS compliance. At this time, all of SDG&E's online renewable contracts are long-term for RPS compliance purposes. SDG&E has three developing projects that were assigned a project failure rate. SDG&E's RNS is calculated by multiplying the expected contractual deliveries (including degradation) by each contract's probability weighting and then adding the resulting expected deliveries across the portfolio.

Load departure commencing in 2021 and the Portfolio Optimization Decision VAMO process commencing in 2023 led to significant changes in SDG&E's RPS portfolio. Based on the analysis supporting SDG&E's RNS table, SDG&E anticipates that its RPS position will fall short in the next Compliance Period. Accordingly, SDG&E may utilize its bank and/or exercise its option to hold a solicitation to address the need that was identified. As illustrated in SDG&E's RNS Narrative in Appendix 1, SDG&E has established a volumetric cap of the amount of new eligible renewable resources it may procure if it exercises its option to hold a solicitation. To determine SDG&E's volumetric cap, SDG&E reduced its PCIA-eligible RPS portfolio based on SDG&E's load share allocation and included RPS resources from the IRP procurement that count towards SDG&E's RPS-eligible portfolio. To forecast SDG&E's needs more realistically, SDG&E is using its alternative scenario RNS table in calculating its volumetric cap. Details regarding the SDG&E's calculation of volumetric cap and capacity cap can be found in Appendix 1- RNS Narrative.

SDG&E will continue to account for further procurement of renewable energy projects under Commission-mandated procurement programs and other procurement authorizations. The MTR Procurement Order requires zero-emitting, clean, firm, non-energy storage resources to be procured between 2026 and 2028. RPS-eligible resources such as geothermal, solar or wind, combined with energy storage ("hybrid") are identified in the MTR Procurement Order as resources that fit these characteristics; thus, SDG&E will include assumptions on RECs from potential RPS resources by 2028 as soon as the resource has been procured. If the RPS-eligible hybrid resources included in SDG&E's planning are not sufficient to meet its RPS compliance goals, SDG&E seeks the option to hold a solicitation. Additionally, a solicitation may be

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<sup>&</sup>lt;sup>27</sup> *Id.* at 19.

<sup>&</sup>lt;sup>28</sup> D.23-02-040.

necessary to mitigate non-compliance risks arising from the impacts of portfolio optimization and a potential unexpected mass return of customer load as the provider of last resort, not included in the load forecast.

As illustrated in Appendix 1, SDG&E's RNS table, SDG&E will fall short in the near future. SDG&E has a significant amount of RECs in its bank. SDG&E may meet its compliance requirements through 2034 by utilizing the bank and/or, after considering the benefits to customers, SDG&E may hold a solicitation or enter agreements bilaterally to procure long-term and/or short-term resources to meet its Procurement Quantity Requirements ("PQR"). Determining compliance needs by compliance period and establishing a volumetric cap for 2024 RPS Plan cycle procurement is further discussed below. In order to have flexibility in its planning to meet RPS obligations in a cost-effective manner, SDG&E requests authority to procure RPS resources through solicitation, bilateral agreements, and brokerages and/or exchanges in the 2024 RPS Plan cycle.

SDG&E may seek short-term optimization opportunities in the near-term, which include the sale of RPS products via request for proposals ("RFP"), bilateral sales agreements and/or brokerages and exchanges. These opportunities are driven by the fast-changing market for RECs. To the extent SDG&E determines that an RFP is appropriate, it will seek to issue the RFP attached hereto as Appendix 9. SDG&E continuously monitors its portfolio to determine if purchase or sale RFO or RFP is needed.

#### **Current & Future Compliance Period Needs**

Based on SDG&E's current RPS generation forecast, SDG&E anticipates meeting its RPS requirements for each CP through 2024 with its portion of the RPS portfolio after impacts of the Portfolio Optimization Decision are considered and by procuring new renewable resources through a competitive solicitation, bilaterally, brokers or exchanges, as needed, or by leveraging the bank. SDG&E has three developing contracts that were assigned a project failure rate, and all of SDG&E's online renewable contracts are long-term, which includes approximately 179 MW of additional RPS-eligible resources from the MTR solicitation, with on-line dates summer of 2025 and later in the year of 2026; thus, SDG&E is not currently at risk of non-compliance with SB 350's 65 percent long-term contracting requirement. Additional short-term renewable resources may be procured. As an alternative to procuring new renewable resources, SDG&E may use its bank to remain compliant. SDG&E accumulated a significant number of RECs in the bank from procuring renewable resources above the RPS Compliance requirements in the previous years.

It is important to note that this outlook is based on current available data and incorporated Voluntary Allocation impacts regarding SDG&E's RPS portfolio. The volume of any new purchases required for current and future compliance periods will be a function of portfolio performance and will be subject to the level of RPS banking, if any. SDG&E intends to fill any remaining RPS need with viable low-cost opportunities from future solicitations, bilateral transactions, and potential investments, utilize the bank if needed and will continue to procure

for mandated programs, to the extent required. SDG&E continues to advocate for no incremental mandated RPS program procurement; and if mandated procurement is needed, it should not apply only to IOUs but to all LSEs, based on need, through the IRP process.

SDG&E intends to manage any potential over-procurement that is created by departing load by banking it for future compliance needs, terminating contracts where conditions precedent or other contractual obligations are not met or where mutual agreement is reached, selling such excess procurement, or transferring the obligation to a new party as permitted by the contract. SDG&E may undertake additional procurement to ensure RPS compliance, with the understanding that any resulting excess can be either banked or sold bilaterally or through an RFP. Additional discussion regarding the analysis of selling versus banking can be found below in Section IV-A2.

#### **Utility Tax Equity Investment and Utility Ownership Opportunities**

SDG&E's participation as a tax equity investor or utility owner in renewable generation and/or associated transmission projects may enhance project viability (through securing of financing) and may decrease costs for customers (given SDG&E's cost of capital relative to the renewable financing market). SDG&E may consider additional investment opportunities where: (a) its involvement might enhance the viability or cost competitiveness of a project; and/or (b) where a project may have a positive socioeconomic impact, potentially involving a Diverse Business Enterprise ("DBE").

Additionally, SDG&E has undertaken the construction of renewable energy facilities, for example under the Solar Energy Project program. SDG&E completed this program with the commercial operation of the 4.32 MW Ramona Solar Project on April 21, 2017. <sup>29</sup>

#### 1. Portfolio Optimization

Separate from specific VAMO and RFI optimization efforts, SDG&E continuously employs a general portfolio optimization strategy. The first step in SDG&E's ongoing portfolio optimization strategy is to determine its RPS need. As outlined above, the probability of success and/or the expected generation of each of the projects in SDG&E's portfolio is frequently reviewed and revised using the most current information. The result of this comprehensive review is a calculation of SDG&E's forecasted RPS Position, which is then compared with SDG&E's RPS compliance requirements to determine its RNS. SDG&E uses its

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Approved by D.10-09-016. SDG&E was authorized to build up to 26 MWs of distributed utility-owned solar PV at a cost cap of \$3.50/W(dc). SDG&E held an RFP in the Fall of 2011 and executed a contract for up to a total of 17 MW at eight sites owned by SDG&E. To stay under the cost cap, the number of projects were subsequently reduced due to permitting, site, and contractor issues. SDG&E held another RFP in the Spring of 2015, and no contracts were executed as a result of the RFP.

alternative scenario RNS to determine the appropriate level of procurement, including the necessary margin of over-procurement (if any), going forward. Generally, if SDG&E were to foresee a shortfall, it would then procure additional resources; if it were to foresee an excess, then it may pursue sales, or other right-sizing activities. Regulatory directives and procurement directed by the Commission in the IRP will likely be RPS eligible, and so that procurement will also be reflected in SDG&E's RPS portfolio.

#### **Cost Optimization**

Cost optimization begins before a contract is executed, with contract analysis methodology development and adoption. Once this analysis methodology is utilized and a contract is executed, if an opportunity to optimize this contract becomes apparent, SDG&E will investigate it to determine the best course of action for its customers.

Least-Cost Best-Fit ("LCBF") Analysis: SDG&E carefully analyzes bids and bilateral proposals according to its LCBF methodology. This methodology is intended to optimize SDG&E's procurement decisions by minimizing cost and maximizing value. The LCBF process results in the quantification and subsequent ranking of the costs and benefits of each bid based on these metrics. It includes analysis of the PPA price, which inherently includes the counterparty's interest, carrying, and transaction costs. The analysis also takes into account the energy, green attributes, and capacity value provided by each of the projects, as well as congestion costs and transmission costs. The formula deducts the PPA Price ("Levelized Contract Cost"), transmission cost, Renewable Integration Cost Adder ("RICA"), and congestion cost from the sum of the energy, green attributes, and capacity benefits to determine a project's Net Market Value ("NMV"). These NMVs can then be compared and used to create a quantitative ranking. SDG&E then evaluates any identifiable qualitative aspects, such as project location (whether in a Disadvantaged Communities ("DAC")), project viability, developer experience, and portfolio fit to determine the shortlist. The projects that are placed on the shortlist will have the highest value to customers and best portfolio fit when compared with other bids from the particular solicitation. SDG&E revises its LCBF methodology as necessary to incorporate new information and will continue to do so in accordance with any future Commission decision on LCBF. See Section X and Appendix 9 for additional details on LCBF.

Banking vs. Sales Analysis: Another optimization tool related to contract management is the analysis of the option to bank or sell excess procurement. When SDG&E forecasts excess RPS procurement in its portfolio, it will perform an analysis of both the short-term and long-term quantitative and qualitative costs and benefits associated with the RECs to determine next steps. In the past, analysis was performed to determine whether to bank or sell the excess; however, given the issuance of the Portfolio Optimization Decision, SDG&E's

portfolio will be allocated by vintaged, forecasted annual load share, with the remainder that is not accepted in allocations offered for sale to the market. If there continues to be excess in its RPS portfolio, SDG&E may bank the excess for future use. The quantitative portion of the valuation includes consideration of SDG&E's RPS Position, the time value of revenues from the potential REC sale, and the potential replacement cost. The qualitative portion includes consideration of the impact on market liquidity and SDG&E's RPS Position. For more information regarding SDG&E's Sales Framework, please see Appendix 15.

**Other Sales Considerations:** To further balance its portfolio and potentially lower electric rates for both its unbundled and bundled customers, SDG&E may find optimization opportunities and is seeking authorization to sell RPS volumes from:

- i. Projects from the pool of its PCIA-eligible portfolio as fixed, firm quantities, percentages of the portfolio, or specified projects in unit contingent product transactions.
- **ii.** SDG&E's elected allocation portion of its PCIA-eligible portfolio as a firm, percentage or unit contingent product.
- **iii.** The portion of the PCIA-eligible portfolio that was transacted as short-term allocations and Market Offer sales and is not required to be further allocated or transacted in the VAMO process.

**Bank Utilization:** Implementation of portfolio optimization, as required by D.21-05-030, has significantly impacted SDG&E's RPS position. SDG&E may choose to utilize the bank as an alternative to procuring more renewable energy for meeting its RPS Compliance requirement when its RPS supply position falls short. Based on SDG&E's conforming RNS table, SDG&E's banked RECs would be sufficient to meet the compliance requirement for the years SDG&E's RPS supply position falls short.

Retirement Analysis: There is a significant link between SDG&E's banking versus sales analysis and its retirement analysis where SDG&E evaluates its compliance position and strategy to ensure that RECs are handled in the most cost-effective way in both the short-term and the long-term for SDG&E's customers. SDG&E's retirement decisions include consideration of its RPS Position and the 36-month shelf-life of the RECs. RECs can be retired and used for compliance purposes within 36 months of the REC's issuance, and any RECs in excess of the CP's required targets can be banked and will not expire. Once a REC is banked, it can be used for compliance purposes at SDG&E's discretion. SDG&E also considers the time value of the impact of potential revenues or additional RPS procurement on rates for bundled customers when making the decision to buy, sell, bank, or retire RECs.

#### **Value Optimization**

In addition to its contract analysis and management strategies, SDG&E also seeks to add value to the RPS procurement process by participating in stakeholder processes related to current and proposed procurement programs, and by evaluating unique procurement opportunities.

**Program Design:** SDG&E actively participates in discussions regarding the initial design and future of renewable procurement programs via comments and workshops. SDG&E's goal is to provide recommendations that contain costs and protect customers. Examples of these efforts are SDG&E's contribution to the BioMAT and BioRAM program design process, as well as its recommendations regarding the future of the RAM program. As explained under Section XV, SDG&E anticipates the IRP process signifies a shift away from individual, separate programs and processes, towards a holistic planning and procurement process.

**Utility Involvement:** SDG&E evaluates utility ownership opportunities as procurement options and assesses the value of its involvement. SDG&E may participate in these types of projects if its participation would either augment the probability of project success or cost competitiveness of a project, and/or lead to a positive socioeconomic impact, for example involving a DBE.

Bilateral Transactions: SDG&E will enter into bilateral purchase or sales agreements, if necessary, to the extent that these transactions benefit customers. Not all products are well-suited for the RFO process due to, for example, deal timing and/or complexity. The ability to contract bilaterally is a potentially valuable tool in maximizing value to customers. For example, it could be useful in addressing an unforeseen need in an expedited manner, as compared to the additional timing required for a solicitation. It also allows an IOU to take advantage of opportunities that are too complex to solicit through an RFO, such as tax equity, utility ownership, or buy/sell transactions. In addition, the ability to engage in bilateral deals is necessary from a practical perspective: bilateral deals assist market development by offering an additional sales option, making project development less dependent on RPS solicitation cycles. SDG&E will request approval of bilateral purchases and sales through a Tier 3 Advice Letter filing.

#### **Risk Optimization**

SDG&E optimizes risk through several long-term and short-term mitigation strategies. SDG&E also seeks to add value by actively participating in discussions regarding compliance and enforcement rules.

**Minimum Margin of Procurement:** A long-term procurement strategy utilized by SDG&E is the establishment of a Minimum Margin of Procurement ("MMoP")

consistent with California Public Utilities ("Cal. Pub. Util.") Code § 399.13(a)(4)(D). The MMoP is designed to mitigate the risk that renewable projects planned or under contract are delayed or canceled. SDG&E currently has three projects under development and has adjusted its RNS consistent with SDG&E's MMoP strategy. SDG&E's MMoP is intended to ensure, to the extent possible, that SDG&E is able to reach its RPS goals, as explained in more detail below under Section IX, which describes how SDG&E's MMoP is incorporated into the RNS formula. Generally, SDG&E applies a failure rate which is a probability weighted deviation below expected forecast generation, and it is based upon but not limited to probability assessments of project failure, project capacity reduction, operational failure after project success, project curtailment due to transmission constraints, etc. 30 Risk-adjusted RECs from RPS facilities in development will be added to the total RPS eligible procurement which is captured in SDG&E's RNS, Appendix 1. Total RPS eligible procurement will be compared to the gross RPS Procurement Quantity Requirement to determine if additional procurement is required. Project development can present challenges that must be accounted for when determining a need. In combination with the constant fluctuation of RPS targets (based on retail sales) and continual changes in RPS deliveries, it is essentially impossible to meet the RPS targets exactly. SDG&E undertakes conservative MMoP procurement as a prudent measure to guard against any unforeseen events that may impact its portfolio and jeopardize compliance. SDG&E provides a risk assignment table in Appendix 1 narrative section.

**Short-term Contracts:** Due to unforeseen circumstances, a situation may occur in which SDG&E needs to procure a small amount of renewable energy in the near-term. In this scenario, short-term contracting is a viable strategy, as it allows SDG&E to respond quickly to a sudden change in portfolio status and manage a short-term need without entering into an unnecessary long-term commitment.

**Category 3 Procurement:** SDG&E may consider Category 3 procurement to the extent that such products are shown to be cost-effective and a need for additional RPS procurement becomes evident. However, SDG&E plans to maintain enough room below its Category 3 procurement limits so that Category 3 procurement is a potential strategy in the short-term, should SDG&E need to fill any unforeseen immediate need.

#### **Request for Information**

SDG&E does not include an additional adjustment to its forecasted REC deliveries through a Voluntary Margin of Procurement ("VMoP"), which is optional, and not required by statute as is the MMoP.

Per the Portfolio Optimization Decision, IOUs shall "propose a Request for Information for Contract Assignments and Contract Modifications in the Renewables Portfolio Standard proceeding in 2021 and 2022." <sup>31</sup> As described below, SDG&E issued another RFI outreach in the 2022 RPS Plan cycle.

To reduce excess and/or uneconomic resources, as directed by D.21-05-030, SDG&E held a RFI process with its supplier counterparties and market participants to determine interest in contract assignments or other contractual structures to optimize SDG&E's RPS portfolio. Merrimack Energy, the assigned Independent Evaluator, oversees the RFI solicitation process for SDG&E.

A list of eligible contracts was developed by reviewing SDG&E's PCIA-eligible RPS portfolio to determine whether any prohibitions to contractual modifications or contract assignments exist. For example, PPAs procured for specific mandates, such as GTSR and BioRAM programs, were excluded. PPAs with non-modifiable requirements such as RAM, REMAT and BioMAT will include limitations as it relates to other mandated programs.

On January 5, 2022, SDG&E issued an RFI outreach to supplier counterparties of existing RPS eligible power purchase agreements to determine interest in modifications to existing contracts to reshape SDG&E's portfolio and minimize costs to customers in the SDG&E service territory. The following structures or potential contract modifications were proposed to the counterparties:

- Contract Novation all obligations of SDG&E under the power purchase agreement would pass from SDG&E to a new off-taker, and SDG&E would cease to be liable under the agreement
- Contract Assignment SDG&E as a counterparty would be replaced with a new counterparty
- **Contract Termination with Buyout** SDG&E would make a lump sum payment to the seller and the contract would end as of the date of the payment
- Contract Buydown SDG&E would make a lump sum payment to the seller to lower the contract price for the duration of the delivery term
- Other Modifications other proposals to modify RPS agreements to reduce the quantity of RPS energy sold to SDG&E and/or the total costs of the contract over the remaining term

On March 11, 2022, SDG&E issued an RFI solicitation to market participants (third parties) who are interested in exploring potential assignment or other arrangement of existing eligible renewable energy contracts from SDG&E's RPS portfolio. The outreach was sent out to financial institutions, energy service providers, utilities, municipal utilities, industrial end users,

<sup>&</sup>lt;sup>31</sup> D.21-05-030, Ordering Paragraph 6 at 65.

wholesale power marketers, and any other entity that would be interested in bundled and or unbundled renewable attributes.

SDG&E received responses from both January 2022 and March 2022 outreach efforts. The summary of the responses is provided in Appendix 17. The responses were evaluated by SDG&E. There were no resulting contracts from this RFI process because no interested party or counterparty offered to enter into a contract modification. SDG&E provided updates to the PRG regarding SDG&E's the RFI process.

On August 23, 2023, SDG&E issued its second RFI in as directed by D.21-05-030 and as authorized in its 2022 Final RPS Plan. SDG&E's 2023 RFI process was similar to its 2022 RFI process. SDG&E reached out to its eligible counterparties interested in contract modifications and third-party market participants interested in potential assignments or other arrangements. SDG&E received responses from both RPS counterparties and third-party RPS market participants and currently evaluating the responses. The summary of responses is provided in Appendix 17 SDG&E has provided and will continue to provide updates to the PRG regarding SDG&E's the RFI process. All resulting contracts, if there are any, from the RFI process, will be submitted to the Commission for approval via Tier 3 Advice Letter filing. Because SDG&E is still in the process of concluding its second RFI and there was minimal interest in entering a contract modification from both interested parties and counterparties, SDG&E does not propose another RFI in the 2024 RPS Plan cycle.

#### B. Responsiveness to LSE Policies & Goals, Statutes, & Commission Policies

In this section, SDG&E provides an overview of its compliance with Commission policies, orders, directives, such as RPS related mandated procurement programs, and energy storage reporting. This section also addresses SDG&E's compliance with the statutory long-term contracting requirement. SDG&E does not have unique regional attributes such as once-through cooling retirements, and thus that topic is not included in SDG&E's RPS Plan.

#### **Responsiveness to Legislation and Programs**

Notably, regarding SB 100's decarbonization goals, RPS resources play an important role in reducing carbon emissions, and the resource planning undertaken in IRP will be instrumental in ensuring that California reaches its carbon reduction goals through increasing clean resources. Procurement undertaken through the IRP process is, and will continue to be, quantified in SDG&E's RPS procurement planning analysis. SDG&E's RNS table includes impacts from the IRP, which would increase SDG&E's RPS once the resource(s) come online. SDG&E supports the efforts occurring in the IRP and will continue to be an active stakeholder through comments, workshops, etc.

The banking rules adopted by SB 350 and formalized in D.17-06-026 make several changes, which are now applicable to SDG&E per its election to utilize them beginning in CP3: (i) short-

term Category 1 products can be banked;<sup>32</sup> (ii) Category 2 products cannot be banked;<sup>33</sup> and (iii) Category 2 and 3 products of any duration cannot be deducted from the bank.<sup>34</sup> In accordance with Commission direction,<sup>35</sup> SDG&E has updated its RNS table under Appendix 1 to comport with the new SB 350 banking rules, assuming for RNS calculation purposes that eligible excess procurement<sup>36</sup> will be utilized in future compliance periods.<sup>37</sup>

#### **Legislation and Mandated Procurement Programs**

#### **Green Tariff Shared Renewables Program**

Over the past several years, the California Legislature has passed SB 43 Green Tariff Shared Renewables or ("GTSR"), and Disadvantaged Communities ("DAC")-Green Tariff programs. SB 43, which became effective on January 1, 2014, requires participating utilities to file an application for a GTSR program allowing customers to buy some or all of their energy from local renewable projects via a GT or Enhanced Community Renewables ("ECR") program. 38 Prior to the effective date of this law, SDG&E filed Application ("A.") 12-01-008 requesting approval of its GTSR program in January 2012. SDG&E launched GTSR solicitations for GT and ECR projects in July 2015, September 2016, March 2017, November 2017, June 2018, November 2018, August 2020, and August 2021. While successful in earlier years, the high penetration of CCAs in SDG&E's service territory caused a majority of participants to depart, as this commoditybased program is only offered to bundled customers. Because program costs were being recovered from a shrinking pool of customers, rates rose sharply, resulting in further attrition. To address this concern, SDG&E filed an application to suspend the GTSR program on May 31, 2022 and received permission to file an advice letter suspending GT later that year.<sup>39</sup> After filing the AL, SDG&E successfully notified all remaining customers and unenrolled them from the offering. SDG&E awaits a proposed decision from the CPUC to permanently close GTSR and the other Green Access Programs, which is now expected in 2024. SDG&E's RPS will increase whenever SDG&E claims allocated portion of the excess GTSR-committed RECs for compliance.

<sup>32</sup> Cal. Pub. Util. Code § 399.13(a)(5)(B)(i).

<sup>&</sup>lt;sup>33</sup> Cal. Pub. Util. Code § 399.13(a)(5)(B)(ii).

The banking rules, established by D.12-06-038 at 66, require that bankable excess procurement be calculated by deducting all short-term RECs of any category from the total volume of bankable excess procurement. SB 350 expressly changes this by allowing the banking of short-term Category 1 products (399.13(a)(5)(B)(i)), and prohibiting the deduction of any Category 2 and 3 products when determining bankable excess procurement (399.13(a)(5)(B)(ii)).

<sup>35</sup> R.11-05-005; Administrative Law Judge's Ruling on Renewable Net Short (May 21, 2014).

<sup>&</sup>lt;sup>36</sup> Rules regarding excess procurement are set forth in D.12-06-038, and D.17-06-026.

Note that SDG&E may manage excess procurement by selling such products when doing so would benefit customers, or by utilizing a retired REC for RPS compliance in future compliance periods.

These programs are branded as EcoChoice ("GT") and EcoShare ("ECR"), and were formerly known as "connected....to the sun."

<sup>&</sup>lt;sup>39</sup> SDG&E Advice Letter 4074-E, approved and effective September 9, 2022.

Reporting: D.15-01-051 allowed IOUs to supply initial GT program demand from an interim pool of existing RPS resources under contract with that IOU. 40 This Decision also requires reporting regarding this pool, specifically that the IOUs' RPS Plans include "all information related to the transfer of megawatts from the existing RPS program to GTSR. This information includes the impact on residual net short and the need to bridge for any shortfall, accounting of RECs, list of contracts with price, and other relevant details." <sup>41</sup> SDG&E received Commission approval of its interim project pool and enrollment in SDG&E's GT program began in Q4 2016. SDG&E's reporting on the interim project pool as of April 2021 shows that 8 RECs in 2016, 4,43RECs in 2017, 86,446 RECs in 2018, 42 87,617 RECs in 2019, 43 and 91,024 RECs in 2020, 44 were transferred between the interim project pool and the GTSR program. Starting in 2021, the customer attrition on the program increased significantly due to customer opt-outs in response to high rates and customer load departure to CCAs. GTSR customer enrollment decreased such that the interim pool was no longer needed to provide energy to GTSR customers. SDG&E's reporting on the interim project as of June 2022 shows no RECs were transferred between the interim project pool and the GTSR programs. Because GTSR customers are being served with dedicated renewable resources, the generation used to serve the customers enrolled in SDG&E's GT program were excluded in SDG&E's RNS table in the previous years. However, beginning 2021, due to the decreased GTSR program enrollment, the remaining generation from the dedicated renewable resources not used by the GTSR program will be included in SDG&E's RPS eligible generation in the RNS table, as allowed by D.15-01-051. 45 SDG&E's filed AL 4074-E to immediately suspend its EcoChoice, Green Tariff Program pursuant to the ALJ Ruling Granting Request for Green Tariff Suspension. 46 Per the approved ERRA Forecast, 47 the dedicated resources for the GTSR Program will be recovered in the PCIA cost mechanism. Beginning in August 2022, the generation from the dedicated GTSR resources will be included in the RPS eligible generation.

On May 30, 2024, the Commission issued a decision modifying green access program tariffs and adopting a community renewable energy program. In the decision, CSGT was terminated for all

<sup>&</sup>lt;sup>40</sup> D.15-01-051 at 39.

<sup>&</sup>lt;sup>41</sup> D.15-01-051 at 41.

<sup>&</sup>lt;sup>42</sup> A total of 102,880 RECs were retired for the GTSR Program (EcoChoice) for 2018. 86,446 RECs were retired from the interim pool and 16,434 RECs were retired from the GTSR project.

<sup>&</sup>lt;sup>43</sup> A total of 128,280 RECs were retired for the GTSR Program (EcoChoice) for 2019. 87,617 RECs were retired from the interim pool and 40,663 RECs were retired from the GTSR project.

<sup>&</sup>lt;sup>44</sup> A total of 127,956 RECs were retired for the GTSR Program (EcoChoice) for 2020. 91,024 RECs were retired from the interim pool and 36,932 RECs were retired from the GTSR project.

<sup>&</sup>lt;sup>45</sup> D.15-01-051, Conclusions of Law 11 at 174.

<sup>&</sup>lt;sup>46</sup> ALJ's Ruling Granting Request for Green Tariff Suspension issued on August 25, 2022.

<sup>&</sup>lt;sup>47</sup> D.22-12-042, Ordering Paragraph 7 at 45.

LSEs and SDG&E was permitted to terminate the modified DAC-GT to its bundled customers. The GTSR-ECR unprocured capacity is reassigned to the modified Green Tariff, which will allow SDG&E to terminate the ECR offering as well. SDG&E's remaining procurement obligations from the GAP program are: (i) procurement through solicitations of the remaining capacity of 19 MW for the modified Green Tariff and (ii) to adopt CREP by utilizing the existing tariffs that are compliant with the federal Public Utility Regulatory Policies Act including REMAT and Standard-Offer-Contract. SDG&E has to implement these modified GAP programs and will update its RPS Plan with the progress accordingly.

#### **Energy Storage**

As of July 2024, SDG&E has a portfolio of approximately 1,400 MWs of energy storage which are operational, under-development or pending CPUC approval. This includes battery energy storage, hybrid PV/battery storage, microgrid energy storage and pumped hydro storage. 480 MW of this capacity is set to come online between 2024 and 2026.

Benefits of Energy Storage: Commission decisions 48 on energy storage list a myriad of grid management issues that can be addressed via storage, for example, contribution to reliability needs or deferment of transmission and distribution upgrade investments. 49 Storage also has the ability to respond to periods of renewable curtailment by charging during the overgeneration periods, harnessing the excess energy and potentially mitigating the frequency of negative pricing. Many of SDG&E's online facilities participate in the CAISO market. SDG&E increased its battery storage project participation in the CAISO market over the last several years. As mentioned, energy storage resources have the ability to take advantage of surplus renewable energy when it occurs, as they have the capability to absorb excess energy during times of high renewable generation and discharge it at times when supply is limited. As energy storage capacity increases, the ability of this resource to absorb excess energy may increase, which may decrease the need for economic curtailments.

Assembly Bill 2514: SDG&E is required to incorporate into its RPS Procurement Plan any energy storage targets and policies that are adopted by the Commission as a result of its implementation of Assembly Bill ("AB") 2514. 50 The Commission issued D.13-10-040 on October 17, 2013, requiring SDG&E to procure 165 MW of energy storage by 2020. On December 31, 2020, CPUC Executive Director Rachel Peterson granted SDG&E an extension to

<sup>50</sup> Cal. Pub. Util. Code § 2837.

<sup>&</sup>lt;sup>48</sup> See, e.g., D.13-01-040; D.14-10-045; and D.16-01-032.

<sup>&</sup>lt;sup>49</sup> D.13-10-040 at 9.

This decision established the policies and mechanisms for procurement of electric energy storage pursuant to AB 2514.

D.13-10-040, Ordering Paragraph 3 at 77, and Appendix A at 7.

2021 to support SDG&E meeting its AB 2514 procurement obligation. To date, SDG&E has completed the 2014, 2016 and 2018 energy storage procurement cycles. In March of 2020, SDG&E filed its Application for Approval of its 2020 Energy Storage Procurement Framework and Program (A.20-03-003), which described how developers terminated two of the third-party contracts leaving SDG&E approximately 6 MW short of its target. Additional third-party contract cancellations in the remainder of 2020 resulted in a deficiency of approximately 13 MWs. On April 21, 2022, the Commission issued D.22-04-044, <sup>53</sup> allowing SDG&E and the other Investor-Owned Utilities to count energy storage procurement that has occurred in other processes at the Commissions towards their AB 2514 targets through Tier 1 Advice Letters.<sup>54</sup> The Commission approved SDG&E's Advice Letter 4112-E via disposition on November 23, 2022, to count energy storage procurement that has occurred in other Commission processes towards its AB 2514 target. By counting 12.5 MW of Valley Center Energy Storage II towards its AB 2514 target, SDG&E has met its obligation. The Lake Hodges Pumped Storage Facility ("Lake Hodges"), a facility that commenced operation in 2012, has notified SDG&E that a force majeure event, which had interrupted service, was expected to continue indefinitely. Lake Hodges has indicated publicly that the project delays originally were thought to continue while emergency repairs were performed over 5-6 months but now indicates that the dam may have to be replaced. SDG&E has counted Lake Hodges towards compliance with its AB 2514 target requirements in past reports. SDG&E is forecasting zero RPS generation from this facility and is in discussions with the counterparty on next steps due to this extended force majeure event.

#### MANDATED RPS PROCUREMENT PROGRAMS

The Commission has implemented several mandated procurement programs, such as RAM, ReMAT, BioMAT, and BioRAM. These programs, with the exception of BioRAM, have resulted and will result in additional RPS procurement that SDG&E must include in its RNS calculation, which will impact SDG&E's position and procurement decisions. RPS-eligible procurement may occur both within and outside the RPS program. If authorized to procure renewable resources as a part of these initiatives, SDG&E will count such resources towards its RPS goals.

With regard to these programs, the Commission, as well as SDG&E, have long been interested in "develop[ing] a comprehensive and practical plan to combine IRP and RPS filings...." <sup>55</sup> SDG&E, along with Southern California Edison Company ("SCE") and Pacific Gas & Electric Company ("PG&E"), have submitted comments to the Commission as proponents to bring about greater efficiencies, avoid duplication, and enhance customer benefits by further aligning the RPS proceeding with the processes in the IRP proceeding.

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This decision adopted remaining direction regarding AB 2514 energy storage procurement targets and approving two energy storage programs pursuant to AB 2868.

<sup>&</sup>lt;sup>54</sup> D.22-04-044, Ordering Paragraph 1 at 42.

<sup>&</sup>lt;sup>55</sup> D.19-12-042 at 74.

To this laudable end, and with the considerations of keeping the costs and benefits of California electric consumers forefront in mind, SDG&E respectfully requests that the Commission now consider undertaking, with all affected parties, the work of having various long-standing RPS programs, such as ReMAT, BioMAT, BioRAM, etc., fully integrated into the robust resource-planning processes already well established in the Commission's IRP proceeding. To date, these programs have been exempt from IRP analysis. Some of these programs are now either antiquated or moribund, but at a minimum they are in need of a fresh look in light of IRP methodologies. Some of these programs may necessitate further legislative action to have them fully integrated into the IRP and considered on an apples-to-apples basis with other resources. But this review is long overdue, in SDG&E's opinion, given that these resources continue to be required to be purchased by SDG&E's customers, when they have not been evaluated regarding (a) the need for these particular resources, and (b) the above-market costs that SDG&E's customers must pay for these resources. This type of review is especially at this critical time in which so many SDG&E customers have difficulty paying for even modest electrical service, regardless of its provider.

SDG&E would like to invite the Commission to work with SDG&E and other interested parties to explore how we can, together, create greater consumer efficiencies by promoting wherever necessary the need for all supply resources to be subject to needs-based and least-cost analyses and utilizing the Commission's existing IRP processes to consider those resources within those existing processes.

#### **Renewable Auction Mechanism**

The Commission implemented its own mandated renewable procurement program, the RAM program in 2010. SDG&E's most recently approved RAM documents can be found in SDG&E AL 3206-E, effective April 28, 2018. D.14-11-042 allows the IOUs to propose an approval process for contracts resulting from the RAM process. At this time, SDG&E proposes no changes to the current Tier 2 AL RAM procurement approval process, but may propose alternate methods in subsequent versions of its RPS Plan.

# **ReMAT**

The ReMAT, established in 2012, is a feed-in tariff program for small renewable generators less than 3 MW in size. In accordance with the ReMAT program rules, SDG&E's Schedule Re-MAT Tariff closed, effective June 30, 2016. Per D.21-12-032, SDG&E reopened its ReMAT program in January 2023. SDG&E has not included RPS resulting from the ReMAT program in its RNS calculation as the incremental procurement volume and timing is unknown. SDG&E will incorporate any updated RPS quantities from ReMAT facilities once they have been procured.

<sup>&</sup>lt;sup>56</sup> AL 3206-E, available at <a href="https://tariff.sdge.com/tm2/pdf/3206-E.pdf">https://tariff.sdge.com/tm2/pdf/3206-E.pdf</a>.

# BioMAT<sup>57</sup>

SB 1122 was signed into law in September 2012, creating the BioMAT program. The program required IOUs to procure a total of 250 MW of bioenergy projects that are 3 MW or less. The categories of procurement are biogas from wastewater plants and green waste (110 MW), dairy or other agriculture bioenergy (90 MW), and forest waste biomass (50 MW). The BioMAT program benefits all California customers, and as a result of D.20-08-043, all BioMAT costs are required to be recovered through a non-bypassable charge. Currently, SDG&E has no BioMAT contracts, and its total available BioMAT capacity is 24.5 MW. <sup>58</sup> AB 843 allows CCAs to participate in the BioMAT program if capacity allocations remain available. This may reduce SDG&E's available capacity. SDG&E will incorporate any updated RPS quantities from BioMAT facilities if and when they are procured.

#### **BioRAM**

The BioRAM program was established in 2016 as a result of former Governor Brown's emergency proclamation. The program was created to aid in mitigating the threat of wildfires by utilizing high hazard zone biofuel from forests and other vegetated areas determined by CAL FIRE that pose a wildfire risk. The program requires IOUs to collectively procure 146 MW, of which SDG&E's share of that total is 19 MW. SDG&E has one 24 MW BioRAM contract which fulfilled its procurement obligation. Per Resolution E-4977, which implements SB 901, SDG&E was required to seek to extend its BioRAM contract for five years. Accordingly, effective July 19, 2019, the Commission approved AL 3356-E and 3356-E-A, extending SDG&E's BioRAM contract by five years. On October 16, 2023, the Commission issued Resolution E-5288 to implement the key provisions of SB 1109, which requires, among other things, the IOUs and Community Choice Aggregators with BioRAM contracts to amend their existing contracts or execute new contracts to include an extension of five years, so long as the eligible biomass facilities are not located in federal severe or extreme nonattainment areas for particulate matter or ozone. The Commission approved SDG&E's request to amend its HL Power BioRAM PPA in AL 4428-E on May 19, 2024.

D.18-12-003 requires SDG&E to make available for sale all of the future RECs associated with SDG&E's BioRAM contract(s) as PCC 1 RECs. SDG&E has utilized, and will continue to utilize, the Sales RFP documents attached herein (see Appendices 9-13) and will file an AL with the Commission for approval of any resulting contracts. According to the Decision, SDG&E may not use RECs associated with BioRAM contracts for compliance purposes. Therefore, SDG&E's RNS excludes RECs associated with BioRAM resource.

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SDG&E, Bioenergy Market Adjusting Tariff, available at <a href="https://www.sdge.com/bioenergy-market-adjusting-tariff-bio-mat">https://www.sdge.com/bioenergy-market-adjusting-tariff-bio-mat</a>.

<sup>58</sup> SDG&E previously contracted with a BioMAT facility which has since been terminated.

<sup>&</sup>lt;sup>59</sup> SDG&E met its BioRAM requirement in November 2016.

#### 1. **Long-Term Procurement**

Requirements set forth in D.17-06-026 require that 65 percent of each retail seller's procurement that can be counted towards the RPS requirement must be from contracts (or ownership or ownership agreements) with term lengths of 10 years or more in duration. SDG&E elected early compliance (beginning in CP 3) with the 65 percent long-term contracting requirement.

Of the RECs retired in CP 3 (2017-2020), one hundred percent were from long-term contracts. In 2024, SDG&E signed a short-term Public Utility Regulatory Policies Act of 1978 ("PURPA") contract with a landfill project. 60 In CP4 (2021-2024) and CP5 (2025-2027), 1 to 2 percent of SDG&E's forecasted RPS generation is from the PURPA short-term contract and the remaining RPS generation is from long-term contracts. SDG&E's developing projects generation is also from long-term contracts. Because SDG&E's RPS portfolio is made up almost exclusively of long-term RPS contracts, it is not at risk for noncompliance with the 65% long-term contracting requirement. Additionally, SDG&E frequently monitors its portfolio to ensure continued compliance with the RPS Program requirements, including the long-term contracting requirement. SDG&E is providing a summary of its long-term and short-term procurement as of July 2024, in the table below:

TABLE 4-1 **SDG&E'S PROCUREMENT SUMMARY** 

Compliance Period	Short-Term	Long-Term
2021-2024	Confidential (See Appendix	Confidential (See Appendix 1-
	1-RNS Narrative)	RNS Narrative)
2025-2027	Confidential (See Appendix	Confidential (See Appendix 1-
	1-RNS Narrative)	RNS Narrative)
2028-2030	N/A	4,568 GWh
2031-2034	N/A	5,195 GWh

<sup>&</sup>lt;sup>60</sup> D.20-050-006, Decision Adopting a New Standard Offer Contract For Qualifying Facilities of 20 Megawatts or Less Pursuant to the Public Utility Regulatory Policies ACT of 1978.

# C. Portfolio Diversity and Reliability

A wide variety of procurement programs exist both within and in addition to the RPS program. This variety contributes to SDG&E's overall portfolio diversity. An overview of SDG&E's mandated RPS procurement programs and preferred resources solicitation is provided above under Section IV; Section XV addresses the IRP process which aims to achieve resource diversity and reliability; and Section IV includes information on SDG&E's flexible capacity and storage procurement efforts. Additionally, SDG&E provides detail regarding how transportation electrification is considered in Section IV, and SDG&E's strategy for optimizing cost, value, and risk, which are also important considerations for both diversity and reliability purposes. Taken together, these various sections address how SDG&E has increased and will continue to increase the diversity of its portfolio and contribute to grid reliability, thereby resulting in customer value.

Another factor that influences SDG&E's portfolio diversity and helps to appropriately address integration and overgeneration is the LCBF calculation that SDG&E has used and will use to select shortlisted projects. The LCBF methodology appears in a document attached hereto as Appendix 9. The LCBF document also contains qualitative evaluation metrics, which play a part in selecting a diverse portfolio.

Additionally, SDG&E's Plan includes Section XIII, dedicated to economic curtailment, which outlines how SDG&E proposes to address the integration of renewables and the issue of overgeneration, both of which can contribute significantly to the incidence of economic curtailment. This section includes a discussion of SDG&E's analysis and activities, as well as information regarding contract modifications SDG&E has made over time to address curtailment. SDG&E notes that the ACR expressed an interest in how SDG&E is addressing the "under-utilization" of renewable energy. <sup>61</sup> This term implies that renewable energy is not being used to the extent possible when generated, which is not the case. As explained further in Section XIII, below, renewable generation is not load-following, and as such can result in overgeneration. One way to address overgeneration is through the use of energy storage. Section IV includes an update on the status of SDG&E's energy storage portfolio, as well as more detail regarding the potential of this technology to address overgeneration.

The various procurement activities and continued refinement of both the project valuation methodology and contracts are undertaken on behalf of SDG&E's customers to ensure that they receive a reliable, diverse and cost-effective portfolio of generation.

# **Alignment with Load Curves**

SDG&E evaluates load curves regularly to ensure that its portfolio meets hourly system needs. SDG&E's renewable resource procurement process analyzes these curves in three phases: (i) need identification; (ii) solicitation; and (iii) resource operations. All steps within this process

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<sup>&</sup>lt;sup>61</sup> ACR at 20.

consider the load curves and their implications on overall portfolio performance and system requirements. The need identification phase outlines the required resource characteristics based on SDG&E's existing portfolio and forecasted load. During the solicitation phase, projects with the characteristics identified in the first phase are sought, and portfolio and system requirements are incorporated into the analysis in the form of capacity value, congestion costs, and transmission costs (see the LCBF discussion below). And finally, once projects are operational, their generation can be managed as deemed necessary via curtailment and/or energy storage (see Sections IV and XIII for further detail).

SDG&E optimizes its RPS portfolio to meet and maintain its RPS compliance while minimizing customer costs, maximizing portfolio value and managing risk. SDG&E approaches this task from a variety of angles, as described below. SDG&E seeks to ensure an optimal, cost-effective portfolio mix based on technology, location, and contract length. SDG&E continually assesses opportunities to increase the value of its existing portfolio of contracts and the investment in SDG&E's RPS bank to maintain RPS compliance and mitigate financial and cost-allocation risks.

# **Advanced Emerging Technologies**

Advanced emerging technologies naturally support resource diversity due to their inherent novelty and propensity to render certain operations more efficient, cost-effective, and cleaner, to name a few benefits. The Commission should also continue to prioritize resource diversification by supporting the development of long-duration energy storage and other potential viable options such as hydrogen energy storage. Hydrogen energy storage can significantly reduce emissions and can play a critical role in complementing intermittent renewables for the state. Hybrid battery storage can also provide benefits to the grid, such as reliability, because storage can absorb excess solar during the day to be used at a time when renewable resources may be producing less. The IRP process will continue to help identify and allow advanced emerging technologies to become part of the State's portfolio of resources. Furthermore, the IRP can help to promote growth in and maturation of new technologies, including EVs, carbon capture, carbon sink options, etc., and allow them to be part of the solution for achieving the State's policy goals.

# D. Lessons Learned & Trends

The following sections discuss lessons learned regarding RPS supply and demand assessments and identify trends and potential future trends.

# **Supply Lessons Learned and Trends**

**Reduced Generation:** SDG&E recently experienced an unforeseen reduction of volumes delivered from a renewable project that suspended operations for a period of time from 2021 to 2022. During this period, the project delivered energy volumes below the expected delivery volumes. If this creates a compliance need in the future, SDG&E will utilize its bank and/or procure more RPS resources to meet RPS requirements.

**REC Sales Considerations:** A firm REC sales agreement requires SDG&E to deliver a guaranteed volume of RECs to a counterparty, typically from a "pool" of renewable facilities. The purpose of the "pool" is to ensure the counterparty receives its full contracted volume. For example, if SDG&E agreed to deliver 10,000 RECs in one year to a counterparty, and Pooled Facility #1 generated 8,000 MWhs, one or more facilities from the "pool" must deliver the remaining 2,000 MWhs needed to fulfill the obligation of the contract. This type of transaction is considered a "firm" transaction.

The alternative to a firm REC sale agreement involves a counterparty agreeing to an as-available volume of RECs from one specific renewable facility. If the facility delivers less than expected, SDG&E is not required to make up the difference with the "pool" because there is no "pool" from which to back-fill shortfall quantities in non-firm REC agreements. This type of transaction is considered a "non-firm" transaction.

SDG&E sees advantages with both firm and non-firm transaction types. Non-firm transactions reduce the risk that a certain technology or facility(ies) in the RPS portfolio underperforms because SDG&E would not be obligated to "make up" RECs from its portfolio that may have been needed for SDG&E's compliance.

**Overbuilding:** SDG&E has had experience with developers providing profiles in prior solicitations that did not match the profiles of the facilities that were ultimately built. In other words, developers "overbuilt" facilities (*i.e.*, installed capacity above the amount bid and/or shaped the production profile to take advantage of higher-priced Time of Delivery ("TOD") periods). The resulting overgeneration has increased costs to customers through increased contract costs, and increased generation overall which increases the incidence of and payments to CASIO for negative real-time energy pricing. SDG&E has modified its pro forma PPAs several times to discourage this practice going forward and will continue to reevaluate its contract provisions in subsequent versions of the plan, as new information becomes available, to determine if and how its contracts should be updated.

**Energy Storage and Curtailments:** Battery storage can work in tandem with renewables which may help reduce economic curtailment events. Energy storage could help alleviate economic curtailments by taking the excess supply off the grid. To address reliability concerns, the Commission ordered 3,300 MWs of capacity procurement in D.19-11-016, and an additional 11,500 MWs in decision D.21.06-035 and 4,000 MW in D.23-02-04.<sup>62</sup> In response, SDG&E

<sup>62</sup> D.19-11-016 at 48-49.

conducted all-source solicitations, in which eligible renewable energy resources could bid in. SDG&E found that of the bids offered, the majority were not renewables given the commercial online date requirements, and instead were battery storage solutions, or hybrid storage and renewable solutions. Ultimately, the development of battery storage could reduce the renewable curtailments currently faced by the CAISO and LSEs.

Capacity Value: SDG&E's method for calculating energy and capacity values uses a benchmark where energy values are shaped hourly based on a forecast of SP15 energy prices and the results of production cost modeling that yields an hourly energy shape that covers the contract term. The capacity value is shaped hourly using a Loss-of-Load Probability ("LOLP") study for a representative year of the contract term. The process assigns higher capacity value to hours of greater capacity need, which more accurately reflects the impact of variable energy resources upon capacity needs. The calculation provides annual capacity values for both local and IV/System area projects. These annual values are then taken through a process which creates monthly capacity values using the LOLP mentioned above, then down to an hourly level using the monthly values.

These benchmark values are reasonable because, when evaluating a contract on a standalone basis, it should be measured against the avoided costs the utility might face had this contract not been part of the portfolio. For example, if SDG&E had a resource in its portfolio, and that resource was crucial to meeting local resource adequacy requirements, the marginal value of that resource is the amount that SDG&E must pay to replace that resource if it becomes unavailable, plus the cost to replace the energy that resource would have generated to serve hourly retail load. SDG&E will update its calculations as the assumption sources are updated.

**Delay of COD Declaration:** SDG&E is concerned that a facility could reach commercial operation prior to the contractual commercial operation date ("COD"), but delay declaring COD until the guaranteed COD date in the contract. As a result, the facility would be paid for this energy at the contract price, thereby extending the term of its contract, resulting in an additional cost to customers. To mitigate this issue, SDG&E's PPAs provide that energy delivered prior to COD will be paid for at a reduced contract price.

**Steady Project Success Rates:** As the market for renewable energy has matured, SDG&E has observed a positive trend in project success rates. As explained above, SDG&E reviews the status of all projects in its portfolio frequently to incorporate the most recent information into its forecast and will continue this practice.

#### **Demand Assessment Lessons Learned and Trends**

Proliferation of CCAs and the provider of last resort ("POLR"): IOUs are experiencing significant amounts of departed load as a result of the proliferation of CCAs in the territory which results in the reduction of SDG&E's bundled retail sales. In SDG&E's service territory, the City of Solana Beach formed the Solana Energy Alliance and began operations in 2018 as the first local CCA, and has since joined the cities of Carlsbad and Del Mar to form the larger Clean Energy Alliance ("CEA"). San Diego Community Power ("SDCP") began serving load in 2021, with customers in the cities of San Diego, Chula Vista, Encinitas, La Mesa and Imperial Beach. Together these two CCAs currently represent over 1,196,282 accounts and close to 60 percent of SDG&E's total load. Both CCAs have filed updated implementation plans and added additional communities in 2023; the County of San Diego and the city of National City joined SDCP, and the cities of Escondido and San Marcos joined CEA. Orange County Power Authority ("OCPA") planned on launching in 2023, to serve SDG&E customers in the unincorporated area Orange County. In early 2023, the Unincorporated County of Orange withdrew from OCPA. In 2024, additional local cities enrolled to CCA service with CEA, who updated its implementation plan in 2022 to add the cities of Oceanside and Vista. With these additional departures, SDG&E expects a lower load share from the region past 2024 as discussed in Appendix 1 – RNS Narrative. As load departs from bundled service, the traditional role played by the IOUs in commodity procurement will need to be re-evaluated.

**Peak Shifting:** Due to the success of the RPS program, a significant amount of renewable energy continues to be added to the grid. Substantial amounts of rooftop solar are also being added by customers behind the meter. As a result, the peak load net of variable energy resources has and will continue to shift as the California resource portfolio evolves. Renewable resources have low variable costs, and thus when they are delivering at high penetration levels during any single time during the day, doing so may result in significant decreases in marginal energy prices and significant ramping events. SDG&E is monitoring the impacts of this issue in the IRP proceeding.

Meeting Demand for Higher Levels of Renewables: In addition to the State's goals (the most recent development of which was SB 100), many customers and communities within SDG&E's service territory are interested in electricity service with even higher levels of renewables than required by law. Related to SDG&E's RPS planning efforts, SDG&E will continue to consider ways in which SDG&E can potentially support offerings that are made available to customers throughout the SDG&E service territory to help meet these goals.

#### V. PROJECT DEVELOPMENT STATUS UPDATE

The adopted Reference System Plan ("RSP") from the 2019-2020 IRP cycle, which was approved in D.20-03-028, showed a need for developing new resources. Due to system reliability concerns, the Commission initiated a procurement track and ordered an additional amount of 3,300 MW. SDG&E has since entered into contracts with multiple counterparties for its allocated procurement. Additionally, in both D.21-06-035 and D.23-02-040, the Commission required the procurement of additional resources, some of which may be RPS eligible. RPS resources procured in SDG&E's IRP-related procurement activities will be included in the Project Development Status Update, and their RPS volumes will be considered after adjusting REC deliveries for potential project failure. More information on SDG&E's RPS procurement alignment with the IRP can be found in Section XV.

The SDG&E project development status update also includes projects procured through other mandates. SDG&E signed a PURPA contract with one hybrid solar plus battery energy storage project, pursuant to D.22-06-003. In future updates, SDG&E will include any projects procured in the ReMAT and BioMAT feed-in-tariff procurement initiatives.

SDG&E regularly evaluates each project's development status to assess each project's ability to begin deliveries pursuant to contract terms and conditions. SDG&E's portfolio of renewable energy resources currently under contract but not yet delivering (either pre-construction or in construction) are in various stages of development. Projects under development generally require numerous permitting approvals, generator interconnection, financing, and completion of construction before they can achieve commercial operation. Each of these issues adds significant risk to the development of a project and can directly impact the success or failure of a project.

Generally, projects in the pre-construction phase are most at risk of failure. However, projects under construction may also encounter issues that could affect their ability to achieve commercial operation, such as successful litigation against the project or exposure to events of Force Majeure. In general, projects that have achieved commercial operation have a high probability of meeting their contractual obligations; however, project failure or resource fluctuations (e.g., a bad wind year, pandemic, etc.) can create challenges. Although a developer's experience may improve the likelihood of a project achieving commercial operation, it does not ensure that a project will be successful. Sections IV, VI and VII of this Plan discuss the various delays and risks that could impact projects in various stages of development.

Regarding the impact of project development status on SDG&E's RNS, as a practical matter, until a project actually begins commercial operation, it bears significant development risk. All

<sup>&</sup>lt;sup>63</sup> D.20-03-028, Finding of Fact 21 at 97.

<sup>&</sup>lt;sup>64</sup> D.19-11-016 at 48-49.

three projects were assigned failure rates, as further discussed in Section VII. SDG&E files monthly and quarterly RPS Database reports with the Commission, which include updates and status for each RPS project. SDG&E bases its forecasting, and therefore its RNS calculation, on its individual project assessments, as is described in more detail in Section IV. It also relies on the lessons it has learned and trends it has observed as a result of the RPS procurement process, as discussed in more detail in Section IV. The above factors contribute to SDG&E's monthly project assessments of the likelihood of each project's success. The result of these cumulative assessments is reflected in the RNS, which SDG&E will use to inform its procurement activities.

Information regarding SDG&E's developing projects, including location, which SDG&E has made public pursuant to D.22-01-004, can be found in Appendix 1.

#### VI. POTENTIAL COMPLIANCE DELAYS

# **Potential Issues that Could Impact RPS Compliance**

The market for renewable energy is dynamic, and multiple factors can impact project development and SDG&E's attainment of its RPS program goals. The following discussion addresses many of the major issues affecting both renewable project developers and SDG&E.

**Transmission Interconnection / Coordination with CAISO:** The timely approval, permitting, and completion of interconnection facilities is crucial to the successful implementation of SDG&E's renewable portfolio. Issues may arise due to transmission facility planning that could impact project development timelines. An inadequate amount of transmission capacity can result in insufficient eligible resources that would be needed for resource adequacy.

The recent approval of major transmission upgrades by CAISO supports solving this issue, however, many projects require long lead times to permit and build. 65 SDG&E monitors these issues and actively participates in the CAISO's Transmission Planning Process ("TPP"), including by responding to competitive solicitations and proposing its own projects when appropriate. The CAISO also recently approved changes to the interconnection process in its Interconnection Process Enhancements ("IPE") initiative, where projects will only be studied in a CAISO cluster if there is sufficient capacity available at their point of interconnection within a transmission planning deliverability zone. 66 Longer term direction regarding the projected cost savings associated with the reduced need for local generation may become more evident based on the results of the Commission's

<sup>66</sup> CAISO Draft Final Proposal – Interconnection Process Enhancements 2023 Track 2 and addendums (https://stakeholdercenter.caiso.com/StakeholderInitiatives/Interconnection-processenhancements-2023).

<sup>&</sup>lt;sup>65</sup> California ISO 2023-2024 Transmission Plan (https://www.caiso.com/documents/iso-board-approved-2023-2024-transmission-plan.pdf)

IRP process.

Jurisdictional Agency Permitting Delays: Project permits and environmental reviews under CEQA and National Environmental Policy Act ("NEPA") can pose significant risk for projects under development. Project cost, design, and schedule can be adversely affected by permitting requirements and environmental reviews, which depend on a multitude of project-specific factors, including location, environmental impacts, agency staffing resources, and public participation or controversy. Project permitting can result in scheduling delays or project conditions, which in turn can affect site control, financing, other agency permitting, engineering and design, and procurement of equipment and materials. In addition, the costs to mitigate environmental impacts or to respond to public concerns can significantly impact project viability, finances, or schedule.

**Debt Equivalence and Accounting:** Two additional issues may challenge SDG&E's ability to achieve its RPS goals. The first involves debt equivalence. The cumulative debt equivalence of executed PPAs could affect SDG&E's credit profile and, consequently, its financial standing. Some rating agencies include long-term fixed financial obligations, such as PPAs, in their credit risk analysis. These obligations could be treated as additional debt during their financial ratio assessment. Core ratios including Funds From Operations ("FFO") to Debt and Debt to Earnings Before Interest, Tax, Depreciation and Amortization, as well as other supplementary ratios, are critical components of a utility's credit profile. Debt equivalence could negatively impact these ratios. Unless this risk is mitigated, a PPA would negatively impact SDG&E's credit profile by degrading credit ratios.

The second issue relates to Accounting Standards Codification ("ASC") 810 Consolidation, which includes the subject of Consolidation of Variable Interest Entities ("VIEs"). Application of ASC 810 as it pertains to consolidation of VIEs could also impact SDG&E's ability to sign new contracts. As part of SDG&E's overall internal review and approval process for new PPAs, SDG&E conducts a review of whether each PPA will be subject to consolidation under ASC 810. Under ASC 810, no renewable PPA has been deemed subject to such consolidation, however, ASC 810 requires SDG&E to reconsider whether PPA counterparties are VIEs upon the occurrence of certain reconsideration events. For this reason, SDG&E believes that it is required to assess quarterly each contract or category of contracts to ensure continued compliance with ASC 810, to determine whether SDG&E must consolidate a counterparty's financial information with SDG&E's quarterly financial reports to the Securities and Exchange Commission. The accounting rules can change. Thus wind, solar, geothermal and bio-gas counterparties could be impacted.

Application of ASC 810 could hinder SDG&E's ability to achieve its RPS goals and

add further costs and risk to execution of new renewable contracts. If SDG&E determines that consolidation is required, a counterparty must open its books to SDG&E and submit financial information, on a quarterly and monthly basis, as specified in SDG&E's contract language for the duration of the relevant agreement.

All PPAs may be affected by either debt equivalence or ASC 810 requirements. The Commission is aware of the negative impact of debt equivalence on SDG&E's credit profile. AB 57 requires that the Commission adopt procurement plans that, among other objectives, enhance the creditworthiness of the utility. ASC 810 will affect SDG&E's reported financial data and may have a negative impact on SDG&E's balance sheet and/or credit profile. ASC 810 could impact SDG&E's capital structure on a consolidated basis and cause it to be misaligned with its authorized capital structure. To the extent SDG&E must seek to mitigate the impacts of debt equivalence and ASC 810, it will do so through a separate cost of capital filing.

Insufficient Supply of Renewable Resources / Reduced Generation: As described above under Section IV, SDG&E expects to meet its CP goals through 2034 with its portion of the RPS portfolio after impacts of the Portfolio Optimization Decision are considered and, thereafter, by utilizing the bank or by procuring new renewable resources through competitive solicitations or bilaterally, as needed.

SDG&E experienced an unforeseen reduced generation wherein a project delivered below the expected deliveries in CP4, as discussed above under section IV. D., Lesson Learned and Trends. SDG&E expects the project to fully operate and expects no risks such as reduced generation in the future deliveries.

The majority of the facilities with which SDG&E has contracted are operating, as can be seen in the probability weighted tables in Appendix 1. It is unlikely that an event, or series of events, will undermine SDG&E's ability to procure energy from these resources. However, as discussed more fully in Sections IV and IX, SDG&E has established an MMoP which guards against unforeseen circumstances with projects that are in development and has the option to develop a VMoP.

**Unanticipated Curtailment:** As explained in more detail below under Section XII, the incidence of curtailment has increased and will continue to do so as more and more intermittent renewable generation is brought online. SDG&E's current strategy inherently addresses curtailment as it seeks to mitigate the need to curtail by procuring a diverse portfolio of resources that account for system needs as described above in Section IV, and by refining its RPS PPA to ensure that the projects that are ultimately built reflect the project as bid, also described under Section IV. Additionally, SDG&E has taken steps in its RPS PPA to provide for economic curtailment rights, and these past RPS PPA modifications are referenced in Section XIII below.

Unanticipated Increases in Retail Sales: SDG&E's retail sales forecast methodology, which is intended to capture both increases and decreases, is explained above under Section IV. SDG&E is the "provider of last resort" in its service territory, which means that in the event of an LSE failure, its customers would return to SDG&E. This event would increase SDG&E's retail sales and would necessarily increase SDG&E's RPS requirements, potentially in excess of its forecasted procurement needs. <sup>67</sup> Furthermore, if unforeseen event or series of events increase SDG&E's retail sales to a level that prevents RPS compliance, SDG&E will utilize its bank and/or procure additional resources to meet compliance.

#### **Impact of Potential Delays**

SDG&E bases its RPS generation forecasting, and therefore its RNS calculation, on its individual project assessments, as described in more detail in Section IV. For example, a project that has been experiencing permitting issues would receive a probability weighting reduction to account for this risk until the issue is resolved. SDG&E also considers lessons learned and trends it has observed as a result of the RPS procurement process. The factors discussed in this section contribute to SDG&E's continuous assessment of the likelihood of each project's success. The results of these cumulative assessments are reflected in the RNS, which SDG&E will use to inform its procurement activities. SDG&E does not anticipate any RPS compliance delays at this time.

#### VII. RISK ASSESSMENT

SDG&E's current overall assessment is that projects in its portfolio have a low risk of non-performance due to SDG&E's expectation that the risk factors mentioned below remain relatively stable. Other factors that could impact SDG&E RPS compliance, such as load departure and variable generation, are also low risk because SDG&E has a REC bank it could use to meet compliance, including the 65% long-term contracting requirement.

# **Compliance Risk**

SDG&E assesses project risk on an ongoing basis utilizing written assessments from developers and periodic status update meetings with developers, especially as it relates to building new resources, delayed construction, and determining whether there is a risk that power will not be delivered. In assessing SDG&E's risk, it is important to first note that SDG&E has fewer projects in development than in prior years and, in general, current project development has been more successful in reaching commercial operation. Given that information, SDG&E's risk assessment is mainly qualitative. For example, SDG&E's RNS includes a delivery failure rate which is the probability weighted deviation below expected forecast generation of projects under

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Issues associated with the "Provider of Last Resort" (POLR) service are being explored in R.21-03-011.

development. The probability rate is weighted and is determined qualitatively and supported by historical project failure rates and subject matter expert knowledge and judgment. Two of SDG&E's three projects under development are in the pre-construction phase and were assigned a high-risk failure. The other one project's status was recently updated to construction phase and will be assigned a medium-risk failure rate. Risks factors are explained below.

As directed by D.23-12-008, SDG&E is assigning low, medium and high-risk factors to its developing projects and will be using project milestones (project development phases) to establish failure rates, in addition to qualitative measures. This approach inherently incorporates risks related to permitting, transmission development, supply chains and financing, because many of those items allow a project to reach a new milestone. First, the projects in the pre-construction phase, such as projects waiting for CPUC approval, permits and interconnection agreement, generally will be assigned a high-risk factor. Second, the projects that are in the construction phase may encounter issues including, but not limited to, financing, supply chain, interconnection, project delayed construction/completion rate and transmission development, generally will be assigned a medium-risk factor. Finally, the projects that are in the post-construction phase generally will be assigned a low-risk factor. These are the projects that may encounter issues including underperformance of delivering projects/delivery failure rate. Additionally, if a project in the construction phase misses a scheduled PPA milestone, it will be assigned a high-risk factor. SDG&E's RPS eligible procurement in its RNS accounts for the Minimum Margin of Over-Procurement ("MMoP"). The MMoP accounts for project development risks. SDG&E's forecasted failure rate for projects under development is illustrated in Appendix 1's Risk Assignment table. As further discussed in Section IX, to calculate the risk-adjusted forecasted generation in the RNS calculation, failure rates are deducted from 100% and then multiplied by the expected generation.

SDG&E periodically evaluates the risk that delivering projects will underperform. In SDG&E's experience, developers are inherently motivated to achieve their COD for their facilities and maintain successful operations due to several factors: (i) the significant investment required to achieve COD; (ii) the timely payments made for energy delivered once COD is reached for its debt service; and (iii) the penalties incurred if the project does not meet commercial operation or its contractual requirements to supply the minimum amount of energy established in the contract.

As explained above under Section IV, SDG&E expects to meet its CP goals through 2034 with RPS eligible procurement already under contract, by leveraging the bank, and/or by procuring new renewable resources, as needed. SDG&E's risk of noncompliance is low considering its bank of RECs.

# **Risk Modeling and Risk Factors**

As discussed above, SDG&E uses qualitative measures to determine project development risk. SDG&E acknowledges risk associated with other factors, such as lower than expected generation, load departure/growth, variable generation, and resource availability. At this time, SDG&E does not conduct traditional modeling to account for these risks, and instead utilizes a three-year average of prior project deliveries. This approach captures natural fluctuations in deliveries that are likely to continue into the future, including lower than expected generation and variable generation. SDG&E assesses minimal risk associated with resource availability for facilities that rely on biofuel or water for hydro. SDG&E has one bioenergy facility through the BioRAM program and is prohibited from using those RECs towards its compliance requirement. Impacts from resource availability for BioRAM facilities do not affect SDG&E's RPS. SDG&E projects minimal risk in customer opt-outs, which may increase SDG&E's load. Customer opt-outs are monitored and are accounted for in retail sales forecast. If SDG&E does not procure renewable energy in a timely manner due to a sudden increase in SDG&E's load, SDG&E's bank could sustain its SDG&E's RPS compliance through 2034.

SDG&E's consideration of project development risk, generation fluctuation, and load departure are factors SDG&E considers when evaluating its RPS compliance requirements. Importantly, as stated above, SDG&E has a REC bank that may be utilized if an unforeseen circumstance were to occur.

# **Diversity & Reliability**

As explained under Section IV, a wide variety of procurement programs exist within and in addition to the RPS program. These programs contribute to SDG&E's overall portfolio diversity and support reliability. In addition to the information in Section IV, it is important to note that the IRP process prioritizes system reliability. Section XV provides additional information on the IRP process.

#### **Lessons Learned**

SDG&E has observed some dynamic factors that may affect power production from delivering projects:

Resource Availability and Variable Generation: Renewable resources depend on natural sources of energy that are variable and can be impacted by various factors. For example, a year with lower-than-expected wind can greatly impact a wind facility's performance and cause lower than expected generation. Another factor that could also impact generation is the occurrence of unexpected mechanical failures, which could cause a facility to be partially or fully unavailable until the issue can be resolved.

**Regulatory Changes:** The expiration of subsidies, additional requirements or unanticipated consequences resulting from changes in regulations, could impact the revenue stream and increase costs for RPS developers, which in turn could

lead to reduced production if the project has difficulty in supporting this lower revenue stream.

**Economic Environment:** The interest rates and flexibility of financing arrangements entered into by developers can impact a project's success. Longterm project financing arrangements with unfavorable terms can lead to project failure or reduced production if the project has difficulty in supporting the financing cost requirements. Additionally, economic factors such as increasing inflation, labor shortages, trade restrictions and tariffs that negatively impact a generator's supply chain could impact its ability to comply with contract terms.

**Evolving Technology:** Facilities with older generation technology that is no longer supported by the manufacturer can experience project failure or reduced production. This problem is arising now for older RPS projects and could occur in the future as the projects built in the past begin to age.

**Issues with Third Party Mandatory Systems:** CAISO and WREGIS systems have experienced technical issues in the past, and potential technical problems with these systems going forward could complicate the compliance process.

#### VIII. RENEWABLE NET SHORT

The analysis attached hereto in Appendix 1 shows the Commission's prescribed RNS calculation with supporting probability weighting calculations by project and impacts of Voluntary Allocation and Market Offer. The RNS calculation illustrates the impacts of the IRP MTR Procurement Order and the allocation of SDG&E's PCIA-eligible RPS portfolio to LSEs, and includes long-term contracts only through 2034. SDG&E is using the approved allocation methodology in AL-3835E to determine its eligible RPS generation based on load share. As mentioned above, SDG&E includes two scenarios that illustrate SDG&E's RPS position based on the recent CEC retail sales forecast (Appendix 1a – conforming scenario) and SDG&E's internal retail sales forecast (Appendix 1b – alternative scenario).

SDG&E intends to monitor the vintage and remaining life of its RECs to maximize their value to the portfolio by retiring them at the most opportune time. This point was discussed in more detail in Section IV, above.

# IX. MINIMUM MARGIN OF OVER-PROCUREMENT ("MMOP")

# A. Minimum Margin Methodology & Inputs

SDG&E has established an MMoP, which is incorporated into SDG&E's RPS eligible procurement volume as shown in its RNS. SDG&E's MMoP is intended to account for project failures or

delays and will inform whether additional procurement is needed for SDG&E to achieve its RPS requirements despite project development risks. SDG&E's forecasted failure rate assignments for projects under development is provided in Appendix 1 and discussed in detail in the Risk Assessment section of this Plan. As a result, SDG&E anticipates an increase in procurement based on the failure rate to compensate for the potential failure. This additional procurement needed to account for this failure rate would vary year by year depending on load. SDG&E has the option to incorporate a Voluntary Margin of Procurement ("VMoP"), which is another form of project development risk mitigation. The VMoP further adjusts REC deliveries beyond the MMoP risk adjustment which results in more RECs being needed to meet RPS requirements. SDG&E does not make further adjustments to REC deliveries by using the VMoP due to the limited number of contracts under development and availability of its REC bank. SDG&E's RPS Risk Adjusted<sup>68</sup> RNS Calculation, as shown in Appendix 1, provides an MMoP and does not include a VMoP.<sup>69</sup>

SDG&E's RNS calculation and MMoP methodology for each year is based on the following formula:

**RPS Risk-adjusted Net Short** = (Bundled Retail Sales Forecast x RPS Procurement Quantity Requirement + Voluntary Minimum Margin of Procurement (if any)) – (Online Generation + Risk-adjusted Forecast Generation + Pre-approved Generic Generation). <sup>70</sup>

#### Where:

- Bundled Retail Sales Forecast = the forecast developed in accordance with Section IV.
- RPS Procurement Quantity Requirement = the target for the relevant CP or year.
- **Voluntary Minimum Margin of Procurement** = zero.
- Online Generation = the generation that SDG&E expects will be delivered by its portfolio of RPS projects that have achieved commercial operation, as discussed in Section IV.

Probability weightings by assigning severity of risk and a corresponding failure rate to each developing project, are used to adjust estimated deliveries based on the likelihood that each developing project will reach COD, as well as the likelihood that each delivering projects will continue to deliver as estimated. The probability weighting process identifies the volume of generation under contract that SDG&E is likely to receive and be able to apply towards its RPS compliance. Based on this analysis, SDG&E can determine what additional procurement, if any, is necessary to reach its RPS targets while considering project development risk.

<sup>69</sup> See Row D of the RNS Table in Appendix 1.

All generation data listed in any of SDG&E's RPS Plans, as well as any of its RPS Plan Appendices, are from contracts that have been approved or pre-approved by the Commission.

- Risk-adjusted Forecast Generation = the generation that SDG&E expects will be delivered by its portfolio of RPS projects that have not yet achieved commercial operation, as discussed in Sections IV and VII. This volume includes SDG&E's MMoP which is based on compliance risk factors' assigned project failure rate. Risk-adjusted Forecast Generation = Expected Deliveries x (100% Risk Failure Rate)
- Pre-approved Generic Generation = unsubscribed volumes that SDG&E is required to procure under fully implemented CPUC-mandated procurement programs (RAM and ReMAT).

# B. Minimum Margin Scenarios

SDG&E's RPS portfolio consists of entirely long-term contracts with facilities that have already commenced commercial operations and three projects that are under development. As discussed previously in section VII, SDG&E's developing projects are assigned either a high or medium risk as they are in the pre-construction or construction phase. According to SDG&E's RNS table in Appendix 1, SDG&E has a substantial REC bank which could be used for compliance if needed. Given these facts, SDG&E's risk of noncompliance with the RPS program requirements is low, therefore its VMoP is currently zero. However, SDG&E continues to monitor its portfolio to determine if impacts from load departure will affect SDG&E's VMoP strategy.

# X. BID SOLICITATION PROTOCOL

#### A. Solicitation Protocols for Renewables Sales

#### **Lessons Learned**

SDG&E requests authorization in its 2024 RPS Plan cycle to enter into RPS solicitations, as necessary, to meet the applicable RPS requirements and to further optimize its RPS portfolio by pursuing transactions that benefit SDG&E's customers. Competitive bid solicitations, such as RFPs, bring together the largest possible number of market participants to make offers to buy RPS resources from SDG&E's RPS resources that are available for sale, thus promoting market liquidity and competition. SDG&E also considers entering bilateral, broker or exchange transactions if SDG&E finds this option to have more benefits. SDG&E may have to enter into agreements bilaterally, or via brokers and exchanges to find the best value for RECs and to ensure that REC deliveries commence in a timely manner. SDG&E regularly evaluates its portfolio needs to determine whether RFPs present advantages to the alternative of bilateral transactions. Through early iterations of the RPS REC sale RFP process, SDG&E identified the importance of adhering to a comprehensively developed schedule when conducting a solicitation. Deliberate planning and anticipating potential delays in the contract execution and approval processes promote meeting all objectives in a timely manner.

# **Sales Solicitation Documents**

Attached hereto in Appendices 9-14 are SDG&E's proposed RPS Sales documents:

- Appendix 11 2024 RPS Sales RFP
- Appendix 12 2024 RPS Sales Model PPA (Bundled Product)
- Appendix 13 2024 RPS Sales Model PPA (Unbundled Product)
- Appendix 14 2024 RPS Sales Offer Form
- Appendix 15 2024 Framework for Assessing Potential RPS Sales
   CONFIDENTIAL<sup>71</sup>
- Appendix 16 2024 BioRAM RPS Sales Model PPA (Bundled Product)

# **Request For Information for Assignment and Novation**

SDG&E's 2022 RFI was distributed to a large amount of market participants as described above, SDG&E has consulted with PRG and has been monitored closely by an IE to oversee the process. There were no executed contracts that resulted from this process. As contemplated in D.21-05-030, SDG&E held another RFI in 2023. SDG&E's RFI process and plans are further discussed in section IV. A.1. If necessary, SDG&E may enter into an agreement through RFI bilaterally and will request approval through a Tier 3 Advice Letter.

#### B. Bid Selection Protocols

In this 2024 Draft RPS Plan, SDG&E is requesting the option to hold an RPS procurement solicitation to address its short portfolio position in CP5, with consideration of the additional RPS-eligible supply may result from the procurement mandated to address the needs identified in the IRP. Listed below are appendices related to RPS procurement including an additional template to accommodate the hybrid resource technology that qualifies as an RPS resource SDG&E posts information on current and historical RFOs and RFPs on its website. <sup>72</sup>

- Appendix 5 2024 RPS Long-Term Model PPA
- Appendix 6 2024 RPS Short-Term Model PPA
- Appendix 7 2024 Hybrid RPS Generation Plus Storage PPA
- Appendix 8 2024 RPS REC Agreement
- Appendix 9 2024 Least-Cost-Best-Fit
- Appendix 10 2024 Procurement Protocols
- Appendix 19 2024 RPS Procurement Offer Form

The Commission has approved SDG&E's Tier 3 Advice Letter 4368-E submitted on January 16, 2023 requesting review and approval for its Bid Selection Protocols ("Solicitation Protocols").

Public versions of SDG&E's RPS Plan will include documents with confidential terms redacted.

<sup>&</sup>lt;sup>72</sup> SDG&E, RFPs and RFOs, available at <a href="https://www.sdge.com/more-information/doing-business-with-us/rfps-rfos">https://www.sdge.com/more-information/doing-business-with-us/rfps-rfos</a>.

#### C. LCBF Criteria

# **Workforce Development Assessment Proposal**

A Workforce Development Assessment is included as a qualitative factor, which addresses projected California employment growth during construction and operation, within SDG&E's LCBF. The information used in this Assessment will be gathered as part of the required bid information for any solicitations which include renewable resources. The Assessment results will be qualitatively compared among all renewable resource bids within the solicitation which will inform the final bid ranking.

# **System Reliability Consideration**

System Reliability consideration is included in the quantitative calculation. SDG&E calculates its NMV as part of its bid evaluation and selection process. Resources with more Capacity Benefits may have a higher NMV and most likely be ranked higher. The details of LCBF and NMV calculation is further discussed in SDG&E's LCBF Methodology (Appendix 8).

# **Assessment of Benefits to Disadvantaged Communities**

In D.04-07-029, the Commission directed the use of "benefits to low income or minority communities" as a qualitative factor in the LCBF analysis. Consistent with this direction, SDG&E has applied this factor on a qualitative basis along with several other qualitative factors (see Appendix 9 for a full list). Benefits to the community are either described by the developer in the project description form or can be requested by SDG&E if not provided. The results of SDG&E's LCBF analysis (quantitative as well as any additional qualitative) are shared with the PRG and also described in the AL seeking approval for SDG&E's shortlist.

#### **State Policies**

SDG&E includes bid evaluation considerations that are policy-related and cannot be quantified in its qualitative bid review process, outlined in Appendix 9, attached hereto. These factors include equity (addressed by the Disadvantaged Communities component), the environment (addressed by environmental stewardship component), and economic development (addressed by the Workforce Development Assessment component). Additionally, to address the issue of safety, SDG&E has added a safety component to the qualitative portion of the LCBF process.

# **Information-Only TOD Factors**

Pursuant to D.19-02-007, SDG&E participated in a stakeholder process to develop information-only TOD factors, and the Commission approved SDG&E, PG&E's and SCE's May 29, 2019 Joint IOU Information-Only TOD Factor proposal ("TOD Proposal"). SDG&E's approved TOD Factors for 2020 and 2024 are within the Commission-approved May 29, 2019 TOD Proposal, and

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<sup>&</sup>lt;sup>73</sup> D.19-12-042.

Appendix 3 includes workpapers to confirm there is a high correlation between the public information-only TOD factors and SDG&E's confidential forecasts, per OP 26 of D.19-12-042.<sup>74</sup>

#### XI. SAFETY CONSIDERATIONS

# **Development and Operation of RPS-Eligible Generation**

SDG&E is committed to providing safe, reliable and environmentally sound electric service for its customers. As discussed in Appendix 4, SDG&E's RPS Plan contemplates procurement of RPS-eligible generation through both PPAs and utility owned generation ("UOG"). SDG&E's emphasis on safety is reflected in: (i) the terms and conditions contained in the pro forma PPAs used in its various procurement programs; and (ii) the safety procedures that all contractors working on UOG facilities are required by SDG&E to follow.

# **RPS Procurement Activities Designed to Address Safety**

There are several components to RPS procurement activities designed to address safety, such as vegetation management, climate change impacts, decommissioning facilities, and customer impacts due to Public Safety Power Shutoff ("PSPS") events which are discussed below. Additionally, SDG&E prioritizes safety and includes a safety component in SDG&E's LCBF criteria.

**Vegetation Management:** SDG&E is also a leader in wildfire safety, preparedness and mitigation. Through its comprehensive Vegetation Management Program, SDG&E manages approximately 490,000 trees and 35,000 poles associated with the electrical infrastructure, thus reducing the risk of vegetation-infrastructure contact outages and ignitions. In 2022, SDG&E "continued its successes in tracking and maintaining its inventory tree database, completing routine and enhanced tree patrols, pruning and removing hazardous trees, replacing unsafe trees with species that are more compatible with power lines, and pole brushing." SDG&E's website includes an interactive map which allows customers to identify when annual vegetation management tree pruning and pole clearing are scheduled to occur in their area. SDG&E has also recently begun to incorporate data analytics and modeling into its vegetation management operations, allowing a more risk-based approach to inform decision making.

To confirm there is a high correlation between the public information-only TOD factors, SDG&E uses 2025 which is in line with May 2024 ERRA filing and 2028 using the forward gas prices at the time of the May 2024 filing.

<sup>&</sup>lt;sup>75</sup> SDG&E 2023-2025 Wildfire Mitigation Plan Update (April, 2023) at 251 (*available at* 2023-2025 WILDFIRE MITIGATION PLAN (sdge.com).

<sup>&</sup>lt;sup>76</sup> SDG&E, Tree Safety, available at <a href="https://www.sdge.com/safety/tree-safety">https://www.sdge.com/safety/tree-safety</a>.

Regarding procurement activities that relate to safety, as noted above, SDG&E has fulfilled its procurement mandate for the BioRAM program, as discussed above in Section IV. SDG&E has a PPA with a 24 MW BioRAM facility in Wendel, California. SDG&E extended its BioRAM contract by 5 years in accordance with Resolution E-4977, which implements SB 901. BioRAM facilities aid in wildfire mitigation efforts removing dead and dying trees from high fire prone areas. This effort is also intended to support sustainable forestry.

**Climate Change Impacts:** The IRP is tasked with achieving the mandates set forth in SB 100 with respect to reducing greenhouse gas emissions. The efforts taking place in the IRP, which include procurement of renewable resources, will continue to help mitigate the adverse impacts of climate change.

Renewable resources paired with energy storage is one practical solution in some circumstances. Energy storage reduces GHG emissions and prevents climate change. For example, energy storage has the ability of storing solar that is produced during the day and deploying it during the evening peak. This attribute creates flexibility which enables reduced reliance on higher GHG emitting resources, thus reducing climate change impacts.

**Decommissioning Facilities:** SDG&E contracts with multiple renewable generators, many of which have a useful life after SDG&E's contract with the counterparty has ended. These facilities are highly regulated by the state and the federal government and must abide by regulations made by those governing bodies. SDG&E's pro forma agreements do not address decommissioning as this is a step that occurs, in many cases, after SDG&E's contract has ended. However, SDG&E expects these generators will appropriately decommission their facilities in a manner consistent with the applicable laws.

# **Customer Impacts During PSPS Events:**

SDG&E understands that, despite the safety benefits, PSPS de-energizations can have negative customer impacts and should be limited as much as feasible to the specific areas that are experiencing extreme risk. This is especially important for critical facilities providing firefighting resources and life-saving services for individuals with Access and Functional Needs (AFN) who may require medical devices to be powered 24 hours a day, seven days a week. SDG&E initiates PSPS de-energizations as a last resort mitigation during extreme weather conditions, utilizing other tools to mitigate PSPS risk. SDG&E has employed multiple strategies to mitigate impacts to customers and will continue to seek additional strategies in the future.

Grid hardening programs are aimed at reducing wildfires caused by utility equipment and minimizing impacts to customers from mitigations such as PSPS. Details of these programs can be found in SDG&E's 2023-2025 Wildfire Mitigation Plan, section 8.1.2.

Specifically, there are three grid hardening programs that have had the greatest impact on PSPS risk reduction and customer impact: PSPS sectionalizing enhancement program, strategic undergrounding, and backup resiliency programs.

**Sectionalizing Enhancement Program:** To mitigate PSPS risk, the PSPS Sectionalizing Enhancement Program installs switches in strategic locations, improving the ability to isolate high-risk areas for potential de energization. Switches are installed on circuits that have significant sections undergrounded, allowing customers with this lower-risk infrastructure to remain energized during weather events. SDG&E also combines weather stations with sectionalizing devices to de-energize only sections of circuits that are experiencing extreme wind events.

Historical PSPS data is used to identify and prioritize locations for switches. This typically means installing switches in the High Fire Threat District (HFTD), however, as recent weather patterns have become more extreme and widespread, switches are placed in both the HFTD and the wildland urban interface (WUI). SDG&E will continue the PSPS Sectionalizing Enhancement Program using data from any additional PSPS events with the goal of reducing PSPS impacts using the most relevant data.

**Strategic Undergrounding:** Strategic undergrounding converts overhead systems to underground, providing the dual benefits of nearly eliminating wildfire risk and the need for PSPS events in these areas. This program is deployed in the HFTD as well as in areas where substantial PSPS impact reductions can be gained through strategic installation of underground electric system. Circuit segments that are fully undergrounded back to the substation source are no longer considered to have a PSPS risk.

Data on historic PSPS events, wind conditions, risk modeling, and others are reviewed to determine where undergrounding will have the largest impact. Constraints such as environmental, permitting, and design are also taken into consideration. Cost effectiveness calculations developed in the WiNGS-Planning model are also utilized to prioritize undergrounding within the HFTD. Between 2023 and 2033, the scope of the Strategic Undergrounding Program is expected to increase as the understanding of costs and constraints improves.

Backup Resiliency Programs The category "Backup Resiliency Programs" consists of three SDG&E programs: the Generator Grant Program (GGP), the Standby Power Program (SPP), and the Generator Assistance Program (GAP). These three programs ensure backup power is provided to customers most vulnerable to PSPS deenergizations in the form of portable battery units with solar charging capacity (GGP), fixed installation backup generators, temporary critical facility generators, or solar panel and backup battery system (SPP), or rebates for portable generators (GAP).

These three programs prioritize their outreach and education to customers in Tiers 2 and 3 of the HFTD. The GGP focuses on the needs of medical baseline (MBL), life

support, and other select customers with AFN who have experienced a PSPS deenergization. As part of the GGP, SDG&E has a reserve of backup batteries established specifically for expedited delivery during active PSPS events. This program is called the Emergency Backup Battery Program. These units are pre-charged and delivered within 1 to 4 hours of eligible requests to customers who call into SDG&E's Customer Care Centers or 211 in need of emergency backup power that cannot be met through other AFN services such as hotel stays and accessible transportation. SDG&E promotes the availability of these backup battery units to vulnerable customers through partnerships with our Public Safety Partners and Indian Health Councils. The SPP targets customers and communities that will not directly benefit from other grid hardening programs due to their location and regions that are fed by circuits with higher historical PSPS impacts. The GAP focuses on resiliency for all customers who reside in the HFTD and have been impacted by PSPS de-energizations. Eligible customers are proactively contacted and educated about these programs.

**Covered Conductor:** Unlike bare conductor, covered conductor is manufactured with an internal semiconducting layer and external insulating ultraviolet-resistant layers to provide incidental contact protection. The Covered Conductor Program has the potential to raise the threshold for PSPS de-energizations to higher wind speeds compared to bare conductor hardening; however, as of the end of 2023 the threshold for PSPS de-energizations has not been raised on any circuits with covered conductor installed as there have not yet been any circuit segments fully hardened with covered conductor.

**Community Resource Centers:** During a PSPS event there may be a need to provide support to an impacted community. SDG&E has a network of 11 Community Resource Centers (CRC) and may open one or more CRCs near the affected area(s) if conditions prolong the estimated outage duration. At these facilities, community residents will have access to water, snacks, Wi-Fi, and electronic charging, as well as receive the most up-to-date information on the shut-off.

**Education and Outreach:** SDG&E customers and the general public are affected by wildfires, which are now a nearly year-long presence in California. Customers and the general public who are not educated about wildfire safety, emergency preparedness, and resiliency may be ill-prepared for a wildfire or a PSPS event.

To mitigate this risk, SDG&E's comprehensive wildfire safety public education and outreach plan was developed with the intent of increasing community resiliency to wildfires and mitigating the impact of PSPS de-energizations. The plan captures three phases: prior to, during, and following a wildfire or PSPS de-energization.

Communication efforts before a wildfire related event focus on educating customers and the public about the measures and programs being implemented to reduce the threat of catastrophic wildfires, tactics they can employ to remain resilient and safe, and the community resources available. During a wildfire related event, real-time awareness and updates about the event are provided along with information on how to remain

safe and vigilant and the community resources available through the end of the event. After a wildfire related event, SDG&E examines communications and solicits customer and stakeholder feedback with the intent of refining and improving communication efforts. SDG&E's wildfire and PSPS education and outreach efforts are focused in the HFTD but expand to the entire service territory.

More information on SDG&E's PSPS preparedness, education and outreach, and resources can be found in the SDG&E PSPS Pre-Season Report on the CPUC's website.

#### XII. CONSIDERATION OF PRICE ADJUSTMENT MECHANISMS

SDG&E acknowledges that contracts with new facilities having initial online dates occurring more than 24 months after the contract execution date can pose additional risk to customers. SDG&E has incorporated price adjustment mechanisms into some of its current contracts that are intended to alleviate some of these risks, including the following:

Damages or Default for delay in Guaranteed Commercial Operation Date ("GCOD"): An effective remedy for missing the GCOD is to charge delay damages to the developer. Projects that are delayed in reaching their GCOD can avoid contract default by paying daily delay damages, which SDG&E has collected from some projects. Collections from these damages are passed on to SDG&E customers. If the GCOD is delayed beyond the maximum period for which daily delay damages are available, the project is in default and SDG&E can terminate the contract.

Capped transmission upgrade costs: Placing a cap on the amount of non-bypassable transmission upgrade costs (which are ultimately borne by customers) that a project can incur is an effective way to limit customer exposure to such costs. This type of cap is especially important for projects that do not yet have an executed interconnection agreement, because transmission upgrade cost estimates could change for these projects. The requirement that the developer execute the interconnection agreement with costs no greater than the upgrade cap is set as a condition precedent to SDG&E's obligations under the PPA. If estimated upgrade costs exceed the cap, SDG&E has the right not to move forward with the PPA.

#### Price adjustment for higher-than-expected transmission upgrade costs:

Another mechanism that SDG&E has successfully incorporated into past contracts is a mechanism whereby the seller agrees to a price reduction to offset higher than anticipated costs for customer-funded transmission upgrades. Under this mechanism, the contract price would be reduced on a dollars per megawatt-hour basis commensurate with the cost of transmission

network upgrades exceeding an agreed upon cap. The price adjustment mechanism would include an upper limit on transmission upgrade costs, above which SDG&E can terminate the contract. This mechanism is similar to the cap described immediately above except, rather than giving SDG&E the right not to move forward with the PPA, it gives the developer the choice to either proceed at a reduced price equal to the amount of transmission costs above the cap, or not go forward with the PPA. If the developer chooses the lower price, that lower price acts as a funding mechanism for the additional upgrades, thereby adhering to the projected total customer costs.

**Price adjustment for failure to achieve full capacity deliverability status:** If a project is not deemed fully deliverable by CAISO at the time of COD, then the PPA price is reduced until such time as the project is deemed fully deliverable.

# XIII. ECONOMIC CURTAILMENT FREQUENCY, COSTS, & FORECASTING

SDG&E's net load profile continues to show a pronounced shift toward an evening peak as increased solar generation has begun to offset load during SDG&E's historical peak load hours (mid-day). The shift of SDG&E's net peak into the evening hours becomes more pronounced as more renewable generation (particularly solar) is brought online, as it has over the past several years and will continue to do so as RPS penetration increases. This shift in peak load periods leads to integration issues, specifically overgeneration, which in turn leads to an increase in economic curtailment orders and negative pricing. The CAISO, the Participating Transmission Owner or distribution operator, or the Buyer (SDG&E) can instruct a generator to curtail (interrupt deliveries of power to the grid) to manage excess generation supply, minimize the effect of negative pricing, and maintain grid reliability. If negative pricing occurs, and generators are not economically curtailed, SDG&E must pay the CAISO to take this power when it is the Scheduling Coordinator for the project, which is applicable to most of its RPS generation. It is important to address and work to mitigate this issue through the valuation and contracting processes. It should also be noted that each year brings with it more information and additional opportunity for refinement of the procurement process.

# 1. Factors Having the Most Impact on the Projected Increases in Incidences of Overgeneration and Negative Market Price Hours

The issue of curtailment is a result of the operational characteristics of the facilities within the renewable market.<sup>78</sup> These resources are intermittent, as-available resources that are negatively affected by atmospherics conditions which interfere with this energy production (*i.e.*, they generate only when the wind is blowing or when the sunlight strikes the panel). These factors result in generation profiles that do not necessarily follow load.

See, CAISO, Fast Facts, "Duck Chart" available at https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables FastFacts.pdf.

Both those procured pursuant to the RPS program, as well as customer-side facilities that are incremental to the RPS program under existing rules, specifically net energy metered installations.

# 2. Written Description of Quantitative Analysis of Forecast of the Number of Hours Per Year of Negative Market Pricing for the Next 10 Years

SDG&E forecasts market price profiles by calculating the net load for its service territory. Net load is defined as total customer load minus utility scale solar and wind generation per hour. When combined solar and wind generation exceeds load in a given hour, this is interpreted to represent a negative pricing condition. SDG&E uses hourly solar and wind profiles that represent the average of the last 3 years of generation for each resource. These hourly resource generation profiles are forecasted to continue until each individual contract ends (which may extend beyond the next ten years), as modified for any expectation of contract renewal, "blend and extend," or added solar or wind generation procurement in the future. SDG&E may also adjust its market price profile forecast using observed recent historical price profiles or production cost modeling.

SDG&E's assessment of the planned installation of resources to meet both mandated reliability and GHG targets over the next ten years show that increasingly ambitious solar resource additions will occur with energy storage additions decreasing as the recent IRP reliability procurement orders are satisfied.<sup>79</sup> The value of new solar resources is no longer to provide peak reliability, since solar has shifted the peak to later in the day, but to provide a clean fuel source for storage which can then provide a significant, clean, reliability contribution. Due to the interaction between storage and solar, the scale and timing of either technology buildout can affect enery prices in either an upward or downward direction. If storage is available to charge mid-day, it can utilize excess solar and prevent prices from falling. However, if solar availability far exceeds storage, prices will continue to be negative, especially during the high solar availability hours. This relationship is also dependent on season, customer electric usage behavior, scale of economy electrification, and both the scale and timing of additional capacity of both storage and solar resources. For these reasons and the high uncertainty of many of these factors, SDG&E can't make an accurate projection if the number of negative price hours over the next ten years will remain relatively constant, and will continue to increase or start to decrease as additional solar is added.

# 3. Experience With Managing Exposure to Negative Market Prices and/or Lessons Learned from Other Retail Sellers

SDG&E manages its exposure to negative market prices by having the flexibility to reduce generation when needed. SDG&E's flexibility is the result of negotiating its ability to economically curtail its contracts for renewable generation and using economic bids for its entire dispatchable generation portfolio. Since the CAISO implemented its tariff revisions on May 1, 2014, SDG&E has acted to minimize customer exposure by economically curtailing facilities with which it has this contractual right. These instances have generally followed the same sequence of events: (a) as facility Scheduling Coordinator, SDG&E economically bids energy from a facility into the market; (b) a negative pricing event occurs; (c) the CAISO instructs the facility that was economically bid by SDG&E to dispatch down (curtail); and (d) the

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<sup>&</sup>lt;sup>79</sup> D.21-06-035; D.23-02-040; D.24-02-047.

facility responds to the extent possible. These actions protected customers by reducing the negative pricing payments made to the CAISO, but SDG&E's ability to curtail its current portfolio is limited by several factors: (a) a few of SDG&E's existing RPS contracts do not contain economic curtailment rights (however, as mentioned below, SDG&E has renegotiated most of its larger contracts to minimize adverse impacts on customers); (b) some contracts have operating restrictions which impact their ability to respond immediately to an economic curtailment order; and (c) (where the contract contains economic curtailment rights) SDG&E's ability to economically curtail is limited in some cases to five (5) percent of a facility's annual deliveries. SDG&E continues to work with the counterparties to reduce the number of cases where these limitations apply, and to obtain greater rights through contract amendments where the counterparty is willing to amend an existing contract.

D.14-11-042 approved SDG&E's RPS PPA modifications which allow for uncapped economic curtailment rights and require that the generator install the software necessary to receive, respond, and implement a dispatch notice/curtailment order. <sup>80</sup> That Decision also approved the incorporation of several provisions allowing payment to the generator for the economically curtailed generation (*i.e.*, the amount of energy that could have been generated but for the economic curtailment). These changes have bolstered grid management and forecasting efforts, resulting in customer benefits. First, requiring facilities to be equipped to respond to a curtailment order will assist the CAISO in complying with the North American Electric Reliability Corporation ("NERC") reliability standards. Second, this increased ability to manage excess generation could help reduce the incidence of negative pricing events overall, which provides a general benefit to all customers in the State. Third, uncapped economic curtailment will allow SDG&E to better manage the incidence of negative pricing payments made to the CAISO, which also is beneficial to SDG&E's customers.

# 4. Direct Costs Incurred, to Date, for Incidences of Overgeneration and Associated Negative Market Prices

SDG&E has been tracking its curtailment actions and results since 2014. Based on currently available data, its curtailment activities have resulted in cost savings for SDG&E customers. SDG&E will continue to track this data and report on it as appropriate. The increase in battery storage capacity in CAISO over the last couple of years has contributed to fewer negative pricing events thus, fewer economic curtailment cost savings. SDG&E had a direct cost impact of almost \$23.9 Million between 2014 to 2023 from incidences of overgeneration and associated negative market prices. This impact was measured by the amount SDG&E paid to the CAISO for generating during times of negative prices, for all SDG&E's resources. The majority of the costs occur during "solar hours" and come between 9:00 am and 3:00 pm during the spring months.

Required software: The Automated Dispatch System ("ADS") and the Application Programming Interface ("API"). See D.14-11-042 at 38.

# 5. An Overall Strategy for Managing the Overall Cost Impact of Increasing Incidences of Overgeneration and Negative Market Prices

To manage the overall cost impact of negative prices going forward, where applicable SDG&E will continue renegotiation of dispatch down, scheduling and curtailment provisions of existing RPS contracts. Negative prices affect not just renewable generating resources, but all generating resources. SDG&E mitigates the impact of negative prices to its ratepayers by economically bidding its dispatchable resources to the CAISO. To the extent SDG&E submits cost-based bids reflecting variable costs, it allows the CAISO to reduce generation from SDG&E's resources when they are not needed or uneconomic. Thus, when feasible, SDG&E's resources will have limited generation during incidences of overgeneration.

# 6. Contract Terms Included in RPS Contracts Intended to Reduce the Likelihood of Curtailment or Protect Against Negative Prices

SDG&E's pro forma RPS PPAs include standard terms allowing SDG&E to curtail the project at its or CAISO's instruction, so long as SDG&E pays the seller for energy and RECs that could have been delivered but for the curtailment. If the Seller does not comply with the instruction to curtail production, they are liable to SDG&E for the value of any excess energy produced plus any imbalance energy or CAISO charges resulting from the failure to comply.

To incent sellers to limit overbuilding of projects, SDG&E has also removed TOD factors from its contract payment calculations, thereby dampening the incentive to overproduce during the peak solar periods of the day. The standard PPA also limits the amount of energy for which SDG&E will pay by reducing to zero the contract price for generation that exceeds the project's contracted capacity in any settlement interval. Further, if and when the cumulative amount of generation from the project in any given year exceeds 115% of the expected generation for that year, the contract price becomes zero dollars per MWh for the balance of the year, and SDG&E may pass through to the seller any CAISO payments, penalties, and other costs attributable to the project.

#### **Energy Storage**

Initiatives undertaken outside of the RPS proceeding also have the potential to assist in the management of intermittent generation and the resulting economic curtailment and negative pricing – specifically, the addition of flexible capacity and energy storage resources to the grid has the capability to absorb renewable energy in times of excess for later use. Please see section IV-B for more information on energy storage.

# XIV. COST QUANTIFICATION

The tables attached hereto in Appendix 2 provide an annual summary through 2034 of both actual and forecasted RPS procurement costs and generation, by technology type using SDG&E's bundled retail sales forecast from its conforming RNS scenario.

#### XV. COORDINATION WITH THE IRP PROCEEDING

SB 350 added a provision to the Public Utilities Code directing the Commission to implement a holistic IRP process. IRP is a wide-ranging effort at the Commission, undertaken along with input from the CEC and CARB, that would combine the numerous planning processes currently undertaken in separate, resource-specific cases into a single regulatory forum. The IRP process reviews the entire portfolio of resource options to ensure that load-serving entities will achieve the targets established by CARB related to GHG emission reductions, while also ensuring reliability and affordability.

However, as of now, RPS procurement remains a composite of several different and separate procurement programs and targets, each with its own history and set of Commission directives. As described above, these RPS programs do not necessarily address a customer's need for additional RPS procurement on a program-by-program basis. Nor do these programs take into consideration their cost-effectiveness compared to other resources, including RPS resources. Further, the RPS program-specific approach of the past does not factor in grid implications in the broader context. Nonetheless, each of these major, omitted elements is necessary to ensure that electricity customers receive the least-cost best-fit resources that are reliable and cost-effective.

SDG&E recommends that, for the benefit of the State's electricity consumers, that the Commission fully utilize the IRP process to create a sea-change away from siloed, project-specific RPS and reliability procurement and towards the statutorily mandated framework of considering first, consumers' needs and then considering all available resources on a comparative basis to meet those needs, consistent with applicable laws and regulations. In large part, the RPS proceeding should implement RPS procurement determinations made in the upstream IRP proceeding, rather than in isolation of that proceeding, which is currently the case. The benefits of removing the longstanding and outdated RPS program-by-program approach to RPS procurement and fully embracing the IRP mechanism will inure to customers. SDG&E will continue to urge the Commission to accelerate these efforts and we look forward to the implementation of the Reliable and Clean Power Procurement Program ("RCPPP") which we hope will alleviate many of these concerns.

Regarding coordination, SDG&E has advocated for a more consolidated framework for LSEs to file annual procurement plans that address both RPS- and IRP-eligible resources and needs. SDG&E has made this point in comments on both the Staff Proposal<sup>81</sup> in the RPS proceeding and the Reliable & Clean Power Procurement Plan Staff Options Paper<sup>82</sup> in the IRP proceeding.

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<sup>&</sup>lt;sup>81</sup> R.18-07-003, Administrative Law Judge's Ruling Requesting Comments on Staff Proposal (September 18, 2020), Attachment A, Staff Proposal for Alignment and Integration of RPS Procurement Planning and Integrated Resource Planning.

R.20-05-003, SDG&E Opening Comments on Staff Paper on Procurement Program (December 12, 2022), at 6-7.

The Commission expects - and SDG&E supports - that the IRP and RPS Plans will begin to align starting in the 2022-2023 IRP cycle.<sup>83</sup>

The 2019-2020 cycle of the IRP resulted in a Procurement Track Decision whereby SDG&E is required to procure for its bundled customers, and on behalf of other LSEs in its service territory that opt out or fail to procure their mandated procurement volume.<sup>84</sup> RPS resources were eligible resources within the IRP Procurement Track solicitation and, ultimately, SDG&E selected primarily battery storage resources and a hybrid solar/battery resource.

As discussed above, the Commission issued its IRP Mid-Term Procurement Decision in 2021 and SDG&E is responsible for 475 MWs, some of which may be RPS eligible. The Commission issued a supplemental IRP Mid-Term Procurement Decision in 2023 and SDG&E is responsible for 144 MWs, some of which may be RPS eligible. The Commission also issued its Proposed System Plan ("PSP") decision and is in the process of implementing AB 1373, both of which may result in additional RPS-eligible procurement.

SDG&E's 2022 IRP incorporates portfolio optimization progress, as ordered in the Portfolio Optimization Decision, to the best of SDG&E's knowledge at the time of filing. Depending on the volume of RPS allocated or sold, SDG&E may have a future need for resources.

The table below summarizes how SDG&E's 2022 RPS Plan and renewable procurement conforms with the determinations made in the IRP Proceeding.

IRP Section Subsection	RPS Alignment in IRPs	
III. Study Results A. Conforming and Alternative Portfolios	Retail sellers should explain how the RPS resources they plan to procure, outlined in their RPS Plan, will align with each of their Conforming Portfolios being developed in their IRP Plans for Commission approval and certification. This explanation should include:	
	<ol> <li>Existing RPS resources that the retail seller owns or contracts.</li> <li>Existing RPS resources that the retail seller plans to contract with in the future.</li> <li>New RPS resources that the retail seller plans to invest in.</li> <li>New and existing resources that will be used to meet Mid-Term Reliability obligations adopted in D.21-06-035 and the supplemental procurement ordered in D.23-02-040.</li> </ol>	

<sup>83</sup> ACR at 37.

<sup>&</sup>lt;sup>84</sup> D.19-11-016.

IRP Section Subsection	RPS Alignment in IRPs
	SDG&E's 2020 Individual IRP ("IIRP") determined no resource need for SDG&E due to its long position and load departure. However, the PCIA Optimization Decision, D.21-05-030, orders SDG&E to reduce its portfolio in proportion to its load share. The IRP Mid-Term Procurement Decision, D.21-06-035, and the Supplemental Mid-Term Procurement Decision, D.23-02-040, also orders SDG&E to procure a total of 619 MWs, 85 of which approximately 150 MW will be RPS eligible and may count towards SDG&E's RPS procurement requirements. SDG&E's 2022 IIRP was filed on November 1, 2022. Although SDG&E identified a need for approximately 1,546 MW in incremental capacity, any resulting procurement from either portfolio is not yet known. Any RPS-eligible resources that are procured or planned to be procured from SDG&E's IIRP will be considered as part of SDG&E's RPS portfolio and potential RPS procurement plans.
IV. Action Plan A. Proposed Activities	Retail sellers should describe how they propose to use RPS resources to implement both Conforming Portfolios. Narratives should include:  1. Proposed RPS procurement activities as required by Commission decision or mandated procurement.  2. Procurement plans, potential barriers, and resource viability for each new RPS resource identified.  AL 4299-E, 86 was accepted on March 21, 2024, and SDG&E will no longer need to procure an additional 27 MW in 2024. However, it will still need to procure at least 19 MW by 2027, and 83 MW by 2028 to meet the MTR Procurement requirements. Of the 83 MW required in 2028, 41.5 MW must be long-duration storage, and 41.5 MW must be from firm zero-emitting sources. SDG&E launched a solicitation in 2023 with no offers shortlisted for the 2027 and 2028 needs and launched another solicitation in early 2024 that closed in April 2024 for the remaining deficiencies. SDG&E is currently evaluating the bids and will propose a shortlist recommendation to the PRG by July or August 2024.

SDG&E's Advice Letter 3967-E, Request to Adjust the Capacity Requirements in D.21-06-035, March 16, 2022.

<sup>&</sup>lt;sup>86</sup> Advice Letter requesting for approval of Mid-Term IRP contracts from SDG&E's Reliability RFO

IRP Section Subsection	RPS Alignment in IRPs
Subsection	In July 2023 SDG&E launched an Emergency Reliability solicitation to procure import resources to meet system reliability needs. SDG&E solicited offers for the purchase of eligible resource adequacy that would be available during both the peak and net peak demand periods and to come online or be operational by June 1, 2024, and/or June 1, 2025. SDG&E's procurement target was 170-320 MW. SDG&E has thus far procured 121 MW of supply-side resources and estimates 34 MW demand-side resources for June 2024; SDG&E is examining its portfolio to determine if there is additional excess MWs to apply toward its targets or if additional procurement is prudent.  Potential barriers are discussed in IRP Subsection IV. C. below.
IV. Action Plan B. Procurement Activities	The retail seller should describe the solicitation strategies for the RPS resources identified in both Conforming Portfolios. This description should include:  1. The type of solicitation. 2. The timeline for each solicitation. 3. Desired online dates. 4. Other relevant procurement planning information, such as
	solicitation goals and objectives.  Per D.19-11-016, the Commission ordered procurement within the IRP for the purpose of ensuring reliability and allocated amounts to LSEs across the state. SDG&E was ordered to procure 292.9 MWs of the total amount. The Commission also ordered the IOUs to procure on behalf of LSEs that "opt-out" of procurement.
	As the result of "opt-out" decisions by LSEs in its service territory, SDG&E was required to procure an additional 8.4 MW, for a total SDG&E procurement obligation of 301.3 MW. On January 14, 2021, the Commission partially approved AL 3605-E in Resolution E-5117 for 144 MW of capacity expected to come online by August 1, 2021. The Commission denied 20 MWs of utility-owned battery storage which was later included in procurement undertaken in the Summer Reliability OIR. SDG&E submitted AL 3689-E and AL 3689-E-A, which were approved effective March 18, 2021. Resolution E-5139 approved SDG&E AL-3666 requesting approval of 140 MWs. The CPUC also approved SDG&E's AL 3868-E on November 19, 2021, for 80 MW of

IRP Section Subsection	RPS Alignment in IRPs
	battery storage, and AL 4010-E for 35 MW of RA-only capacity on June 13, 2022.
	As discussed above, the Commission has identified a mid-term need, and ordered SDG&E to procure 475 MWs and to procure additional 144 MWs through a supplemental order, which will include renewable resources, including RPS eligible resources. On January 12, 2023, the Commission approved AL 4096-E in Resolution E-5250 for 200 MW of capacity expected to come online by August 1, 2023, and June 1, 2024. On August 11, 2023, the Commission approved AL 4189-E in Resolution E-5283 for 163.5 MW of storage capacity paired with 178.5 MW of solar photovoltaic generation capacity expected to come online June 1, 2025, and 60 MW of storage capacity expected to come online April 1, 2026. On July 14, 2023, the Commission approved AL 4182-E in Resolution E-5277 for 131 MW of storage capacity to count towards IRP mid-term procurement needs. On December 21, 2024, SDG&E filed AL 4299-E requesting approval of 47 MW of stand-alone storage capacity expected to come online in 2024. This AL was approved on March 21, 2024.
	Regarding activities in 2023 in support of the Summer Electric Reliability Proceeding, on May 25, 2023, the CPUC adopted a Decision directing the IOUs to seek contracts for additional capacity to be available by the summers of 2024 and 2025 with a target in the range of 170 – 320 MW for SDG&E. As part of meeting these requirements SDG&E submitted (i) Advice Letter 4290-E for two utility-owned energy storage projects totaling 39.6 MW with expected online dates on July 17, 2024, which were approved in Commission Resolution-E 5303; and, (ii) Advice Letter 4293-E for one utility-owned energy storage project (Westside Canal Energy Storage Expansion Project – Phase 1) totaling 119 MWs with an online date of October 31, 2024, for which the Commission issued its draft Resolution-E denying Advice Letter 4293-E.
	SDG&E is also allocating RPS resources as a result of the Portfolio Optimization Decision. SDG&E's PCIA-eligible RPS portfolio is reduced proportionally based on its load share allocation. Based on SDG&E's current RPS generation forecast, including eligible allocation, SDG&E

 $<sup>^{87}</sup>$  SDG&E AL 4189-E, filed April 14, 2023, CPUC Resolution E-5283, issued August 11, 2023.

IRP Section Subsection	RPS Alignment in IRPs
	anticipates meeting its RPS requirements for each CP through 2033 by utilizing its banked RECs. 88 If SDG&E is required to procure additional RPS-eligible resources within the IRP proceeding, then these resources will be factored into any RPS procurement considerations and count towards RPS procurement obligations.
IV. Action Plan C. Potential Barriers	Retail sellers should provide a summary of the potential barriers to implementing both Conforming Portfolios as they relate to RPS resources. The section should include:  1. Key market, regulatory, financial, or other resource viability barriers or risks associated with the RPS resources coming online in retail sellers' Preferred Portfolios.  2. Key risks associated with the potential retirement of existing RPS resources on which the retail seller intends to rely in the future.  There are numerous potential barriers to SDG&E achieving its procurement targets. Project delays due to supply chain shortages or other unforeseen limitations continue to be the largest barrier to getting projects into commercial operation within the original timeline. Second, rising battery costs, interest rates, inflation, and project demand all contribute to high project costs that result in low numbers of economically feasible bids submitted to SDG&E's solicitations. This extremely tight market, while widespread, counters the efforts of the CPUC to increase resource procurement and achieve long-term goals.  In addition to the limited availability of "standard" resource types such as wind, solar, or battery storage, additional barriers are the need for procurement of less conventional types. These include long-duration storage, firm dispatchable zero-emissions generation technologies, and yet-to-be-built off-shore wind. SDG&E agrees a diverse resource portfolio is a benefit for California, but there is significant inertia in getting new technologies to market at a large scale.

 $^{88}$  See Appendix 1 – SDG&E's Renewable Net Short Table.

#### XVI. IMPACT OF TRANSMISSION AND INTERCONNECTION DELAYS

Pursuant to the ACR issued on May 17, 2024, and SB1174 (Hertzberg Stat. 2022, Ch.229), SDG&E is required to provide information on the development of transmission and interconnection facilities that enable renewable energy or energy storage resources which have executed agreements, and are in development. SDG&E has reviewed and provided in this filing its transmission facilities and network upgrades that support renewable or energy storage resources. SDG&E has not had delays in the construction of the transmission facility and system network upgrade currently in development to support renewable or energy storage resources. Furthermore, SDG&E does not currently have transmission facilities or network upgrades that are required to interconnect renewable or energy storage resources that are under its Wholesale Distribution Open Access Tariff (WDAT).

# XVII. OTHER RPS PLANNING CONSIDERATIONS AND ISSUES SDG&E's REQUEST FOR AN UPDATED SHORT-TERM RPS TRANSACTION APPROVAL FRAMEWORK

SDG&E is at a disadvantage when competing with the other LSEs and other REC market participants due to the current Commission approval process for short-term REC transactions. To address the challenges, SDG&E seeks the ability to transact short-term transactions through a process similar to the Quarterly Compliance Report ("QCR"). SDG&E requests the Commission to update the approval process for REC transactions less than five years. SDG&E believes that this change will empower SDG&E and the other IOUs to manage RPS compliance in a highly competitive and evolving renewable energy product market, deliver or receive RPS products in a timely manner, and create a level playing field for SDG&E's bundled customers. SDG&E, in coordination with the other California IOUs, SCE and PG&E, proposes an updated approval process consistent with individual IOUs upfront, achievable standards and criteria, which would be pre-approved and reported in a quarterly compliance report submitted to the Commission's Auditors and Energy Division via Tier 1 Advice Letter. Long-term transactions with terms of 5 years or more and short-term transactions not consistent with upfront, achievable standards and criteria would continue to utilize the Tier 3 Advice Letter approval process. SDG&E provides its upfront and achievable standards and criteria in Appendix 18.

#### **Appendix 1**

### Renewable Net Short and Project Development Status Update

#### SDG&E Renewable Net Short for RPS Procurement – July 22, 2024:

The appendix herein provides two scenarios of the data behind SDG&E's RPS Risk Adjusted Net Short Calculation as of July 2024. They include the outputs required by the Administrative Law Judge's Ruling on Renewable Net Short, dated May 21, 2014, and have been updated to reflect the banking rules adopted under D.17-06-026 and the impacts of Portfolio Optimization Decision D.21-05-030 to SDG&E's RPS portfolio. SDG&E's PCIA-eligible RPS portfolio is reduced by percent, which is equivalent to the total amount of load departure in 2024, to show the impact of VAMO. SDG&E's methodology to calculate the PCIA-eligible portfolio volumes is consistent with the approach approved in Advice Letter 3835-E. With the additional departures mentioned in Section IV. D. of SDG&E's Draft Plan, SDG&E estimates that approximately of the region's load will remain in SDG&E service beginning 2024. The difference between the two scenarios is the retail sales forecast. Appendix 1a, the conforming scenario, is based on the CEC's 2023 California Demand Forecast, and Appendix 1b, the alternative scenario, uses SDG&E's internal retail sales forecast. The updated RNS scenarios illustrate that SDG&E

SDG&E's RPS eligible procurement in its RNS accounts for the MMoP. The MMoP accounts for project development risks. SDG&E's forecasted failure rate for projects under development is illustrated in the table below. A discussion of this methodology is provided in Sections VII and IX-A.

#### **Risk Assignment Table**

Severity of Risk	Project	Risk Factors (Including but	Failure Rate%
	Development	not limited to the following):	
	Phase		
High-risk	Pre-Construction	CPUC approval, projects	
	Phase	permits and interconnection	
		agreement	
Medium-risk	Construction	Financing, supply chain,	
	Phase	interconnection, project	
		delayed construction /	
		completion rate ,	
		transmission development	
		and missed milestone(s)*	
Low-risk	Post-Construction	Underperformance of	
	Phase	delivering projects/delivery	
		failure and other delays	

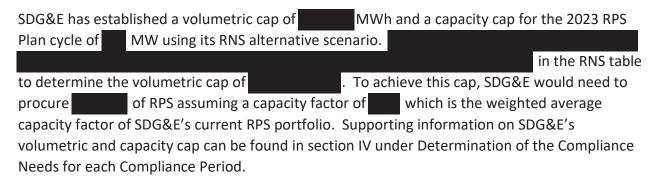
<sup>\*</sup> A project that is assigned a medium-risk factor will be assigned a high-risk factor when it misses a milestone.

As set forth in Advice letter 4345-E, SDG&E is not holding a future VAMO process.<sup>1</sup> After meeting all the requirements of D.21-05-030, SDG&E is providing a summary of RPS volumes not allocated and sold in the VAMO process that are available beginning in 2025 in the table below.

#### Summary of RPS Volumes Not Allocated or Sold in the VAMO Process<sup>2</sup>

PCIA-eligible Portfolio	Estimated Total Volume in MWH
Unbundled RECs (2025-2033)	
Bundled RECs (2025-2032)	
Bundled RECs (2025-2042)	

#### **Volumetric and Capacity Cap**



**TABLE 4-1 from Section IV. B.1. Long-Term Procurement** 

As discussed in Section IV. B.1 of this Plan, SDG&E is providing the confidential summary of SDG&E's long-term and short-term procurement below:

Compliance Period	Short-Term	Long-Term
2021-2024		
2025-2027		
2028-2030	N/A	4,592 GWh
2031-2034	N/A	5,226 GWh

On May 9, 2024, the Commission approved SDG&E's Advice Letter 4345-E request that no future Voluntary Allocation and Market Offer Processes be held, pursuant to Ordering Paragraph 4 of D.21-05-030.

Volumes identified in this summary apply to product categories if such volumes are sold. If used for SDG&E compliance, volumes would be categorized as long-term bundled product.

ct End	Date n/dd/yyyy)	4/30/2038	6/30/2040	12/31/2041												1
Contract End	Date (mm/dd/yyyy)															
Con	Date (mm/dd/yyyy)	5/1/2026	6/28/2025	12/1/2026												
Contract Execution	Date (mm/dd/yyyy)	11/18/2022	4/11/2023	1/24/2023												
	ct Length	12	15	15												-
	Longitude	-116.272	-120.4031	-115.7804												
	Zip Code   Latitude   Longitude   ct Length	32.658	36.5924	36.0679												
·	Zip Code	91905	93640	89061												1
	State	CA	CA	>Z												
	County	San Diego	Fresno	e/N												
	City	Boulevard	Mendota	Pahrump												I
	Tyroject Development Phas	Pre-Construction	Construction	Pre-Construction												
	chnology Ty	Hybrid	Hybrid	Hvbrid	,											1
	Project Name	Starlight	Luna Valley Solar	Yellow Pine Solar III												
	PS Contract	SD5086 S	SD5088	Y SD5087												†
;	Reporting LSE Name	San Diego Gas & Electric	San Diego Gas & Electric	San Diego Gas & Electric												

Project Nates	69.6 Hybrid: Solar PV (Ground Mount) + Energy Storage	"Contractual hybrid" project - Luna Valley Solar, together with Daggett Energy Storage form a contractually paired hybrid project	0 Hybrid: Solar Tracking 1 Axis + Enerry Storage											
Storage: Capacity (MWh)			300											Ī
Storage: Rated Power (MWI)	17.4	113.5	20											
Transmission Status														
Commercial Operation Date (COD)	5/1/2026	6/28/2025	12/1/2026											Ī
Total Contract Volume	000009	2485500	1095000											
Expected Annual Generation	20000	73000	165700											
Contract Capacity	17.4	113.5	9											

### Appendix 1a Renewable Net Short Conforming Scenario

# Renewable Net Short Calculations - 2020 RPS Procurement Plans

San Diego Gas & Electric	ric		Input required			No input required	<u></u>		Hard-coded		
	Item	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2017-2020	2021 Actual	2022 Actual	2023 Actual	2024 Forecast	2021-2024
Forecast Year						CP3				1	CP4
Annual RPS Requirement	quirement				•						
Total Retail Sales (MWh) RPS Procurement Quantity	Total Retail Sales (MWh)  RPS Procurement Quantity Requirement (%)	15,618,767	15,036,269	14,277,607	14,270,246	59,202,889	11,255,481	7,796,873	4,619,558	44.0%	38.6%
Gross RPS Proct	Gross RPS Procurement Onantity Requirement (MWh)	7907177	4 360 518	4426.058	4 709 181	17712 824 4	4.023.835	3.001.796	1 905 568		
Voluntary Margi	Voluntary Margin of Over-procurement (MWh)										
Net RPS Procure	Net RPS Procurement Need (MWh)	4,217,067	4,360,518	4,426,058	4,709,181	17,712,824	4,023,835	3,001,796	1,905,568		
RPS-Eligible Procurement	curement										
Risk-Adjusted R	Risk-Adjusted RECs from Online Generation (MWh)	6,933,773	6,731,419	6,615,096	6,302,576	26,582,864	6,228,743	6,445,246	2,224,898		
Forecast Failure F	Forecast Failure Rate for Online Generation (%)	%0.0	%0.0	%0:0	%0:0	%0.0	%0'0	%0'0	%0'0		
Risk-Adjusted RECs from RPS	RECs from RPS Facilities in Development (MWh)	٠							٠		
Forecast Failure	Forecast Failure Rate for RPS Facilities in Development (%)	%0'0	%0:0	%0:0	%0:0	0.0%	%0'0	%0'0	%0'0		
Pre-Approved G	Pre-Approved Generic RECs (MWh)					1			٠		
Executed REC Sales (MWh)	ules (MWh)	-	130,000	1,008,000	740,750	1,878,750		1,830,000	-		
Total RPS Eligib	Total RPS Eligible Procurement (MWh)	6,933,773	6,601,419	5,607,096	5,561,826	24,704,114	6,228,743	4,615,246	2,224,898		
Category 0 RECs	8	2,368,303	2,294,240	2,167,158	2,192,568	9,022,269	2,108,281	2,117,256	666,357		
Category 1 RECs	8	4,565,470	4,307,179	3,439,938	3,369,258	15,681,845	4,120,462	2,497,991	1,558,541		
Category 2 RECs	S	-		•		-	•	•	-		
Category 3 RECs	3.5	-	-	-		-	-		-		
Gross RPS Po	Gross RPS Position (Physical Net Short)										
Annual Gross	Annual Gross RPS Position (MWh)	2,716,706	2,240,901	1,181,038	852,645	6,991,290	2,204,908	1,613,450	319,331		
Annual Gross	Annual Gross RPS Position (%)	44%	44 %	39%	39%	42%	25%	29%	48%		
Application of Bank	f Bank										
Existing Bank	Hc (from previous CI Existing Banked RECs above the PQR	7,045,016	9,761,722	12,002,623	13,183,661	7,045,016	14,036,306	16,241,214	17		
RECs above t	RECs above the PQR added to Bank	2,716,706	2,240,901	1,181,038	852,645	6,991,290	2,204,908	1,613,450	319,331		
Non-bank abl	Non-bankable RECs above the PQR	-	1	i	1		-	•	-		
Gross Balan	Gross Balance of RECs above the PQR	9,761,722	12,002,623	13,183,661	14,036,306	14,036,306	16,241,214	17,854,664	18,173,995		
Planned App	Planned Application of RECs above the PQR towards RPS Compliance					1		٠			
Planned Sales	Planned Sales of RECs above the PQR	-	-	-		-		•	-		
Net Balance o	Net Balance of RECs above the PQR	9,761,722	12,002,623	13,183,661	14,036,306	14,036,306	16,241,214	17,854,664	18,173,995		
Category 0 RECs	5]	4,672,602	5,495,745	5,924,851	6,226,452	22,319,650	7,024,424	7,756,227	7,812,145		
Category 1 RECs	3	5,089,120	6,506,878	7,258,810	7,809,854	26,664,662	9,216,790	10,098,437	10,361,850		
Category 3 Bu	Category 3 Bundled RECs (Non-CBA Utilities Only)*	-	-	-		-	-	-	-		
Expiring Contracts	tracts										_
RECs from E	RECs from Expiring RPS Contracts (MWh)	21,344	87,459	183,615	539	292,957		33,732	65,340		
Net RPS Pos	Net RPS Position (Optimized Net Short)										
Annual Net	Annual Net RPS Position after Bank Optimization (MWh)	2,716,706	2,240,901		852,645	6,991,290	2,204,908	1,613,450			
Annual Net RI	Annual Net RPS Position after Bank Optimization (%)	0.443938552	0.43903306	0.392719587	0.389749845	0.417278861	0.553396394	0.591935516	0.481625798		

## Note: All values are to be input in MWhs

\*D.17-11-037 provides for utilities serving load in areas outside California Independent System Operator Balancing Authority (Non-CBA Utilities) to bank excess bundled PCC3 RECs



# Renewable Net Short Calculations - 2020 RPS Procurement Plans

San Diego Gas & Electric 7/22/2024

LSE Name: ©

Variable	Calculation	Item	2025 Forecast 2	2026 Forecast	2027 Forecast	2025-2027	2028 Forecast	2029 Forecast	2030 Forecast	2028-2030	2031 Forecast	2032 Forecast	2033 Forecast
		Forecast Year	2	3	4	CP5	2	9	2	CP 6	8	6	10
		Annual RPS Requirement											
V		Total Retail Sales (MWh)			3,570,806			3,878,918	4,072,885	11,657,391	4,303,440	4,536,717	4,818,422
В		RPS Procurement Quantity Requirement (%)	46.7%	49.3%	52.0%	49.4%	54.7%	57.3%	%0:09	57.4%	%0'09	%0'09	%0.09
O	A*B	Gross RPS Procurement Quantity Requirement (MWh)			1,856,819		2,025,845	2,223,784	2,443,731	6,693,359.8	2,582,064	2,722,030	2,891,053
D		Voluntary Margin of Over-procurement (MWh)								-			
н	C+D	Net RPS Procurement Need (MWh)			1,856,819		2,025,845	2,223,784	2,443,731	6,693,360	2,582,064	2,722,030	2,891,053
		RPS-Eligible Procurement											
Fa		Risk-Adjusted RECs from Online Generation (MWh)			1,424,309		1,424,287	1,424,287	1,423,913	4,272,486	1,411,677	1,382,378	1,169,105
Faa		Forecast Failure Rate for Online Generation (%)			0:0%		%0.0	0.0%	%0'0	%0.0	%0'0	%0'0	0.0%
Fb		Risk-Adjusted RECs from RPS Facilities in Development (MWh)			107,287		106,790	106,295	105,800	318,885	105,306	104,813	104,321
Fbb		Forecast Failure Rate for RPS Facilities in Development (%)			24.3%		24.3%	24.3%	24.3%	24.3%	24.3%	24.3%	24.4%
Fc		Pre-Approved Generic RECs (MWh)			•				-				
Fd		Executed REC Sales (MWh)			•				-				
Н	Fa+Fb+Fc-Fd	Total RPS Eligible Procurement (MWh)			1,531,596		1,531,077	1,530,581	1,529,713	4,591,371	1,516,983	1,487,191	1,273,425
F0		Category 0 RECs			321,155		321,133	321,133	321,133	963,398	318,259	289,141	211,360
F1		Category 1 RECs			1,210,441		1,209,944	1,209,449	1,208,580	3,627,973	1,198,724	1,198,050	1,062,065
F2		Category 2 RECs					-	•	-	-	-	-	
F3		Category 3 RECs					-		-		-	-	
		Gross RPS Position (Physical Net Short)											
Ga	F-E	Annual Gross RPS Position (MWh)			(325,223)		(494,768)	(693,202)	(914,018)	(2,101,989)	(1,065,081)	(1,234,840)	(1,617,628)
Gb	F/A	Annual Gross RPS Position (%)			43%		41%	39%	38%	39%	35%	33%	26%
		Application of Bank											
Ha	Hc (from previous C	Hc (from previous C Existing Banked RECs above the PQR			17,949,434		17,624,211	17,129,443	16,436,240	17,624,211	15,522,222	14,457,141	13,222,301
HP		RECs above the PQR added to Bank			1					-			
Hc		Non-bankable RECs above the PQR			1				-		-		
Н	Ha+Hb	Gross Balance of RECs above the PQR			17,949,434		17,624,211	17,129,443	16,436,240	17,624,211	15,522,222	14,457,141	13,222,301
Ia		Planned Application of RECs above the PQR towards RPS Compliance			325,223		494,768	693,202	914,018	2,101,989	1,065,081	1,234,840	1,617,628
Ib.		Planned Sales of RECs above the PQR			1		-	-		-	-	-	-
J	H-la-lb	Net Balance of RECs above the PQR			17,624,211		17,129,443	16,436,240	15,522,222	15,522,222	14,457,141	13,222,301	11,604,673
JO		Category 0 RECs			7,285,724		7,008,642	6,658,280	6,227,578	19,894,499	5,746,581	5,205,630	4,527,201
11		Category 1 RECs			10,338,486		10,120,801	096'222'6	9,294,644	29,193,406	8,710,560	8,016,671	7,077,472

948,861 54,454 894,407

3,073,488 845,032 0.0% 1103,829

5,122,480 60.0% 3,073,488

2034 Forecast

## Note: All values are to be input in MWhs

Annual Net RPS Position after Bank Optimization (MWh)

Ga+la-lb-Hc

La

Net RPS Position (Optimized Net Short)

Expiring Contracts

(F+Ia-Ib-Hc)/A Annual Net RPS Position after Bank Optimization (%)

9,480,046 3,661,802 5,818,244

274,654

111,286

1,711

(0)

0.6

0.574173043

0.6

0.5733

(0)

11,604,673

(2,124,627

11,604,673

\*D.17-11-037 provides for utilities serving load in areas outside California Independent Syst



### Appendix 1b Renewable Net Short Alternative Scenario

# Renewable Net Short Calculations - 2020 RPS Procurement Plans

LSE Name:	San Diego Gas & Electric	itric		Input required			No input required	9		Hard-coded		
Date Filed:	7/22/2024				•							
Variable	Calculation	Item	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2017-2020	2021 Actual	2022 Actual	2023 Actual	2024 Forecast	2021-2024
		Forecast Year					CP3				1	CP 4
		Annual RPS Requirement										
A		Total Retail Sales (MWh)	15,618,767	15,036,269	14,277,607	14,270,246	59,202,889	11,255,481	7,796,873	4,619,558		
В		RPS Procurement Quantity Requirement (%)	27.0%	29.0%	31.0%	33.0%	29.9%	35.8%	%5'88	41.3%	44.0%	38.6%
С	A*B	Gross RPS Procurement Quantity Requirement (MWh)	4,217,067	4,360,518	4,426,058	4,709,181	17,712,824.4	4,023,835	3,001,796	1,905,568		
D		Voluntary Margin of Over-procurement (MWh)										
Е	C+D	Net RPS Procurement Need (MWh)	4,217,067	4,360,518	4,426,058	4,709,181	17,712,824	4,023,835	3,001,796	1,905,568		
		RPS-Eligible Procurement										
Fa		Risk-Adjusted RECs from Online Generation (MWh)	6,933,773	6,731,419	6,615,096	6,302,576	26,582,864	6,228,743	6,445,246	2,224,898		
Faa		Forecast Failure Rate for Online Generation (%)	%0.0	%0.0	%0:0	%0.0	0.0%	0.0%	%0.0	%0:0		
Fb		Risk-Adjusted RECs from RPS Facilities in Development (MWh)	-				-		-			
Fbb		Forecast Failure Rate for RPS Facilities in Development (%)	%0'0	%0:0	%0:0	%0.0	0.0%	0.0%	%0'0	%0:0		
Fc		Pre-Approved Generic RECs (MWh)	-				-	-	-	•		
Fd		Executed REC Sales (MWh)	•	130,000	1,008,000	740,750	1,878,750		1,830,000	•		
F	Fa+Fb+Fc-Fd	Total RPS Eligible Procurement (MWh)	6,933,773	6,601,419	5,607,096	5,561,826	24,704,114	6,228,743	4,615,246	2,224,898		
F0		Category 0 RECs	2,368,303	2,294,240	2,167,158	2,192,568	9,022,269	2,108,281	2,117,256	666,357		
F1		Category 1 RECs	4,565,470	4,307,179	3,439,938	3,369,258	15,681,845	4,120,462	2,497,991	1,558,541		
F2		Category 2 RECs	-				-			•		
F3		Category 3 RECs	-				-					
		Gross RPS Position (Physical Net Short)										
Ga	F-E	Annual Gross RPS Position (MWh)	2,716,706	2,240,901	1,181,038	852,645	6,991,290	2,204,908	1,613,450	319,331		
Gb	F/A	Annual Gross RPS Position (%)	44%	44%	39%	39%	42%	55%	29%	48%		
		Application of Bank										
Ha	J-Hc (from previous CP)	J-Hc (from previous CP) Existing Banked RECs above the PQR	7,045,016	9,761,722	12,002,623	13,183,661	7,045,016	14,036,306	16,241,214	17,854,664		
HB		RECs above the PQR added to Bank	2,716,706	2,240,901	1,181,038	852,645	6,991,290	2,204,908	1,613,450	319,331		
Hc		Non-bankable RECs above the PQR	-				-	-		•		
Н	Ha+Hb	Gross Balance of RECs above the PQR	9,761,722	12,002,623	13,183,661	14,036,306	14,036,306	16,241,214	17,854,664	18,173,995		
Ia		Planned Application of RECs above the PQR towards RPS Compliance					-		-	•		
Ib		Planned Sales of RECs above the PQR	•				-	-	-	٠		
J	H-la-lb	Net Balance of RECs above the PQR	9,761,722	12,002,623	13,183,661	14,036,306	14,036,306	16,241,214	17,854,664	18,173,995		
JO		Category 0 RECs	4,672,602	5,495,745	5,924,851	6,226,452	22,319,650	7,024,424	7,756,227	7,812,145		
J1		Category 1 RECs	5,089,120	6,506,878	7,258,810	7,809,854	26,664,662	9,216,790	10,098,437	10,361,850		
J3		Category 3 Bundled RECs (Non-CBA Utilities Only)*	1	1	1	-	-	-	-	-		
		Expiring Contracts										
K		RECs from Expiring RPS Contracts (MWh)	21,344	87,459	183,615	239	292,957		33,732	65,340		
		Net RPS Position (Optimized Net Short)										
La	Ga+Ia-Ib-Hc	Annual Net RPS Position after Bank Optimization (MWh)	2,716,706	2,240,901	1,181,038	852,645	6,991,290	2,204,908	1,613,450	319,331		
TP	(F+Ia-Ib-Hc)/A	Annual Net RPS Position after Bank Optimization (%)	0.443938552	0.43903306	0.392719587	0.389749845	0.417278861	0.553396394	0.591935516	0.481625798		

## Note: All values are to be input in MWhs

\*D.17-11-037 provides for utilities serving load in areas outside California Independent System Operator Balancing Authority (Non-CBA Utilities) to bank excess bundled PCC3 RECs



# Renewable Net Short Calculations - 2020 RPS Procurement Plans

LSE Name: San Diego Gas & Electric
Date Filed: 7/22/2024

Variable	Calculation	Item	2025 Forecast 2026 Fe	2026 Forecast 2027	2027 Forecast 2025-2027		2028 Forecast 2029 Forecast	2030 Forecast	2028-2030	2031 Forecast	2032 Forecast 2033 Forecast		2034 Forecast
		Forecast Year	2	3	4 CP 5	ம	9	7	CP6	8	6	10	11
		Annual RPS Requirement											
A		Total Retail Sales (MWh)			4,122,998	4,249,002	4,400,741	4,568,495	13,218,238	4,776,832	4,992,649	5,249,384	5,513,141
В		RPS Procurement Quantity Requirement (%)	46.7%	49.3%	52.0%	49.4% 54.7%	6 57.3%	%0'09	57.4%	%0'09	%0.09	%0.09	%0:09
U	A*B	Gross RPS Procurement Quantity Requirement (MWh)			2,143,959	2,322,929	2,522,945	2,741,097	7,586,971.0	2,866,099	2,995,590	3,149,630	3,307,884
D		Voluntary Margin of Over-procurement (MWh)							1				
Ε	C+D	Net RPS Procurement Need (MWh)			2,143,959	2,322,929	2,522,945	2,741,097	7,586,971	2,866,099	2,995,590	3,149,630	3,307,884
		RPS-Eligible Procurement											
Fa		Risk-Adjusted RECs from Online Generation (MWh)			1,424,309	1,424,287	1,424,287	1,423,913	4,272,486	1,411,677	1,382,378	1,169,105	845,032
Faa		For ecast Failure Rate for Online Generation (%)			%0.0	%0'0	90.0%	%0'0	%0.0	%0:0	%0:0	%0.0	%0.0
Fb		Risk-Adjusted RECs from RPS Facilities in Development (MWh)			107,287	106,790	106,295	105,800	318,885	105,306	104,813	104,321	103,829
Fbb		Forecast Failure Rate for RPS Facilities in Development (%)			24.3%	24.3%	24.3%	24.3%	24.3%	24.3%	24.3%	24.4%	24.4%
Fc		Pre-Approved Generic RECs (MWh)			•					-			
Fd		Executed REC Sales (MWh)			,		-		-	-	-	-	
Ŧ	Fa+Fb+Fc-Fd	Total RPS Eligible Procurement (MWh)			1,531,596	1,531,077	1,530,581	1,529,713	4,591,371	1,516,983	1,487,191	1,273,425	948,861
F0		Category 0 RECs			321,155	321,133	321,133	321,133	963,398	318,259	289,141	211,360	54,454
F1		Category 1 RECs			1,210,441	1,209,944	1,209,449	1,208,580	3,627,973	1,198,724	1,198,050	1,062,065	894,407
F2		Category 2 RECs			•	-		-	-	-	-	-	1
F3		Category 3 RECs				•	•		1				
		Gross RPS Position (Physical Net Short)											
Ga	F-E	Annual Gross RPS Position (MWh)		L	(612,363)	(791,852)	(992,364)	(1,211,384)	(2,995,600)	(1,349,116)	(1,508,399)	(1,876,205)	(2,359,023)
Gb	F/A	Annual Gross RPS Position (%)			37%	36%	35%	33%	35%	32%	30%	24%	17%
		Application of Bank											
Ha	J-Hc (from previous CP)	Existing Banked RECs above the PQR		1	17,461,653	16,849,290	16,057,437	15,065,074	16,849,290	13,853,690	12,504,573	10,996,175	9,119,970
Hb		RECs above the PQR added to Bank			-	•	1						
Hc		Non-bankable RECs above the PQR					1		-	-	1	-	1
Н	Ha+Hb	Gross Balance of RECs above the PQR		1	17,461,653	16,849,290	16,057,437	15,065,074	16,849,290	13,853,690	12,504,573	10,996,175	9,119,970
Ia		Planned Application of RECs above the PQR towards RPS Compliance			612,363	791,852	992,364	1,211,384	2,995,600	1,349,116	1,508,399	1,876,205	2,359,023
Ib		Planned Sales of RECs above the PQR						٠	•	-			
J	H-la-lb	Net Balance of RECs above the PQR		1	16,849,290	16,057,437		13,853,690	13,853,690	12,504,573	10,996,175	9,119,970	6,760,947
)O		Category 0 RECs			6,965,378	6,570,022	6,102,824	5,558,156	18,231,002	4,970,453	4,329,203	3,557,872	2,611,512
J1		Category 1 RECs			9,883,912	9,487,415	8,962,250	8,295,534	26,745,199	7,534,120	6,666,972	5,562,098	4,149,435
13		Category 3 Bundled RECs (Non-CBA Utilities Only)*							-				
		Expiring Contracts											
K		RECs from Expiring RPS Contracts (MWh)			22	•	-	9,362	9,362	1,711	111,286	274,654	71,381
		Net RPS Position (Optimized Net Short)											
La	Ga+Ia-Ib-Hc	Annual Net RPS Position after Bank Optimization (MWh)			0	•	(0)			(0)	(0)	(0)	(0)
TP	(F+Ia-Ib-Hc)/A	Annual Net RFS Position after Bank Optimization (%)			0.52	0.5467	7 0.5733	9.0	0.5739775	9:0	9.0	9.0	9.0

## Note: All values are to be input in MWhs

\*D.17-11-037 provides for utilities serving load in areas outside California Independent System Ope



#### Appendix 2

#### **Quantitative Information**

LSE Narl San Diego Gas & Electric Input Required Date Fild 7722/2024

	Table 1: Cost Quantification (Actual Net Costs, \$)	Actual RPS-Eligible Procurement and Generation Net Costs (\$)	ole Procurement ar Costs (\$)	nd Generation Ne
<u>⊞</u>	Executed RPS-Eligible Contracts by Technology Type* (Purchases and Sales)	2021	2022	2023
l	Biogas: Digester Gas			
	Biogas: Landfill Gas	\$8,753,599	\$7,892,637	3272951.295
	Biodiesel			
	Biomass			
	Muni Solid Waste			
	Geothermal			
	Small Hydro (Non-UOG)	\$143,668	\$161,573	212428.4064
	Conduit Hydro			
	Water Supply / Conveyance			
	Ocean Wave			
	Ocean Thermal			
	Tidal Current			
	Solar PV (Non-UOG)	\$389,979,212	\$397,082,781	126088139.1
	Solar Thermal			
	Wind	\$210,364,299	\$209,513,799	87290008.06
	Unbundled RECs (REC Only)			
	Various (Index Plus REC)***			
	Fuel Cell			
	UOG: Small Hydro			
	UOG: Solar PV	\$789,059	\$493,005	491587.7041
	UOG: Other			
	Executed REC Sales (Revenue)		\$25,071,000	
	Total RPS-Eligible Procurement and Generation Net Cost	\$610,029,837	\$590,072,794	\$217,355,115
ı	Total Retail Sales (MWh)	11,255,481	7,796,873	4619557.762
	Incremental Rate Impact	5.419846779	7.568069534	4.705106544

2026 2027 2028 2029 2030 2031 2032  2026 2027 2028 2029 2030 2031 2032  2027 2029 2030 2031  2028 2029 2030 2032  2029 2030 2032  2029 2030 2032  2020 2031 20	Tab	Table 2: Cost Quantification (Forecast Costs and Revenues, \$)				Ľ	orecast RPS-Eligible	Forecast RPS-Eligible Procurement Costs and Revenues (\$)	sts and Revenues (	(\$			
Biogram Digester Case   Biodresal Biomass   Biom	-	Executed But Not Approved RPS-Eligible Contracts (Purchases and Sales)**	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Biograph Landfill Case   Biograph Landfill C	2	Biogas: Digester Gas											
Bioticase  Bioticase    Bioti	3	Biogas: Landfill Gas											
Biomass   Biom	4	Biodiesel											
Munit Solid Waste   Munit Solid Record REC Saled Revorters   Munit Solid Revolute   Munit Solid	2	Biomass											
Coordinat Hydron (North-UCG)	9	Muni Solid Waste											
Cocean Wave Conduit Hydro   Wave Control Wave Control Hydro   Cocean Wave Conduit Hydro   Cocean Wave Control Hydro   Cocean Wave Complex Norman   Cocean Wave	7	Geothermal											
Water Supply Conneyance         Cocant Hydro           Ocean Thermal         Tidal Current         Cocan Thermal         P           Cocan Thermal         Solar Thermal         P           Wind         Wind           Unbrundled RECs (REC Only)         P           Various (Index Plus REC)***         P           Lebecuted RECs Sear PV (Nam-UCs)         P           Uncl. Solar PV (Nam-Ucs)         P           Various (Index Plus REC)***         P           Lebecuted RECs Sear (REC Only)         P           Uncl. Solar PV (Nam-Ucs)         P           Lebecuted REC Seals (Revouled)         P           Incl. Solar PV (Nam-Ucs)         P           Lebecuted REC Seals (Revouled)         P           Incl. Solar PV (Nam-Ucs)         P           Lebecuted REC Seals (Revouled)         P           Incl. Solar PV (Nam-Ucs)         P <t< td=""><td>8</td><td>Small Hydro (Non-UOG)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	8	Small Hydro (Non-UOG)											
Water Supply / Conveyance         Water Supply / Conveyance         Cocean Wave	6	Conduit Hydro											
Cocean Neve	10	Water Supply / Conveyance											
Cocean Thermal Tidal Current Solar Portion Cocean Thermal	11	Ocean Wave											
Solar Put (Non-UoG)	12	Ocean Thermal											
Solar PV (Non-UOG)	13	Tidal Current											
Solar Thermal   Wind	14	Solar PV (Non-UOG)											
Wind         Unbundled RECs (REC Only)         Purple of RECS (REC On	15	Solar Thermal											
Unbundled RECs (REC Only)	16	Wind											
Various (Index Plus REC)***         Post Solidar (Index Plus REC)***         Public Solidar (Index Plus REC)***         Public Solidar (Index Plus REC)***         Public Solidar (Index Plus Recurred REC Salidar (Index Plus Recurred But Not Approved RPS-Eligible Procurement Recurred But Not Approved RPS-Eligible Recurred But Not Approved RPS-Eligible Recurred But Not Approved RPS-Eligible Recurred But N	17	Unbundled RECs (REC Only)											
Fuel Cell	18	Various (Index Plus REC)***											
UOG: Shall Hydro         UOG: Shall Hydro         LOG: Shall Hydro	20	Fuel Cell											
OCG: Solar PV   UCG: Other	21	UOG: Small Hydro											
UOG: Other   UOG	22	UOG: Solar PV											
Total Executed REC Sales (Revenue)   So   So   So   So   So   So   So   S	23	UOG: Other											
Total Executed But Not Approved RPS-Eligible Procurement   \$0   \$0   \$0   \$0   \$0   \$0   \$0   \$	24	Executed REC Sales (Revenue)											
Total Retail Sales (MVh)	25	Total Executed But Not Approved RPS-Eligible Procurement and Generation Cost	0\$	0\$	0\$	0\$	0\$	\$0	0\$	0\$	0\$	0\$	0\$
Incremental Rate Impact 0.00 ¢/kWh	26	Total Retail Sales (MWh)				3,570,806	3,705,588	3,878,918	4,072,885	4,303,440	4,536,717	4,818,422	5,122,480
	27	Incremental Rate Impact	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh				

28	Executed RPS-Eligible Contracts (Purchases and Sales)****	2024	2025	2026	2027	2028	5029	2030	2031	2032	2033	2034
29	Biogas: Digester Gas											
30	Biogas: Landfill Gas	\$2,948,668	\$2,096,422	\$2,096,422	\$534,910	\$534,910	\$534,910	\$534,910	\$199,613	\$0	\$0	\$0
31	Biodiesel											
32	Biomass											
33	Muni Solid Waste											
34	0											
35	Small Hydro (Non-UOG)	\$151,870	\$151,870	\$151,870	\$151,870	\$151,870	\$151,870	\$151,870	\$151,870	\$151,870	\$151,870	\$151,870
36	Conduit Hydro											
37	Water Supply / Conveyance											
38	Ocean Wave											
39	Ocean Thermal											
40	Tidal Current											
41	Solar PV (Non-UOG)	\$97,881,767	\$100,042,896	\$102,089,090	\$104,183,582	\$104,572,250	\$104,953,571	\$105,318,153	\$105,068,704	\$105,470,186	\$103,356,346	\$85,342,848
42	Solar Thermal											
43	Wind	\$54,701,322	\$50,892,464	\$48,598,302	\$48,515,110	\$48,515,110	\$48,515,110	\$48,515,110	\$48,515,110	\$45,335,907	\$27,228,193	\$14,931,646
44	Unbundled RECs (REC Only)											
45	Various (Index Plus REC)***											
47	Fuel Cell											
48	UOG: Small Hydro	\$234,897	\$141,562	\$141,825	\$141,357	\$133,200	\$133,869	\$134,542	\$135,218	\$135,897	\$136,580	\$137,267
49	UOG: Solar PV											
20	UOG: Other											
51	Executed REC Sales (Revenue)											
52	Total Executed and Approved RPS-Eligible Procurement and Generation Cost	\$155,918,525	\$153,325,214	\$153,077,508	\$153,526,829	\$153,907,340	\$154,289,330	\$154,654,586	\$154,070,516	\$151,093,861	\$130,872,990	\$100,563,631
53	Total Retail Sales (MWh)				3,570,806	3,705,588	3,878,918	4,072,885	4,303,440	4,536,717	4,818,422	5,122,480
54	Incremental Rate Impact				4.299500939	4.153385273	3.977638553	3.797174893	3.580170957	3.330466629	2.716096391	1.963182353
55	Total RPS-Eligible Procurement and Generation Cost	\$155,918,525	\$153,325,214	\$153,077,508	\$153,526,829	\$153,907,340	\$154,289,330	\$154,654,586	\$154,070,516	\$151,093,861	\$130,872,990	\$100,563,631
26	Total Incremental Rate Impact				4.299500939	4.153385273	3.977638553	3.797174893	3.580170957	3.330466629	2.716096391	1.963182353

Technology definitions are given in the PCC Classification Handbook located in the RPS Compliance Reporting Section of: https://www.cpuc.ca.gov/RPSComplianceReporting/ For contracts that have been executed but still require formal approval (PCV or other formal approval process) for purchases and safes. The "Various" rechnology type is to be used in the case of contracts encompassing multiple facilities where the generation type is not yet known. For IOUs and SMJUs: Include all executed contracts that required CPUC approval. For CCAs and ESPs: Include all executed contracts that required CPUC approval. For CCAs and ESPs: Include all executed contracts that required CPUC approval. For CCAs and ESPs: Include all executed contracts that required CPUC approval. For CCAs and ESPs: Include all executed contracts that required CPUC approval. For CCAs and ESPs: Include all executed contracts that required CPUC approval. For CCAs and ESPs: Include all executed contracts that have been approved through relevant formal approval processes. \*Note: \*\*Note: \*\*\*Note: \*\*\*Note:

LSE Nar	LSE Nan San Diego Gas & Eelectric		Input Required		No Input Required	Þ						
Date File	7/22/2024											
Table	Table 3: Cost Quantification (Actual Procurement / Generation and Sales, MWh)	Actual RPS-Eligi	ble Procurement Sales (MWh)	Actual RPS-Eligible Procurement / Generation and Sales (MWh)								
← (	Technology Type* (Procurement / Generation and Sales)	2021	2022	2023								
Ν 60	Biogas: Digester Gas Biogas: Landfill Gas	105,538	92,113	32679.67376								
4	Biodiesel											
2	Biomass											
9	Muni Solid Waste											
- 8	Small Hydro (Non-UOG)	1,514	1,774	3199.45274								
6	Conduit Hydro											
1 19	Water Supply / Conveyance											
12	Ocean Thermal											
13	Tidal Current											
4 t	Solar PV (Non-UOG)	3,208,374	3,292,292	1046406.64								
16	Wind	2,910,562	3,058,118	1141111.532								
17	Unbundled RECs (REC Only)											
\$ 6	Various (Index Plus REC)***											
20	UOG: Small Hydro											
21	UOG: Solar PV	2,756	949	1500.894								
22	UOG: Other											
23	Executed REC Sales (MWh)		1,830,000									
24	Total RPS Eligible Procurement (MWh)	6,228,743	4,615,246	2,224,898								
									A MARIE V			
Table 4: Co	Table 4: Cost Quantification (Forecast Procurement / Generation and Sales, MWh)				Forecast RPS	s-Eligible Procu	rement / Genera	Forecast RPS-Eligible Procurement / Generation and Sales (MWN)	(IMMN)			
-	Executed But Not Approved RPS-Eligible Contracts (Purchases and Sales)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2	Biogas: Digester Gas											
3	Biogas: Landfill Gas											
4	Biodiesel											
2	Biomass											
9	Muni Solid Waste											
7	Geothermal											
8	Small Hydro (Non-UOG)											
6	Conduit Hydro											
10	Water Supply / Conveyance											
11	Ocean Wave											
15	Ocean Thermal											
13	Tidal Current											
14	Solar PV (Non-UOG)											
15	Solar Themal											
16	Wind											
17	Unbundled RECs (REC Only)											
18	Various (Index Plus REC)***											
20	Fuel Cell											
21	UOG: Small Hydro											
22	UOG: Solar PV											
23	UOG: Other											
24	Executed REC Sales (MWh)											
25	Total Executed But Not Approved RPS-Eligible Procurement	0	0	0	0	0	0	0	0	0	0	0

26	Executed and Approved RPS-Eligible Contracts (Purchases and Sales) ****	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
27	Biogas: Digester Gas											
28	Biogas: Landfill Gas	36,090	28,446	28,446	4,584	4,584	4,584	4,584	1,711	0	0	0
59	Biodiesel											
30	Biomass											
31	Muni Solid Waste											
32	Geothermal											
33	Small Hydro (Non-UOG)	2,733	2,733	2,733	2,733	2,733	2,733	2,733	2,733	2,733	2,733	2,733
34	Conduit Hydro											
35	Water Supply / Conveyance											
36	Ocean Wave											
37	Ocean Thermal											
38	Tidal Current											
39	Solar PV (Non-UOG)	819,530	854,981	890,827	926,817	926,321	925,825	924,957	915,100	914,607	893,296	754,250
40	Solar Themal											
41	Wind	772,911	636,851	597,583	596,822	596,822	596,822	596,822	596,822	569,233	376,779	191,260
42	Unbundled RECs (REC Only)											
43	Various (Index Plus REC)***											
45	Fuel Cell											
46	UOG: Small Hydro											
47	UOG: Solar PV	829	642	642	640	617	617	219	617	617	617	617
48	UOG: Other											
49	Executed REC Sales (MWh)											
20	Total Executed and Approved RPS-Eligible Procurement	1,632,093	1,523,653	1,520,231	1,531,596	1,531,077	1,530,581	1,529,713	1,516,983	1,487,191	1,273,425	948,861
51	Total RPS Eligible Procurement (MWh)	1,632,093	1,523,653	1,520,231	1,531,596	1,531,077	1,530,581	1,529,713	1,516,983	1,487,191	1,273,425	948,861
*Note:	Technology definitions are given in the PCC Classification Handbook located in the RPS	e RPS Compliance	Reporting section	Compliance Reporting section of: https://www.cpuc.ca.gov/RPSComplianceReporting.	ic.ca.gov/RPSCo	mplianceReportin	ıg/					
**Note:	For contracts that have been executed but still require formal approval (CPUC or other formal approval process) for purchases and sales	other formal approv	al process) for pur	chases and sales.								
***Note:	The "Various" technology type is to be used in the case of contracts encompassing multiple facilities where the generation type is not yet known	g multiple facilities	where the generat	ion type is not yet k	nown							
****Note:	For IOUs and SMJUs: Include all executed contracts that required CPUC approval. For CCAs and ESPs: Include all executed contracts that have been approved through relevant formal approval processes.	. For CCAs and E	SPs: Include all exe	ecuted contracts tha	it have been appi	oved through rele	evant formal app	roval processes.				

#### **APPENDIX 3**

#### **Information Only TOD Factor Workpapers**

Pursuant to D.19-02-007, SDG&E participated in a stakeholder process to develop information-only Time of Delivery factors ("TODs"), and the Commission approved SDG&E, PG&E's and SCE's May 29, 2019 Joint IOU Information-Only TOD Factor proposal ("TOD Proposal"). SDG&E's approved TOD Factors for 2020 and 2024 are within the Commission-approved May 29, 2019 TOD Proposal. Per OP 26 of D.19-12-042, below are workpapers to confirm there is a high correlation between the public information-only TOD factors and SDG&E's confidential forecasts. <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> D.19-12-042, OP 18.

<sup>&</sup>lt;sup>2</sup> To confirm there is a high correlation between the public information-only TOD factors, SDG&E uses 2025, which is in line with the May 2024 ERRA filing, and 2028, using the forward gas prices at the time of the May 2024 filing.

### CONFIDENTIAL TOD WORKPAPERS ARE NOT INCLUDED IN THE PUBLIC VERSION OF THE 2024 DRAFT RPS PLAN

#### **APPENDIX 4**

#### **Safety Considerations**

#### A. RPS Power Purchase Agreements

SDG&E's procurement programs and the safety-related contractual provisions included in the contract for each program are described below. For those contracts that are appendices to this Plan, the relevant sections are referenced, for all other contracts, language from the relevant sections is provided. Although the precise wording varies slightly among PPAs related to different programs, each PPA follows the same logic by first defining prudent business practices as those which, given the information available at the time the decision was made, could reasonably be expected to accomplish the desired result consistent with good business practices, reliability and safety. This definition is then referenced throughout the contract. By executing any of the following referenced PPAs, a counterparty agrees to incorporate safety considerations into its decision-making process and operate accordingly.

#### i. PPA Provisions - Utility Scale RFOs (Long-Term and Short-Term<sup>1</sup> Contracts) and GT RAM<sup>2</sup>

- Section 1.1: Good Industry Practice
- Section 3.1(f)(ii): Annual Capacity Testing
- Section 3.5(a): General Operation
- Section 3.5(b): CAISO and WECC Standards
- Section 3.5(c): Reliability Standards.
- Section 3.6(a)(i): Testing and Calibration.
- Section 3.7(a): Planned Outages
- Exhibit F, Form of Quarterly Progress Report, Section 9.0: Safety and Health Reports

#### ii. PPA Provisions – CRE and WATER FiT Programs<sup>3</sup>

- Section 5.4: The Generating Facility shall be operated with all of Producer's Protective Functions in service and in accordance with Prudent Electrical Practices whenever the Generating Facility is operated in parallel with SDG&E's Distribution System. Any deviation from these requirements may occur only when the Parties have agreed to such deviations in writing.
- Appendix F, Item 32: "Operate," "Operating" or "Operation" means to provide (or the provision of) all the operation, engineering, purchasing,

<sup>&</sup>lt;sup>1</sup> SDG&E's Short-Term PPA is for projects that have already been constructed because it is not likely that a new project would be interested in a term of 5 years or less, as such it does not contain a Milestone Schedule, a Commercial Operations Certificate, or a Form of Quarterly Progress Report.

<sup>&</sup>lt;sup>2</sup> D.14-11-042 requires that SDG&E file a short-term RPS PPA and RAM PPA, and D.16-05-006 requires that SDG&E utilize a RAM Rider for its ECR program. The Short-Term RPS PPA is Appendix 6 within this Plan and SDG&E's most recently approved RAM documents can be found in SDG&E AL 3206-E, effective April 28, 2018 at http://regarchive.sdge.com/tm2/pdf/3206-E.pdf. All of these documents are based on SDG&E's Long-Term RPS PPA, attached hereto as Appendix 5, as such the safety provisions and associated references are the same.

<sup>&</sup>lt;sup>3</sup> SDG&E's CRE FiT and WATER FiT programs terminated July 24, 2013.

- repair, supervision, training, inspection, testing, protection, use, management, improvement, replacement, refurbishment, retirement, and maintenance activities associated with operating the Generating Facility in accordance with Prudent Electrical Practices.
- Appendix F, Item 41: "Prudent Electrical Practices" means those practices, methods and acts that would be implemented and followed by prudent operators of electric energy generating facilities in the Western United States, similar to the Generating Facility, during the relevant time period, which practices, methods and acts, in the exercise of prudent and responsible professional judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result consistent with good business practices, reliability and safety.
  - Prudent Electrical Practices shall include, at a minimum, those professionally responsible practices, methods and acts described in the preceding sentence that comply with manufacturers' warranties, restrictions in this Agreement, and the requirements of Governmental Authorities, WECC standards, the ISO and applicable laws.
  - Prudent Electrical Practices shall also include taking reasonable steps to ensure that:
    - Equipment, materials, resources, and supplies, including spare parts inventories, are available to meet the Generating Facility's needs;
    - Sufficient operating personnel are available at all times and are adequately experienced and trained and licensed as necessary to operate the Generating Facility properly and efficiently, and are capable of responding to reasonably foreseeable emergency conditions at the Generating Facility and emergencies whether caused by events on or off the Site;
    - Preventive, routine, and non-routine maintenance and repairs are performed on a basis that ensures reliable, long term and safe operation of the Generating Facility, and are performed by knowledgeable, trained, and experienced personnel utilizing proper equipment and tools;
    - Appropriate monitoring and testing are performed to ensure equipment is functioning as designed;

- Equipment is not operated in a reckless manner, in violation of manufacturer's guidelines or in a manner unsafe to workers, the general public, or SDG&E's electric system or contrary to environmental laws, permits or regulations or without regard to defined limitations such as, flood conditions, safety inspection requirements, operating voltage, current, volt ampere reactive (VAR) loading, frequency, rotational speed, polarity, synchronization, and control system limits; and
- Equipment and components designed and manufactured to meet or exceed the standard of durability that is generally used for electric energy generating facilities operating in the Western United States and will function properly over the full range of ambient temperature and weather conditions reasonably expected to occur at the Site and under both normal and emergency conditions.

#### iii. PPA Provisions – Re-MAT FiT Program, and BioRAM<sup>4</sup>

- Section 6.4: <u>Standard of Care</u>. Seller shall: (a) maintain and operate the
  Facility and Interconnection Facilities, except facilities installed by Buyer, in
  conformance with all Laws and in accordance with Prudent Electrical
  Practices; (b) obtain any governmental authorizations and permits required
  for the construction and operation thereof; and (c) generate, schedule and
  perform transmission services in compliance with all applicable operating
  policies, criteria, rules, guidelines and tariffs and Prudent Electrical Practices.
  Seller shall reimburse Buyer for any and all losses, damages, claims,
  penalties, or liability Buyer incurs as a result of Seller's failure to obtain or
  maintain any governmental authorizations and permits required for
  construction and operation of the Facility throughout the Term of this
  Agreement.
- Section 6.5.2: <u>Access Rights</u>. Buyer, its authorized agents, employees and inspectors may, on reasonable advance notice under the circumstances, visit the Project during normal business hours for purposes reasonably connected with this Agreement or the exercise of any and all rights secured to Buyer by Law, its tariff schedules, and rules on file with the CPUC. Buyer, its authorized agents, employees and inspectors must (a) at all times adhere to all safety and security procedures as may be required by Seller; and (b) not interfere with the operation of the Project. Buyer shall make reasonable efforts to

A4-4

<sup>&</sup>lt;sup>4</sup> SDG&E's Re-MAT FiT Program ended June 30, 2016. Note that SDG&E's BioRAM contract is also based on SDG&E's ReMAT PPA.

- coordinate its emergency activities with the Safety and Security Departments, if any, of the Project operator. Seller shall keep Buyer advised of current procedures for contacting the Project operator's Safety and Security Departments.
- Appendix A: "Demonstrated Contract Capacity" means the Facility's total rated electric alternating current energy generating capacity which will equal the [lesser of (a) the sum of the Inverter Block Unit Capacity of all Inverter Block Units in the Facility and (b) the continuous output power rating at the expected operating power factor of the step-up transformer that connects the Facility to the Transmission/Distribution Owner's system[for solar photovoltaic technology]] [the total of the manufacturer's nameplate ratings of all installed Wind Turbines, consistent with Prudent Electrical Practices and accepted industry standards, as indicated on the nameplates physically attached to the individual Wind Turbine generators[for wind technology]] [sum of the Metered Amounts for the Demonstration Hour[all other technologies]], as determined in accordance with Appendix M.
- Appendix A: "Inverter Block Unit Capacity" means, with respect to each Inverter Block Unit, the total rated electric alternating current energy generating capacity of such Inverter Block Unit, determined as the lesser of:

   (a) The manufacturer's output rating of the Current Inverter included in such Inverter Block Unit, consistent with Prudent Electrical Practices and accepted industry standards, as indicated on the nameplate physically attached to such Current Inverter;
   (b) The sum of the manufacturer's nameplate ratings of all Photovoltaic Modules included in such Inverter Block Unit, consistent with Prudent Electrical Practices and accepted industry standards, as indicated on the nameplates physically attached to such individual Photovoltaic Modules;
- Appendix A: "Prudent Electrical Practices" means those practices, methods and acts that would be implemented and followed by prudent operators of electric energy generating facilities in the Western United States, similar to the Facility, during the relevant time period, which practices, methods and acts, in the exercise of prudent and responsible professional judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result consistent with good business practices, reliability and safety. Prudent Electrical Practices shall include, at a minimum, those professionally responsible practices, methods and acts described in the preceding sentence that comply with manufacturers' warranties, restrictions in this Agreement, and the

requirements of Governmental Authorities, WECC standards, the CAISO and Laws. Prudent Electrical Practices also includes taking reasonable steps to ensure that:

- (a) Equipment, materials, resources, and supplies, including spare parts inventories, are available to meet the Facility's needs;
- (b) Sufficient operating personnel are available at all times and are adequately experienced and trained and licensed as necessary to operate the Facility properly and efficiently, and are capable of responding to reasonably foreseeable emergency conditions at the Facility and Emergencies whether caused by events on or off the Site;
- (c) Preventive, routine, and non-routine maintenance and repairs are performed on a basis that ensures reliable, long term and safe operation of the Facility, and are performed by knowledgeable, trained, and experienced personnel utilizing proper equipment and tools;
- (d) Appropriate monitoring and testing are performed to ensure equipment is functioning as designed;
- (e) Equipment is not operated in a reckless manner, in violation of manufacturer's guidelines or in a manner unsafe to workers, the general public, or the Transmission/Distribution Owner's electric system or contrary to environmental laws, permits or regulations or without regard to defined limitations such as, flood conditions, safety inspection requirements, operating voltage, current, volt ampere reactive (VAR) loading, frequency, rotational speed, polarity, synchronization, and control system limits; and
- (f) Equipment and components are designed and manufactured to meet or exceed the standard of durability that is generally used for electric energy generating facilities operating in the Western United States and will function properly over the full range of ambient temperature and weather conditions reasonably expected to occur at the Site and under both normal and emergency conditions.

#### iv. PPA Provisions – BioMAT FiT Program<sup>5</sup>

Section 5.4: Standard of Care. Seller shall: (a) maintain and operate the
Facility and Interconnection Facilities, except facilities installed by Buyer, in
conformance with all Laws and in accordance with Prudent Electrical
Practices; (b) obtain any governmental authorizations and permits required

<sup>&</sup>lt;sup>5</sup> SDG&E's BioMAT FiT Program began February 1, 2016.

for the construction and operation thereof; and (c) generate, schedule and perform transmission services in compliance with all applicable operating policies, criteria, rules, guidelines and tariffs and Prudent Electrical Practices. Seller shall reimburse Buyer for any and all losses, damages, claims, penalties, or liability Buyer incurs as a result of Seller's failure to obtain or maintain any governmental authorizations and permits required for construction and operation of the Facility throughout the Term of this Agreement.

- Section 5.5.2: Access Rights. Buyer, its authorized agents, employees and inspectors may, on reasonable advance notice under the circumstances, visit the Project during normal business hours for purposes reasonably connected with this Agreement or the exercise of any and all rights secured to Buyer by Law, its tariff schedules, and rules on file with the CPUC. Buyer, its authorized agents, employees and inspectors must (a) at all times adhere to all safety and security procedures as may be required by Seller; and (b) not interfere with the operation of the Project. Buyer shall make reasonable efforts to coordinate its emergency activities with the Safety and Security Departments, if any, of the Project operator. Seller shall keep Buyer advised of current procedures for contacting the Project operator's Safety and Security Departments.
- Section 5.17: Safety Plan. Seller shall provide to Buyer, prior to commencement of any construction activities on the Site, a report from an independent engineer (acceptable to both Buyer and Seller) certifying that Seller has a written plan for the safe construction and operation of the Facility in accordance with Prudent Electrical Practices.
- Appendix A: "Demonstrated Contract Capacity" means the Facility's total
  rated electric alternating current energy generating capacity which will equal
  the sum of the metered amounts for the Demonstration Hour, as determined
  in accordance with Appendix J.
- Appendix A: "Prudent Electrical Practices" means those practices, methods and acts that would be implemented and followed by prudent operators of electric energy generating facilities in the Western United States, similar to the Facility, during the relevant time period, which practices, methods and acts, in the exercise of prudent and responsible professional judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result consistent with good business practices, reliability and safety. Prudent Electrical Practices shall include, at a minimum, those professionally responsible practices, methods

and acts described in the preceding sentence that comply with manufacturers' warranties, restrictions in this Agreement, and the requirements of Governmental Authorities, WECC standards, the CAISO and Laws. Prudent Electrical Practices also includes taking reasonable steps to ensure that:

- (a) Equipment, materials, resources, and supplies, including spare parts inventories, are available to meet the Facility's needs;
- (b) Sufficient operating personnel are available at all times and are adequately experienced and trained and licensed as necessary to operate the Facility properly and efficiently, and are capable of responding to reasonably foreseeable emergency conditions at the Facility and Emergencies whether caused by events on or off the Site;
- (c) Preventive, routine, and non-routine maintenance and repairs are performed on a basis that ensures reliable, long term and safe operation of the Facility, and are performed by knowledgeable, trained, and experienced personnel utilizing proper equipment and tools;
- (d) Appropriate monitoring and testing are performed to ensure equipment is functioning as designed;
- (e) Equipment is not operated in a reckless manner, in violation of manufacturer's guidelines or in a manner unsafe to workers, the general public, or the Transmission/Distribution Owner's electric system or contrary to environmental laws, permits or regulations or without regard to defined limitations such as, flood conditions, safety inspection requirements, operating voltage, current, volt ampere reactive (VAR) loading, frequency, rotational speed, polarity, synchronization, and control system limits; and
- (f) Equipment and components are designed and manufactured to meet or exceed the standard of durability that is generally used for electric energy generating facilities operating in the Western United States and will function properly over the full range of ambient temperature and weather conditions reasonably expected to occur at the Site and under both normal and emergency conditions.

#### **B.** Renewable Utility-Owned Generation Projects

SDG&E requires all contractors working on the construction of new UOG facilities to observe the following safety-related procedures:

#### i. Safety Requirements

- The Contractor must comply with all applicable federal, state, regional, municipal, and local laws, ordinances, rules, codes, regulations, and executive orders, including all laws, ordinances, rules, codes, regulations, and executive orders applicable to health and safety, SDG&E's Class 1 Contractor Safety Manual, and all contract terms as set forth in the contract entered into with the Company, and must ensure that all employees and subcontractors working on Contractor's behalf meet or exceed these same requirements. If there is a conflict between SDG&E's Class 1 Contractor Safety Manual, the contract entered into with the Company, or applicable H&S Laws, the more specific standard applies.
- The Contractor must enroll with SDG&E's Third Party Administrator and maintain compliance with SDG&E's Contractor safety program.
- The Contractor must establish, implement, and maintain a complete work scope specific safety program. The Contractor must submit electronic and written copies of this program to SDG&E for review.
- The safety program must include a, Safety Manager at the start of the project and sufficient, qualified support staff for the duration of on-site work. The safety program must follow the applicable laws, ordinances, regulations, and standards for such programs and must include: code of safe practices, fire protection plan, spill prevention plan, worker environmental awareness training, emergency situations response plan and procedures, hazardous material control and training, and other applicable programs. The plan must be coordinated with SDG&E's and local authorities as required.
- The safety program must include sections addressing site environmental protection and a personal protective equipment.
- Safety and Health Orientation:
  - Each new employee (including subcontractors and vendors) must receive a thorough safety and health orientation from the Contractor that gives the employee the basic information about the Contractor's safety program, Federal or State OSHA (the most stringent in any case), and other applicable safety rules and regulations. The Contractor must provide additional safety instructions during the

scope of the normal daily activities for the performance of hazardous or unfamiliar tasks.

#### Supervisor's Safety Orientation

 The Contractor must familiarize all supervisory personnel with the Contractor's safety and health responsibilities by conducting a safety and health orientation with each supervisor. Supervisors must be trained in CPR and First Aid.

#### Weekly Toolbox and Daily Safety Meetings

 The Contractor must conduct weekly toolbox meetings, open to SDG&E's representatives, to provide all on-site employees with up-todate safety and health information. Daily task safety analysis for each planned activity must be performed to help the employees prepare for the hazards associated with each assigned task.

#### General Safety Requirements:

- Barricades: The Contractor must erect and maintain all barricades used to protect personnel from hazardous work operations as required by Federal or State OSHA, whichever is applicable.
- Safety Signs: The Contractor must post any signs or posters that may be needed to advise employees of unsafe areas or conditions as required by Federal or State OSHA, whichever is applicable.
- Scaffolds: The Contractor must erect all scaffolds in conformance with applicable Federal or State OSHA standards and maintain a method of communication that daily scaffolding erection inspection has been performed and that the scaffolding is ready for use.
- Floor and Roof Openings: The Contractor must barricade or cover all floor and roof openings to protect employees from falls as required by Federal or State OSHA.
- Lock Out and Tag Out: The Contractor must provide an approved procedure for lock out and tag out, including all lock tags, of all applicable equipment.
- The Contractor must identify in writing a qualified safety representative to administer the Contractor's safety program. All vendor-supplied service organizations must each be required to implement a safety program appropriate for the Work being performed and in compliance with the Contractor's safety program. The Contractor is responsible for all subcontractor compliance with the it's safety program.

#### • Loss Prevention Requirements:

- Implementation of an approved safety program
- o Provision of a safe workplace for all employees
- Implementation of a fire prevention program in accordance with NFPA 241: Standard for Safeguarding Construction, Alteration, and Demolition Operations
- Prevention of equipment operation unless the equipment is safe to operate, all protective equipment is in place, and the operators are properly trained and licensed or certified for the particular equipment being operated
- Identified hazards are addressed/mitigated
- Implementation of regular safety meetings and training
- Adherence to all applicable Federal or State OSHA, DOT, and other applicable safety requirements

#### Occupational Health

The Contractor must take all reasonable steps and precautions to protect the health of their employees and other site personnel. The Contractor must conduct occupational health monitoring and sampling as required by Federal or State OSHA, whichever is applicable, to determine the levels of exposure of its employees to hazardous or toxic substances or environmental conditions. Copies of employee sampling results must be provided to SDG&E upon request.

#### • Fire Protection and Prevention

- The Contractor must provide fire extinguishers that are adequate for potential fire hazards present during construction, and must provide instruction regarding the proper use of such equipment to all employees. Only carbon dioxide (CO2) fire extinguishers may be used within proximity of the inverters, transformers, switchgear, and communications enclosures to avoid damage to this equipment.
- The Contractor must ensure the material it proposes to use at the site conforms to appropriate standards for flame-resistance or fireproof characteristics or is adequately protected from fire danger. Specific materials in this category include coatings, plastic-covering materials, construction lumber, scaffold plans, paper, boxes, and crating materials. Flammables, such as fuels and solvents, must be stored in appropriate containers. Fire blankets must be used to protect personnel and permanent project equipment/installations when necessary.
- Crane Safety and Material Handling

o The Contractor must comply with all rules, regulations, and standards associated with crane safety and material handling. No equipment or machinery intended for material or personnel handling is allowed on site without having written proof of a current inspection, insurance, and crane operator certification. All equipment inspection reports must be renewed prior to expiration. All crane equipment must have an inspection checklist signed off by the operator at the beginning of each shift to ensure that any crane used is in safe operating condition. Equipment must have functioning horns of sufficient volume to provide warnings when required. When applicable, crane lift plan(s) will be submitted in advance for SDG&E's review.

#### ii. Safety Inspections and Reporting

#### Inspections

- The Contractor must conduct safety inspections of all work areas and operations in accordance with the Contractor's safety program. The Contractor must cooperate with any general safety inspections conducted by SDG&E.
- The Contractor must maintain an inspection program for review of safety compliance for the Contractor's equipment, including power tools, electrical cords, rigging equipment, safety equipment, etc.

#### Accident and Incident Reporting

- The Contractor must immediately notify a SDG&E Representative of all project-related incidents, as required by SDG&E's Class 1 Contractor Safety Manual.
- The Contractor must analyze any accident or incident (including "near misses") and provide an independent report of the cause and results of the accident or incident to SDG&E, as required by SDG&E's Class 1 Contractor Safety Manual. The Contractors safety program must identify and implement all necessary corrective action to prevent future occurrence of a similar incident.
- Contractor must immediately notify SDG&E of any governmental agency (OSHA, Fire Dept., Health Dept., etc.) complaint or inspection on any project.

#### Recordkeeping

• The Contractor must maintain all records required by federal and state agencies that pertain to work-related injuries or illness.

#### Security

during construction.	

o The Contractor is responsible for providing site security as necessary

#### **APPENDIX 5**

#### **RPS Long-Term Model PPA**

#### [Form of PPA for As-Available, Baseload, Peaking or Dispatchable Product]

[Standard contract terms and conditions that "may not be modified" per CPUC D.04-06-014 and subsequent decisions are shown in red shaded text and standard contract terms and conditions that may be modified per CPUC D.04-06-014 and subsequent decisions are shown in green shaded text.]

#### POWER PURCHASE AGREEMENT

Between

SAN DIEGO GAS & ELECTRIC COMPANY

(as "Buyer")

	and
_	
	(as "Seller")

#### POWER PURCHASE AGREEMENT

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# **COVER SHEET**

This Power Purchase Agreement is made	do as of the following date:
	de as of the following date:
	xhibits, schedules, appendices, and any writter
supplements hereto, any designated collatera	l, credit support or margin agreement or similar
arrangement between the Parties as well as all	written and signed amendments and modifications
C	red to as, the "Agreement." The Parties to this
Agreement (hereinafter individually a "Party")	and collectively the "Parties") are the following:
Name (46C-11-22)	Names Car Diago Car & Electric Communic
Name: ("Seller")	Name: San Diego Gas & Electric Company
All N. C.	("Buyer")
All Notices:	All Notices:
Street:	Street: 8315 Century Park Court
City: Zip:	City: San Diego, CA Zip: 92123
Attn: Contract Administration	Attn: Electric & Fuel Procurement - Contract
Phone:	Administration
Facsimile:	Phone: (858) 636-5536
Duns:	Facsimile: (858) 650-6190
Federal Tax ID Number:	Duns: 006911457
	Federal Tax ID Number: 95-1184800
Invoices:	Invoices:
	San Diego Gas & Electric Company
	8315 Century Park Ct.
<del></del>	San Diego, California 92123-1593
Attn:	Attn: Electric & Fuel Procurement – Invoicing and
Phone:	Reporting
Facsimile:	Phone: (858) 650-6187
	Facsimile: (858) 650-6190
Scheduling:	Scheduling:
	San Diego Gas & Electric Company
<u> </u>	8315 Century Park Ct.
	San Diego, California 92123-1593
Attn:	Attn: Transaction Scheduling Manager
Phone:	Phone: (858) 650-6160
Facsimile:	Facsimile: (858) 650-6191
Payments:	Payments:
	San Diego Gas & Electric Company
	PO Box 25110
<u> </u>	Santa Ana, CA 92799-5110
Attn:	Attn: Mail Payments
Phone:	Phone: (619) 696-4521
Facsimile:	Facsimile: (619) 696-4899
Wire Transfer:	Wire Transfer:
BNK:	BNK: Union Bank of California
ABA:	for: San Diego Gas & Electric Company
ACCT:	ABA: Routing # 122000496
Confirmation:	ACCT: #4430000352
FAX:	Confirmation: SDG&E, Major Markets
	FAX:(213) 244-8316
Credit and Collections:	Credit and Collections:
	San Diego Gas & Electric Company, Major
	Markets
	555 W. Fifth Street, ML 18A3
Attn:	Los Angeles CA 90013-1011

Phone:	Attn.: Major Markets, Credit and Collections
Facsimile:	Manager
	Fax No.: (213) 244-8316
	Phone: (213) 244-4343
With additional Notices of an Event of Default or	With additional Notices of an Event of Default or
Potential Event of Default to:	Potential Event of Default to:
	San Diego Gas & Electric Company
	8330 Century Park Ct.
	San Diego, California 92123
Attn:	Attn: General Counsel
Phone:	Phone: (858) 650-6141
Facsimile:	Facsimile: (858) 650-6106

#### **GENERAL TERMS AND CONDITIONS**

#### ARTICLE ONE: GENERAL DEFINITIONS

1.1 <u>General</u>. The following terms shall have the following meaning for purposes of this Agreement.

"[AAA][JAMS]" means [the American Arbitration Association] [JAMS, Inc.].

"Affiliate" means, with respect to any person, any other person (other than an individual) that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with, such person. For this purpose, "control" means the direct or indirect ownership of fifty percent (50%) or more of the outstanding capital stock or other equity interests having ordinary voting power.

"Agreement" has the meaning set forth in the preamble to the Cover Sheet.

"Arbitration" has the meaning set forth in Section 12.3.

[For As-Available Product only: "As-Available" means a Product for which, subject to the terms of this Agreement, Seller is excused from selling and delivering the Product to Buyer, and Seller shall not be liable to Buyer for any damages determined pursuant to Section 3.1(h) of the Agreement, in the event that Seller fails to deliver the Product to Buyer for any of the following reasons:

- (a) if the Project is unavailable as a result of a Forced Outage and such Forced Outage is not the result of Seller's negligence or willful misconduct;
- (b) Force Majeure;
- (c) by the Buyer's failure to perform;
- (d) by a Planned Outage of the Project;
- (e) a reduction in output as ordered under Dispatch Down Periods; or
- (f) [the unavailability of landfill gas which was not anticipated as of the Execution Date, which is not within the reasonable control of, or the result of negligence of, Seller or the party supplying such landfill gas to the Project, and which by the exercise of reasonable due diligence, Seller is unable to overcome or avoid or causes to be avoided.] OR [insufficient wind power for the Project to generate energy as determined by the best wind speed and direction standards utilized by other wind producers or purchasers in the vicinity of the Project or if wind speeds exceed the Project's technical specifications.] OR [the unavailability of water or the unavailability of sufficient pressure required for operation of the hydroelectric turbine-generator as reasonably determined by Seller within its operating procedures, neither of which was anticipated as of the

Execution Date, which is not within the reasonable control of, or the result of negligence of, Seller or the party supplying such water to the Project, and which by the exercise of due diligence, such Seller or the party supplying the water is unable to overcome or avoid or causes to be avoided.] OR [insufficient solar power for the Project to generate energy as determined by the best solar standards utilized by other solar producers or purchasers in the vicinity of the Project.]

[For Dispatchable Product only: "Availability Adjustment Factor" has the meaning set forth in Section 4.1(b).]

"Availability Incentive Payments" shall mean Availability Incentive Payments as defined in FERC filing ER09-1064 or such other similar term as modified and approved by FERC thereafter to be incorporated in the CAISO Tariff or otherwise applicable to CAISO.

**[For Dispatchable Product only:** "Availability Notice" has the meaning set forth in Section 3.3([f/g]).]

"Availability Standards" shall mean Availability Standards as defined in FERC filing ER09-1064 or such other similar term as modified and approved by FERC thereafter to be incorporated in the CAISO Tariff or otherwise applicable to CAISO.

"Bankrupt" means with respect to any entity, such entity that (a) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar Law, (b) has any such petition filed or commenced against it which remains unstayed or undismissed for a period of sixty (60) days, (c) makes an assignment or any general arrangement for the benefit of creditors, (d) otherwise becomes bankrupt or insolvent (however evidenced), (e) has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets, or (f) is generally unable to pay its debts as they fall due.

[For Baseload Product only: "Baseload" means a Unit Firm Product for which the delivery levels are uniform twenty-four (24) hours per day, seven (7) days per week.]

"Bundled Green Energy" means Energy, Green Attributes, and any other Product, the quantity of which is measured based on the amount of Delivered Energy, in each case, that are produced by or associated with the Project. The quantity of Bundled Green Energy shall be equal to the lesser of the quantity of (i) [When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program: Contract Energy] [When SDG&E is SC for the Project and Project is in the VER Forecasting Program: Delivered Energy] (ii) Green Attributes that are delivered to Buyer, and (iii) any other Product that is delivered to Buyer, the quantity of which is measured based on the amount of Delivered Energy. For example, if the quantity of Renewable Energy Credits that are delivered to Buyer is less than the quantity of the [When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program: Contract Energy] [When SDG&E is SC for the Project and Project is in the VER Forecasting Program: Delivered Energy], then the quantity of Bundled Green Energy shall be equal to the quantity of Renewable Energy Credits that are delivered to Buyer.

"Business Day" means any day except a Saturday, Sunday, or a Federal Reserve Bank holiday and shall be between the hours of 8:00 a.m. and 5:00 p.m. local time for the relevant Party's principal place of business where the relevant Party, in each instance unless otherwise specified, shall be the Party from whom the Notice, payment or delivery is being sent and by whom the Notice or payment or delivery is to be received.

"Buyer" has the meaning set forth on the Cover Sheet.

"CAISO" means the California Independent System Operator Corporation or any successor entity performing similar functions.

[When SDG&E is the SC for the Project: "CAISO Charges Invoice" has the meaning set forth in Section 3.3([a/b])(iv).]

"CAISO Grid" means the system of transmission lines and associated facilities of the Participating Transmission Owners that have been placed under the CAISO's operational control.

"CAISO Tariff" means the CAISO Operating Agreement and Tariff, including the rules, protocols, procedures and standards attached thereto, as the same may be amended or modified from time-to-time and approved by FERC.

"California Renewables Portfolio Standard" means the Renewables Portfolio Standard of California under California Senate Bills 1078 and 107, as codified in California Public Utilities Code Sections 387, 390.1, and Article 16 (commencing with Section 399.11) of Chapter 2.3 of Part 1 of Division 1, as such provisions are amended or supplemented from time to time.

"Capacity Attributes" means any current or future defined characteristic, certificate, tag, credit, or ancillary service attribute, whether general in nature or specific as to the location or any other attribute of the Project intended to value any aspect of the capacity of the Project to produce Energy or ancillary services, including but not limited to any accounting construct so that the Contract Capacity of the Project may be counted toward a Resource Adequacy obligation or similar measure in respect to the capacity of the Project to generate Energy by the CPUC, the CAISO, the FERC, or any other entity vested with the authority under federal or state Law, to require Buyer to procure, or to procure at Buyer's expense, Resource Adequacy or other similar products.

[For Dispatchable Product only: "Capacity Price" has the meaning set forth in Section 4.1(a).]

[For Baseload, Peaking, or Dispatchable Product only: "Capacity Test" shall be the complete capacity testing procedure for the Project that is reasonably acceptable to Buyer that Seller shall develop no later than thirty (30) days prior to the initial capacity testing of the Project prior to the Commercial Operation Date. The capacity testing procedure shall describe in detail the testing standard(s) to be used for the technology of the Project, the conditions under which testing shall take place, the average summer ambient conditions to which the results will be corrected, and the testing procedures. The same capacity testing procedure shall be applied to all subsequent Capacity Tests.]

"CEC" means the California Energy Commission or its successor agency.

"CEC Certification and Verification" means that the CEC has certified (or, with respect to periods before the Project has been constructed, that the CEC has pre-certified) that the Project is an ERR for purposes of the California Renewables Portfolio Standard and that all Energy produced by the Project qualifies as generation from an ERR for purposes of the Agreement.

"Claims" has the meaning set forth in Section 11.2(a).

"Commercial Operation" means that (a) the Project is operating and able to produce and deliver the Product to Buyer pursuant to the terms of this Agreement; (b) Seller shall have satisfied the requirements set forth in the Commercial Operation Certificate in the form attached as Exhibit E; (c) Seller shall have delivered a true, correct, and complete Commercial Operation Certificate from Seller, the Renewable Generation Equipment Supplier, the EPC Contractor, and a Licensed Professional Engineer; (d) Seller shall have delivered to Buyer the Delivery Term Security required under Article 8; (e) Seller has received all local, state and federal Governmental Approvals and other approvals as may be required by Law for the construction, operation and maintenance of the Project, including approvals, if any, required under the California Environmental Quality Act for the Project and related interconnection facilities; [For Baseload, Peaking, Dispatchable Product only: and (f) Seller shall have successfully completed the initial Capacity Test and delivered to Buyer a true, correct, and complete report documenting the results of Seller's initial Capacity Test as required under Section 3.1(f)].

"Commercial Operation Date" means the date on which Seller achieves Commercial Operation for the Project.

"Conditions Precedent" has the meaning set forth in Section 2.3.

"Construction Period Security" shall mean the Performance Assurance that Seller is required to maintain during the period and as otherwise specified in Section 8.4(a)[(ii)/(iii)] to secure performance of its obligations hereunder.

"Contract Capacity" has the meaning set forth in Section 3.1(f).

[When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program: "Contract Energy" means the lower of Delivered Energy or Scheduled Energy for any given period in each case net of all Electrical Losses.]

"Contract Quantity" has the meaning set forth in Section 3.1(e).

"Contract Year" means a period of twelve (12) consecutive months (except in the case of the first Contract Year which may be longer) with the first Contract Year commencing on the Commercial Operation Date and each subsequent Contract Year commencing on the anniversary of the first day of the month following the Commercial Operation Date.

"Costs" means, with respect to the Non-Defaulting Party, brokerage fees, commissions and other similar third party transaction costs and expenses reasonably incurred by such Party either in terminating any arrangement pursuant to which it has hedged its obligations or entering into

new arrangements which replace a Terminated Transaction; and all reasonable attorneys' fees and expenses incurred by the Non-Defaulting Party in connection with such Terminated Transaction.

"Cover Sheet" means the document that precedes Article 1: General Definitions to this Agreement.

"CP Satisfaction Date" shall mean the date on which all of the Conditions Precedent have been satisfied (or waived in writing by the Party described in Section 2.4).

"CPUC" or "Commission or successor entity" means the California Public Utilities Commission, or successor entity.

"CPUC Approval" means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to the Parties, or either of them, which contains the following terms:

- (a) approves this Agreement in its entirety, including payments to be made by the Buyer, subject to CPUC review of the Buyer's administration of the Agreement; and
- (b) finds that any procurement pursuant to this Agreement is procurement from an eligible renewable energy resource for purposes of determining Buyer's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 *et seq.*), Decision 03-06-071, or other applicable Law.

CPUC Approval will be deemed to have occurred on the date that a CPUC decision containing such findings becomes final and non-appealable. [For Agreements for the purchase and sale of TRECS only, use STC REC-3 instead of the foregoing]

[For Agreements with Delivery Terms greater than two years: "CPUC Approval Date" shall mean the date on which the Conditions Precedent set forth in Section 2.3(a) have been satisfied (or waived in writing by the beneficiary Party described in Section 2.4).]

[For Agreements with Delivery Terms greater than two years: "CPUC Approval Security" shall mean the Performance Assurance that Seller is required to maintain during the period and as otherwise specified in Section 8.4(a)(i) to secure performance of its obligations hereunder.]

"Credit Rating" means, with respect to any entity, the rating then assigned to such entity's unsecured, senior long-term debt obligations (not supported by third party credit enhancements) by S&P or Moody's.

"Daily Delay Damages" means an amount equal to (a) the Construction Period Security amount required hereunder, divided by (b) the number of days in the Project Cure Period.

"Day-Ahead Forecast" has the meaning set forth in Section 3.3([d/e]).

[For As-Available and Baseload Products only: "Deemed Bundled Green Energy" means the amount of Bundled Green Energy that Seller could reasonably have delivered to Buyer but was instructed not to deliver to Buyer by reason of Economic Dispatch Down. The quantity of Deemed Bundled Green Energy shall be equal to [For As-Available Products: (a) the Deemed Delivery Forecast of Energy corresponding to the applicable Economic Dispatch Down periods, whether or not Seller is participating in the VER Forecasting Program during such events, less the amount of Energy scheduled under Economic Dispatch Down as specified in the Dispatch Notice during such periods, and less any amount of Energy that was not delivered associated with any concurrent Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault but only to the extent the Deemed Delivery Forecast does not already reflect the foregoing provided that, if the applicable amount calculated pursuant to this clause (a) is negative, the Deemed Bundled Green Energy shall be zero (0), or (b) if there is no such Deemed Delivery Forecast available during the applicable Economic Dispatch Down periods or if the Bundled Green Energy amount has historically not been determined based on clause (i) of the definition of Bundled Green Energy, the amount of Bundled Green Energy that Seller could reasonably have delivered to Buyer but was instructed not to deliver to Buyer as a result of Economic Dispatch Down as determined by Buyer in a commercially reasonable manner, which amount shall not include any amount of Energy that was not delivered associated with any concurrent Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault.] [For Baseload Products: the amount of Bundled Green Energy that Seller could reasonably have delivered to Buyer but was instructed not to deliver to Buyer during the applicable Economic Dispatch Down periods, as determined by Buyer in a commercially reasonable manner, which amount shall not include any amount of Energy that was not delivered associated with any concurrent Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault.]]

[For As-Available only: "Deemed Delivery Forecast" means the forecast of the Energy to be produced by the Project prepared by the CAISO or its agent in accordance with the VER Forecasting Program and communicated to the Scheduling Coordinator, which forecast is the last such forecast prepared by the CAISO that does not reflect curtailed production as a result of Economic Dispatch Down periods. As of the Execution Date, such Deemed Delivery Forecast is the CAISO forecast generated through its Resource Specific VER Forecast Usage Report].

[Dispatchable Product only: "Default Availability Factor" means, for any period, the amount determined according to the following formula:

Default Availability Factor = (PH - (EDH - EEDH)) / PH

Where:

PH is the number of period hours;

*EDH* is the number of equivalent derate hours calculated as the sum, for each derate, of the product of the number of hours of full or partial derate hours times the size of the reduction from the initial Contract Capacity (as of the Commercial Operation Date) divided by the initial Contract Capacity. For the purposes of this calculation, a derate includes all outages for any reason, including without limitation, Forced Outages, Force Majeure

events, Dispatch Down Periods, Planned Outages, Buyer's failure to perform, and other times when any portion of the Contract Capacity is not available and when the Delivered Energy of the Project is less than the amount of Energy dispatched by Buyer; and

*EEDH* is the number of equivalent excused derate hours solely due to either Force Majeure events, Dispatch Down Periods or Buyer's failure to perform (and for no other reason), calculated as the sum, for each excused derate, of the product of the number of hours of full or partial derate hours times the size of the reduction from the initial Contract Capacity, divided by the initial Contract Capacity.]

"Defaulting Party" means the Party that is subject to an Event of Default.

"Default Rate" means for any date, the lesser of (a) the per annum rate of interest equal to the prime lending rate as may from time to time be published in *The Wall Street Journal* under "Money Rates" on such day (or if not published on such day on the most recent preceding day on which published), plus two percent (2%) and (b) the maximum rate permitted by applicable Law.

"Delivered Energy" means all Energy produced from the Project and delivered to Buyer at the Delivery Point as measured in MWh at the CAISO revenue meter of the Project based on a power factor of precisely one (1) and net of all Electrical Losses.

"Delivery Point" means the point at which Buyer receives Seller's Product, as set forth in Section 3.1(d).

"Delivery Term" has the meaning set forth in Section 3.1(c).

"Delivery Term Security" shall mean the Performance Assurance that Seller is required to maintain during the period and as otherwise specified in Section 8.4(a)[(iii)/(iv)] to secure performance of its obligations hereunder.

"Development Period Security" shall mean the Performance Assurance that Seller is required to maintain during the period and as otherwise specified in Section 8.4(a)[(i)/(ii)] to secure performance of its obligations hereunder.

"Disclosing Party" has the meaning set forth in Section 13.1(a).

"Disclosure Order" has the meaning set forth in Section 13.1(a).

"Dispatch Down Period" means the period of curtailment of delivery of Product from the Project resulting from System Dispatch Down [For all Products other than Dispatchable Product: or Economic Dispatch Down].

"Dispatch Notice" means the operating instruction, and any subsequent updates given either by Buyer to Seller or by the CAISO to Seller, directing Seller to operate the Project at a specified megawatt output for the period of time set forth in such order.

[For Dispatchable Product only: "Dispatchable" means a Unit Firm Product for which Seller makes available capacity for Buyer to Schedule and dispatch up or down at Buyer's option in accordance with Section 3.3([g/h]).]

"Distribution Upgrades" has the meaning set forth in the CAISO Tariff.

"DUNS" means the Data Universal Numbering System, which is a unique nine character identification number provided by Dun and Bradstreet.

"Early Termination Date" has the meaning set forth in Section 5.2.

[For all Products other than Dispatchable Product: "Economic Dispatch Down" means curtailment of delivery of Product from the Project that is the result of economic curtailment where Buyer (as the Scheduling Coordinator) or a third party Scheduling Coordinator (in accordance with Buyer's directions) either submits a self-schedule with a binding Product quantity or an economic bid in the applicable CAISO market or fails to submit any such schedule or bid, in either case, that when implemented by the CAISO results in an otherwise available Product quantity not being scheduled or awarded in such CAISO market and such curtailment is not concurrently the result of a Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault.

"Electrical Losses" means all electrical losses associated with the transmission of Product to the Delivery Point, including if applicable, but not limited to, any transmission or transformation losses between the CAISO revenue meter and the Delivery Point.

"Electrical Interconnection Upgrades" means the facilities to which Seller shall be able to interconnect and deliver Energy from the Project to and at the Delivery Point and Buyer shall be able to transmit Energy from the Delivery Point and the facilities that protect the Participating Transmission Owner's, Transmission Provider's, distribution operator's, or other affected system owner's, as applicable, electric system (or other systems to which such electric systems are connected, including the CAISO Grid) and the Participating Transmission Owner's, Transmission Provider's, distribution operator's, or other affected system owner's, as applicable, customers from faults occurring at the Project, including, but not limited to, all network, distribution, connection, transformation, switching, metering, communications, control, and safety equipment, as such equipment may be required pursuant to Good Industry Practices or in accordance with the Participating Transmission Owner's, Transmission Provider's, distribution operator's, or other affected system owner's, as applicable, facility connection requirements. Such Electrical Interconnection Upgrades include all Network Upgrades, Distribution Upgrades, Interconnection Facilities, and other network upgrades, distribution upgrades, or interconnection facilities on any other affected system owner's electrical system that are determined to be necessary by the CAISO, Participating Transmission Owner, other affected system owner, as applicable, to physically and electrically interconnect the Project to the Participating Transmission Owner's electric system so as to allow Seller to deliver Energy from the Project to the Delivery Point and Buyer to be able to transmit Energy from the Delivery Point.

"Eligible Renewable Energy Resource" or "ERR" has the meaning set forth in California Public Utilities Code Section 399.11, *et seq.*, as amended or supplemented from time to time.

"Energy" means electric energy measured in MWh and net of Station Service (unless otherwise specified).

"Energy Price" has the meaning set forth in Section 4.[1/2](a).

"EPC Contract" means the Seller's engineering, procurement and construction contract with the EPC Contractor.

"EPC Contractor" means an engineering, procurement, and construction contractor, selected by Seller, with substantial experience in the engineering, procurement, and construction of power plants of the same type of facility as Seller's.

"Equitable Defenses" means any bankruptcy, insolvency, reorganization or other Laws affecting creditors' rights generally and, with regard to equitable remedies, the discretion of the court before which proceedings may be pending to obtain same.

**[For Dispatchable Product only:** "Equivalent Availability Factor" or "EAF" has the meaning set forth in Section 4.1(b).]

"Event of Default" has the meaning set forth in Section 5.1.

"Execution Date" means the date hereof as set forth in the preamble of the Cover Sheet.

"Executive(s)" has the meaning set forth in Section 12.2(a).

"FERC" means the Federal Energy Regulatory Commission or any successor government agency.

"Force Majeure" means any event or circumstance which wholly or partly prevents or delays the performance of any material obligation arising under this Agreement but only to the extent (1) such event is not within the reasonable control, directly or indirectly, of the Party seeking to have its performance obligation(s) excused thereby, (2) the Party seeking to have its performance obligation(s) excused thereby has taken all reasonable precautions and measures in order to prevent or avoid such event or mitigate the effect of such event on such Party's ability to perform its obligations under this Agreement and which by the exercise of due diligence such Party could not reasonably have been expected to avoid and which by the exercise of due diligence it has been unable to overcome, and (3) such event is not the direct or indirect result of the fault or negligence of the Party seeking to have its performance obligations excused thereby.

- (a) Subject to the foregoing, events that could qualify as Force Majeure include, but are not limited to the following:
- (i) acts of God, flooding, lightning, landslide, earthquake, fire, drought, explosion, epidemic, quarantine, storm, hurricane, tornado, volcano, other natural disaster or unusual or extreme adverse weather-related events;

- (ii) war (declared or undeclared), riot or similar civil disturbance, acts of the public enemy (including acts of terrorism), sabotage, blockade, insurrection, revolution, expropriation or confiscation; or
- (iii) except as set forth in subpart (b)(vii) below, strikes, work stoppage or other labor disputes (in which case the affected Party shall have no obligation to settle the strike or labor dispute on terms it deems unreasonable).
  - (b) Force Majeure shall not be based on:
- (i) Buyer's inability economically to use or resell the Product purchased hereunder;
- (ii) Seller's ability to sell the Product at a price greater than the price set forth in this Agreement;
- (iii) Seller's inability to obtain Governmental Approvals or other approvals of any type for the construction, operation, or maintenance of the Project;
- (iv) a lack of wind, sun or other fuel source of an inherently intermittent nature;
- (v) Seller's inability to obtain sufficient labor, equipment, materials, or other resources to build or operate the Project, except to the extent Seller's inability to obtain sufficient labor, equipment, materials, or other resources is caused by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iii) above;
- (vi) Seller's failure to obtain financing or other funds, including funds authorized by a state or the federal government or agencies thereof to supplement the payments made by Buyer pursuant to this Agreement;
- (vii) a strike, work stoppage or labor dispute limited only to any one or more of Seller, Seller's Affiliates, the EPC Contractor or subcontractors thereof or any other third party employed by Seller to work on the Project; or
- (viii) any equipment failure except if such equipment failure is caused solely by an event of Force Majeure of the specific type described in any of subsections (a)(i) though (a)(iii) above.

"Force Majeure Extension Period" has the meaning set forth in Section 3.9(c)(ii).

"Forced Outage" means any unplanned reduction or suspension of production of Product from the Project or unavailability of the Project in whole or in part that is not a Planned Outage or a willful withholding of Product when the Project is otherwise capable of delivering Product under Good Industry Practices.

"GAAP" has the meaning set forth in Section 13.4.

"Gains" means with respect to any Party, an amount equal to the present value of the economic benefit to it, if any (exclusive of Costs), resulting from the termination of this Agreement for the remaining Delivery Term, determined in a commercially reasonable manner, subject to Section 5.2 hereof. Factors used in determining economic benefit may include, without limitation, reference to information either available to it internally or supplied by one or more third parties, including, without limitation, quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets market referent prices for renewable power set by the CPUC, comparable transactions, forward price curves based on economic analysis of the relevant markets, settlement prices for comparable transactions at liquid trading hubs (e.g., NYMEX), all of which should be calculated for the remaining term of this Agreement and include the value, if any, of Capacity Attributes, and Green Attributes.

"Good Industry Practice" means those practices, methods and acts that would be implemented and followed by prudent operators of electric transmission facilities (with respect to Buyer) or prudent operators of electric generation facilities similar to the Project (with respect to Seller) in the Western United States during the relevant time period, which practices, methods and acts, in the exercise of prudent and responsible professional judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result consistent with good business practices, reliability and safety, and shall include, at a minimum, those professionally responsible practices, methods and acts described in the preceding sentence that comply with manufacturers' warranties, restrictions in this Agreement, and the requirements of Governmental Authorities, WECC standards, the CAISO and applicable Law. Good Industry Practice is not intended to be the optimum practice, method or act to the exclusion of all others, but rather is intended to be any of the practices, methods and/or actions generally accepted in the region.

"Governmental Approval" means all authorizations, consents, approvals, waivers, exceptions, variances, filings, permits, orders, licenses, exemptions and declarations of or with any governmental entity and, with respect to the Seller, shall include those siting and operating permits and licenses, and any of the foregoing under any applicable environmental Law, that are required for the construction, use, and operation of the Project.

"Governmental Authority" means any federal, state, local or municipal government, governmental department, commission, board, bureau, agency, or instrumentality, or any judicial, regulatory or administrative body, having jurisdiction as to the matter in question.

"Governmental Charges" has the meaning set forth in Section 9.2.

"Green Attributes" means, subject to the limitations in the final sentence of this definition, any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Project, and its avoided emission of pollutants. Green Attributes include but are not limited to Renewable Energy Credits, as well as: (1) any avoided emission of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants; (2) any avoided emissions of carbon dioxide (CO2), methane (CH4), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations

Intergovernmental Panel on Climate Change, or otherwise by Law, to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere; 1 and (3) the reporting rights to these avoided emissions, such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of a Green Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state Law, if applicable, and to a federal or state agency or any other party at the Green Tag Purchaser's discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local Law, regulation or bill, and international or foreign emissions trading program. Green Tags are accumulated on a MWh basis and one Green Tag represents the Green Attributes associated with one (1) MWh of Energy. Green Attributes do not include (i) any energy, capacity, reliability or other power attributes from the Project, (ii) production tax credits associated with the construction or operation of the Project and other financial incentives in the form of credits, reductions, or allowances associated with the Project that are applicable to a state or federal income taxation obligation, (iii) fuel-related subsidies or "tipping fees" that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or (iv) emission reduction credits encumbered or used by the Project for compliance with local, state, or federal operating and/or air quality permits. If the Project is a biomass facility and Seller receives any tradable Green Attributes based on the greenhouse gas reduction benefits or other emission offsets attributed to its fuel usage, it shall provide Buyer with sufficient Green Attributes to ensure that there are zero net emissions associated with the production of electricity from the Project and for all electric generation using biomethane as fuel, Seller shall transfer to Buyer sufficient Green Attributes of biomethane production and capture to ensure that there are zero net emissions associated with the production of electricity from the Project using the biomethane.

"Guaranteed Commercial Operation Date" or "GCOD" means [insert date], as may be extended pursuant to Section 3.9(c)(ii).

"Guaranteed Energy Production" has the meaning set forth in Section 3.1(e).

"Guarantor" means, with respect to Seller, any person that (a) does not already have any material credit exposure to Buyer under any other agreements, guarantees, or other arrangements at the time its Guaranty is issued, (b) is an Affiliate of Seller, or other third party reasonably acceptable to Buyer, (c) has a Credit Rating of [\_\_\_\_] or better from S&P or a Credit Rating of [\_\_\_\_] or better from Moody's, (d) has a tangible net worth of at least [\_\_\_\_\_], (e) is incorporated or organized in a jurisdiction of the United States and is in good standing in such jurisdiction, and (f) executes and delivers a Guaranty for the benefit of Buyer substantially in the form attached hereto as Exhibit D. [SDG&E will consider accepting a Guaranty based on the Project, the amount of Performance Assurance, and the identity of the Seller and Guarantor]

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Avoided emissions may or may not have any value for GHG compliance purposes. Although avoided emissions are included in the list of Green Attributes, this inclusion does not create any right to use those avoided emissions to comply with any GHG regulatory program.

"Guaranty" means a guaranty from a Guarantor provided for the benefit of Buyer substantially in the form attached hereto as Exhibit D. [SDG&E will consider accepting a Guaranty based on the Project, the amount of Performance Assurance, and the identity of the Seller and Guarantor]

"Imbalance Energy" means the amount of Energy, in any given settlement interval, by which the amount of Delivered Energy deviates from the amount of Scheduled Energy.

"Initial Negotiation End Date" has the meaning set forth in Section 12.2(a).

"Interconnection Facilities" has the meaning set forth in the CAISO Tariff.

"Interest Amount" means, with respect to an Interest Period, the amount of interest derived from the product of (a) the sum of (i) the principal amount of Performance Assurance in the form of cash held by Buyer during that Interest Period, and (ii) the sum of all accrued and unpaid Interest Amounts accumulated prior to such Interest Period; multiplied by (b) the Interest Rate in effect on the first day of the Interest Period; multiplied by (c) the number of days in that Interest Period; divided by (d) 360.

"Interest Payment Date" means the date on which cash held as Performance Assurance is returned pursuant to the terms of this Agreement.

"Interest Period" means the monthly period beginning on the first day of each month and ending on the last day of each month or the shorter period during which Performance Assurance in the form of cash is held by Buyer.

"Interest Rate" means for any date the rate per annum equal to the Commercial Paper (non-financial, 3 months) rate as published the prior month in the Federal Reserve Statistical Release, H.15. Should publication of the interest rate on Commercial Paper (non-financial, 3 months) be discontinued, then the interest rate on commercial paper, which most closely approximates the discontinued rate, published the prior month in the Federal Reserve Statistical Release, H.15, or its successor publication.

"[Large/Small] Generator Interconnection Agreement" has the meaning set forth in the CAISO Tariff.

"Law" means any statute, law, treaty, rule, regulation, ordinance, code, Governmental Approval, enactment, injunction, order, writ, decision, authorization, judgment, decree or other legal or regulatory determination or restriction by a court or Governmental Authority of competent jurisdiction, including any of the foregoing that are enacted, amended, or issued after the Execution Date, and which become effective prior to the end of the Delivery Term; or any binding interpretation of the foregoing by a Governmental Authority.

"Letter(s) of Credit" means one or more irrevocable, standby letters of credit issued by a U.S. commercial bank or a U.S. branch of a foreign bank with such bank having a Credit Rating of at least [A-] with an outlook designation of "stable" from S&P or [A3] with an outlook designation of "stable" from Moody's, in substantially the form as contained in Exhibit C to this Agreement.

"Licensed Professional Engineer" means a person acceptable to Buyer in its reasonable judgment who (a) is licensed to practice engineering in California, (b) has training and experience in the power industry specific to the technology of the Project, (c) has no economic relationship, association, or nexus with Seller or Buyer, other than to meet the obligations of Seller pursuant to this Agreement, (d) is not a representative of a consultant, engineer, contractor, designer or other individual involved in the development of the Project or of a manufacturer or supplier of any equipment installed at the Project, and (e) is licensed in an appropriate engineering discipline for the required certification being made.

"Locational Marginal Price" has the meaning set forth in the CAISO Tariff.

"Losses" means with respect to any Party, an amount equal to the present value of the economic loss to it, if any (exclusive of Costs), resulting from a Terminated Transaction for the remaining term of this Agreement, determined in a commercially reasonable manner. Factors used in determining the loss of economic benefit may include, without limitation, reference to information either available to it internally or supplied by one or more third parties including without limitation, quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets, market referent prices for renewable power set by the CPUC, comparable transactions, forward price curves based on economic analysis of the relevant markets, settlement prices for comparable transactions at liquid trading hubs (e.g. NYMEX), all of which should be calculated for the remaining term of this Agreement and include the value, if any, of Capacity Attributes, and Green Attributes.

"Manager" has the meaning set forth in Section 12.2(a).

"Milestones" has the meaning set forth in Section 3.9(b)(i).

[For Dispatchable Product only: "Monthly Capacity Payment" has the meaning set forth in Section 4.1(b).]

"Monthly Energy Payment" has the meaning set forth in Section 4.[1/2]([b/c]).

[For Dispatchable Product only: "Monthly Shaping Factor" has the meaning set forth in Section 4.1(b).]

"Moody's" means Moody's Investor Services, Inc., or its successor.

"MWh" means megawatt-hour.

"Negative Imbalance Energy" has the meaning set forth in Section 4.[2/3].

"NERC" means the North American Electric Reliability Corporation or a successor organization that is responsible for establishing reliability criteria and protocols.

"NERC Holiday" means any of the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. Three of these days, Memorial Day, Labor Day, and Thanksgiving Day, occur on the same day each year. Memorial Day is the last Monday in May; Labor Day is the first Monday in September; and Thanksgiving

Day is the fourth (4<sup>th</sup>) Thursday in November. New Year's Day, Independence Day, and Christmas Day occur on the same date each year, but in the event any of these holidays occur on a Sunday, the "NERC Holiday" is celebrated on the Monday immediately following that Sunday; and if any of these holidays occur on a Saturday, the "NERC Holiday" remains on that Saturday.

"Network Upgrades" has the meaning set forth in the CAISO Tariff.

"Non-Availability Charges" shall mean Non-Availability Charges as defined in FERC filing ER09-1064 or such other similar term as modified and approved by FERC thereafter to be incorporated in the CAISO Tariff or otherwise applicable to CAISO.

"Non-Defaulting Party" has the meaning set forth in Section 5.2.

"Notice" shall, unless otherwise specified in the Agreement, mean written communications by a Party to be delivered by hand delivery, United States mail, overnight courier service, facsimile or electronic messaging (e-mail).

"Notice to Proceed" or "NTP" means the notice provided by Seller to the EPC Contractor following execution of the EPC Contract between Seller and such EPC Contractor and satisfaction of all conditions precedent to performance of such contract, by which Seller authorizes such EPC Contractor to commence and complete full performance of the work under the EPC Contract without any delay or waiting periods.

"Outage Notification Form" means the completed document from Seller notifying Buyer or the CAISO of an outage of the Project substantially in the form attached hereto as Exhibit G. Buyer reserves the right to reasonably revise or change the form upon Notice to Seller.

*[For intermittent As-Available Product:* "Participating Intermittent Resource" shall have the meaning set forth in the CAISO Tariff.]

"Participating Transmission Owner" or "Participating TO" means an entity that (a) owns, operates and maintains transmission lines and associated facilities and/or has entitlements to use certain transmission lines and associated facilities that are interconnected to the Delivery Point and (b) has transferred to the CAISO operational control of such facilities and/or entitlements to be made part of the CAISO Grid. As of the Execution Date, the Participating Transmission Owner is *[San Diego Gas & Electric Company]*.

"Party" or "Parties" means the Buyer or Seller individually, or to both collectively.

[For Peaking Product only: "Peaking" means a Unit-Firm Product for which Energy must be delivered during hours ending 1200-1900 (11:00 am to 7:00 pm) on Monday-Friday, excluding NERC Holidays, for the months July through October and during hours ending 1400-2100 (1:00 pm to 9:00 pm) on Monday-Friday, excluding NERC Holidays, for the months November and December.] [Note: Buyer will consider other firm products such as 6x16: "6x16 Block" means a Unit-Firm Product for which Energy must be delivered during hours ending 0700-2200 (6:00 am to 10:00 pm) on Monday-Saturday throughout the Delivery Term.]

"Performance Assurance" means collateral provided by Seller to Buyer to secure Seller's obligations hereunder and includes *[For Agreements with Delivery Terms greater than two years:* CPUC Approval Security,] Development Period Security, Construction Period Security, and Delivery Term Security.

[For As-Available, Baseload, Peaking Product: "Performance Measurement Period" has the meaning set forth in Section 3.1(e).]

"Planned Outage" means any planned reduction or suspension of the electrical output from the Project or unavailability of the Project in whole or in part as a result of the inspection, maintenance, or repair of equipment that is scheduled in accordance with Section 3.7(a).

"PNode" has the meaning set forth in the CAISO Tariff.

"Positive Imbalance Energy" has the meaning set forth in Section 4.[2/3].

"Product" has the meaning set forth in Section 3.1(a).

[For Projects receiving PTCs: "Production Tax Credit" or "PTC" means the tax credit for electricity produced from certain renewable generation resources described in Section 45 of the Internal Revenue Code of 1986, as it may be amended from time to time.]

"Project" means all of the *[insert technology]* electric generating units, the Site at which the generating facility is located, the utility interconnection facilities up to the point of change in ownership to the applicable utility's facilities, and the other assets, tangible and intangible, that compose the generation facility as more particularly described on Exhibit A.

"Project Cure Period" has the meaning set forth in Section 3.9(c)(i).

"Quarterly Progress Report" means the report similar in form and content attached hereto as Exhibit F, as may be modified from time to time to meet applicable CPUC requirements.

"Recording" has the meaning set forth in Section 13.6.

"Reductions" has the meaning set forth in Section 3.2(c).

"Referral Date" has the meaning set forth in Section 12.2(a).

"Remedial Action Plan" has the meaning provided in Section 3.9(b)(ii).

"Renewable Energy Credit" has the meaning set forth in California Public Utilities Code Section 399.12(h) and CPUC Decision 08-08-028, as each may be amended from time to time or as further defined or supplemented by Law.

"Renewable Generation Equipment Supplier" means the supplier of the [electric generating [wind] [gas] [steam] turbine(s)] [solar electric generating equipment] for the Project, selected by Seller.

"Replacement Price" means the price (in dollars per megawatt hour) at which Buyer, acting in a commercially reasonable manner, purchases for delivery at the Delivery Point (or any other reasonably equivalent delivery point for Buyer) a replacement for any Product (including its associated Green Attributes) that was not Scheduled and delivered by Seller, plus (a) costs (calculated in dollars per megawatt hour) reasonably incurred by Buyer in purchasing such replacement Product and (b) additional transmission charges (calculated in dollars per megawatt hour), if any, reasonably incurred by Buyer for such replacement Product, or absent a purchase, the market price at the Delivery Point (or any other reasonably equivalent delivery point for Buyer) for such replacement Product for the hours impacted by such failure to Schedule or deliver such Product as determined by Buyer in a commercially reasonable manner. The Replacement Price also shall include all CAISO and other charges and penalties calculated in dollars per megawatt hour with respect to the deviation from the Scheduled supply resulting from Seller's failure to Schedule or deliver; provided, however, in no event shall such price include any ratcheted demand or similar charges, nor shall Buyer be required to utilize or change its utilization of its owned or controlled assets or market positions to minimize Seller's liability. For the purposes of this definition, Buyer shall be considered to have purchased replacement Product to the extent Buyer shall have entered into one or more arrangements in a commercially reasonable manner whereby Buyer repurchases its obligation to sell and deliver the Product to another party. If for any reason a Replacement Price is unavailable when Seller fails to deliver or Schedule Product, then the Replacement Price for the hours when a Replacement Price is unavailable shall be the last available Replacement Price together with any charges and penalties allocated to Buyer during such time.

"Resource Adequacy" means the procurement obligation of load serving entities, including Buyer, as such obligations are described in CPUC Decisions 04-01-050, 04-10-035, 05-10-042, 06-04-040, 06-06-064, 06-07-031, 07-06-029, 08-06-031, 09-06-028, 10-06-036, 11-06-022, 12-06-025, 13-06-024, and subsequent CPUC decisions addressing Resource Adequacy issues, as those obligations may be altered from time to time in the CPUC Resource Adequacy Rulemakings (R.) 04-04-003 and (R.) 05-12-013 or by any successor proceeding, and all other Resource Adequacy obligations established by any other entity, including the CAISO.

"Sales Price" means the price (in dollars per megawatt hour) at which Seller, acting in a commercially reasonable manner, resells any Product not Scheduled and received by Buyer, deducting from such proceeds any (a) costs (calculated in dollars per megawatt hour) reasonably incurred by Seller in reselling such Product including all costs charged by CAISO to Schedule and deliver the Product into the CAISO System, and (b) additional transmission charges (calculated in dollars per megawatt hour), if any, reasonably incurred by Seller in Scheduling and delivering such Product to the third party purchasers, or absent a sale despite commercially reasonable efforts to resell the Product, zero. The Sales Price shall also be reduced by all CAISO and other costs, charges and penalties with respect to the deviation from the Scheduled supply, in each case, resulting from Buyer's failure to take Product and calculated in dollars per megawatt hour; provided, however, in no event shall such price include any ratcheted demand or similar charges, nor shall Seller be required to utilize or change its utilization of its owned or controlled assets, including contractual assets, or market positions to minimize Buyer's liability. The Sales Price may be less than zero.

"S&P" means the Standard & Poor's Rating Group (a division of McGraw-Hill, Inc.) or its successor.

"Schedule" means the actions of Seller, Buyer and/or their designated representatives, or Scheduling Coordinators, including each Party's Transmission Providers, if applicable, of notifying, requesting and confirming to each other and the CAISO the quantity and type of Product to be delivered at any given time at a specified Delivery Point.

"Scheduling Coordinator" or "SC" means an entity certified by the CAISO as qualifying as a Scheduling Coordinator pursuant to the CAISO Tariff, for the purposes of undertaking the functions specified in "Responsibilities of a Scheduling Coordinator," of the CAISO Tariff, as amended from time-to-time.

"Scheduled Energy" means the Energy that clears under the applicable CAISO market based on the final Schedule developed in accordance with this Agreement, the operating procedures developed by the Parties pursuant to Section 3.10, and the applicable CAISO Tariff, protocols and Scheduling practices.

"SEC" means the U.S. Securities and Exchange Commission.

"Seller" shall have the meaning set forth on the Cover Sheet.

"Settlement Amount" means, with respect to the Non-Defaulting Party, the Losses or Gains, and Costs, expressed in U.S. Dollars, which such Party incurs as a result of the liquidation of a Terminated Transaction pursuant to Sections 5.2 and 5.3.

"Site" shall mean the location of the Project as described in Exhibit A.

"Station Service" means the electric energy produced by the Project that is used within the Project to power the lights, motors, control systems and other auxiliary electrical loads that are necessary to support the operation of the Project.

"System Dispatch Down" means curtailment of delivery of Product from the Project resulting from (a) curtailment ordered by the CAISO (whether directly or through the Scheduling Coordinator or the Participating Transmission Owner), for any reason, including, but not limited to, an Exceptional Dispatch (as defined in the CAISO Tariff), any system emergency as defined in the CAISO Tariff ("System Emergency"), any warning of an anticipated System Emergency, or any warning of an imminent condition or situation which could jeopardize the CAISO's or Participating Transmission Owner's electric system integrity or the integrity of other systems to which the CAISO or Participating Transmission Owner is connected, any warning, forecast, or anticipated overgeneration conditions, including a request from CAISO to manage over-generation conditions; (b) curtailment ordered by the Participating Transmission Owner or distribution operator (if interconnected to distribution or sub-transmission system) for reasons including, but not limited to, (i) any situation that affects normal function of the electric system including, but not limited to, any abnormal condition that requires action to prevent circumstances such as equipment damage, loss of load, or abnormal voltage conditions, (ii) any warning, forecast or anticipation of conditions or situations that jeopardize the Participating Transmission Owner's electric system integrity or the integrity of other systems to which the Participating Transmission Owner is connected; (c) curtailment ordered by the Participating Transmission Owner or distribution operator (if interconnected to distribution or sub-transmission system) as a result of scheduled or unscheduled maintenance or construction on the Participating Transmission Owner's transmission facilities or distribution operator's facilities (if interconnected to distribution or subtransmission system) that instructs the Seller not to deliver, or prevents the receipt of Delivered Energy to or at the Delivery Point, (d) curtailment in accordance with Seller's obligations under its interconnection agreement with the Participating Transmission Owner or distribution operator, *[If the Project is located outside of the CAISO:* or (e) curtailment ordered by the Transmission Provider provided, that Seller has contracted for firm transmission with such Transmission Provider for the Product to be delivered to the Delivery Point and such curtailment is due to "force majeure" or "uncontrollable force" or a similar term as defined under the Transmission Provider's tariff]; *[For Dispatchable Product only:* or ([e/f]) curtailment ordered by Buyer pursuant to a Dispatch Notice.*] [For all Products other than Dispatchable:* provided, however, that System Dispatch Down shall not include Economic Dispatch Down].

"Terminated Transaction" means the termination of this Agreement in accordance with Section 5.2 of this Agreement.

"Termination Payment" has the meaning set forth in Section 5.2.

"Transmission Provider" means any entity or entities transmitting or transporting the Product on behalf of Seller or Buyer to or from the Delivery Point.

[For Baseload, Peaking, or Dispatchable Product only: "Unit Firm" means, with respect to a Product, that the Product is intended to be supplied from the Project, and subject to the terms of this Agreement, Seller is excused from selling and delivering the Product to Buyer, and Seller shall not be liable to Buyer for any damages determined pursuant to Section 3.1(h) of the Agreement, in the event that Seller fails to deliver the Product to Buyer for any of the following reason:

- (a) if the Project is unavailable as a result of a Forced Outage and such Forced Outage is not the result of Seller's negligence or willful misconduct;
- (b) Force Majeure;
- (c) by the Buyer's failure to perform;
- (d) by a Planned Outage of the Project; or
- (e) a reduction in output as ordered under Dispatch Down Periods.

The following products shall be considered "Unit Firm" products: Peaking, Baseload, and Dispatchable.

*[For an intermittent As-Available Product only:* "VER Forecasting Program" means the rules, protocols, procedures and standards for Participating Intermittent Resources under the CAISO's Eligible Intermittent Resource Protocol, as may be amended from time to time, as set forth in the CAISO Tariff.]

"WECC" means the Western Electricity Coordinating Council or successor agency.

"WREGIS" means the Western Renewable Energy Generating Information System or any successor renewable energy tracking program.

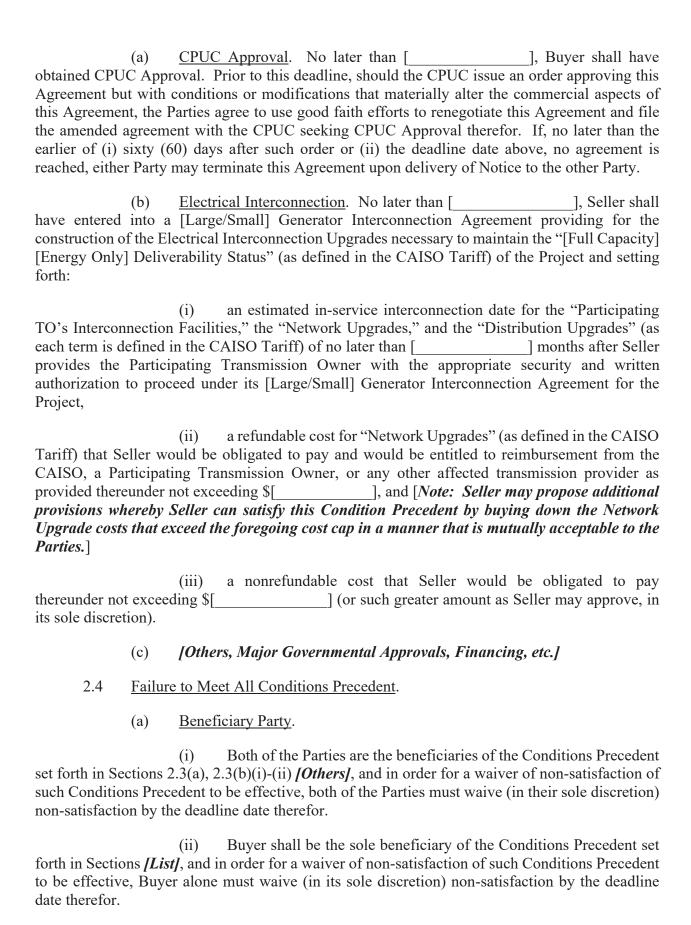
- 1.2 <u>Interpretation</u>. The following rules of interpretation shall apply:
- (a) The term "month" shall mean a calendar month unless otherwise indicated, and a "day" shall be a 24-hour period beginning at 12:00:01 a.m. Pacific Prevailing Time and ending at 12:00:00 midnight Pacific Prevailing Time; provided that a "day" may be 23 or 25 hours on those days on which daylight savings time begins and ends.
- (b) Unless otherwise specified herein, all references herein to any agreement or other document of any description shall be construed to give effect to amendments, supplements, modifications or any superseding agreement or document as then exist at the applicable time to which such construction applies.
- (c) Capitalized terms used in this Agreement, including the appendices hereto, shall have the meaning set forth in Article 1, unless otherwise specified.
- (d) Unless otherwise specified herein, references in the singular shall include references in the plural and vice versa, pronouns having masculine or feminine gender will be deemed to include the other, and words denoting natural persons shall include partnerships, firms, companies, corporations, joint ventures, trusts, associations, organizations or other entities (whether or not having a separate legal personality). Other grammatical forms of defined words or phrases have corresponding meanings.
- (e) The term "including" when used in this Agreement shall be by way of example only and shall not be considered in any way to be in limitation.
- (f) References to a particular article, section, subsection, paragraph, subparagraph, appendix or attachment shall, unless specified otherwise, be a reference to that article, section, subsection, paragraph, subparagraph, appendix or attachment in or to this Agreement.
- (g) Any reference in this Agreement to any natural person, Governmental Authority, corporation, partnership or other legal entity includes its permitted successors and assigns or to any natural person, Governmental Authority, corporation, partnership or other legal entity succeeding to its functions.
  - (h) All references to dollars are to U.S. dollars.

## ARTICLE TWO: EFFECTIVENESS OF AGREEMENT; CONDITIONS PRECEDENT

2.1 <u>Effectiveness of Agreement Prior to CP Satisfaction Date</u>. Commencing on the Execution Date until the CP Satisfaction Date, this Agreement shall be in full force and effect, enforceable and binding only to the extent required to give full effect to, and enforce, the rights and obligations of the Parties under this Article 2, including, as it relates to Article 2, the rights and obligations under Articles 1, 5, 7, 8, 9, 10, 11, 12, and 13.

- 2.2 <u>Obligations of the Parties</u>. The Parties shall cooperate with each other to cause the Conditions Precedent to be satisfied as soon as reasonably practical.
- Seller's Obligations. Prior to the CP Satisfaction Date, Seller shall (i) use commercially reasonable efforts to pursue satisfaction of the Conditions Precedent set forth in Sections [ ], (ii) diligently pursue development of the Project in accordance with Section 3.9, (iii) comply with Section 3.9(b) in achieving the applicable Milestones that have due dates occurring prior to the CP Satisfaction Date, reporting completion of such Milestones, and delivering Remedial Action Plans in respect of missed Milestones as more fully described therein, (iv) deliver the Quarterly Progress Report in accordance with Section 3.9(a), and (v) otherwise comply with its obligations, covenants, representations, and warranties under Articles 7-13. [For Agreements with Delivery Terms greater than two years: Upon an Event of Default of Seller prior to the CPUC Approval Date, Buyer may terminate this Agreement in which case Seller shall owe Buyer liquidated damages in the amount of the CPUC Approval Security.] Upon an Event of Default of Seller [For Agreements with Delivery Terms greater than two years: on or after the CPUC Approval Date but] prior to the CP Satisfaction Date, Buyer may terminate this Agreement in which case Seller shall owe Buyer liquidated damages in the amount of the Development Period Security. Buyer may retain such Performance Assurances to pay such liquidated damages. Each Party agrees and acknowledges that (a) the actual damages that Buyer would incur due to an Event of Default of Seller prior to the CP Satisfaction Date would be difficult or impossible to predict with certainty, (b) the liquidated damages set forth in this section are a reasonable and appropriate approximation of such damages, and (c) the liquidated damages set forth in this section are the exclusive remedy for an Event of Default of Seller prior to the CP Satisfaction Date.
- Buyer's Obligations. Prior to the CP Satisfaction Date, Buyer shall (i) use (b) commercially reasonable efforts to pursue satisfaction of the Conditions Precedent set forth in Sections 2.3(a), and (ii) otherwise comply with its obligations, covenants, representations, and warranties under Articles 7-13. [For Agreements with Delivery Terms greater than two years: Upon an Event of Default of Buyer prior to the CPUC Approval Date, Seller may terminate this Agreement in which case Buyer shall owe Seller liquidated damages in the amount of the CPUC Approval Security.] Upon an Event of Default of Buyer [For Agreements with Delivery Terms greater than two years: on or after the CPUC Approval Date but] prior to the CP Satisfaction Date, Seller may terminate this Agreement in which case Buyer shall owe Seller liquidated damages in the amount of the Development Period Security. Each Party agrees and acknowledges that (a) the actual damages that Seller would incur due to an Event of Default of Buyer prior to the CP Satisfaction Date would be difficult or impossible to predict with certainty, (b) the liquidated damages set forth in this section are a reasonable and appropriate approximation of such damages, and (c) the liquidated damages set forth in this section are the exclusive remedy for an Event of Default of Buyer prior to the CP Satisfaction Date.
- 2.3 <u>Conditions Precedent.</u> Subject to Section 2.1, the effectiveness of the remainder of this Agreement is conditioned upon the satisfaction (or waiver by the Party described in Section 2.4) of all of the following conditions precedent ("Conditions Precedent") by the deadline dates set forth below for each Condition Precedent without extension for Force Majeure or any other reason:

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- (iii) Seller shall be the sole beneficiary of the Conditions Precedent set forth in Sections 2.3(b)(iii) *[Others]*, and in order for a waiver of non-satisfaction of such Conditions Precedent to be effective, Seller alone must waive (in its sole discretion) non-satisfaction by the deadline date therefor.
- (b) <u>Termination</u>. If any of the Conditions Precedent is not satisfied or waived in writing by the beneficiary Parties thereto on or before the date that is fifteen (15) days after the applicable deadline date therefor, then this Agreement shall automatically terminate with no further obligation to either Party (other than as set forth in Sections 2.4(b)(i)-(ii) below and any other payment obligations which are accrued and payable at the time of termination).
- (i) Upon a termination of this Agreement for any reason under Section 2.4 other than as described in Section 2.4(b)(ii) below, Seller shall forfeit to Buyer an amount equal to the Performance Assurance then required to be delivered to Buyer hereunder. Buyer may retain such Performance Assurance to pay such amount.
- (ii) Upon a termination of this Agreement under this Section 2.4 as a result of the failure of the Conditions Precedent set forth in Sections 2.3(a) to be satisfied (or waived by both Parties) or as a result of the failure of the Conditions Precedent set forth in Sections 2.3(b)(i)-(ii) to be satisfied or waived by Buyer, Buyer shall return to Seller the Performance Assurances then held by Buyer.
- 2.5 Effectiveness of Agreement on and after CP Satisfaction Date. This Agreement shall be in full force and effect, enforceable and binding in all respects as of the CP Satisfaction Date until the conclusion of the Delivery Term or earlier termination pursuant to the terms of this Agreement; provided however, that this Agreement shall remain in effect until (i) the Parties have fulfilled all obligations under this Agreement, including payment in full of amounts due for the Product delivered prior to the end of the Delivery Term, the Settlement Amount, indemnification payments or other damages (whether directly or indirectly such as through set-off or netting) and (ii) the undrawn portion of the *[For Agreements with Delivery Terms greater than two years:* CPUC Approval Security,] Development Period Security, Construction Period Security, or Delivery Term Security, as applicable, is released and/or returned as applicable (if any is due). All indemnity rights shall survive the termination or expiration of this Agreement for the longer of twelve (12) months or the expiration of the statute of limitations period of the claim underlying the indemnity obligation.

#### ARTICLE THREE: OBLIGATIONS AND DELIVERIES

#### 3.1 Transaction.

- (a) <u>Product</u>. The "Product" to be delivered and sold by Seller and received and purchased by Buyer under this Agreement is *[Seller to select:* As-Available, Baseload, Peaking, or Dispatchable Energy, Capacity Attributes, Green Attributes, and other ancillary products, services or attributes similar to the foregoing which are or can be produced by or associated with the Project (net of Station Service) in accordance with the terms hereof.
- (b) <u>Transaction</u>. Unless specifically excused by the terms of this Agreement during the Delivery Term, Seller shall sell and deliver, or cause to be delivered, and Buyer shall

purchase and receive, or cause to be received, the Product at the Delivery Point, and Buyer shall pay Seller for the Product in accordance with the terms hereof. In no event shall Seller have the right to procure any element of the Product from sources other than the Project for sale or delivery to Buyer under this Agreement [If the Project is located outside of the CAISO: except with respect to Imbalance Energy from the Transmission Provider].

- (c) <u>Delivery Term.</u> The Parties agree that the period of Product delivery is [\_\_\_\_] Contract Years. As used herein, "Delivery Term" shall mean the period of Contract Years specified above beginning on the Commercial Operation Date and continuing until the end of the last Contract Year unless terminated earlier as provided by the terms of this Agreement.
- (d) <u>Delivery Point</u>. The Delivery Point shall be [the point of interconnection of the Project to the CAISO Grid] [Seller may specify another delivery point; for a Project located outside the CAISO Grid, the Delivery Point should be a CAISO Scheduling Point as defined by the CAISO] and for financial settlement purposes under the applicable CAISO market, the PNode corresponding to such point.
- [For Baseload, Peaking, As-Available Product: Contract Quantity and Guaranteed Energy Production. The quantity of Bundled Green Energy that Seller expects to be able to deliver to Buyer during each Contract Year is [\_\_\_\_] MWh ("Contract Quantity"). Throughout the Delivery Term, Seller shall be required to deliver to Buyer no less than the Guaranteed Energy Production (as defined below) in any [twelve (12)] [twenty-four (24)] consecutive calendar month period during the Delivery Term ("Performance Measurement Period"). "Guaranteed Energy Production" means an amount of Bundled Green Energy, as measured in MWh, equal to [two times] [ 1% of the Contract Quantity. Notwithstanding the excuses to performance set forth in the definition of the Product type (as such Product type is specified in Section 3.1(a)), Seller shall be excused from achieving the Guaranteed Energy Production during any Performance Measurement Period only to the extent of any Force Majeure events, Buyer's failure to perform, or Dispatch Down Periods. For purposes of determining whether Seller has achieved the Guaranteed Energy Production, Seller shall be deemed to have delivered to Buyer an amount of Bundled Green Energy that it could reasonably have delivered to Buyer but was prevented from delivering to Buyer by reason of any Force Majeure events or Buyer's failure to perform, or was instructed not to deliver to Buyer during Dispatch Down Periods.] [For Dispatchable Product: Contact Quantity. The quantity of Bundled Green Energy that Seller expects to be able to deliver to Buyer during each Contract Year is [ | MWh ("Contract Quantity").]
- of the Project net of all Station Service which shall be [For As-Available Product: no less than MW and no greater than [\_\_\_\_] MW] [For Baseload, Peaking, or Dispatchable Product only: an amount determined periodically pursuant to a Capacity Test as set forth below]. Throughout the Delivery Term, Seller shall sell and Schedule all Product associated with the Contract Capacity of the Project solely to Buyer, except in the case of an Event of Default of Buyer or an unexcused failure by Buyer to Schedule, receive, and pay for Product under Section 3.1(h)(ii) [If the Project is located outside of the CAISO: or the sale of Imbalance Energy to the Transmission Provider]. [For Dispatchable Product: Throughout the Delivery Term, Seller shall make the Contract Capacity available solely to Buyer at all times, except in the case of an Event

of Default of Buyer or an unexcused failure by Buyer to Schedule, receive, and pay for Product under Section 3.1(h)(ii) [If the Project is located outside of the CAISO: or the sale of Imbalance Energy to the Transmission Provider].]

- (i) *[For Baseload, Peaking, Dispatchable Product:* Initial Capacity Testing. Upon no less than fourteen (14) days prior Notice to Buyer, Seller shall schedule and complete a Capacity Test prior to the Commercial Operation Date for the Project. Such initial Capacity Test shall establish the Contract Capacity for the Project for the first Contract Year.]
- (ii) *[For Baseload, Peaking, Dispatchable Product:* Annual Capacity Testing. Thereafter, at least once per Contract Year within the first quarter of each Contract Year, upon no less than 14 days prior Notice to Buyer, Seller shall schedule and complete a Capacity Test. In addition, Buyer shall have the right to require a retest of the Capacity Test at any time upon five (5) days prior written Notice to Seller if Buyer reasonably believes that the actual Contract Capacity has varied materially from the results of the most recent tests. Seller shall have the right to run a retest of the Capacity Test at any time upon two (2) days prior written Notice to Buyer (or any shorter period reasonably acceptable to Buyer consistent with Good Industry Practices).]
- (iii) *[For Baseload, Peaking, Dispatchable Product:* Witness at Capacity Tests. Buyer shall have the right to send one or more representative(s) to witness all Capacity Tests.]
- (iv) *[For Baseload, Peaking, Dispatchable Product:* Capacity Test Reporting. No later than fourteen (14) days following any Capacity Test, Seller shall submit a testing report detailing results and findings of the test. The report shall include meter readings and plant log sheets verifying the operating conditions and output of the Project. The Contract Capacity determined pursuant to a Capacity Test shall become the new Contract Capacity at the beginning of the day following the completion of the test for all purposes under this Agreement.]
- (v) [For Baseload, Peaking, Dispatchable Product: Capacity Test Costs and Payments. Buyer shall pay the [Monthly Energy Payment] in respect of the Product produced during the initial Capacity Test prior to the Commercial Operation Date and each annually scheduled Capacity Test thereafter. In addition, Buyer shall pay the [Monthly Energy Payment] in respect of the Product produced during any other Buyer requested test unless the results of such test demonstrate that the actual Contract Capacity has varied by more than two percent (2%) from the results of the most recent tests, in which case Buyer shall pay the lesser of the [Monthly Energy Payment] in respect of the Product produced during such test and the applicable CAISO real-time hourly average energy price. In addition, Buyer shall pay the lesser of the [Monthly Energy Payment] in respect of the Product produced during any Seller requested test and the applicable CAISO real-time hourly average energy price]. Buyer is responsible for all costs, expenses and fees payable or reimbursable to its representative(s) witnessing Capacity Testing. All other costs of any Capacity Tests shall be borne by Seller.]
- (g) <u>Project</u>. All Product provided by Seller pursuant to this Agreement shall be supplied from the Project only *[If the Project is located outside of the CAISO:* except with respect to Imbalance Energy from the Transmission Provider]. Other than maintenance in accordance

with Good Industry Practices, Seller shall not make any alteration or modification to the Project which results in a change to the Contract Capacity of the Project or any other material changes to the Project without Buyer's prior written consent. The Project is further described in Exhibit A.

## (h) <u>Performance Excuses.</u>

- (i) <u>Seller Excuses</u>. The performance of Seller to Schedule, deliver, and sell the Product shall be excused only for the reasons set forth in the definition of *[Seller to select:* "As-Available" or "Unit Firm" *J.* If Seller fails to Schedule, deliver, or sell all or part of the Product for a period or a series of periods that is cumulatively longer than thirty (30) days, and such failure is not excused as described above, then such failure shall be an Event of Default. If Seller fails to Schedule, deliver, or sell all or part of the Product for any period prior to an Early Termination Date, and such failure is not excused as described above, then Seller shall pay Buyer, on the date payment would otherwise be due in respect of the month in which the failure occurred an amount for such Product deficiency equal to the positive difference, if any, obtained by subtracting (A) the product of the Energy Price times the Product deficiency, from (B) the product of the Replacement Price times the Product deficiency. The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount.
- Buyer Excuses. The performance of Buyer to Schedule, receive, (ii) and pay for the Product shall be excused only (A) during periods of Force Majeure, (B) by Seller's failure to perform or (C) during Dispatch Down Periods [For all Products other than Dispatchable Product: (except that Buyer shall not be excused from paying for the Product as required under Section 3.4 during periods of Economic Dispatch Down). If Buyer fails to Schedule, receive, or purchase all or part of the Product for a period or a series of periods that is cumulatively longer than thirty (30) days and such failure is not excused as described above, then then such failure shall be an Event of Default. If Buyer fails to Schedule, receive, or purchase all or part of the Product for any period prior to an Early Termination Date and such failure is not excused as described above, then Buyer shall pay Seller, on the date payment would otherwise be due in respect of the month in which the failure occurred an amount for such Product deficiency equal to the positive difference, if any, obtained by subtracting (Y) the product of the Sales Price times the Product deficiency from (Z) the product of the Energy Price times the Product deficiency. The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount.
- (i) Green Attributes. Seller hereby provides and conveys all Green Attributes associated with all electricity generation from the Project to Buyer as part of the Product being delivered. Seller represents and warrants that Seller holds the rights to all Green Attributes from the Project, and Seller agrees to convey and hereby conveys all such Green Attributes to Buyer as included in the delivery of the Product from the Project. For all electric generation using biomethane as fuel, neither Buyer nor Seller may make a marketing, regulatory, or retail claim that asserts that a procurement contract to which that entity was a party resulted, or will result, in greenhouse gas reductions related to the destruction of methane is not required by Law, neither Buyer nor Seller may make a marketing, regulatory, or retail claim that asserts that a procurement contract to which that entity was a party resulted, or will result, in greenhouse gas reductions related to the destruction of methane, unless the environmental attributes associated with the

capture and destruction of the biomethane pursuant to that contract are transferred to Buyer and retired on behalf of the retail customers consuming the electricity associated with the use of that biomethane, or unless Seller's procurement contract with the source of biomethane prohibits the source of biomethane from separately marketing the environmental attributes associated with the capture and destruction of the biomethane sold pursuant to that contract, and such attributes have been retired.

- (j) Resource Adequacy. During the Delivery Term, Seller grants, pledges, assigns and otherwise commits to Buyer all of the Project's Contract Capacity, including Capacity Attributes, from the Project for Buyer to use in meeting its Resource Adequacy or successor program requirements, as the CPUC, CAISO or other regional entity may prescribe. Seller understands that the CPUC is updates or modifies the requirements for Resource Adequacy from time to time, and these requirements and the implementation thereof are subject to change. Seller agrees that it shall take all commercially reasonable actions and execute any and all documents or instruments reasonably necessary to enable Buyer to use all of the Contract Capacity, including Capacity Attributes, to be committed by Seller to Buyer pursuant to this Agreement for the Resource Adequacy requirements of Buyer. Seller agrees that the Project is subject to the terms of the Availability Standards.
- (k) <u>WREGIS</u>. Prior to the initial delivery of Energy to Buyer, Seller shall register the Project in WREGIS, execute a CAISO Qualified Reporting Entity Service Agreement to allow CAISO, on the Seller's behalf, to upload generation information directly into WREGIS, and take all other actions necessary to ensure that the Green Attributes produced from the Project in an amount equal to the amount of Delivered Energy are issued and tracked for purposes of satisfying the requirements of the California Renewable Portfolio Standard and transferred to Buyer, including payment of all fees required to register the facility in WREGIS, issue WREGIS certificates, and transfer such certificates to Buyer. Within seventy-five (75) days after the initial delivery of energy to Buyer, Seller shall provide to Buyer written approval from WREGIS for Seller's generation to be reported to WREGIS. Seller warrants that all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in WREGIS will be taken prior to the first delivery under the Agreement
- (l) <u>Prevailing Wage</u>. To the extent applicable, Seller shall comply with the prevailing wage requirements of California Public Utilities Code Section 399.13, subdivision (h).

## 3.2 Transmission.

(a) <u>Seller's Transmission Service Obligations</u>. During the Delivery Term, Seller shall arrange and be responsible for transmission service for delivery of the Product to and at the Delivery Point and bear all risks and costs associated with such transmission service, including, but not limited to, all Transmission Provider costs and charges, electric transmission losses, and any transmission outages or curtailment, except as provided otherwise in this Agreement in respect of Dispatch Down Periods. *[For Projects located outside of CAISO:* Seller shall obtain and maintain during the Delivery Term firm transmission service to deliver the Product from the Site to the Delivery Point from all intermediary Transmission Providers between the Site and the Delivery Point. At Buyer's request, Seller shall provide to Buyer a copy of all firm transmission service agreements and any amendments thereto.] Seller shall fulfill all contractual,

metering and applicable interconnection requirements, including those set forth in Participating Transmission Owner's applicable tariffs, the CAISO Tariff and implementing CAISO standards and requirements, including, but not limited to, executing applicable interconnection agreements, Participating Generator Agreement and Meter Service Agreement so as to be able to deliver Energy to the CAISO Grid. Seller shall arrange for any interconnection agreement with the CAISO and such interconnection agreement is separate from and not a part of this Agreement.

- (b) <u>Buyer's Transmission Service Obligations</u>. During the Delivery Term, Buyer shall arrange and be responsible for transmission service for delivery of the Product from the Delivery Point and bear all risks and costs associated with such transmission service, including, but not limited to, all Transmission Provider costs and charges, electric transmission losses, and any transmission outages or curtailment, except as provided otherwise in this Agreement in respect of Dispatch Down Periods.
- (c) <u>Congestion Charges</u>. Seller shall be responsible for all costs of congestion for transmission of the Product up to and at the Delivery Point. Buyer shall be responsible for all costs of congestion for transmission of the Product from the Delivery Point. To the extent that Seller is reimbursed for or receives any refunds, credits, or benefits from the CAISO for congestion charges or losses in respect of transmission of the Product from the Delivery Point, whether due to differences between the locational marginal pricing at the Delivery Point and Buyer's load aggregation point or any other point downstream of the Delivery Point, congestion revenue rights associated with any transmission path downstream of the Delivery Point, or any other hedging instruments associated with the transmission of the Product from the Delivery Point (collectively, any such refunds, credits or benefits are referred to as "Reductions"), then, at Buyer's option, either (i) Seller shall transfer any such Reductions and their related rights to Buyer; or (ii) Buyer shall reduce payments due to Seller under this Agreement in amounts equal to the Reductions and Seller shall retain the Reductions.

## 3.3 Scheduling.

Requirements. Seller shall cause the Project to become a Participating Intermittent Resource including executing all necessary documents to become a Participating Intermittent Resource. Seller shall be responsible for all CAISO forecasting fees and related charges associated with the Project becoming a Participating Intermittent Resource and participating in the VER Forecasting Program. Seller and Buyer shall comply with the VER Forecasting Program, and all additional protocols issued by the CAISO relating to Participating Intermittent Resources, including the VER Forecasting Program, for the Delivery Term. Seller shall provide Buyer with a copy of the notice from the CAISO certifying the Project as a Participating Intermittent Resource prior to the Commercial Operation Date. In the event that the VER Forecasting Program or the CAISO Tariff and/or any protocols relating thereto are changed, amended, modified replaced or terminated, Seller and Buyer agree to comply with such revisions and, to the extent practical, to implement such revisions in a manner that maintains the relative economic positions of the Parties as of the date of this Agreement.]

# (b) <u>Scheduling Coordinator</u>.

## [When Seller is SC for the Project, include the following two paragraphs:

Seller as Scheduling Coordinator for the Project. Delivery Term, Seller shall be its own Scheduling Coordinator or designate a qualified third party to provide Scheduling Coordinator services with its Transmission Provider to Schedule and deliver the Product to the Delivery Point and Buyer shall be its own Scheduling Coordinator or designate a qualified third party to provide Scheduling Coordinator services with its Transmission Provider to Schedule and receive the Product at the Delivery Point. Throughout the Delivery Term, Buyer and Seller shall submit inter-SC trades for scheduling all Product from the Project at the Delivery Point (including Energy, Integrated Forward Market Load Uplift Obligations in respect of selfscheduled Energy, and other Product from time to time contemplated under the CAISO Tariff to be subject to inter-SC trades), based on a final Schedule developed in compliance with this Agreement. During the Delivery Term, each Party or each Party's SC shall conduct all Scheduling in accordance with the operating procedures developed by the Parties pursuant to Section 3.10 and in full compliance with the applicable CAISO Tariff, protocols and Scheduling practices for Product on a day-ahead, hour-ahead, or real time basis, as determined by Buyer. [For As-Available intermittent Product only: Whenever the VER Forecasting Program is available, Seller shall submit Schedules and any updates to such Schedules to the CAISO based on the most current forecast of Delivered Energy consistent with the VER Forecasting Program.] In all cases, [For all Products other than Dispatchable: consistent with its Economic Dispatch Down curtailment rights,] Buyer may direct the Scheduling Coordinator to submit, and Seller shall cause the Scheduling Coordinator to submit in accordance with such Buyer's directions, a self-schedule or an economic bid in the applicable CAISO market in order to Schedule the Product with the CAISO. It is the intent of the Parties that neither Party be subject to a double payment or a double charge for Product from the Project through this Agreement and CAISO settlement process and that the more detailed Scheduling and operating procedures developed pursuant to Section 3.10 complement the CAISO settlement process to produce a final economic result between them that is consistent with the fundamental transaction of this Agreement.

CAISO Costs and Revenues. Seller shall be responsible for CAISO costs (including penalties and other charges) and shall be entitled to all CAISO revenues (including credits and other payments) as the Scheduling Coordinator for the Project, in each case, associated with Imbalance Energy, including all CAISO charges or penalties incurred as a consequence of the Project not being available, the Seller not notifying the CAISO and Buyer of outages in a timely manner (in accordance with the CAISO Tariff and as set forth in Section 3.7), any other failure by Seller to abide by the CAISO Tariff, and any other deviations between Delivered Energy and Scheduled Energy that are attributable to Seller, the Project, or any event, circumstance, act, or incident occurring prior to or at the Delivery Point, including without limitation uninstructed deviation penalties. The Parties agree that any Availability Incentive Payments are for the benefit of the Seller and for Seller's account and that any Non-Availability Charges or other CAISO charges associated with the Project not providing sufficient Resource Adequacy capacity are the responsibility of the Seller and for Seller's account. In addition, if during the Delivery Term, the CAISO implements or has implemented any sanction or penalty related to scheduling, outage reporting, or generator operation, the cost of the sanctions or penalties shall be the Seller's responsibility. Buyer shall be entitled to all credits, payments, or revenues from the CAISO in respect of the Contract Energy, from the Project including revenues associated with CAISO dispatches, inter-SC trade credits, and bid cost recovery.

# [When SDG&E is SC for the Project, include the following seven paragraphs:

- Buyer as Scheduling Coordinator for the Project. Delivery Term] [Upon initial synchronization of the Project to the CAISO Grid], Buyer shall be the Scheduling Coordinator or designate a qualified third party to provide Scheduling Coordinator services with the CAISO for the Project for both the delivery and the receipt of the Product at the Delivery Point. At least thirty (30) days prior to the [Commercial Operation Date of the Project] [initial synchronization of the Project to the CAISO Grid], Seller shall take all actions and execute and deliver to Buyer and the CAISO all documents necessary to authorize or designate Buyer as Seller's Scheduling Coordinator for the Project effective as of [the beginning of the Delivery Term] [initial synchronization of the Project to the CAISO Grid]. [During the Delivery Term] [On and after initial synchronization of the Project to the CAISO Grid], Seller shall not authorize or designate any other party to act as Seller's Scheduling Coordinator, nor shall Seller perform for its own benefit the duties of Scheduling Coordinator, and Seller shall not revoke Buyer's authorization to act as Seller's Scheduling Coordinator unless agreed to by Buyer. Buyer (as Seller's SC) shall submit Schedules to the CAISO based on the final Schedule developed in accordance with this Agreement, the operating procedures developed by the Parties pursuant to Section 3.10, and the applicable CAISO Tariff, protocols and Scheduling practices for Product on a day-ahead, hour-ahead, or real time basis, as determined by Buyer. [For As-Available intermittent Product only: Buyer (as Seller's SC) shall submit Schedules and any updates to such Schedules to the CAISO based on the most current forecast of Delivered Energy consistent with the VER Forecasting Program whenever the VER Forecasting Program is available, and consistent with Buyer's best estimate based on the information reasonably available to Buyer including Buyer's forecast whenever the VER Forecasting Program is not available. In all cases, [For all **Products other than Dispatchable:** consistent with its Economic Dispatch Down curtailment rights,] Buyer (as the Scheduling Coordinator) may, or may direct the third party Scheduling Coordinator to, submit a self-schedule or an economic bid in the applicable CAISO market in order to Schedule the Product with the CAISO.
- (iv) <u>Notices</u>. Buyer (as Seller's SC) shall provide Seller with access to a web based system through which Seller shall submit to Buyer and the CAISO all notices and updates required under the CAISO Tariff regarding the Project's status, including, but not limited to, all outage requests, forced outages, forced outage reports, clearance requests, or must offer waiver forms. In accordance with Section 3.7 and this Section 3.2, Seller will cooperate with Buyer to provide such notices and updates. If the web based system is not available, Seller shall promptly submit such information to Buyer and the CAISO (in order of preference) telephonically, by electronic mail, or facsimile transmission to the personnel designated to receive such information.
- (v) <u>CAISO Costs and Revenues</u>. Except as otherwise set forth below, *[For all Products other than Dispatchable Product:* in Section 3.4(c)(ii), *[for all Products other than Dispatchable Product:* in Section 3.4(c)(ii), *[for As-Available Product VER Forecasting Program Participants only:* Negative Imbalance Energy costs or revenues, *[for As-Available Product VER Forecasting Program Participants only:* Positive Imbalance Energy revenues or costs, *[for As-Available Product VER Forecasting Program Participants only:* Positive Imbalance Energy revenues or costs, and other payments) as the Scheduling Coordinator for the Project, including revenues associated with CAISO dispatches, bid cost recovery, inter-SC trade

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credits, or other credits in respect of the Product Scheduled or delivered from the Project; provided, however that during periods when the Project is under curtailment for both System Dispatch Down and Economic Dispatch Down during the same CAISO settlement interval, Imbalance Energy costs and revenues shall be allocated in accordance with Section 3.4(c)(ii). [For As-Available Product VER Forecasting Program Participants only: Seller shall be responsible for all CAISO charges or penalties net of credits and payments (including without limitation all Imbalance Energy costs), in each case, resulting from the Seller not notifying the CAISO and Buyer (as Seller's SC) of outages or other unavailability of Project capacity in a timely manner (in accordance with the CAISO Tariff and as set forth in Section 3.7) or any other failure by Seller to abide by the CAISO Tariff.] [For all Products other than As-Available Product VER Forecasting Program Participants: Seller shall be responsible for all CAISO charges or penalties net of credits and payments, in each case, resulting from the Project not being available, the Seller not notifying the CAISO and Buyer (as Seller's SC) of outages in a timely manner (in accordance with the CAISO Tariff and as set forth in Section 3.7), any other failure by Seller to abide by the CAISO Tariff, and deviations between Delivered Energy and Scheduled Energy that are attributable to Seller, the Project, or any event, circumstance, act, or incident occurring prior to or at the Delivery Point, including without limitation uninstructed deviation penalties. The Parties agree that any Availability Incentive Payments are for the benefit of the Seller and for Seller's account and that any Non-Availability Charges or other CAISO charges associated with the Project not providing sufficient Resource Adequacy capacity are the responsibility of the Seller and for Seller's account. In addition, if during the Delivery Term, the CAISO implements or has implemented any sanction or penalty related to scheduling, outage reporting, or generator operation, and any such sanctions or penalties are imposed upon the Project or to Buyer as Scheduling Coordinator due to the actions or inactions of Seller, the cost of the sanctions or penalties shall be the Seller's responsibility.

(vi) <u>CAISO Settlements</u>. Buyer (as Seller's SC) shall be responsible for all settlement functions with the CAISO related to the Project. Buyer shall render a separate invoice to Seller for any CAISO charges or penalties ("CAISO Charges Invoice") for which Seller is responsible under this Agreement. CAISO Charges Invoices shall be rendered after settlement information becomes available from the CAISO that identifies any CAISO charges. Notwithstanding the foregoing, Seller acknowledges that the CAISO will issue additional invoices reflecting CAISO adjustments to such CAISO charges. Seller shall pay the amount of CAISO Charges Invoices within ten Business Days of Seller's receipt of the CAISO Charges Invoice. If Seller fails to pay such CAISO Charges Invoice within that period, Buyer may net or offset any amounts owing to it for these CAISO Charges Invoices against any future amounts it may owe to Seller under this Agreement. The obligations under this section with respect to payment of CAISO Charges Invoices shall survive the expiration or termination of this Agreement.

(vii) <u>Dispute Costs</u>. Buyer (as Seller's SC) may be required to dispute CAISO settlements in respect of the Project. Seller agrees to pay Buyer's costs and expenses (including reasonable attorneys' fees, including reasonably allocated costs of in-house counsel of the Buyer) associated with its involvement with such CAISO disputes. In no event shall Buyer (or its third party designee, as Scheduling Coordinator) be liable to Seller for the actions, inactions, errors, or omissions of the CAISO or its agents in the performance of their scheduling functions and/or market operations.

- (viii) <u>Terminating Buyer's Designation as Scheduling Coordinator</u>. At least thirty (30) days prior to expiration of this Agreement or as soon as reasonably practicable upon an earlier termination of this Agreement, the Parties will take all actions necessary to terminate the designation of Buyer as Scheduling Coordinator for the Project as of 11:59 p.m. on such expiration date.
- (ix) <u>Master File and Resource Data Template</u>. Seller shall provide the data to the CAISO (and to Buyer) that is required for the CAISO's Master File and Resource Data Template (or successor data systems) for this Project consistent with this Agreement. Neither Party shall change such data without the other Party's prior written consent.
- (c) <u>Annual Delivery Schedules</u>. No later than forty-five (45) days before (A) the first day of the first Contract Year of the Delivery Term and (B) the beginning of each calendar year for every subsequent Contract Year during the Delivery Term, Seller shall provide a non-binding forecast of each month's average-day expected Delivered Energy, by hour, for the following calendar year.
- (d) <u>Monthly Delivery Schedules</u>. Ten (10) Business Days before the beginning of each month during the Delivery Term, Seller shall provide a non-binding forecast of each day's average expected Delivered Energy, by hour, for the following month ("Monthly Delivery Forecast").
- Daily Delivery Schedules. By 5:30 AM Pacific Prevailing Time on the Business Day immediately preceding the date of delivery, Seller shall *[When Seller is SC for the*] **Project:** cause its Scheduling Coordinator to provide Buyer with a **[For As-Available intermittent**] Product only: non-binding VER forecast of the Project's available capacity (or if the VER Forecasting Program is not available for any reason, the expected Delivered Energy) [For all Products other than As-Available intermittent: binding forecast of the expected Delivered Energy] for each hour of the immediately succeeding day ("Day-Ahead Forecast") [For all Products other than As-Available intermittent: [When Seller is SC for the Project: concurrent with delivery to the CAISO] [When SDGE is SC for the Project: and Buyer shall submit a Schedule to the CAISO consistent with such Day-Ahead Forecast, it being understood that, [For all Products other than Dispatchable: consistent with its Economic Dispatch Down curtailment rights, Buyer (as the Scheduling Coordinator) may, or may direct the third party Scheduling Coordinator to, submit a self-schedule or an economic bid in the applicable CAISO market in order to Schedule the Product with the CAISO]. A Day-Ahead Forecast provided in a day prior to any non-Business Day(s) shall include Schedules for the immediate day, each succeeding non-Business Day and the next Business Day. Each Day-Ahead Forecast shall clearly identify, for each hour, Seller's best estimate of [For As-Available intermittent Product only: the Project's available capacity (or if the VER Forecasting Program is not available for any reason, the expected Delivered Energy) [For all Products other than As-Available intermittent: the expected Delivered Energy]. Seller may not change such Schedule past the deadlines provided in this section except in the event of a Forced Outage or Schedule change imposed by Buyer or the CAISO, in which case Seller shall promptly provide Buyer with a copy of any and all updates to such Schedule indicating changes from the then-current Schedule. These notices and changes to the Schedules shall be sent to Buyer's on-duty Scheduling Coordinator. If Seller fails to provide Buyer with a Day-Ahead Forecast as required herein, then for such unscheduled delivery period

only Buyer shall rely on the delivery Schedule provided in the Monthly Delivery Forecast or Buyer's best estimate based on information reasonably available to Buyer and Seller shall be liable for Scheduling and delivery based on such Monthly Delivery Forecast or Buyer's best estimate.

- (f) Real Time Delivery Schedules. Notwithstanding anything to the contrary herein, in the event Seller makes a change to its Schedule on the actual date of delivery for any reason including Forced Outages (other than a scheduling change imposed by Buyer or CAISO) which results in a change to its deliveries (whether in part or in whole), Seller shall notify Buyer immediately by calling Buyer's on-duty Scheduling Coordinator. Seller shall notify Buyer and the CAISO of Forced Outages in accordance with Section 3.7. Seller shall keep Buyer informed of any developments that will affect either the duration of the outage or the availability of the Project during or after the end of the outage.
- (g) [For Dispatchable Product Only: Availability Notices. During the Delivery Term, no later than two (2) Business Days before each Schedule day for the day-ahead market in accordance with WECC scheduling practices, Seller shall provide Buyer with an hourly Schedule of the capacity that the Project is expected to have available for each hour of such Schedule day (the "Availability Notice"). Seller will notify Buyer immediately if the available capacity of the Project may change after Buyer's receipt of an Availability Notice. Seller shall accommodate Buyer's reasonable requests for changes in the time of delivery of Availability Notices. Seller shall provide Availability Notices using the form developed by the Parties under Section 3.10 by (in order of preference) electronic mail, facsimile transmission or, telephonically to Buyer personnel designated to receive such communications.]
- (h) *[For Dispatchable Product Only:* Dispatch Notices. Buyer or the CAISO will have the right to dispatch the Project, seven days per week and 24 hours per day (including holidays), by providing Dispatch Notices and updated Dispatch Notices to Seller electronically, subject to the requirements and limitations set forth in this Agreement, including the system requirements under Section 3.4(b) and the Project operating restrictions set forth in Exhibit H. Each Dispatch Notice will be effective unless and until Buyer modifies such Dispatch Notice by providing Seller with an updated Dispatch Notice. In addition to any other requirements set forth or referred to in this Agreement, all Dispatch Notices and updated Dispatch Notices will be made in accordance with the timelines as specified in the CAISO Tariff.]

#### 3.4 Dispatch Notices.

- (a) <u>General</u>. Seller shall adjust delivery amounts as directed by the CAISO, the Participating Transmission Owner, Buyer, or a Transmission Provider during any Dispatch Down Period.
- (b) <u>System Requirements</u>. Seller shall acquire, install, and maintain such facilities, communications links and other equipment, and implement such protocols and practices, as necessary (i) for Seller to respond and follow instructions, including an electronic signal conveying real time instructions, to operate the Project as directed by the Buyer and/or the CAISO, including to implement a System Dispatch Down or an Economic Dispatch Down in accordance with the then-current methodology used to transmit such instructions as it may change from time to time, and (ii) for Buyer and/or the CAISO to control the quantity of Product generated by the

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Project in order to implement a System Dispatch Down or an Economic Dispatch Down, in each case, in accordance with the then-current methodology used to transmit such instructions as it may change from time to time. As of the Execution Date, the systems required to comply with clause (i) include at a minimum the CAISO's Automatic Dispatch System (as described in the CAISO website) and the systems required to comply with clause (ii) include at a minimum the CAISO'S Application Programming Interfaces (as described in the CAISO website). If at any time during the Delivery Term Seller's facilities, communications links or other equipment, protocols or practices are not in compliance with then-current methodologies, Seller shall take all commercially reasonable steps necessary to become compliant as soon as possible. Seller shall be liable pursuant to Section [For all Products other than Dispatchable Product: 3.4(c)(ii)] [For Dispatchable **Product:** 3.3(b)[(ii)/(iii)]/ for failure to comply with an order directing a Dispatch Down Period, during the time that Seller's facilities, communications links or other equipment, protocols or practices are not in compliance with then-current methodologies. For the avoidance of doubt, an order directing a Dispatch Down Period via such systems and facilities shall have the same force and effect on Seller as any other form of communication. If an electronic submittal is not possible, Buyer and/or the CAISO may provide Dispatch Notices by (in order of preference) electronic mail, telephonically, or facsimile transmission to Seller's personnel designated to receive such communications, as provided by Seller in writing and Seller shall maintain communications systems necessary to permit such transmittal of Dispatch Notices. The Parties shall describe with more specificity the Economic Dispatch Down process (including the automated communication process for Dispatch Notices) in the operating procedures developed by the Parties pursuant to Section 3.10.

- Down. [For Projects where SDG&E purchases Test Energy: Before or after the Commercial Operation Date,] each of Buyer and the CAISO has the right to order Seller to curtail deliveries of Energy from the Project to the Delivery Point for Economic Dispatch Down purposes, seven days per week and 24 hours per day (including holidays), by providing Dispatch Notices and updated Dispatch Notices to Seller electronically via the communications systems described in Section 3.4(b), subject to the requirements and limitations set forth in this Agreement, including the Project operating restrictions set forth in Exhibit H. Each Dispatch Notice will be effective unless and until Buyer (or the CAISO) modifies such Dispatch Notice by providing Seller with an updated Dispatch Notice. In addition to any other requirements set forth or referred to in this Agreement, all Dispatch Notices and updated Dispatch Notices will be made in accordance with the timelines as specified in the CAISO Tariff. Seller agrees to adjust the Project's Delivered Energy as set forth in a Dispatch Notice that meets the requirements of Economic Dispatch Down.
- Energy: On and after the Commercial Operation Date, Buyer shall pay Seller, on the date payment would otherwise be due in respect of the month in which any such Economic Dispatch Down occurred an amount equal to the positive difference, if any, of (Y) the product of the Energy Price, times the amount of Deemed Bundled Green Energy resulting from such Economic Dispatch Down [For Projects receiving PTCs: plus the product of the after tax value of any lost PTC benefits (in dollars per megawatt hour) that Seller has not been able to mitigate after use of reasonable efforts, times the amount of Deemed Bundled Green Energy resulting from such Economic Dispatch Down], minus (Z) the product of the positive value of the Sales Price, if received, times the amount of Deemed Bundled Green Energy resulting from such Economic

Dispatch Down. *[For Projects receiving PTCs:* Seller shall provide Buyer with documentation that establishes to Buyer's reasonable satisfaction (A) that Seller would have been entitled to receive PTCs for the Deemed Bundled Green Energy if it had actually been generated; and (B) the after tax value of any lost PTC benefits (in dollars per megawatt hour) due under this Section 3.4(c)(i).

(ii) Failure to Comply. If Seller fails to comply with a Dispatch Notice that is in compliance with this Agreement, then, for the deviation between the Delivered Energy and the amount set forth in the Dispatch Notice, Seller shall pay Buyer an amount equal to the sum of (A) + (B) + (C), where: (A) is the amount, if any, paid to Seller by Buyer for any Delivered Energy in excess of the amount set forth in the Dispatch Notice, and (B) is all Imbalance Energy costs or charges (excluding any revenues or credits), and (C) is any penalties or other charges resulting from Seller's failure to comply with the Dispatch Notice.

#### 3.5 Standards of Care.

- (a) <u>General Operation</u>. Seller shall comply with all applicable requirements of Law, the CAISO, NERC and WECC relating to the Project (including those related to safety, construction, ownership and/or operation of the Project).
- (b) <u>CAISO and WECC Standards</u>. Each Party shall perform all generation, scheduling and transmission services in compliance with all applicable (i) operating policies, criteria, rules, guidelines, tariffs and protocols of the CAISO, (ii) WECC scheduling practices and (iii) Good Industry Practices.
- (c) <u>Reliability Standard</u>. Seller agrees to abide by all (i) NERC, WECC and CAISO reliability requirements, including all such reliability requirements for generator owners and generator operators, and, if applicable, CPUC General Order No.167, "Enforcement of Maintenance and Operation Standards for Electrical Generating Facilities," and (ii) all applicable requirements regarding interconnection of the Project, including the requirements of the interconnected Transmission Provider.

#### 3.6 Metering.

(a) <u>CAISO Revenue Meter</u>. All output from the Project per the terms of this Agreement must be delivered through a single CAISO revenue meter and that meter must be dedicated exclusively to the Project described herein. All Product purchased under this Agreement must be measured by the Project's CAISO revenue meter to be eligible for payment under this Agreement. Seller shall bear all costs relating to all metering equipment reasonably necessary to accommodate the Project. In addition, Seller hereby agrees to provide all meter data to Buyer in a form acceptable to Buyer, and consents to Buyer obtaining from the CAISO the CAISO meter data applicable to the Project and all inspection, testing and calibration data and reports. Seller shall grant Buyer the right to retrieve the meter reads from the CAISO meter reporting website and/or directly from the CAISO meter(s) at the Project site. If the CAISO makes any adjustment to any CAISO meter data for a given time period, Seller agrees that it shall submit revised monthly invoices, pursuant to Section 6.2, covering the entire applicable time period in order to conform fully such adjustments to the meter data. Seller shall submit any such revised invoice no later than

thirty (30) days from the date on which the CAISO provides to Seller such binding adjustment to the meter data.

- (i) <u>Testing and Calibration</u>. Seller shall perform or cause to be performed, at its expense, annual testing and calibration of the electric meters in accordance with Good Industry Practice and the CAISO Tariff. Seller shall give Buyer reasonable advance notice of any inspection, testing or calibration of the electric meters. Buyer shall have the right to have a representative or designee present at such inspection, test or calibration of the electric meters. Buyer shall have the right to require, at Buyer's expense, except as required below, a test of any of the electric meters not more often than two (2) times every twelve (12) months.
- (ii) <u>Inaccurate Meters</u>. If any of the electric meters is deemed to be inaccurate under the Meter Service Agreement, deliveries shall be measured by reference to Seller's check-meters, if any are installed and registering accurately, or the meter readings for the period of inaccuracy shall be adjusted as far as can be reasonably ascertained by Seller from the best available data, subject to review and approval by Buyer. If the period of the inaccuracy cannot be ascertained reasonably, any such adjustment shall be for a period equal to one-half of the time elapsed since the preceding test by applying the percentage of inaccuracy so found. Seller shall promptly cause such electric meters to be corrected and, where such inaccuracy was determined pursuant to a test required by Buyer, Seller shall bear the expense of any such test.
- (iii) <u>Delivered MWh Adjustments</u>. In the event that, due to correction for inaccurate electric meters deemed to be inaccurate under the Meter Service Agreement, the Delivered Energy is increased or decreased, the revised Delivered Energy shall be used for purposes of calculating payments. If any of such amounts for any period have already been calculated using the previous amount of Delivered Energy, they shall be recalculated using the revised amount of Delivered Energy. If the recalculation changes the amount payable for the period in question, revised payments shall be made by Buyer or Seller, as applicable, in accordance with Section 6.2.
- (b) Real Time Telemetry. Seller shall install, activate and maintain metering, communication and telemetry equipment for the Project in a centralized system to which Buyer shall have real time access. Seller shall link its system to Buyer via an approved Buyer communication network, utilizing existing industry standard network protocol, as reasonably approved by Buyer. Seller shall correct any problems with such equipment as soon as practicable.
- (c) [The following section is for As-Available Intermittent Products only] Meteorological Station. Seller, at its own expense, shall install and maintain such stand-alone meteorological stations at the Project as may be required under the VER Forecasting Program and the CAISO Tariff to monitor and report weather data to both the CAISO and Buyer's weather station data collection system. Each station shall be equipped with instruments and equipment that meet the specifications of the VER Forecasting Program and shall measure, collect, record, format, and communicate the data required under the VER Forecasting Program. Seller shall submit to Buyer for review and approval, which shall not be unreasonably withheld, its technical specifications for the meteorological station along with a site plan showing the location of the station within the Project. Seller shall correct any problems with such equipment as soon as practicable.

## 3.7 Outage Notification.

- Planned Outages. Seller shall schedule Planned Outages for the Project in accordance with Good Industry Practices and with the prior written consent of Buyer, which consent may not be unreasonably withheld or conditioned. The Parties acknowledge that in all circumstances, Good Industry Practices shall dictate when Planned Outages should occur. Seller shall notify Buyer of its proposed Planned Outage schedule for the Project for the following calendar year by submitting a written Planned Outage schedule no later than October 1st of each year during the Delivery Term. The Planned Outage schedule is subject to Buyer's approval, which approval may not be unreasonably withheld or conditioned. Buyer shall promptly respond with its approval or with reasonable modifications to the Planned Outage schedule and Seller shall use its best efforts in accordance with Good Industry Practices to accommodate Buyer's requested modifications. Notwithstanding the submission of the Planned Outage schedule described above, Seller shall also submit a completed Outage Notification Form to Buyer no later than fourteen (14) days prior to each Planned Outage and all appropriate outage information or requests to the CAISO in accordance with the CAISO Tariff. Seller shall contact Buyer with any requested changes to the Planned Outage schedule if Seller believes the Project must be shut down to conduct maintenance that cannot be delayed until the next scheduled Planned Outage consistent with Good Industry Practices. Seller shall not change its Planned Outage schedule without Buyer's approval, not to be unreasonably withheld or conditioned. Seller shall use its best efforts in accordance with Good Industry Practices not to schedule Planned Outages during the months of July, August, September and October. At Buyer's request, Seller shall use commercially reasonable efforts to reschedule Planned Outage so that it may deliver Product during CAISO declared or threatened emergency periods. Seller shall not substitute Energy from any other source for the output of the Project during a Planned Outage.
- (b) <u>Forced Outages</u>. Within *[When Seller is the SC for the Project:* Within two hours of any Forced Outage,] *[When SDG&E is the SC for the Project:* Within one-half of the notification time prescribed under the CAISO Tariff for Forced Outages,] Seller shall submit a completed Outage Notification Form to the Buyer in accordance with the instructions shown on the form and shall submit outage information to the CAISO in accordance with the CAISO Tariff *[When SDG&E is the SC for the Project:* and Section 3.3(b)(ii) above]. Seller shall not substitute Energy from any other source for the output of the Project during a Forced Outage.
- (c) <u>Coordination with CAISO</u>. Seller shall be responsible *[When SDG&E is SC for the Project:* in accordance with Section 3.3(b)(ii)] for all outage coordination communications with the CAISO. Buyer shall cooperate with Seller in arranging and coordinating all Project outages with the CAISO.

#### 3.8 Operations Logs and Access Rights.

(a) Operations Logs. Seller shall maintain a complete and accurate log of all material operations and maintenance information on a daily basis. Such log shall include, but not be limited to, information on power production, fuel consumption, efficiency, availability, maintenance performed, outages, results of inspections, manufacturer recommended services, replacements, electrical characteristics of the generators, control settings or adjustments of

equipment and protective devices. Seller shall maintain this information for at least two (2) years and shall provide this information electronically to Buyer within one day of Buyer's request.

(b) <u>Access Rights</u>. Buyer, its authorized agents, employees and inspectors shall have the right of ingress to and egress from the Project during normal business hours upon reasonable advance Notice and for any purposes reasonably connected with this Agreement.

## 3.9 New Generation Facility.

- (a) Project Development. Seller, at no cost to Buyer, shall:
  - (i) Design and construct the Project.
- (ii) Perform all studies, pay all fees, obtain all necessary approvals and execute all necessary agreements with the CAISO and the Participating Transmission Owner for the Electrical Interconnection Upgrades to Schedule and deliver the Product from the Project [For Projects Providing Resource Adequacy: under "Full Capacity Deliverability Status" (as defined in the CAISO Tariff)]. Following satisfaction or waiver of the Conditions Precedent set forth in Section 2.3(b), Seller shall not request from the CAISO or the Participating Transmission Owner any changes to its plan of interconnection that are inconsistent with the plan of interconnection that was evaluated in connection with the satisfaction or waiver of the Conditions Precedent in Section 2.3(b) without Buyer's prior written consent.
- (iii) Acquire all Governmental Approvals and other approvals necessary for the construction, operation, and maintenance of the Project.
- (iv) Complete all environmental impact studies necessary for the construction, operation, and maintenance of the Project, including all environmental analysis required under the California Environmental Quality Act for the Project and related interconnection facilities.
- (v) At Buyer's request, provide to Buyer Seller's electrical specifications and design drawings pertaining to the Project.
- (vi) Within fifteen (15) days after the close of each calendar quarter following the Execution Date until the Commercial Operation Date, provide to Buyer a Quarterly Progress Report and agree to regularly scheduled meetings between representatives of Buyer and Seller to review such reports and discuss Seller's construction progress. The Quarterly Progress Report shall identify the Milestones and indicate whether Seller has met or is on target to meet such Milestones.
- (vii) Provide access to Buyer, its authorized agents, employees and inspectors for purpose of inspecting the Project's construction site or on-site Seller data and information pertaining to the Project during normal business hours upon reasonable advance Notice.
- (viii) At Buyer's request, provide information to Buyer relating to Seller's or Seller's contractor's use, during Project construction, of "Women-Owned Businesses" or

"Minority-Owned Businesses" or "Disabled Veteran Business Enterprises" as defined in CPUC General Order 156, and the number of new employees hired by Seller or Seller's contractors and the number of women, minority, and disabled veterans trained or hired by Seller or Seller's contractor's as contemplated under Cal. Public Utilities Code §910(a)(8), as each such group of entities and individuals may be amended from time to time or further defined, supplemented, or superseded by applicable Law or replaced with similar designations or certifications. [Include other covenants related to "women-owned business" or "minority-owned business" as may be applicable to the Seller's RFO bid.]

#### (b) Construction Milestones.

- (i) The Parties agree time is of the essence in regards to this Agreement. As such, the Parties also agree certain milestones for the construction of the Project as set forth in the Milestone schedule attached hereto as Exhibit B ("Milestones") must be achieved in a timely fashion or Buyer will suffer damages.
- (ii) Within seven (7) days after completion of each Milestone, Seller shall provide Buyer with Notice along with accompanying documentation (including reasonably redacted copies of applicable agreements, Governmental Approvals, and certificates) to reasonably demonstrate the achievement of such Milestone. If Seller misses the deadline date for three (3) or more Milestones or misses the deadline date for any one Milestone by more than ninety (90) days, Seller shall submit to Buyer, within ten (10) Business Days of such missed Milestone completion date, a remedial action plan ("Remedial Action Plan") that describes in detail a reasonable course of action and plan (including accelerating the work, for example, by using additional shifts, overtime, additional crews or resequencing of the work, as applicable) to achieve the missed Milestones and all subsequent Milestones no later than the Guaranteed Commercial Operation Date (as it may be extended under Section 3.9(c)(i)-(ii)); provided, that delivery of any Remedial Action Plan shall not relieve Seller of its obligation to meet any subsequent Milestones and the Guaranteed Commercial Operation Date.

#### (c) Daily Delay Damages.

COD. Seller shall cause the Project to achieve the Commercial Operation Date by the Guaranteed Commercial Operation Date; provided, however, that the Commercial Operation Date shall not occur more than [Insert number of days] days prior to the Guaranteed Commercial Operation Date. Seller may elect to extend the Guaranteed Commercial Operation Date for no more than a total of [ days (the "Project Cure Period") by providing Buyer with Notice of its election to extend the Guaranteed Commercial Operation Date by no later than 5:00 p.m. on the Business Day prior to the Guaranteed Commercial Operation Date along with Seller's estimate of the duration of the extension and its payment of Daily Delay Damages for each day or portion of a day that the Guaranteed Commercial Operation Date is extended. Seller may further extend the Guaranteed Commercial Operation Date beyond the already extended Guaranteed Commercial Operation Date subject to the same terms applicable to the original extension; provided, however, that the total of all extensions under this clause (i) shall not exceed the Project Cure Period. The Daily Delay Damages payments are in addition to, and not a part of, the Construction Period Security. Seller will be entitled to a refund (without interest) of any estimated Daily Delay Damages payments paid by Seller that exceed the amount

required to cover the number of days or partial days by which the Commercial Operation Date occurred after the original Guaranteed Commercial Operation Date (where the original Guaranteed Commercial Operation Date excludes any extensions under this Section 3.9(c)(i) but includes any extensions under Section 3.9(c)(ii)). In addition, Seller shall submit a Remedial Action Plan within ten (10) days after each extension of the Guaranteed Commercial Operation Date if the Project has not then achieved the Commercial Operation Date. Each Party agrees and acknowledges that (a) the actual damages that Buyer would incur due to a delay in achieving the Commercial Operation Date on or before the original Guaranteed Commercial Operation Date (where the original Guaranteed Commercial Operation Date excludes any extensions under this Section 3.9(c)(i) but includes any extensions under Section 3.9(c)(ii)) would be difficult or impossible to predict with certainty, (b) the Daily Delay Damages set forth in this section are a reasonable and appropriate approximation of such damages, and (c) the Daily Delay Damages set forth in this section are the exclusive remedy for Seller's delay in achieving the Commercial Operation Date for the length of the extensions paid for in advance by Seller up to the Project Cure Period but shall not otherwise act to limit any of Buyer's rights or remedies arising from any other Event of Default by Seller, including, without limitation, the failure by Seller to achieve the Commercial Operation Date altogether.

(ii) <u>Extensions</u> . The Guaranteed Commercial Operation	Date and the
deadline dates for Milestone numbers [] as set forth in Exhibit B shall b	e extended on
a day for day basis for up to ninety (90) calendar days in the aggregate ("Force Maje	ure Extension
Period") without imposition of any Daily Delay Damages to the extent Seller is	actually and
demonstrably delayed in its critical path to achieving the Commercial Operation	Date by the
Guaranteed Commercial Operation Date as a result of Force Majeure; provided, howe	ever, any such
delay in excess of this period shall be subject to Daily Delay Damages pursuant to Sec	tion 3.9(c)(i).

Operating Procedures. No later than forty-five (45) days before the Commercial Operation Date, and from time to time as reasonably determined necessary by the Parties, the Parties shall meet to address how each Party will perform its respective obligations under this Agreement, including, but not limited to: (1) the method of day-to-day communications; (2) key personnel lists for each Party; (3) procedures for Forced Outage and Planned Outage reporting; (4) procedures for delivery forecasting; (5) procedures for record keeping; (6) Scheduling procedures; and (7) invoicing and payment procedures; provided, that the failure to agree on these operating procedures will not relieve the Parties of their respective obligations under this Agreement, and any failure to agree shall be resolved in accordance with the dispute resolution procedures in Article 12.

#### ARTICLE FOUR: COMPENSATION; MONTHLY PAYMENTS

- 4.1 [For Dispatchable Product Only: Capacity Payment.
  - (a) Capacity Price.

Contract	Capacity Price
Year	(\$/KW)
1	

(b) <u>Monthly Capacity Payment</u>. For each month, Buyer shall pay Seller for the Product the amount calculated as follows ("Monthly Capacity Payment"):

$$MCP = CC \times CP \times SF \times AAF$$

#### Where:

*MCP* is the Monthly Capacity Payment expressed in Dollars for such month of the Delivery Term.

CC is the Contract Capacity, expressed in kW, rounded to the nearest 100 kW.

*CP* is the Capacity Price expressed in Dollars per kW-year, for the applicable month.

SF is the Monthly Shaping Factor for the applicable month, as set forth in the following table:

Month	Monthly Shaping Factor (%)
January	6.7
February	5.0
March	5.0
April	5.8
May	6.3
June	8.3
July	15.8
August	17.5
September	11.7
October	5.8
November	5.8
December	6.3

AAF is the Availability Adjustment Factor for each month, expressed as a three-place decimal and determined as follows:

(a) If the Equivalent Availability Factor ("EAF") for the month is less than or equal to 0.980, then the AAF equals EAF / 0.98.

- (b) If the EAF for the month is greater than 0.980 but less than 0.990, then the AAF equals 1.0.
- (c) If the EAF for the month is greater than or equal to 0.990, then the AAF equals EAF / 0.99.

EAF is the Equivalent Availability Factor for each month determined as follows:

$$EAF = (PH - (EDH - EEDH)) / PH$$

Where:

PH is the number of period hours;

EDH is the number of equivalent derate hours calculated as the sum, for each derate, of the product of the number of hours of full or partial derate hours times the size of the reduction from the Contract Capacity divided by the Contract Capacity for the month. For the purposes of this calculation, a derate includes all outages for any reason, including without limitation, Forced Outages, Force Majeure events, Dispatch Down Periods, Planned Outages, Buyer's failure to perform, and other times when any portion of the Contract Capacity is not available and when the Delivered Energy of the Project is less than the amount of Energy dispatched by Buyer; and

EEDH is the number of equivalent excused derate hours solely due to either Dispatch Down Periods or Buyer's failure to perform (and for no other reason), calculated as the sum, for each excused derate, of the product of the number of hours of full or partial derate hours times the size of the reduction from the Contract Capacity, divided by the Contract Capacity for the month.

#### 4.2 Energy Payment.

(a) <u>Energy Price</u>. The price for the Bundled Green Energy and Deemed Bundled Green Energy that is delivered to Buyer in each Contract Year shall be as follows ("Energy Price"):

Contract Year	Energy Price (\$/MWh)	

provided, however, that:

- (i) if Seller delivers Bundled Green Energy in the aggregate for any CAISO settlement interval (not to exceed one hour) in excess of the product of the Contract Capacity times the length of such settlement interval, expressed in hours, then the Energy Price for such excess Bundled Green Energy in such settlement interval shall be reduced to zero dollars (\$0), and if the real time Locational Marginal Price for the Delivery Point during such settlement interval is less than zero dollars (\$0), Seller shall pay to Buyer an amount equal to the absolute value of such negative Locational Marginal Price times such excess Bundled Green Energy;
- (ii) if Seller delivers Bundled Green Energy plus Deemed Delivered Energy in the aggregate for any Contract Year during the Delivery Term in excess of one hundred fifteen percent (115%) of the annual Contract Quantity, then the Energy Price for such excess Bundled Green Energy and Deemed Bundled Green Energy, if any, for each settlement interval for the remainder of that Contract Year shall be reduced to zero dollars (\$0) and Seller shall be entitled to the CAISO revenues (including positive Locational Marginal Prices, credits and other payments) in respect of such excess amounts and Seller shall be responsible for the CAISO costs (including negative Locational Marginal Prices, penalties, sanctions and other charges) in respect of such excess amounts.

# (iii) Reserved

## (b) Reserved

(c) <u>Monthly Energy Payment</u>. For each month, Buyer shall pay Seller for the Product an amount equal to the sum for each hour in the month of the product of the Energy Price times the sum of Bundled Green Energy plus Deemed Bundled Green Energy in each hour ("Monthly Energy Payment").

Monthly Energy Payment =  $\sum$  Energy Price x (Bundled Green Energy + Deemed Bundled Green Energy)

For any period where the quantity of Bundled Green Energy is less than the quantity of Delivered Energy and the quantity of Bundled Green Energy cannot practicably be determined for each settlement interval during such period (for example, where WREGIS does not specify in which settlement intervals Renewable Energy Credits were delivered or not delivered), then the quantity of Bundled Green Energy for any settlement interval during the entire period shall be equal to the product of the quantity of Delivered Energy for a settlement interval multiplied by the quotient of the aggregate quantity of Green Attributes that are delivered to Buyer during such entire period divided by the aggregate quantity of Delivered Energy that is delivered to Buyer during such entire period.

4.3 <u>Imbalance Energy</u>. Seller shall use commercially reasonable efforts to deliver Energy in accordance with the Scheduled Energy. Buyer and Seller recognize that from time to time the amount of Delivered Energy will deviate from the amount of Scheduled Energy. When Delivered Energy minus Scheduled Energy is a positive amount, it shall be considered "Positive"

Imbalance Energy;" when Delivered Energy minus Scheduled Energy is a negative amount, the absolute (i.e., positive) value of that amount shall be considered the "Negative Imbalance Energy." [When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program: Seller shall be responsible for settlement of Imbalance Energy with the CAISO and all fees, liabilities, assessments, or similar charges assessed by the CAISO in connection with Imbalance Energy.] Buyer and Seller shall cooperate to minimize charges and imbalances associated with Imbalance Energy to the extent possible. Seller shall promptly notify Buyer as soon as possible of any material imbalance that is occurring or has occurred. [When SDG&E is SC for the Project and Project is in the VER Forecasting Program: Buyer shall receive all Green Attributes for the Positive Imbalance Energy in all settlement intervals.]

# [When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program, include the following two paragraphs:

- (a) <u>Positive Imbalance Energy (Over Deliveries)</u>. In the event that Delivered Energy for any CAISO settlement interval is equal to or greater than Scheduled Energy for such CAISO settlement interval, Buyer shall have no payment obligation in respect of the Positive Imbalance Energy. Buyer shall receive all Green Attributes for the Positive Imbalance Energy in such CAISO settlement interval regardless as to whether it was sold into the CAISO. Seller shall be entitled to all payments or credits from the CAISO to Seller's SC and Seller shall make all payments to the CAISO in respect of the Positive Imbalance Energy.
- (b) <u>Negative Imbalance Energy (Under Deliveries)</u>. In the event that Delivered Energy for any CAISO settlement interval is less than Scheduled Energy for such CAISO settlement interval, Buyer shall have no payment obligation in respect of the Negative Imbalance Energy. Seller shall make all payments to the CAISO and Seller shall be entitled to all payments or credits from the CAISO to Seller's SC in respect of the Negative Imbalance Energy required under the CAISO Tariff.]
- 4.4 <u>Additional Compensation</u>. To the extent not otherwise provided for in this Agreement, in the event that Seller is compensated by a third party for any Product produced by the Project, including, but not limited to, compensation for Resource Adequacy or Green Attributes, Seller shall remit all such compensation directly to Buyer; provided that for avoidance of doubt, nothing herein precludes Seller from retaining credits related to transmission upgrades funded by Seller.
- 4.5 Energy Sales Prior to Commercial Operation Date. For each month prior to the Commercial Operation Date, as compensation for the Product delivered to Buyer, (i) Buyer shall pay Seller for the Product an amount equal to the product of [SDG&E to insert REC value amount in \$/MWh] times the total Bundled Green Energy delivered to Buyer in such month, and (ii) Seller shall be entitled to all CAISO revenues (including credits, Imbalance Energy revenues, and other payments), including revenues associated with CAISO dispatches, bid cost recovery, inter-SC trade credits, or other credits in respect of the Product Scheduled or delivered from the Project, and Seller shall be responsible for all CAISO costs (including penalties, Imbalance Energy costs, and other charges) including all CAISO charges or penalties, in each case, resulting from the Project not being available, the Seller not notifying the CAISO of outages in a timely manner, and any other failure by Seller to abide by the CAISO Tariff, including without limitation uninstructed

deviation penalties. *[When Buyer is SC for the Project, include the following:* Each month, Buyer (as the SC for the Project) shall deliver an invoice to Seller including a statement of all such CAISO revenues and charges within thirty (30) days after the CAISO final settlement data is available to Buyer for such deliveries.]

#### ARTICLE FIVE: EVENTS OF DEFAULT; FORCE MAJEURE

## 5.1 Events of Default. An "Event of Default" shall mean,

- (a) with respect to a Party that is subject to the Event of Default the occurrence of any of the following:
- (i) the failure by such Party to make, when due, any payment required pursuant to this Agreement and such failure is not remedied within five (5) Business Days after Notice thereof:
- (ii) any representation or warranty made by such Party herein is false or misleading in any material respect when made or when deemed made or repeated, and such default is not remedied within thirty (30) days after Notice thereof;
- (iii) the failure by such Party to perform any material covenant or obligation set forth in this Agreement (except to the extent constituting a separate Event of Default, and except for such Party's unexcused failure to perform its obligations to Schedule, deliver, or receive (as applicable), or sell or purchase (as applicable) the Product for a period or a series of periods that is cumulatively no longer than thirty (30) days, the exclusive remedy for which is provided in Section 3.1(h)) and such failure is not remedied within thirty (30) days after Notice thereof;
- (iv) the failure by such Party to perform its obligations to Schedule, deliver or receive (as applicable), or sell or purchase (as applicable) the Product for a period or a series of periods that is cumulatively longer than thirty (30) days and such failure is not excused as described in Section 3.1(h);

#### (v) such Party becomes Bankrupt;

- (vi) such Party assigns this Agreement or any of its rights hereunder other than in compliance with Section 13.2; or
- (vii) such Party consolidates or amalgamates with, or merges with or into, or transfers all or substantially all of its assets to, another entity and, at the time of such consolidation, amalgamation, merger or transfer, the resulting, surviving or transferee entity fails to assume all the obligations of such Party under this Agreement to which it or its predecessor was a party by operation of Law or pursuant to an agreement reasonably satisfactory to the other Party.
- (b) with respect to Seller as the Defaulting Party, the occurrence of any of the following:

- (i) if at any time, Seller delivers or attempts to deliver to the Delivery Point for sale under this Agreement Energy that was not generated by the Project [If the Project is located outside of the CAISO: other than Imbalance Energy from the Transmission Provider];
- (ii) the failure by Seller to achieve the Commercial Operation Date no later than the Guaranteed Commercial Operation Date unless otherwise excused under the terms of this Agreement;
- (iii) *[For Baseload, Peaking, Dispatchable Product:* the Contract Capacity at the Commercial Operation Date or at any other time pursuant to a Capacity Test is less than [ ] MW and such default is not remedied within thirty (30) days after Notice thereof;]
- (iv) **For Baseload, Peaking, As-Available Product:** the failure by Seller to achieve the Guaranteed Energy Production requirement during any Performance Measurement Period as set forth in Section 3.1(e) of this Agreement] **For Dispatchable Product:** the Default Availability Factor of the Project is less than [ ] percent for any rolling twelve (12) consecutive calendar month period];
- (v) the failure by Seller to deliver a Remedial Action Plan that reasonably demonstrates in detail how Seller will achieve the Commercial Operation Date no later than the Guaranteed Commercial Operation Date, if such failure is not remedied within ten (10) days after Notice;
- (vi) failure by Seller to satisfy the collateral requirements pursuant to Sections 8.3 or 8.4 of this Agreement;
- (vii) with respect to any Guaranty provided for the benefit of Buyer, the failure by Seller to provide for the benefit of Buyer either (1) cash, (2) a replacement Guaranty from a different Guarantor meeting the criteria set forth in the definition of Guarantor, or (3) a replacement Letter of Credit from an issuer meeting the criteria set forth in the definition of Letter of Credit, in each case, in the amount required hereunder within five (5) Business Days after Seller receives Notice of the occurrence of any of the following events:
  - (A) if any representation or warranty made by the Guarantor in connection with this Agreement is false or misleading in any material respect when made or when deemed made or repeated, and such default is not remedied within thirty (30) days after Notice thereof;
  - (B) the failure of the Guarantor to make any payment required or to perform any other material covenant or obligation in any Guaranty;
    - (C) the Guarantor becomes Bankrupt;
  - (D) the Guarantor shall fail to meet the criteria for an acceptable Guarantor as set forth in the definition of Guarantor;

- (E) the failure of the Guaranty to be in full force and effect (other than in accordance with its terms) prior to the indefeasible satisfaction of all obligations of Seller hereunder; or
- (F) the Guarantor shall repudiate, disaffirm, disclaim, or reject, in whole or in part, or challenge the validity of any Guaranty; or
- (viii) with respect to any outstanding Letter of Credit provided for the benefit of Buyer that is not then required under this Agreement to be canceled or returned, the failure by Seller to provide for the benefit of Buyer either (1) cash, or (2) a substitute Letter of Credit from a different issuer meeting the criteria set forth in the definition of Letter of Credit, in each case, in the amount required hereunder within five (5) Business Days after Seller receives Notice of the occurrence of any of the following events:
  - (A) the issuer of the outstanding Letter of Credit shall fail to maintain a Credit Rating of at least "A-" by S&P or "A3" by Moody's;
    - (B) the issuer of such Letter of Credit becomes Bankrupt;
  - (C) the issuer of the outstanding Letter of Credit shall fail to comply with or perform its obligations under such Letter of Credit and such failure shall be continuing after the lapse of any applicable grace period permitted under such Letter of Credit;
  - (D) the issuer of the outstanding Letter of Credit shall fail to honor a properly documented request to draw on such Letter of Credit;
  - (E) the issuer of the outstanding Letter of Credit shall disaffirm, disclaim, repudiate or reject, in whole or in part, or challenge the validity of, such Letter of Credit;
  - (F) such Letter of Credit fails or ceases to be in full force and effect at any time; or
  - (G) Seller shall fail to renew or cause the renewal of each outstanding Letter of Credit on a timely basis as provided in the relevant Letter of Credit and as provided in accordance with this Agreement, and in no event less than sixty (60) days prior to the expiration of the outstanding Letter of Credit.
- 5.2 Remedies; Declaration of Early Termination Date. If an Event of Default with respect to a Defaulting Party shall have occurred and be continuing, the other Party ("Non-Defaulting Party") shall have the right (a) to send Notice, designating a day, no earlier than the day such Notice is deemed to be received and no later than twenty (20) days after such Notice is deemed to be received, as an early termination date of this Agreement ("Early Termination Date") that terminates this Agreement and ends the Delivery Term effective as of the Early Termination Date, to accelerate all amounts owing between the Parties, and to collect liquidated damages calculated in accordance with Section 5.3 below ("Termination Payment"); (b) to withhold any

payments due to the Defaulting Party under this Agreement; (c) to suspend performance; and (d) to exercise any other right or remedy available at law or in equity, including specific performance or injunctive relief, except to the extent such remedies are expressly limited under this Agreement.

- 5.3 Termination Payment. The Termination Payment for a Terminated Transaction shall be the aggregate of all Settlement Amounts plus any and all other amounts due to the Non-Defaulting Party netted into a single amount. Except in the case of a termination of this Agreement by the Non-Defaulting Party solely as a result of an Event of Default by the Defaulting Party under Section 5.1(a)(iv) [Bankruptcy], if the Non-Defaulting Party's aggregate Gains exceed its aggregate Losses and Costs, if any, resulting from the termination of this Agreement, the Termination Payment shall be zero. The Non-Defaulting Party shall calculate, in a commercially reasonable manner, a Settlement Amount for the Terminated Transaction as of the Early Termination Date. Third parties supplying information for purposes of the calculation of Gains or Losses may include, without limitation, dealers in the relevant markets, end-users of the relevant product, information vendors and other sources of market information. The Settlement Amount shall not include consequential, incidental, punitive, exemplary, indirect or business interruption damages; provided, however, that any lost Capacity Attributes and Green Attributes shall be deemed direct damages covered by this Agreement. Without prejudice to the Non-Defaulting Party's duty to mitigate, the Non-Defaulting Party shall not have to enter into replacement transactions to establish a Settlement Amount. Each Party agrees and acknowledges that (a) the actual damages that the Non-Defaulting Party would incur in connection with a Terminated Transaction would be difficult or impossible to predict with certainty, (b) the Termination Payment described in this section is a reasonable and appropriate approximation of such damages, and (c) the Termination Payment described in this section is the exclusive remedy of the Non-Defaulting Party in connection with a Terminated Transaction but shall not otherwise act to limit any of the Non-Defaulting Party's rights or remedies if the Non-Defaulting Party does not elect a Terminated Transaction as its remedy for an Event of Default by the Defaulting Party.
- 5.4 <u>Notice of Payment of Termination Payment</u>. As soon as practicable after a Terminated Transaction, Notice shall be given by the Non-Defaulting Party to the Defaulting Party of the amount of the Termination Payment and whether the Termination Payment is due to the Non-Defaulting Party. The Notice shall include a written statement explaining in reasonable detail the calculation of such amount and the sources for such calculation. The Termination Payment shall be made to the Non-Defaulting Party, as applicable, within ten (10) Business Days after such Notice is effective.
- 5.5 <u>Disputes With Respect to Termination Payment</u>. If the Defaulting Party disputes the Non-Defaulting Party's calculation of the Termination Payment, in whole or in part, the Defaulting Party shall, within five (5) Business Days of receipt of the Non-Defaulting Party's calculation of the Termination Payment, provide to the Non-Defaulting Party a detailed written explanation of the basis for such dispute. Disputes regarding the Termination Payment shall be determined in accordance with Article 12.
- 5.6 <u>Rights And Remedies Are Cumulative</u>. Except where liquidated damages are provided as the exclusive remedy, the rights and remedies of a Party pursuant to this Article 5 shall be cumulative and in addition to the rights of the Parties otherwise provided in this Agreement.

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- 5.7 <u>Mitigation</u>. Any Non-Defaulting Party shall be obligated to mitigate its Costs, losses and damages resulting from any Event of Default of the other Party under this Agreement.
- Force Majeure. To the extent either Party is prevented by Force Majeure from carrying out, in whole or part, its obligations under this Agreement and such Party gives Notice and details of the Force Majeure to the other Party as detailed below, then, the Party impacted by Force Majeure shall be excused from the performance of its obligations to the extent impacted. Within forty-eight (48) hours of commencement of an event of Force Majeure, the non-performing Party shall provide the other Party with oral notice of the event of Force Majeure, and within two (2) weeks of the commencement of an event of Force Majeure the non-performing Party shall provide the other Party with Notice in the form of a letter describing in detail the particulars of the occurrence giving rise to the Force Majeure claim. Seller shall not substitute Product from any other source for the output of the Project during an outage resulting from Force Majeure. The suspension of performance due to a claim of Force Majeure must be of no greater scope and of no longer duration than is required by the Force Majeure. Buyer shall not be required to make any payments for any Product that Seller fails to Schedule, deliver or provide as a result of Force Majeure during the term of a Force Majeure. This Agreement may be terminated by the nonclaiming Party with no further obligation to the Force-Majeure-claiming Party if a Force Majeure event prevents the performance of a material portion of the obligations of the Force-Majeureclaiming Party hereunder and such Force Majeure event is not resolved within eight (8) months after the commencement of such Force Majeure event. In addition to the foregoing, prior to the Commercial Operation Date, this Agreement may be terminated by Buyer with no further obligation to Seller if one or more Force Majeure events prevents Seller from achieving the Commercial Operation Date by the end of the Force Majeure Extension Period; provided, however, that Buyer shall not have the right under this section to terminate this Agreement until the Guaranteed Commercial Operation Date if Seller is paying delay liquidated damages to Buyer as required under Section 3.9(c)(i) during the Project Cure Period (it being acknowledged, that Seller may elect to pay Daily Delay Damages during periods of Force Majeure up to the expiration of any remaining unclaimed portion of the Project Cure Period in lieu of claiming Force Majeure relief hereunder).

#### ARTICLE SIX: PAYMENT

8.1 Billing and Payment. On or about the tenth (10<sup>th</sup>) day of each month beginning with the second month of the first Contract Year and every month thereafter, and continuing through and including the first month following the end of the Delivery Term, Seller shall provide to Buyer (a) records of metered data, including CAISO metering and transaction data sufficient to document and verify the generation of Product by the Project for any CAISO settlement time interval during the preceding months, (b) access to any records, including invoices or settlement data from CAISO, necessary to verify the invoice; and (c) an invoice, in a format reasonably specified by Buyer, covering the services provided in the preceding month determined in accordance with Article 4 (which may include preceding months), with all component charges and unit prices identified and all calculations used to arrive at invoiced amounts described in reasonable detail. Buyer shall pay the undisputed amount of such invoices on or before thirty (30) days after receipt of the invoice. If either the invoice date or payment date is not a Business Day, then such invoice or payment shall be provided on the next following Business Day. Each Party will make payments by electronic funds transfer, or by other mutually agreeable method(s), to the

account designated by the other Party. Any undisputed amounts not paid by the due date will be deemed delinquent and will accrue interest at the Default Rate, such interest to be calculated from and including the due date to but excluding the date the delinquent amount is paid in full. Invoices should be compiled in the form of an Excel spreadsheet or other electronic form acceptable to Buyer and may be sent by facsimile or e-mail.

- Disputes and Adjustments of Invoices. A Party may, in good faith, dispute the correctness of any invoice or any adjustment to an invoice, rendered under this Agreement or adjust any invoice for any arithmetic or computational error within twelve (12) months of the date the invoice, or adjustment to an invoice, was rendered. In the event an invoice or portion thereof, or any other claim or adjustment arising hereunder, is disputed, payment of the undisputed portion of the invoice shall be required to be made when due. Any invoice dispute or invoice adjustment shall be in writing and shall state the basis for the dispute or adjustment. Payment of the disputed amount shall not be required until the dispute is resolved. Upon resolution of the dispute, any required payment shall be made within two (2) Business Days of such resolution along with interest accrued at the Default Rate from and including the original due date to but excluding the date paid. Inadvertent overpayments shall be returned upon request or deducted by the Party receiving such overpayment from subsequent payments, with interest accrued at the Interest Rate from and including the date of such overpayment to but excluding the date repaid or deducted by the Party receiving such overpayment. Any dispute with respect to an invoice is waived if the other Party is not notified in accordance with this Section 6.2 within twelve (12) months after the invoice is rendered or subsequently adjusted, except to the extent any misinformation was from a third party not Affiliated with any Party and such third party corrects its information after the twelve-month period. If an invoice is not rendered within twelve (12) months after the close of the month during which performance occurred, the right to payment for such performance is waived.
- 6.3 <u>Netting of Payments</u>. The Parties hereby agree that they shall discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts owed by each Party to the other Party for the purchase and sale of Product during the monthly billing period under this Agreement, including any related damages calculated pursuant to Section 3.1(h), interest, and payments or credits, shall be netted so that only the excess amount remaining due shall be paid by the Party who owes it.

#### ARTICLE SEVEN: LIMITATIONS

The Limitation of Remedies, Liability and Damages. EXCEPT AS SET FORTH HEREIN, THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED. THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND MEASURES OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF. FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY, THE OBLIGOR'S LIABILITY SHALL BE LIMITED AS SET FORTH IN SUCH PROVISION AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED, UNLESS THE PROVISION IN QUESTION PROVIDES THAT THE EXPRESS

REMEDIES ARE IN ADDITION TO OTHER REMEDIES THAT MAY BE AVAILABLE. EXCEPT FOR A PARTY'S INDEMNITY OBLIGATION IN RESPECT OF THIRD PARTY CLAIMS OR AS OTHERWISE EXPRESSLY HEREIN PROVIDED, NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE. UNLESS EXPRESSLY HEREIN PROVIDED, AND SUBJECT TO THE PROVISIONS OF SECTION 11.2 (INDEMNITIES), IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE. TO THE EXTENT ANY DAMAGES REOUIRED TO BE PAID HEREUNDER ARE LIQUIDATED, THE PARTIES ACKNOWLEDGE THAT THE DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE, OR OTHERWISE OBTAINING AN ADEQUATE REMEDY IS INCONVENIENT AND THE DAMAGES CALCULATED HEREUNDER CONSTITUTE A REASONABLE APPROXIMATION OF THE HARM OR LOSS.

# ARTICLE EIGHT: CREDIT AND COLLATERAL REQUIREMENTS

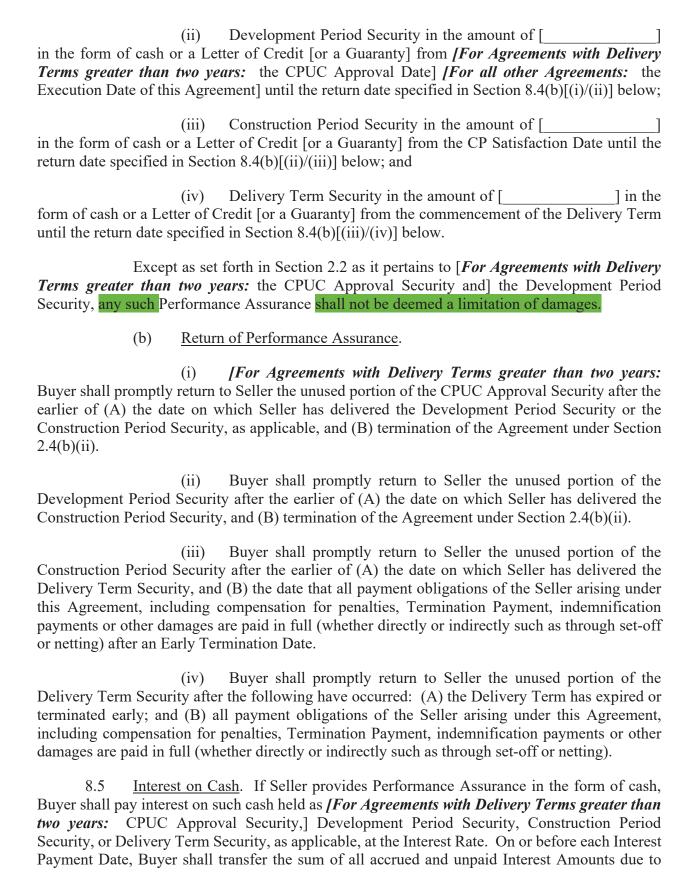
- 8.1 <u>Buyer Financial Information</u>. If requested by Seller, Buyer shall deliver (i) within one hundred twenty (120) days following the end of each fiscal year, a copy of Buyer's annual report containing audited consolidated financial statements for such fiscal year and (ii) within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of Buyer's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases the statements shall be for the most recent accounting period and prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as Buyer diligently pursues the preparation, certification and delivery of the statements. Buyer shall be deemed to have satisfied such delivery requirement if the applicable report is publicly available.
- 8.2 <u>Seller Financial Information</u>. Seller shall provide the following financial information:
- (a) If requested by Buyer, Seller shall deliver (i) within one hundred twenty (120) days following the end of each fiscal year, a copy of Seller's annual report containing audited consolidated financial statements for such fiscal year and (ii) within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of Seller's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases the statements shall be for the most recent accounting period and prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as Seller diligently pursues the preparation, certification and delivery of the statements.

- by Buyer, Seller shall deliver (i) within one hundred twenty (120) days following the end of each fiscal year, a copy of Guarantor's annual report containing audited consolidated financial statements for such fiscal year and (ii) within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of Guarantor's quarterly report containing unaudited consolidated financial statements for such fiscal quarter certified by an officer of Guarantor. In all cases the statements shall be for the most recent accounting period and prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as Guarantor diligently pursues the preparation, certification and delivery of the statements. Seller shall be deemed to have satisfied such delivery requirement if the applicable report is publicly available.]
- Grant of Security Interest/Remedies. To secure its obligations under this 8.3 Agreement and to the extent Seller delivers Performance Assurance hereunder, Seller hereby grants to Buyer a present and continuing first priority security interest in, and lien on (and right of setoff against), and assignment of, all cash collateral and cash equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, Buyer, and each Party agrees to take such action as the other Party reasonably requires in order to perfect the Buyer's first-priority security interest in, and lien on (and right of setoff against), such collateral and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence and during the continuation of an Event of Default by Seller or an Early Termination Date as a result thereof, Buyer may do any one or more of the following: (i) exercise any of the rights and remedies of a secured party with respect to all Performance Assurance, including any such rights and remedies under Law then in effect; (ii) exercise its rights of setoff against such collateral and any and all proceeds resulting therefrom or from the liquidation thereof; (iii) draw on any outstanding Letter of Credit issued for its benefit; and (iv) liquidate all or any portion of any Performance Assurance then held by or for the benefit of Buyer free from any claim or right of any nature whatsoever of Seller, including any equity or right of purchase or redemption by Seller. Buyer shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce the Seller's obligations under the Agreement (Seller remaining liable for any amounts owing to Buyer after such application), subject to Buyer's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

## 8.4 Performance Assurance.

(a) [For Agreements with Delivery Terms greater than two years: CPUC Approval Security,] Development Period Security, Construction Period Security, Delivery Term Security. To secure its obligations under this Agreement Seller agrees to deliver to Buyer and maintain in full force and effect for the period set forth below, the following Performance Assurance:

(i)	[For Agreements	with Delivery	Terms	greater	than to	wo years:
CPUC Approval Security, in	the amount of [	] :	in the fo	orm of c	ash or a	Letter of
Credit [or a Guaranty] from	the Execution Date	of this Agreeme	ent unti	l the ret	urn date	specified
in Section 8.4(b)(i) below;						



Seller for such security in the form of cash by wire transfer to the bank account specified under "Wire Transfer" in the Cover Sheet.

8.6 Costs of Letter of Credit. If Seller provides Performance Assurance in the form of a Letter of Credit, in all cases, the reasonable costs and expenses of (including but not limited to the reasonable costs, expenses, and attorneys' fees, including reasonably allocated costs of inhouse counsel of the Buyer) establishing, renewing, substituting, canceling, increasing and reducing the amount of (as the case may be) one or more Letters of Credit shall be borne by the Seller.

#### ARTICLE NINE: GOVERNMENTAL CHARGES

- 9.1 <u>Cooperation</u>. Each Party shall use reasonable efforts to implement the provisions of and to administer this Agreement in accordance with the intent of the Parties to minimize all taxes, so long as neither Party is materially adversely affected by such efforts.
- 9.2 Governmental Charges. Seller shall pay or cause to be paid all taxes imposed by any governmental authority ("Governmental Charges") on or with respect to the Product or the transaction under this Agreement arising prior to and at the Delivery Point, including, but not limited to, ad valorem taxes and other taxes attributable to the Project, land, land rights or interests in land for the Project. Buyer shall pay or cause to be paid all Governmental Charges on or with respect to the Product or the transaction under this Agreement from the Delivery Point. In the event Seller is required by Law or regulation to remit or pay Governmental Charges which are Buyer's responsibility hereunder, Buyer shall promptly reimburse Seller for such Governmental Charges. If Buyer is required by Law or regulation to remit or pay Governmental Charges which are Seller's responsibility hereunder, Buyer may deduct such amounts from payments to Seller with respect to payments under the Agreement; if Buyer elects not to deduct such amounts from Seller's payments, Seller shall promptly reimburse Buyer for such amounts upon request. Nothing shall obligate or cause a Party to pay or be liable to pay any Governmental Charges for which it is exempt under the Law.

#### ARTICLE TEN: REPRESENTATIONS AND WARRANTIES; COVENANTS

- 10.1 <u>General Representations and Warranties</u>. On the Execution Date and the CP Satisfaction Date, each Party represents and warrants to the other Party that:
- (a) it is duly organized, validly existing and in good standing under the Laws of the jurisdiction of its formation;
- (b) it has all Governmental Approvals necessary for it to perform its obligations under this Agreement, except for as of the Execution Date (i) CPUC Approval in the case of Buyer, and (ii) all Governmental Approvals necessary to construct, operate and maintain the Project and related interconnection facilities in the case of Seller;
- (c) the execution, delivery and performance of this Agreement is within its powers, have been duly authorized by all necessary action and do not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any applicable Law;

- (d) this Agreement and each other document executed and delivered in accordance with this Agreement constitutes a legally valid and binding obligation enforceable against it in accordance with its terms, subject to any Equitable Defenses;
- (e) it is not Bankrupt and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming Bankrupt;
- (f) except as may be set forth in its reports filed with the SEC, there is not pending or, to its knowledge, threatened against it or any of its Affiliates any legal proceedings that could materially adversely affect its ability to perform its obligations under this Agreement;
- (g) no Event of Default with respect to it has occurred and is continuing and no such event or circumstance would occur as a result of its entering into or performing its obligations under this Agreement;
- (h) it is acting for its own account, has made its own independent decision to enter into this Agreement and as to whether this Agreement is appropriate or proper for it based upon its own judgment, is not relying upon the advice or recommendations of the other Party in so doing, and is capable of assessing the merits of and understanding, and understands and accepts, the terms, conditions and risks of this Agreement; and
- (i) it has entered into this Agreement in connection with the conduct of its business and it has the capacity or the ability to make or take delivery of the Product as provided in this Agreement.

#### 10.2 Seller Representations and Warranties.

- (a) Seller, and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement that: (i) the Project qualifies and is certified by the CEC as an Eligible Renewable Energy Resource ("ERR") as such term is defined in Public Utilities Code Section 399.12 or Section 399.16; and (ii) the Project's output delivered to Buyer qualifies under the requirements of the California Renewables Portfolio Standard. To the extent a change in Law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in Law.
- (b) Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement the Renewable Energy Credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in CPUC Decision 08-08-028, and as may be modified by subsequent decision of the CPUC or by subsequent legislation. To the extent a change in Law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in Law.
- (c) [Include other appropriate representations, warranties, and covenants to satisfy the California RPS content category requirements.]

#### 10.3 Covenants.

- (a) <u>General Covenants</u>. Each Party covenants that throughout the Delivery Term:
- (i) it shall continue to be duly organized, validly existing and in good standing under the Laws of the jurisdiction of its formation;
- (ii) it shall maintain (or obtain from time to time as required, including through renewal, as applicable) all Governmental Approvals necessary for it to legally perform its obligations under this Agreement;
- (iii) it shall perform its obligations under this Agreement in a manner that does not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any applicable Law; and
- (iv) it shall not dispute its status as a "forward contract merchant" within the meaning of the United States Bankruptcy Code.

## (b) <u>Seller Covenants</u>.

- (i) Seller covenants throughout the Delivery Term that it, or its permitted successors or assigns, shall maintain ownership of a fee, easement, long-term leasehold interest, or other similar asset ownership interest in the Project.
- (ii) Seller covenants throughout the Delivery Term that it shall maintain market based rate authority from the FERC to sell Product to Buyer under the terms of this Agreement.
- (iii) If at any time during the Delivery Term, Seller's representations and warranties set forth in Section 10.2 become materially false or misleading, Seller covenants that it shall provide prompt Notice to Buyer describing such default along with a description of its efforts to cure such default.
- (iv) [Include other appropriate representations, warranties, and covenants to satisfy the California RPS content category requirements.]
- (v) [Include other appropriate covenants regarding the use of contractors that may be diverse business enterprises.]

#### ARTICLE ELEVEN: TITLE, RISK OF LOSS, INDEMNITIES

11.1 <u>Title and Risk of Loss</u>. Title to and risk of loss related to the Product shall transfer from Seller to Buyer at the Delivery Point. Seller warrants that it will deliver to Buyer the Product free and clear of all liens, security interests, claims and encumbrances or any interest therein or thereto by any person arising prior to or at the Delivery Point.

#### 11.2 Indemnities.

- Indemnity by Seller. Seller shall release, indemnify, defend, and hold harmless Buyer, its Affiliates, and its and their directors, officers, employees, agents, and representatives against and from any and all actions, suits, losses, costs, damages, injuries, liabilities, claims, demands, penalties and interest, including reasonable costs and attorneys' fees ("Claims") resulting from, or arising out of or in any way connected with (i) any event, circumstance, act, or incident relating to the Product delivered under this Agreement up to and at the Delivery Point, (ii) Seller's development, permitting, construction, ownership, operation and/or maintenance of the Project, (iii) the failure by Seller or the failure of the Project to comply with applicable Law, including without limitation the CAISO Tariff, (iv) any Governmental Charges for which Seller is responsible hereunder, or (v) any liens, security interests, encumbrances, or other adverse claims against the Product delivered hereunder made by, under, or through Seller, in all cases including, without limitation, any Claim for or on account of injury, bodily or otherwise, to or death of persons, or for damage to or destruction of property belonging to Buyer, Seller, or others, excepting only such Claim to the extent caused by the willful misconduct or gross negligence of Buyer, its Affiliates, and its and their directors, officers, employees, agents, and representatives.
- (b) <u>Indemnity by Buyer</u>. Buyer shall release, indemnify, defend, and hold harmless Seller, its Affiliates, and its and their directors, officers, employees, agents, and representatives against and from any and all Claims resulting from, or arising out of or in any way connected with (i) any event, circumstance, act, or incident relating to the Product received by Buyer under this Agreement after the Delivery Point, (ii) the failure by Buyer to comply with applicable Law, including without limitation the CAISO Tariff, or (iii) any Governmental Charges for which Buyer is responsible hereunder, in all cases including, without limitation, any Claim for or on account of injury, bodily or otherwise, to or death of persons, or for damage to or destruction of property belonging to Buyer, Seller, or others, excepting only such Claim to the extent caused by the willful misconduct or gross negligence of Seller, its Affiliates, and its and their directors, officers, employees, agents, and representatives.

#### ARTICLE TWELVE: DISPUTE RESOLUTION

12.1 <u>Intent of the Parties</u>. Except as provided in the next sentence, the sole procedure to resolve any claim arising out of or relating to this Agreement or any related agreement is the dispute resolution procedure set forth in this Article 12. Either Party may seek a preliminary injunction or other provisional judicial remedy if such action is necessary to prevent irreparable harm or preserve the status quo, in which case both Parties nonetheless will continue to pursue resolution of the dispute by means of the dispute resolution procedure set forth in this Article 12.

## 12.2 Management Negotiations.

(a) The Parties will attempt in good faith to resolve any controversy or claim arising out of or relating to this Agreement or any related agreements by prompt negotiations between each Party's authorized representative designated in writing as a representative of the Party (each a "Manager"). Either Manager may, by Notice to the other Party, request a meeting to initiate negotiations to be held within ten (10) Business Days of the other Party's receipt of such request, at a mutually agreed time and place (either in person or telephonically). If the matter is not resolved within fifteen (15) Business Days of their first meeting ("Initial Negotiation End

Date"), the Managers shall refer the matter to the designated senior officers of their respective companies that have authority to settle the dispute ("Executive(s)"). Within five (5) Business Days of the Initial Negotiation End Date ("Referral Date"), each Party shall provide one another Notice confirming the referral and identifying the name and title of the Executive who will represent the Party.

- (b) Within five (5) Business Days of the Referral Date, the Executives shall establish a mutually acceptable location and date, which date shall not be greater than thirty (30) days from the Referral Date, to meet. After the initial meeting date, the Executives shall meet, as often as they reasonably deem necessary, to exchange relevant information and to attempt to resolve the dispute.
- (c) All communication and writing exchanged between the Parties in connection with these negotiations shall be confidential and shall not be used or referred to in any subsequent binding adjudicatory process between the Parties.
- (d) If the matter is not resolved within forty-five (45) days of the Referral Date, or if the Party receiving the Notice to meet, pursuant to Section 12.2(a) above, refuses or does not meet within the ten (10) Business Day period specified in Section 12.2(a) above, either Party may initiate arbitration of the controversy or claim by providing Notice of a demand for binding arbitration at any time thereafter.
- 12.3 <u>Arbitration</u>. Any dispute that cannot be resolved by management negotiations as set forth in Section 12.2 above shall be resolved through binding arbitration by a retired judge or justice from the [AAA][JAMS] panel conducted in San Diego, California, administered by and in accordance with [AAA's Commercial Arbitration Rules] [JAMS [Comprehensive][Streamlined] Arbitration Rules and Procedures] ("Arbitration").
- (a) Any arbitrator shall have no affiliation with, financial or other interest in, or prior employment with either Party and shall be knowledgeable in the field of the dispute. The Parties shall cooperate with one another in selecting the arbitrator within sixty (60) days after Notice of the demand for arbitration. If, notwithstanding their good faith efforts, the Parties are unable to agree upon a mutually-acceptable arbitrator, the arbitrator shall be appointed as provided for in [AAA's Commercial Arbitration Rules] [JAMS [Comprehensive][Streamlined] Arbitration Rules and Procedures].
- (b) At the request of a Party, the arbitrator shall have the discretion to order depositions of witnesses to the extent the arbitrator deems such discovery relevant and appropriate. Depositions shall be limited to a maximum of three (3) per Party and shall be held within thirty (30) days of the making of a request. Additional depositions may be scheduled only with the permission of the arbitrator, and for good cause shown. Each deposition shall be limited to a maximum of six (6) hours duration unless otherwise permitted by the arbitrator for good cause shown. All objections are reserved for the Arbitration hearing except for objections based on privilege and proprietary and confidential information. The arbitrator shall also have discretion to order the Parties to exchange relevant documents. The arbitrator shall also have discretion to order the Parties to answer interrogatories, upon good cause shown.

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- (c) The arbitrator shall have no authority to award punitive or exemplary damages or any other damages other than direct and actual damages and the other remedies contemplated by this Agreement.
- (d) The arbitrator shall prepare in writing and provide to the Parties an award including factual findings and the reasons on which their decision is based.
- (e) The arbitrator's award shall be made within nine (9) months of the filing of the notice of intention to arbitrate (demand) and the arbitrator shall agree to comply with this schedule before accepting appointment. However, this time limit may be extended by agreement of the Parties or by the arbitrator, if necessary.
  - (f) Judgment on the award may be entered in any court having jurisdiction.
- (g) The prevailing Party in this dispute resolution process is entitled to recover its costs. Until such award is made, however, the Parties shall share equally in paying the costs of the Arbitration.
- (h) The arbitrator shall have the authority to grant dispositive motions prior to the commencement of or following the completion of discovery if the arbitrator concludes that there is no material issue of fact pending before the arbitrator.
- (i) The existence, content, and results of any Arbitration hereunder is confidential information that is subject to the provisions of Section 13.1.

#### ARTICLE THIRTEEN: MISCELLANEOUS

#### 13.1 Confidentiality.

General. Neither Party shall disclose the non-public terms or conditions of this Agreement or any transaction hereunder to a third party, other than (i) the Party's Affiliates and its and their officers, directors, employees, lenders, counsel, accountants or advisors who have a need to know such information and have agreed to keep such terms confidential, (ii) for disclosure to the Buyer's Procurement Review Group, as defined in CPUC Decision (D) 02-08-071, subject to a confidentiality agreement, (iii) to the CPUC under seal for purposes of review, (iv) disclosure of terms specified in and pursuant to Section 13.1(b) of this Agreement; (v) in order to comply with any applicable Law, regulation, or any exchange, control area or CAISO rule, or order issued by a court or entity with competent jurisdiction over the disclosing Party ("Disclosing Party"), other than to those entities set forth in subsection (vi); or (vi) in order to comply with any applicable regulation, rule, or order of the CPUC, CEC, or the Federal Energy Regulatory Commission. In connection with requests made pursuant to clause (v) of this Section 13.1(a) ("Disclosure Order") each Party shall, to the extent practicable, use reasonable efforts to prevent or limit such disclosure. After using such reasonable efforts, the Disclosing Party shall not be: (i) prohibited from complying with a Disclosure Order or (ii) liable to the other Party for monetary or other damages incurred in connection with the disclosure of the confidential information. Except as provided in the preceding sentence, the Parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with, this confidentiality obligation.

- (b) <u>RPS Confidentiality</u>. Notwithstanding Section 13.1(a) of this Agreement, at any time on or after the date on which the Buyer makes its filing seeking CPUC Approval for this Agreement, either Party shall be permitted to disclose the following terms with respect to this Agreement: Party names, resource type, Delivery Term, Project location, Contract Capacity, anticipated Commercial Operation Date, Contract Quantity, and Delivery Point.
- (c) <u>Publicity</u>. Except as otherwise agreed to in this Section 13.1 above, no announcement, publicity, advertising, press release, promotional or marketing materials regarding the arrangement contemplated under this Agreement, including the existence hereof, shall be made by either Party without the prior written approval of the other Party which approval shall not be unreasonably withheld or delayed.
- Assignment. Neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent shall not be unreasonably withheld. For purposes hereof, the transfer of more than fifty percent (50%) of the equity ownership or voting interest of Seller (or any parent entity holding directly or indirectly at least fifty percent (50%) of the equity ownership or voting interest of Seller if such interest constitutes more than twenty percent (20%) of the fair market value of the assets of such parent entity) to a person that is not an Affiliate of Seller shall also constitute an assignment of this Agreement requiring Buyer's prior written consent. Notwithstanding the foregoing, either Party may, without the consent of the other Party (and without relieving itself from liability hereunder), transfer, sell, pledge, encumber, or assign this Agreement or the accounts, revenues or proceeds hereof to its financing providers. In connection with any financing or refinancing of the Project by Seller, Buyer shall in good faith negotiate and agree upon a consent to collateral assignment of this Agreement in a form that is commercially reasonable and customary in the industry. Notwithstanding the foregoing, Buyer may, without the consent of the Seller (and therefor relieving itself from liability hereunder), assign this Agreement to a Qualified Assignee. Qualified Assignee shall mean: any community choice aggregation entity or joint powers authority formed in the State of California or any legal entity that is established by statute or by the CPUC to serve load as a central procurement entity. Notwithstanding the foregoing, Buyer may, without the consent of the Seller (and thereby relieving itself from liability hereunder), assign this Agreement to a Qualified Assignee. Qualified Assignee shall mean: any community choice aggregation entity or joint powers authority formed in the State of California or any legal entity that is established by statute or by the CPUC to serve load as a central procurement entity. Any assignment in violation of this Section 13.2 shall be null and void.
- 13.3 Audit. Each Party has the right, at its sole expense and during normal working hours, to examine the records of the other Party to the extent reasonably necessary to verify the accuracy of any statement, charge or computation made pursuant to this Agreement including amounts of Delivered Energy or Scheduled Energy. If any such examination reveals any inaccuracy in any statement, the necessary adjustments in such statement and the payments thereof will be made promptly and shall bear interest calculated at the Default Rate from the date the overpayment or underpayment was made until paid; provided, however, that no adjustment for any statement or payment will be made unless objection to the accuracy thereof was made prior to the lapse of twelve (12) months from the rendition thereof, and thereafter any objection shall be deemed waived except to the extent any misinformation was from a third party not Affiliated with any Party and such third party corrects its information after such twelve-month period. In addition,

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Buyer shall have the right, at its sole expense and during normal working hours, to examine the records of Seller to the extent reasonably necessary to verify Seller's compliance with its representations and warranties set forth in Section 10.2.

- 13.4 <u>Sarbanes-Oxley and SEC Requirements</u>. The Parties acknowledge that accounting principles generally accepted in the United States of America ("GAAP") and SEC rules require Buyer and its independent auditor to evaluate whether Buyer must consolidate Seller's financial information (but not financial information of Seller's constituent members unless deemed to be included in the entity under GAAP). Buyer may require access to information concerning Seller's organizational structure, including its debt/capital structure, as well as to personnel of Seller to determine if consolidated financial reporting is required. If Buyer and its independent auditor determine at any time that the Buyer must consolidate the Seller's financial statements to comply with GAAP and/or SEC rules regarding consolidated financial reporting, then:
- (a) Buyer shall require from Seller and Seller agrees to provide to Buyer the following during the Term of this Agreement:
- (i) Unaudited financial statements of the Seller prepared in accordance with GAAP as of the end of the quarterly period. The financial statements should include quarter to date and year to date information and are to be provided within fifteen (15) calendar days of the end of the applicable reporting period (or the Business Day thereafter);
- (ii) Unaudited financial schedules of the Seller, as deemed necessary for Buyer to prepare its consolidated financial statements and related footnotes to the financial statements in accordance with GAAP as of the end of the quarterly period. The financial schedules should include quarter to date and year to date information underlying the financial statements and footnotes to the financial statements and are to be provided within fifteen (15) calendar days of the end of the applicable reporting period (or the Business Day thereafter);
- (iii) Access to Seller's accounting and other records, and accounting and management personnel as reasonably determined by both Buyer and Seller so that (A) Buyer's independent auditor or its internal auditors may conduct financial audits (in accordance with the standards of the Public Company Accounting Oversight Board (United States)) as well as internal control audits (in accordance with Section 404 of the Sarbanes-Oxley Act of 2002) and (B) Buyer can be provided analytical information, as needed, to enable Buyer to meet its SEC filing requirements, including but not limited to those under Item 2 on Form 10-Q, and Item 7 on Form 10-K, "Management's Discussion and Analysis of Financial Condition and Results of Operations;"
- (iv) Upon the request of Buyer, such certifications by a duly authorized representative(s) of Seller as may be reasonably requested by Buyer (which certifications shall presumptively be reasonable if the certifications are substantially identical to those required by Buyer or its parent of business units of Buyer or its parent); and
- (v) As reasonably requested by Buyer, such information or schedules, similar to the items noted in clauses (i)-(iv) above, to enable Buyer to prepare consolidated financial statements and schedules as may be required for Buyer to obtain financing or to prepare

other reports as required by regulatory bodies, such as the SEC, for periods other than as of the end of the monthly, quarterly or year to date periods then ended.

- (b) If Buyer (i) in its sole discretion determines that the financial statements of the Seller would be considered material to the Buyer or its parent company's financial statements, financial condition, or internal controls over financial reporting, and (ii) reasonably determines Seller's internal controls over financial reporting are not operating effectively or have resulted in a control deficiency, Buyer shall provide Notice to Seller. Upon receipt of such Notice, Seller will have thirty (30) days to remediate any deficiency in Seller's internal controls over financial reporting identified by the Buyer, which Buyer and Buyer's independent auditor deem to be necessary to ensure Seller's internal controls over financial reporting are adequate, during or as a result of the audits permitted under Section 13.4(a)(iii) or any other provision of this Agreement.
- (c) As soon as possible, but in no event later than two (2) Business Days following any occurrence that would affect Seller in any material way, Seller shall provide to Buyer a Notice describing such occurrence in sufficient detail to permit the Buyer to file a report on SEC Form 8-K. Such occurrences include all reportable events on the then current Form 8-K that applies to Buyer and its parent company at such time, including but not limited to a material acquisition or disposition of assets, a material direct financial obligation or off-balance sheet financing arrangement, material litigation, and the execution or termination of a material contract.
- (d) Any information provided to Buyer shall be treated as confidential except that it may be disclosed in connection with the preparation, review, certification and publication of Buyer's financial statements.
- (e) Seller shall notify Buyer at any time during the term of this Agreement of any services provided or proposed to be provided to Seller by Buyer's independent auditor. Seller, and any of Seller's Affiliates, are prohibited from engaging Buyer's independent auditor for any services or in any consulting agreement without the express written consent of partner in charge of Buyer's independent audit.
- 13.5 <u>Entire Agreement</u>. This Agreement, together with the Cover Sheet and each and every appendix, attachment, amendment, schedule and any written supplements hereto, if any, between the Parties constitutes the entire agreement between the Parties.
- 13.6 Recording. Unless a Party expressly objects to a Recording (defined below) at the beginning of a telephone conversation, each Party consents to the creation of a tape or electronic recording ("Recording") of all telephone conversations between the Parties to this Agreement, and that any such Recordings will be retained in confidence, secured from improper access, and may be submitted in evidence in any proceeding or action relating to this Agreement. Each Party waives any further notice of such monitoring or recording, and agrees to notify its officers and employees of such monitoring or recording and to obtain any necessary consent of such officers and employees.
- 13.7 <u>Forward Contract</u>. The Parties acknowledge and agree that this Agreement constitutes a "forward contract" within the meaning of the United States Bankruptcy Code.

- 13.8 Governing Law. THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. TO THE EXTENT ENFORCEABLE AT SUCH TIME, EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY LITIGATION ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT.
- 13.9 <u>Attorneys' Fees</u>. In any proceeding brought to enforce this Agreement or because of the breach by any Party of any covenant or condition herein contained, the prevailing Party shall be entitled to reasonable attorneys' fees (including reasonably allocated fees of in-house counsel) in addition to court costs and any and all other costs recoverable in said action.
- 13.10 General. This Agreement shall be considered for all purposes as prepared through the joint efforts of the Parties and shall not be construed against one Party or the other as a result of the preparation, substitution, submission or other event of negotiation, drafting or execution hereof. Except to the extent provided for herein, no amendment or modification to this Agreement shall be enforceable unless reduced to writing and executed by both Parties. This Agreement shall not impart any rights enforceable by any third party (other than a permitted successor or assignee bound to this Agreement). Waiver by a Party of any default by the other Party shall not be construed as a waiver of any other default. The headings used herein are for convenience and reference purposes only. This Agreement shall be binding on each Party's successors and permitted assigns.
- 13.11 <u>Severability</u>. If any provision in this Agreement is determined to be invalid, void or unenforceable by any court having jurisdiction, such determination shall not invalidate, void, or make unenforceable any other provision, agreement or covenant of this Agreement and the Parties shall use their best efforts to modify this Agreement to give effect to the original intention of the Parties.
- 13.12 <u>Counterparts</u>. This Agreement may be executed in one or more counterparts each of which shall be deemed an original and all of which shall be deemed one and the same Agreement. Delivery of an executed counterpart of this Agreement by fax will be deemed as effective as delivery of an originally executed counterpart. Any Party delivering an executed counterpart of this Agreement by facsimile will also deliver an originally executed counterpart, but the failure of any Party to deliver an originally executed counterpart of this Agreement will not affect the validity or effectiveness of this Agreement.
- 13.13 Notices. Whenever this Agreement requires or permits delivery of a "Notice" (or requires a Party to "notify"), the Party with such right or obligation shall provide a written communication delivered personally, by a nationally recognized overnight courier, mailed by registered or certified mail (return receipt requested), or by facsimile or e-mail (if facsimile numbers or e-mail addresses are identified on the Cover Sheet or by subsequent Notice) to the receiving Party at the addresses identified on the Cover Sheet (or at such other addresses as such receiving Party shall identify by like Notice to the other Party); provided, however, that notices of Outages or other Scheduling or dispatch information or requests, shall be provided in accordance with the terms set forth in the relevant section of this Agreement. Invoices may be sent by

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facsimile or e-mail (if facsimile numbers or e-mail addresses are identified on the Cover Sheet or by subsequent Notice). A Notice delivered in accordance herewith shall be deemed received (i) on the date of delivery, if hand delivered, (ii) two Business Days after the date of sending, if sent by a nationally recognized overnight courier, or at such earlier time as is confirmed by the receiving Party, (iii) three Business Days after the date of mailing, if mailed by registered or certified mail, return receipt requested, or at such earlier time as is confirmed by the receiving Party, and (iv) on the Business Day on which such Notice was transmitted by facsimile transmission or e-mail (where permitted); provided, however, that a Notice delivered in accordance with this Section but received on any day other than a Business Day or after 5:00 p.m. in the place of receipt will be deemed received on the next Business Day. Each Party shall provide Notice to the other Party of the persons authorized to nominate and/or agree to a Schedule or Dispatch Order for the delivery or acceptance of the Product or make other Notices on behalf of such Party and specify the scope of their individual authority and responsibilities, and may change its designation of such persons from time to time in its sole discretion by providing Notice.

13.14 Mobile Sierra. Notwithstanding any provision of this Agreement, neither Party shall seek, nor shall they support any third party in seeking, to prospectively or retroactively revise the rates, terms or conditions of service of this Agreement through application or complaint to FERC pursuant to the provisions of Section 205, 206 or 306 of the Federal Power Act, or any other provisions of the Federal Power Act, absent prior written agreement of the Parties. Further, absent the prior agreement in writing by both Parties, the standard of review for changes to the rates, terms or conditions of service of this Agreement proposed by a Party, a non-Party or the FERC acting *sua sponte* shall be the "public interest" application of the "just and reasonable" standard of review set forth in United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 US 332 (1956) and Federal Power Commission v. Sierra Pacific Power Co., 350 US 348 (1956) and clarified by Morgan Stanley Capital Group Inc. v. Pub. Util. Dist. No. 1 of Snohomish County, 128 S. Ct. 2733 (2008).

IN WITNESS WHE date first above writ	REOF, the Parties have caused this Agreen.	eement to be duly executed as of the
a [	COMPAN	GO GAS & ELECTRIC IY ia corporation
By: Name: Title:		ame:

# Exhibit A

# PROJECT DESCRIPTION INCLUDING DESCRIPTION OF SITE

PROJECT DESCRIPTION
Project name
Project Site name:
Project physical address:
Total number of electric generating units at the Project (committed and not committed to Buyer)
Technology Type:
Substation:
The term "Site" as defined in the Agreement means the following parcel description upon which the Project is located:
Latitude and Longitude of Project:
The nameplate capacity of the Project is
The electric generating units utilized as generation assets as part of the Project are described below:

[INSERT MAP]

# Exhibit B

# MILESTONE SCHEDULE

	Date	Project Name
1.		Obtains control of all lands and rights-of-way comprising the Site.
2.		Files a CEC Pre-Certification and Verification application.
3.		Receives a completed [Phase I Interconnection Study Report] [interconnection feasibility study] and CAISO Deliverability Assessment Study Report. [Omit if addressed by a Condition Precedent]
4.		Receives a completed [Phase II Interconnection Study Report] [interconnection system impact study] and CAISO Deliverability Assessment Study report [Omit if addressed by a Condition Precedent]
5.		Files CEQA/NEPA application with appropriate agency(ies).
6.		Executes interconnection agreement and/or transmission agreement and receives FERC approval.
7.		Receives CEQA/NEPA approval/permit
8.		Executes a supply contract.
9.		Executes an Engineering, Procurement and Construction ("EPC") contract.
10.		Delivers full NTP under EPC contract and begins construction of the Project.
11.		Executes Meter Service Agreement and Participating Generator Agreement.
12.		Delivers Energy to the Transmission Provider to which the Project is physically interconnected.
13.		Receives all Governmental Approvals necessary to achieve COD.
14.		Receives CEC Certification and Verification.

# Exhibit C

# FORM OF LETTER OF CREDIT

[DATE]

To:	San Diego Gas & Electric Company 555 W. Fifth Street Mail Code: ML 18A3 Los Angeles, CA 90013		
Re:	Our Irrevocable Standby Letter of Credit No In the Amount of US		
Ladies	and Gentlemen:		
Benefication Benef	reby open our irrevocable standby Letter of Credit Number in favor of [name of ciary] ("Beneficiary"), by order and for account of [name of Applicant] ("Applicant"), ss of Applicant], available at sight upon demand at our counters, at [location] for an amount amount spelled out and xx/100 U.S. Dollars] against presentation one of lowing documents:		
1-	Statement signed by a person purported to be an authorized representative of Beneficiary stating that: "[name of Applicant] ("Applicant") is in default under the Power Purchase Agreement between Beneficiary and Applicant dated or under any transaction contemplated thereby (whether by failure to perform or pay any obligation thereunder or by occurrence of a "default", "event of default" or similar term as defined in such agreement, any other agreement between Beneficiary and Applicant, or otherwise). The amount due to Beneficiary is U.S. \$"		
or			
2-	Statement signed by a person purported to be an authorized representative of Beneficiary stating that: "[name of Applicant] ("Applicant") has forfeited all or part of its <i>[For Agreements with Delivery Terms greater than two years:</i> CPUC Approval Security or] Development Period Security as set forth and defined in the Power Purchase Agreement between Beneficiary and Applicant dated The amount due to Beneficiary, whether or not a default has occurred, is U.S. \$"		
or			
3-	Statement signed by a person purported to be an authorized representative of Beneficiary stating that: "as of the close of business on [insert date, which is less than 60 days prior to the expiration date of the Letter of Credit] you have provided written		

notice to us indicating your el	lection not to	permit extension	of this Letter	of Credit
beyond its current expiry date.	The amount d	lue to Beneficiary,	whether or no	t a default
has occurred, is U.S. \$	.,,			

#### **Special Conditions:**

- All costs and banking charges pertaining to this Letter of Credit are for the account of Applicant.
- Partial and multiple drawings are permitted.

-	Fax of Document 1 or 2 or 3 above is acceptable. Notwithstanding anything to the contrary
	herein, any drawing hereunder may be requested by transmitting the requisite documents as
	described above to us by facsimile at or such other number as specified from
	time to time by us. The facsimile transmittal shall be deemed delivered when received. It is
	understood that drawings made by facsimile transmittal are deemed to be the operative
	instrument without the need of originally signed documents.

This Letter of Credit expires on at our counters.

We hereby engage with Beneficiary that upon presentation of a document as specified under and in compliance with the terms of this Letter of Credit, this Letter of Credit will be duly honored in the amount stated in Document 1, 2, or 3 above. If a document is so presented by 1:00 pm on any New York banking day, we will honor the same in full in immediately available New York funds on that day and, if so presented after 1:00 pm on a New York banking day, we will honor the same in full in immediately available New York funds by noon on the following New York banking day.

It is a condition of this Letter of Credit that it shall be deemed automatically extended without an amendment for a one year period beginning on the present expiry date hereof and upon each anniversary of such date, unless at least ninety (90) days prior to any such expiry date we have sent you written notice by regular and registered mail or courier service that we elect not to permit this Letter of Credit to be so extended beyond, and will expire on its then current expiry date. No presentation made under this Letter of Credit after such expiry date will be honored.

We agree that if this Letter of Credit would otherwise expire during, or within 30 days after, an interruption of our business caused by an act of god, riot, civil commotion, insurrection, act of terrorism, war or any other cause beyond our control or by any strike or lockout, then this Letter of Credit shall expire on the 30th day following the day on which we resume our business after the cause of such interruption has been removed or eliminated and any drawing on this Letter of Credit which could properly have been made but for such interruption shall be permitted during such extended period.

This Letter of Credit is subject to the Uniform Customs and Practice for Documentary Credits (2007 Revision) International Chamber of Commerce, Publication No. 600 ("UCP"), except to the extent that the terms hereof are inconsistent with the provisions of the UCP, including but not limited to Articles 14(b) and 36 of the UCP, in which case the terms of this Letter of Credit shall

govern. Matters not covered by the UCP shall be governed and construed in accordance with the laws of the State of California.
[Name of Bank]
Authorized Signature(s)

#### Exhibit D

#### FORM OF GUARANTY

#### **GUARANTY**

In consideration of San Diego Gas & Electric Company ("Company") entering into a power purchase agreement with [NAME OF COUNTERPARTY] (hereinafter referred to as "Applicant"), [NAME OF GUARANTOR], a [TYPE OF LEGAL ENTITY i.e. California corporation], (hereinafter referred to as "Guarantor") agrees with Company as follows:

- 1. The term "Obligations" shall mean all obligations, liabilities and indebtedness of any kind whatsoever arising in connection with \_\_\_\_\_\_ or arising in connection with or under any security agreement or other agreement between the Company and Applicant. The amount of Obligations existing from time to time shall be calculated after giving effect to all contractual netting arrangements between Applicant and the Company.
- 2. Guarantor unconditionally and irrevocably guarantees to Company the full, prompt and faithful payment and performance when due of each and all of the Obligations.
- 3. This is a continuing guaranty relating to the Obligations. Guarantor acknowledges that there is a continuing consideration to Guarantor for this Guaranty and therefore Guarantor waives and relinquishes the right to revoke or terminate this Guaranty as provided in California Civil Code Section 2815.
- 4. Any of the Obligations may be amended, modified, waived, or increased (whether or not beyond any dollar limitation hereunder), further agreements may be entered into between Company and Applicant, Company may provide additional goods or services or credit to Applicant or increase or decrease the dollar value of such goods, services or credit, and further obligations (including, without limitation, the provision or pledging of security to Company for any obligation), indebtedness and liabilities may be entered into or incurred from time to time by Applicant and without further authorization from or notice to Guarantor and no such action shall terminate, release, impair, reduce, discharge, diminish or in any way affect any of the obligations of Guarantor hereunder or any security furnished by Guarantor or give Guarantor any recourse or defense against Company. Company need not inquire into the power of Applicant or the authority of its officers, directors, partners or agents acting or purporting to act in its behalf.
- 5. With respect to all Obligations, this is a guaranty of payment and performance and not of collection, and Guarantor waives and agrees not to assert or take advantage of:
- (a) any right to require Company to proceed against Applicant or any other person or to resort to, proceed against or exhaust any security held by it at any time or to pursue any other remedy in its power before proceeding against any Guarantor;
- (b) demand, presentment, protest and notice of any kind including, without limiting the generality of the foregoing, notice of nonperformance, protest, dishonor and acceptance of this Guaranty, notice under Section 9611 of the California Commercial Code, and

notice of the existence, creation or incurring of any new or additional indebtedness or obligation or of any action or non-action on the part of Applicant, Company, a guarantor under this or any other instrument, or creditor of Applicant or any other person whomsoever, in connection with any of the Obligations or any collateral for any of the Obligations or in connection with any of the Obligations; and

- any suretyship defenses and suretyship rights of every nature otherwise available under California law and the laws of any other state or jurisdiction, including, without limitation, all defenses and rights arising under Sections 2787 through 2855 of the California Civil Code (the "Suretyship Provisions") and any successor provisions to those Sections. Without limiting the generality of the foregoing, Guarantor acknowledges his, her or its understanding that the Suretyship Provisions provide various partial or complete defenses to the recovery by Company from Guarantor and/or grant Guarantor rights the enforcement of which could reduce or eliminate entirely Guarantor's liability hereunder to Company. Among the defenses and rights contained in the Suretyship Provisions are the following: (1) Section 2809 of the Civil Code, which provides, in part, that the obligation of a surety must not be either larger in amount or in other respects more burdensome than that of the principal; (2) Section 2810 of the Civil Code, which provides, in part, that a surety is not liable if for any reason other than the mere personal disability of the principal there is no liability upon the part of the principal at the time of execution of the contract, or the liability of the principal thereafter ceases; (3) Section 2819 of the Civil Code, which provides, in part, that a surety is exonerated if the creditor alters the original obligation of the principal without the consent of the surety; (4) Section 2845 of the Civil Code, which provides, in part, that a surety is exonerated to the extent that the creditor fails to proceed against the principal, or to pursue any other remedy in the creditor's power which the surety cannot pursue and which would lighten the surety's burden; (5) Section 2846 of the Civil Code, which provides that a surety may compel his principal to perform the obligation when due; (6) Section 2847 of the Civil Code, which provides, in part, that if a surety satisfies the principal obligation, or any part thereof, the principal is obligated to reimburse the surety for the amounts paid by the surety; (7) Section 2848 of the Civil Code, which provides, in part, that a surety, upon satisfaction of the obligation of the principal is entitled to enforce remedies which the creditor then has against the principal; (8) Section 2849 of the Civil Code, which provides, in part, that a surety is entitled to the benefit of security held by the creditor for the performance of the principal obligation held by the creditor; (9) Section 2850 of the Civil Code, which provides, in part, that whenever the property of a surety is hypothecated with property of the principal, the surety is entitled to have the property of the principal first applied to the discharge of the obligation; and (10) Section 2822 of the Civil Code, which provides, in part, for a right to have the principal designate the portion of any obligation to be satisfied by the surety in the event that the principal provides partial satisfaction of such obligation.
- 6. All existing and future indebtedness of Applicant to Guarantor ("Intercompany Obligations") is subordinated to all Obligations hereby guaranteed. All of Guarantor's right, title and interest in and to the Intercompany Obligations and rights to receive any payments of the Intercompany Obligations are hereby granted and assigned to Company as continuing security for the Obligations hereby guaranteed, and, in the event of any default in the payment of any of the Obligations when due and until the Obligations guaranteed hereby have been paid in full (a) at the Company's request, Applicant shall forthwith pay to the Company all or any part of such Intercompany Obligations and any capital which Guarantor is entitled to withdraw until all of the

Obligations guaranteed hereby have been paid in full, and (b) Guarantor shall pay to Company immediately any payments of such Intercompany Obligations received by Guarantor.

- 7. Guarantor agrees to pay all attorneys' fees (including without limitation, reasonably allocated fees of in-house counsel) and all other costs and expenses which may be incurred by Company in the enforcement of this Guaranty against Guarantor.
- 8. This Guaranty is not assignable by Guarantor without Company's consent. This Guaranty shall inure to the benefit of Company and its successors and assigns, including the assignees of any Obligations, and bind the heirs, executors, administrators, successors and permitted (if any) assigns of Guarantor. This Guaranty is assignable by Company with respect to all or any portion of the Obligations, and when so assigned Guarantor shall be liable to the assignees under this Guaranty without in any manner affecting the liability of Guarantor hereunder with respect to any Obligations retained by Company.
- 9. This Guaranty shall be governed by and construed in accordance with the laws of the State of California, without reference to its choice of law provisions. Guarantor hereby irrevocably and unconditionally agrees that any legal action or proceeding against Guarantor or any of Guarantor's property with respect to this Guaranty may be brought in the courts of the State of California in the County of San Diego or the courts of the United States in the County of San Diego, as Company may elect, and by executing and delivering this Guaranty Guarantor hereby submits to and accepts with regard to any such action or proceeding for himself, herself or itself and in respect of his, her or its property, generally, irrevocably and unconditionally, the jurisdiction of the above mentioned courts. Guarantor hereby irrevocably appoints the Secretary of State of the State of California as his, her or its agent for service of process in any suit or proceeding if the Guarantor is located outside the State of California at the time of service or cannot reasonably be located by Company. The foregoing, however, shall not limit the right of Company as it may elect to bring any legal action or proceeding or to obtain execution of judgment in any other appropriate jurisdiction including but not limited to any other jurisdiction in which Guarantor or his, her or its property is located.
- 10. Except as provided in any other written agreement now or at any time hereafter in force between Company and Guarantor, this Guaranty shall constitute the entire agreement of Guarantor with Company with respect to the subject matter hereof and no representation, understanding, promise or condition concerning the subject matter hereof shall be binding upon Company unless expressed herein.
- 11. All notices, demands, requests and other communications required or permitted hereunder shall be in writing and shall be given personally, by certified or registered mail, postage prepaid, return receipt requested, or by reliable overnight courier to the address of the Company set forth below (or to such new address as Company may designate hereafter in a notice to Guarantor) in the case of a communication to the Company and to the address appearing next to Guarantor's signature on this Guaranty (or to such new address as Guarantor may designate hereafter in a notice to Company) in the case of a communication to Guarantor. Any notice served personally shall be deemed delivered upon receipt, and any notice served by certified or registered mail or by reliable overnight courier shall be deemed delivered on the date of receipt as shown on

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the addressee's registry or certification of receipt or on the date receipt is refused as shown on the records or manifest of the U.S. Postal Service or such courier.

San Diego Gas & Electric Company 555 W. Fifth Street Attn: Major Markets 18A3, Credit Manager

Los Angeles, CA 90013 Fax No.: (213) 244-8316

- 12. Until all of the Obligations guaranteed hereby have been satisfied in full, Guarantor shall have no right of subrogation or reimbursement from the Applicant which Guarantor may have as a result of any payment by Guarantor under this Guaranty, and waives any right to enforce any remedy which Company now has or may hereafter have against the Applicant as a result of such payment by Guarantor under this Guaranty and waives any right under section 2849 of the California Civil Code and any other benefit of or right to participate in any security now or hereafter held by Company.
- 13. All amounts payable by Guarantor hereunder shall be paid without set-off or counterclaim and without any deduction or withholding whatsoever unless and to the extent that Guarantor shall be prohibited by law from doing so, in which case Guarantor shall pay to Company such additional amount as shall be necessary to ensure that Company receives the full amount it would have received if no such deduction or withholding had been made.
- 14. If any portion of this Guaranty is held to be unenforceable by a court of competent jurisdiction, the remainder of this Guaranty shall remain in full force and effect.

IN WITNESS WHEREOF, the undersigned Guarantor has executed this Guaranty on [MONTH AND DAY], [YEAR].

GUARANTOR: [NAME OF GUARANTOR]	
[IVIIVIE OF GOMETIVEOR]	
Signature	_
Title	_
Printed Name of Person Signin	_ g for
Guarantor	

Guarantor's Address	
City, State, Zip	
Guarantor's Phone No.	

# **Exhibit E**

# **COMMERCIAL OPERATION CERTIFICATE**

Equip ("Own dated the m and Si	undersigned, ("EPC Contractor"), ("Renewable Generation ment Supplier"), ("Licensed Professional Engineer") and [] ner") make the following certifications to San Diego Gas & Electric Company ("SDG&E"), as of All capitalized terms not otherwise defined herein shall have eaning given to them in the Power Purchase Agreement dated between Owner DG&E (the "Agreement").		
Itelie			
1.	The [] comprising the Project have been erected and installed at the project site and have been commissioned as required under the Supply and Installation Agreement ("[] Supply Agreement") dated as of, by and between Renewable Generation Equipment Supplier and Owner and each such [] has passed the performance testing required to be performed pursuant to the [] Supply Agreement.		
2.	The Warranty Period under the Warranty Agreement ("Warranty Agreement") dated as of, by and between Renewable Generation Equipment Supplier and Owner has commenced.		
EPC	Contractor hereby certifies that:		
	All requirements necessary to achieve [Commercial Operation/Substantial Completion] as set forth in the agreement between the EPC Contractor and Owner dated ("EPC Contract") have been completed and the Project has successfully passed all performance tests at a level that demonstrates satisfaction of at least the [minimum performance guarantees].		
Owne	er hereby certifies that:		
1.	Except for punch list items that would not materially affect the performance, reliability of safe operation of the Project, the Project has been completed in accordance with all applicable specifications and is ready for continuous commercial operation in compliance with all applicable laws and governmental approvals. The Project has successfully passed all performance tests at a level that demonstrates satisfaction of at least the [inserminimum performance guarantees], and complete test reports have been submitted to Buyer.		
2.	The Operation and Maintenance Agreement (O&M Agreement), by and between Owner and dated as of has commenced.		

3.	Owner has a valid leasehold or real property interest in the Project Site for a term of at least [] years from the Commercial Operation date.
4.	The interconnection facilities have been completed in accordance with applicable specifications, tariffs, laws and governmental approvals to enable power generated by the Project to be received at the Delivery Point.
5.	Owner has obtained all governmental approvals necessary for the continuous commercial operation of the Project and the Project is in compliance with all such governmental approvals and all other applicable laws.
6.	The Contract Capacity of the Project is [] MWac and [] MWdc at [] conditions.
Licen	sed Professional Engineer certifies that:
1.	We have read the Agreement, the [] Supply Contract, and the EPC Contract and we understand the requirements for Commercial Operation under the Agreement, the specifications and performance testing requirements under the [] Supply Contract, and the requirements for [Commercial Operation/Substantial Completion] under the EPC Contract.
2.	We have reviewed the material and data made available to us by the Owner, the Renewable Generation Equipment Supplier, and the EPC Contractor for the Project.
3.	To the extent practical, we have reviewed the engineering, procurement, construction and performance testing for the Project and in the course of this review we have not discovered any material errors or omissions in the work performed to date.
4.	We have reviewed the certificates of Owner, Renewable Generation Equipment Supplier, and EPC Contractor above, and find the representations provided to be correct in all material respects.
5.	We have reviewed all Governmental Approvals and permits identified by the Owner as being required for the construction and operation of the Project and are of the opinion that the Project as completed is in compliance in all material respects with the environmental and technical requirements contained therein.

6.

Based on our review of the aforementioned information and of information provided to

us by others which we have not independently verified, we are of the opinion that, as of, Commercial Operation has occurred as defined in the Agreement.

	RENEWABLE GENERATION EQUIPMENT SUPPLIER
	[Name of Renewable Generation Equipment Supplier]
	a corporation
	Par-
	By: Name:
	Title:
	EPC CONTRACTOR
	[Name of EPC Contractor]
	a corporation
	By:
	Name:
	Title:
	OWNER
	[Name of Owner] a limited liability company
	a infined hability company
	By:
	Name:
	Title:
	LICENSED PROFESSIONAL ENGINEER:
	[Name of Licensed Professional Engineer]
	a
	By:
	Name:
	Title:
ACCEPTED BY SAN DIEGO GA	S & ELECTRIC COMPANY
By:	
Name: Title:	<u> </u>
Date:	
Dute.	

Executed this \_\_\_\_ day of \_\_\_\_, 200\_

# Exhibit F FORM OF QUARTERLY PROGRESS REPORT

Quarterly Progress Report
of
[\_\_\_\_\_]
("Seller")

provided to San Diego Gas & Electric Company

[Date]

# Table of Contents

[Insert Table of Contents]

# 1.0 Instructions.

All capitalized terms used in this report shall have the meanings set forth below and any capitalized terms used in this report which are not defined below shall have the meanings ascribed thereto in the Power Purchase Agreement by and between ("Seller") and San Diego Gas & Electric Company dated, (the "Agreement").
Seller shall review the status of each significant element of the Project schedule and Seller shall identify such matters referenced in clauses (i)-(v) below as known to Seller and which in Seller's reasonable judgment are expected to adversely affect the Project or the Project schedule, and with respect to any such matters, shall state the actions which Seller intends to tak to ensure that Conditions Precedent and the Milestones will be attained by their required dates. Such matters may include, but shall not be limited to:
(i) Any material matter or issue arising in connection with a Governmental Approval, or compliance therewith, with respect to which there is an actual or threatened dispute over the interpretation of a law or regulation, actual or threatened opposition to the granting of a necessary Governmental Approval, any organized public opposition, any action or expenditure required for compliance or obtaining approval that Seller is unwilling to take or make, or in each case which could reasonably be expected to materially threaten or prevent financing of the Project, attaining any Condition or Milestone, or obtaining any contemplated agreements with other parties which are necessary for attaining any Condition or Milestone or which otherwise reasonably could be expected to materially threaten Seller's abilit to attain any Condition or Milestone;
(ii) Any development or event in the financial markets or the independent power industry, any change in taxation or accounting standards or practices or in Seller's business or prospects which reasonably could be expected to materially threaten financing of the Project, attainment of any Condition or Milestone or materially threaten any contemplated agreements with other parties which are necessary for attaining any Condition or Milestone or could otherwise reasonably be expected to materially threaten Seller's ability to attain any Condition or Milestone;
(iii) A change in, or discovery by Seller of, any legal or regulatory requirement which would reasonably be expected to materially threaten Seller's ability to attain any Condition or Milestone;
(iv) Any material change in the Seller's schedule for initiating or completing any material aspect of Project;
(v) The status of any matter or issue identified as outstanding in an prior Quarterly Report and any material change in the Seller's proposed actions to remedy overcome such matter or issue.
Seller shall complete, certify, and deliver this form Quarter Quarterly Progress Report to [], together with all attachments and exhibits, with [3] copies of the Report delivered to [] and [].

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#### 2.0 Executive Summary.

# 2.1 Major activities to be performed for each aspect of the Project during the current calendar quarter.

Please provide a brief summary of the Major<sup>2</sup> activities to be performed for each of the following aspects of the Project during the current calendar quarter:

- 2.1.1 Design
- 2.1.2 Engineering
- 2.1.3 Major Equipment procurement
- 2.1.4 Construction
- 2.1.5 Milestone report
- 2.1.6 Permitting (See Section 3.0)

# 2.2 Major activities scheduled to be performed in the previous calendar quarter but not completed as scheduled.

Please provide a brief summary of the Major activities which were scheduled to be performed in the previous calendar quarter and their status, including those activities that were not completed as scheduled:

- 2.2.1 Design
- 2.2.2 Engineering
- 2.2.3 Major Equipment procurement
- 2.2.4 Construction
- 2.2.5 Milestone report
- 2.2.6 Permitting

\_

<sup>&</sup>lt;sup>2</sup> For Purposes of this Report, "Major" shall mean any activity, event, or occurrence which may have a material adverse impact on the construction of the Facility or completion of the Project on a timely basis if such activity, event, or occurrence occurs or if such activity, event, or occurrence fails to occur as anticipated or scheduled, which material adverse impact includes, but is not limited to, Seller's inability to achieve a Milestone Date.

#### 3.0 Permitting.

The following describes each of the major Governmental Approvals required for the construction of the Project and the status of each:

#### 3.1 State and/or federal Governmental Approvals.

Please describe each of the Major state and/or federal Governmental Approval (including the Permit to Construct issued by the San Diego County Air Pollution Control District) to be obtained by Seller (or EPC Contractor) and the status of each.

DESCRIPTION	STATUS

#### 3.2 Local and/or county Governmental Approvals.

Please describe each of the Major local and/or county Governmental Approvals to be obtained by Seller and the status of each.

DESCRIPTION	STATUS

#### 3.3 Permitting activities which occurred during the previous calendar quarter.

Please list all permitting activities which occurred during the previous calendar quarter.

#### 3.4 Permitting activities occurring during the current calendar quarter.

Please list all permitting activities which are expected to occur during the current calendar quarter.

#### 3.5 Permitting Notices received from EPC Contractor.

Please attach to this Quarterly Progress Report copies of any notices related to permitting activities received from EPC Contractor during the previous calendar quarter.

### 4.0 Design Activities.

#### 4.1 Table of design schedule to be followed by Seller and its subcontractors.

The following table lists the design schedule to be followed by Seller and its subcontractors.

ACTIVITY	CONTRACTOR/ SUBCONTRACTOR	SCHEDULED COMPLETION DATE	ACTUAL COMPLETION DATE

#### 4.2 Design activities to be performed during the current calendar quarter.

Please explain in detail the design activities which are expected to be performed during the current calendar quarter.

#### 4.3 Table of design activities completed during the previous calendar quarter.

Please explain in detail the design activities which were completed during the previous calendar quarter.

#### 5.0 Engineering Activities.

### 5.1 Table of engineering schedule to be followed by Seller and its subcontractors.

The following table lists the engineering schedule to be followed by Seller and its subcontractors:

ACTIVITY	CONTRACTOR/ SUBCONTRACTOR	SCHEDULED COMPLETION DATE	ACTUAL COMPLETION DATE

#### 5.2 Engineering activities to be performed during the current calendar quarter.

Please explain in detail the engineering activities which are expected to be performed during the current calendar quarter.

### 5.3 Engineering activities completed during the previous calendar month.

Please explain in detail the engineering activities which were completed during the previous calendar quarter.

#### 5.4 Three-month look-ahead engineering schedule.

Please provide a three-month look ahead engineering schedule.

#### 6.0 Major Equipment Procurement.

#### 6.1 Table of major equipment to be procured by Seller and its subcontractors.

The following table lists major equipment to be procured by Seller and its subcontractors:

EQUIPMENT DESCRIPTION	MANUFACTURER	MODEL	CONTRACTED DELIVERY DATE	ACTUAL DELIVERY DATE	PROJECTED INSTALLATION DATE	ACTUAL INSTALLATION DATE

# 6.2 Major Equipment procurement activities to be performed during the current calendar quarter.

Please explain in detail the major equipment procurement activities which are expected to be performed during the current calendar quarter.

# 6.3 Major Equipment procurement activities completed during the previous calendar quarter.

Please explain in detail the major equipment procurement activities which were completed during the previous calendar quarter.

#### 7.0 Construction Activities.

# 7.1 Table of construction activities to be performed by Seller and its subcontractors.

The following tables lists construction activities to be performed by Seller and its subcontractors:

ACTIVITY	CONTRACTOR/ SUBCONTRACTOR	SCHEDULED COMPLETION DATE	ACTUAL COMPLETION DATE
Civil Progress			
Structural Progress			
[Steam] Generator			
Progress			
Piping Progress			
IC and Electrical			
Progress			
Subcontractor			
Progress			

#### 7.2 Construction activities to be performed during the current calendar quarter.

Please explain in detail the construction activities which are expected to be performed during the current calendar quarter.

#### 7.3 Construction activities completed during the previous calendar quarter.

Please explain in detail the construction activities which are expected to be performed during the previous calendar quarter.

#### 7.4 EPC Contractor Monthly Progress Report.

Please attach a copy of the Monthly Progress Reports received during the previous calendar quarter from the EPC Contractor pursuant to the EPC Contract, certified by the EPC Contractor as being true and correct as of the date issued.

#### 7.5 Three-month look-ahead construction schedule.

Please provide a three-month look ahead construction schedule.

#### 8.0 Milestones.

#### 8.1 Milestone schedule.

Please state the status and progress of each Milestone and identify any completed Milestone(s) for the previous calendar quarter.

# 8.2 Remedial Action Plan (applicable if Seller fails to achieve Milestone by the Milestone Date).

Please explain in detail each of the following aspects of Seller's remedial action plan:

- 8.2.1 Missed Milestone
- 8.2.2 Plans to achieve missed Milestone
- 8.2.3 Plans to achieve subsequent Milestone
- 8.2.4 Delays in engineering schedule

Please explain in detail any delays beyond the scheduled Milestone Dates stated in <u>Section 5.1</u>, any impact from the delays on the engineering schedule, and Seller's plans to remedy such impact.

#### 8.2.5 Delays in Major Equipment procurement

Please explain in detail any delays beyond the contracted delivery date and/or the projected installation date stated in <u>Section 6.1</u>, any impact from the delays on Major Equipment procurement schedule, and Seller's plans to remedy such impact.

#### 8.2.6 Delays in construction schedule

Please explain in detail any delays beyond the scheduled completion dates stated in <u>Section 7.1</u>, any impact from the delays on the construction schedule, and Seller's plans to remedy such impact.

9.0	Safet	y and Health Reports
	9.1	Please list all accidents from the previous calendar quarter:
	9.2	Any work stoppage from the previous calendar quarter:
	9.3	Work stoppage impact on construction of the Project:
and a	iny and	, on behalf of and as an authorized representative of, do hereby certify all information contained in the attached Seller's Quarterly Progress Report is true, and reflects, to the best of my knowledge, the current status of the construction of s of the date specified below.
By:_		
Namo	e:	
Title:		

Date:\_\_\_\_\_

### **RPS Project Development Status Report**

#### Project Name Date

	Date		
Date of Latest Construction Progress Report from C	Counterparty:		
Project Owner/Counterparty:			
Technology:			
Capacity (MW):	Annual Energy (G	Wh/year):	
On-Line Date:	Term/Duration (ye	ears):	
Construction Start Date:	Point of Delivery:		
Location:			
	tus At-A-Glance		
The below to be filled in w/ either: Completed, Ace			
of milestones. When the answer is "Concern" the m	nilestone should be f	lagged with a notation no	ımber where
additional detail is provided in Section A.			
Milestones	Status	Initial Completion Date	Projected Completion Date
Fuel/Resource Supply:			
Financing:			
Corporate Financing			
Project Financing			
Site Control (100%):			
Permitting:			
Engineering:			
Major Equipment Procurement:			
Construction:			
Startup Testing and Commissioning:			
Transmission:			
Transmission - Detail (see Section C)			
Dependent Transmission Upgrade(s):			
Scheduled Completion:			
Point of Interconnection:			
Early Interconnection:			
Gen-Tie Length:			
Gen-Tie Voltage:			
ISO Queue Position:			
Feasibility Study (FS):			
System Impact Study (SIS):			
Facilities Study (FAS):			
Remedial Action Plan:			
Additional Comments:			

Date of Preparation:

# Exhibit G

# **OUTAGE NOTIFICATION FORM**

nent Problem		
Affected Compo	onent	
Codes 9000-9040		
Codes 8000-8835	t Others Codes 9900-999	9
Generator Codes 4500-4899	Codes 9504-972	Safety, Environmental
		MR Unit? Yes/No
	Outage Duration:	
(	Outage End Time:	hh:mm
C	outage Start Time:	hh:mm
		(For times, use 24hr format)
ge 🔻		mm/dd/yyyy hh:mm
	Previous Notification	on (if applicable)
	Generator Codes 4500-4899 Pollution Control Equipmen Codes 8000-8835 External Codes 9000-9040 Affected Compo	Date Sent:

#### Exhibit H

#### PROJECT OPERATING RESTRICTIONS

Operational characteristics of the Project must be equal to or greater than the resource flexibility reflected in the resource Master File, as such term is defined in the CAISO Tariff. Buyer may request that CAISO modify the Master File for the Project to reflect the findings of a CAISO audit of the Project and to ensure that the information provided by Seller is true and accurate. Seller agrees to coordinate with Buyer and any third party Scheduling Coordinator to ensure all information provided to the CAISO regarding the operational and technical constraints in the Master File for the Project are accurate and are actually based on physical characteristics of the resource. The Parties agree to make reasonable modifications to this Exhibit H to modify existing operating restrictions or add additional operating restrictions that may be necessary to address changes in the CAISO Tariff or applicable Law applicable to the Products provided from this Project.

Nameplate capa	acity of the Project:MW
Minimum opera	ating capacity:MW
Advance notific	eation required for a Dispatch Notice:
Ramp Rate:	MW/minute

# **APPENDIX 6**

# **RPS Short Term Model PPA**

[Form of PPA for As-Available, Baseload, Peaking or Dispatchable Product for a Project that
is already constructed]

[Standard contract terms and conditions that "may not be modified" per CPUC D.04-06-014 and subsequent decisions are shown in red shaded text and standard contract terms and conditions that may be modified per CPUC D.04-06-014 and subsequent decisions are shown in green shaded text.]

#### POWER PURCHASE AGREEMENT

#### Between

SAN DIEGO GAS & ELECTRIC COMPANY

(as "Buyer")

and	
(as "Seller")	

# POWER PURCHASE AGREEMENT

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# **COVER SHEET**

This Dower Durchase Agreement is made	le as of the fellowing date:
This Power Purchase Agreement is mad	
	xhibits, schedules, appendices, and any writter
supplements hereto, any designated collateral	l, credit support or margin agreement or similar
arrangement between the Parties as well as all	written and signed amendments and modifications
	red to as, the "Agreement." The Parties to this
Agreement (nereinafter individually a "Party" a	and collectively the "Parties") are the following:
N (40 11 2)	N G D' G OFL C
Name: ("Seller")	Name: San Diego Gas & Electric Company
AH NI 🚜	(" <u>Buyer</u> ")
All Notices:	All Notices:
Street:	Street: 8315 Century Park Court
City: Zip: Zip:	City: San Diego, CA Zip: 92123
Attn: Contract Administration	Attn: Electric & Fuel Procurement - Contract
Phone:	Administration
Facsimile:	Phone: (858) 636-5536
Duns:	Facsimile: (858) 650-6190
Federal Tax ID Number:	Duns: 006911457
	Federal Tax ID Number: 95-1184800
Invoices:	Invoices:
	San Diego Gas & Electric Company
	8315 Century Park Ct.
A	San Diego, California 92123-1593
Attn:	Attn: Electric & Fuel Procurement – Invoicing and
Phone:	Reporting
Facsimile:	Phone: (858) 650-6187
	Facsimile: (858) 650-6190
Scheduling:	Scheduling:
	San Diego Gas & Electric Company
	8315 Century Park Ct.
A 11	San Diego, California 92123-1593
Attn:	Attn: Transaction Scheduling Manager
Phone:	Phone: (858) 650-6160
Facsimile:	Facsimile: (858) 650-6191
Payments:	Payments:
-	San Diego Gas & Electric Company
	PO Box 25110
A 44	Santa Ana, CA 92799-5110
Attn:	Attn: Mail Payments
Phone:	Phone: (619) 696-4521
Facsimile:	Facsimile: (619) 696-4899 Wire Transfer:
Wire Transfer:	BNK: Union Bank of California
BNK:	
ABA:	for: San Diego Gas & Electric Company
ACCT:	ABA: Routing # 122000496
Confirmation:	ACCT: #4430000352
FAX:	Confirmation: SDG&E, Major Markets
Credit and Callactions	FAX:(213) 244-8316
Credit and Collections:	Credit and Collections:
	San Diego Gas & Electric Company, Major Markets
A +++	555 W. Fifth Street, ML 18A3 Los Angeles, CA 90013-1011
Attn:	LOS ATIPCIES, CA 90013-1011

Phone:	Attn.: Major Markets, Credit and Collections
Facsimile:	Manager
	Fax No.: (213) 244-8316
	Phone: (213) 244-4343
With additional Notices of an Event of Default or	With additional Notices of an Event of Default or
Potential Event of Default to:	Potential Event of Default to:
	San Diego Gas & Electric Company
	8330 Century Park Ct.
	San Diego, California 92123
Attn:	Attn: General Counsel
Phone:	Phone: (858) 650-6141
Facsimile:	Facsimile: (858) 650-6106

#### **GENERAL TERMS AND CONDITIONS**

#### ARTICLE ONE: GENERAL DEFINITIONS

1.1 <u>General</u>. The following terms shall have the following meaning for purposes of this Agreement.

"[AAA][JAMS]" means [the American Arbitration Association] [JAMS, Inc.].

"Affiliate" means, with respect to any person, any other person (other than an individual) that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with, such person. For this purpose, "control" means the direct or indirect ownership of fifty percent (50%) or more of the outstanding capital stock or other equity interests having ordinary voting power.

"Agreement" has the meaning set forth in the preamble to the Cover Sheet.

"Arbitration" has the meaning set forth in Section 12.3.

[For As-Available Product only: "As-Available" means a Product for which, subject to the terms of this Agreement, Seller is excused from selling and delivering the Product to Buyer, and Seller shall not be liable to Buyer for any damages determined pursuant to Section 3.1(h) of the Agreement, in the event that Seller fails to deliver the Product to Buyer for any of the following reasons:

- (a) if the Project is unavailable as a result of a Forced Outage and such Forced Outage is not the result of Seller's negligence or willful misconduct;
- (b) Force Majeure;
- (c) by the Buyer's failure to perform;
- (d) by a Planned Outage of the Project;
- (e) a reduction in output as ordered under Dispatch Down Periods; or
- (f) [the unavailability of landfill gas which was not anticipated as of the Execution Date, which is not within the reasonable control of, or the result of negligence of, Seller or the party supplying such landfill gas to the Project, and which by the exercise of reasonable due diligence, Seller is unable to overcome or avoid or causes to be avoided.] OR [insufficient wind power for the Project to generate energy as determined by the best wind speed and direction standards utilized by other wind producers or purchasers in the vicinity of the Project or if wind speeds exceed the Project's technical specifications.] OR [the unavailability of water or the unavailability of sufficient pressure required for operation of the hydroelectric turbine-generator as reasonably determined by Seller within its operating procedures, neither of which was anticipated as of the

Execution Date, which is not within the reasonable control of, or the result of negligence of, Seller or the party supplying such water to the Project, and which by the exercise of due diligence, such Seller or the party supplying the water is unable to overcome or avoid or causes to be avoided.] OR [insufficient solar power for the Project to generate energy as determined by the best solar standards utilized by other solar producers or purchasers in the vicinity of the Project.]

[For Dispatchable Product only: "Availability Adjustment Factor" has the meaning set forth in Section 4.1(b).]

"Availability Incentive Payments" shall mean Availability Incentive Payments as defined in FERC filing ER09-1064 or such other similar term as modified and approved by FERC thereafter to be incorporated in the CAISO Tariff or otherwise applicable to CAISO.

**[For Dispatchable Product only:** "Availability Notice" has the meaning set forth in Section 3.3([f/g]).]

"Availability Standards" shall mean Availability Standards as defined in FERC filing ER09-1064 or such other similar term as modified and approved by FERC thereafter to be incorporated in the CAISO Tariff or otherwise applicable to CAISO.

"Bankrupt" means with respect to any entity, such entity that (a) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar Law, (b) has any such petition filed or commenced against it which remains unstayed or undismissed for a period of sixty (60) days, (c) makes an assignment or any general arrangement for the benefit of creditors, (d) otherwise becomes bankrupt or insolvent (however evidenced), (e) has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets, or (f) is generally unable to pay its debts as they fall due.

[For Baseload Product only: "Baseload" means a Unit Firm Product for which the delivery levels are uniform twenty-four (24) hours per day, seven (7) days per week.]

"Bundled Green Energy" means Energy, Green Attributes, and any other Product, the quantity of which is measured based on the amount of Delivered Energy, in each case, that are produced by or associated with the Project. The quantity of Bundled Green Energy shall be equal to the lesser of the quantity of (i) [When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program: Contract Energy] [When SDG&E is SC for the Project and Project is in the VER Forecasting Program: Delivered Energy] (ii) Green Attributes that are delivered to Buyer, and (iii) any other Product that is delivered to Buyer, the quantity of which is measured based on the amount of Delivered Energy. For example, if the quantity of Renewable Energy Credits that are delivered to Buyer is less than the quantity of the [When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program: Contract Energy] [When SDG&E is SC for the Project and Project is in the VER Forecasting Program: Delivered Energy], then the quantity of Bundled Green Energy shall be equal to the quantity of Renewable Energy Credits that are delivered to Buyer.

"Business Day" means any day except a Saturday, Sunday, or a Federal Reserve Bank holiday and shall be between the hours of 8:00 a.m. and 5:00 p.m. local time for the relevant Party's principal place of business where the relevant Party, in each instance unless otherwise specified, shall be the Party from whom the Notice, payment or delivery is being sent and by whom the Notice or payment or delivery is to be received.

"Buyer" has the meaning set forth on the Cover Sheet.

"CAISO" means the California Independent System Operator Corporation or any successor entity performing similar functions.

[When SDG&E is the SC for the Project: "CAISO Charges Invoice" has the meaning set forth in Section 3.3([a/b])(iv).]

"CAISO Grid" means the system of transmission lines and associated facilities of the Participating Transmission Owners that have been placed under the CAISO's operational control.

"CAISO Tariff" means the CAISO Operating Agreement and Tariff, including the rules, protocols, procedures and standards attached thereto, as the same may be amended or modified from time-to-time and approved by FERC.

"California Renewables Portfolio Standard" means the Renewables Portfolio Standard of California under California Senate Bills 1078 and 107, as codified in California Public Utilities Code Sections 387, 390.1, and Article 16 (commencing with Section 399.11) of Chapter 2.3 of Part 1 of Division 1, as such provisions are amended or supplemented from time to time.

"Capacity Attributes" means any current or future defined characteristic, certificate, tag, credit, or ancillary service attribute, whether general in nature or specific as to the location or any other attribute of the Project intended to value any aspect of the capacity of the Project to produce Energy or ancillary services, including but not limited to any accounting construct so that the Contract Capacity of the Project may be counted toward a Resource Adequacy obligation or similar measure in respect to the capacity of the Project to generate Energy by the CPUC, the CAISO, the FERC, or any other entity vested with the authority under federal or state Law, to require Buyer to procure, or to procure at Buyer's expense, Resource Adequacy or other similar products.

[For Dispatchable Product only: "Capacity Price" has the meaning set forth in Section 4.1(a).]

[For Baseload, Peaking, or Dispatchable Product only: "Capacity Test" shall be the complete capacity testing procedure for the Project that is reasonably acceptable to Buyer that Seller shall develop no later than thirty (30) days prior to the initial capacity testing of the Project prior to the Initial Delivery Date. The capacity testing procedure shall describe in detail the testing standard(s) to be used for the technology of the Project, the conditions under which testing shall take place, the average summer ambient conditions to which the results will be corrected, and the testing procedures. The same capacity testing procedure shall be applied to all subsequent Capacity Tests.]

"CEC" means the California Energy Commission or its successor agency.

"CEC Certification and Verification" means that the CEC has certified (or, with respect to periods before the Project has been constructed, that the CEC has pre-certified) that the Project is an ERR for purposes of the California Renewables Portfolio Standard and that all Energy produced by the Project qualifies as generation from an ERR for purposes of the Agreement.

"Claims" has the meaning set forth in Section 11.2(a).

"Conditions Precedent" has the meaning set forth in Section 2.3.

"Contract Capacity" has the meaning set forth in Section 3.1(f).

[When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program: "Contract Energy" means the lower of Delivered Energy or Scheduled Energy for any given period in each case net of all Electrical Losses.]

"Contract Quantity" has the meaning set forth in Section 3.1(e).

"Contract Year" means a period of twelve (12) consecutive months (except in the case of the first Contract Year which may be longer) with the first Contract Year commencing on the Initial Delivery Date and each subsequent Contract Year commencing on the anniversary of the first day of the month following the Initial Delivery Date.

"Costs" means, with respect to the Non-Defaulting Party, brokerage fees, commissions and other similar third party transaction costs and expenses reasonably incurred by such Party either in terminating any arrangement pursuant to which it has hedged its obligations or entering into new arrangements which replace a Terminated Transaction; and all reasonable attorneys' fees and expenses incurred by the Non-Defaulting Party in connection with such Terminated Transaction.

"Cover Sheet" means the document that precedes Article 1: General Definitions to this Agreement.

"CP Satisfaction Date" shall mean the date on which all of the Conditions Precedent have been satisfied (or waived in writing by the Party described in Section 2.4).

"CPUC" or "Commission or successor entity" means the California Public Utilities Commission, or successor entity.

"CPUC Approval" means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to the Parties, or either of them, which contains the following terms:

- (a) approves this Agreement in its entirety, including payments to be made by the Buyer, subject to CPUC review of the Buyer's administration of the Agreement; and
- (b) finds that any procurement pursuant to this Agreement is procurement from an eligible renewable energy resource for purposes of determining Buyer's compliance with any

obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 *et seq.*), Decision 03-06-071, or other applicable Law.

CPUC Approval will be deemed to have occurred on the date that a CPUC decision containing such findings becomes final and non-appealable. [For Agreements for the purchase and sale of TRECS only, use STC REC-3 instead of the foregoing]

[For Agreements with Delivery Terms greater than two years: "CPUC Approval Date" shall mean the date on which the Conditions Precedent set forth in Section 2.3(a) have been satisfied (or waived in writing by the beneficiary Party described in Section 2.4).]

[For Agreements with Delivery Terms greater than two years: "CPUC Approval Security" shall mean the Performance Assurance that Seller is required to maintain during the period and as otherwise specified in Section 8.4(a)(i) to secure performance of its obligations hereunder.]

"Credit Rating" means, with respect to any entity, the rating then assigned to such entity's unsecured, senior long-term debt obligations (not supported by third party credit enhancements) by S&P or Moody's.

"Day-Ahead Forecast" has the meaning set forth in Section 3.3([d/e]).

[For As-Available and Baseload Products only: "Deemed Bundled Green Energy" means the amount of Bundled Green Energy that Seller could reasonably have delivered to Buyer but was instructed not to deliver to Buyer by reason of Economic Dispatch Down. The quantity of Deemed Bundled Green Energy shall be equal to [For As-Available Products: (a) the Deemed Delivery Forecast of Energy corresponding to the applicable Economic Dispatch Down periods, whether or not Seller is participating in the VER Forecasting Program during such events, less the amount of Energy scheduled under Economic Dispatch Down as specified in the Dispatch Notice during such periods, and less any amount of Energy that was not delivered associated with any concurrent Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault but only to the extent the Deemed Delivery Forecast does not already reflect the foregoing provided that, if the applicable amount calculated pursuant to this clause (a) is negative, the Deemed Bundled Green Energy shall be zero (0), or (b) if there is no such Deemed Delivery Forecast available during the applicable Economic Dispatch Down periods or if the Bundled Green Energy amount has historically not been determined based on clause (i) of the definition of Bundled Green Energy, the amount of Bundled Green Energy that Seller could reasonably have delivered to Buyer but was instructed not to deliver to Buyer as a result of Economic Dispatch Down as determined by Buyer in a commercially reasonable manner, which amount shall not include any amount of Energy that was not delivered associated with any concurrent Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault.] [For Baseload Products: the amount of Bundled Green Energy that Seller could reasonably have delivered to Buyer but was instructed not to deliver to Buyer during the applicable Economic Dispatch Down periods, as determined by Buyer in a commercially reasonable manner, which amount shall not include any amount of Energy that was not delivered associated with any concurrent Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault.]]

[For As-Available only: "Deemed Delivery Forecast" means the forecast of the Energy to be produced by the Project prepared by the CAISO or its agent in accordance with the VER Forecasting Program and communicated to the Scheduling Coordinator, which forecast is the last such forecast prepared by the CAISO that does not reflect curtailed production as a result of Economic Dispatch Down periods. As of the Execution Date, such Deemed Delivery Forecast is the CAISO forecast generated through its Resource Specific VER Forecast Usage Report].

[Dispatchable Product only: "Default Availability Factor" means, for any period, the amount determined according to the following formula:

Default Availability Factor = (PH - (EDH - EEDH)) / PH

Where:

*PH* is the number of period hours;

EDH is the number of equivalent derate hours calculated as the sum, for each derate, of the product of the number of hours of full or partial derate hours times the size of the reduction from the initial Contract Capacity (as of the Initial Delivery Date) divided by the initial Contract Capacity. For the purposes of this calculation, a derate includes all outages for any reason, including without limitation, Forced Outages, Force Majeure events, Dispatch Down Periods, Planned Outages, Buyer's failure to perform, and other times when any portion of the Contract Capacity is not available and when the Delivered Energy of the Project is less than the amount of Energy dispatched by Buyer; and

EEDH is the number of equivalent excused derate hours solely due to either Force Majeure events, Dispatch Down Periods or Buyer's failure to perform (and for no other reason), calculated as the sum, for each excused derate, of the product of the number of hours of full or partial derate hours times the size of the reduction from the initial Contract Capacity, divided by the initial Contract Capacity.]

"Defaulting Party" means the Party that is subject to an Event of Default.

"Default Rate" means for any date, the lesser of (a) the per annum rate of interest equal to the prime lending rate as may from time to time be published in *The Wall Street Journal* under "Money Rates" on such day (or if not published on such day on the most recent preceding day on which published), plus two percent (2%) and (b) the maximum rate permitted by applicable Law.

"Delivered Energy" means all Energy produced from the Project and delivered to Buyer at the Delivery Point as measured in MWh at the CAISO revenue meter of the Project based on a power factor of precisely one (1) and net of all Electrical Losses.

"Delivery Point" means the point at which Buyer receives Seller's Product, as set forth in Section 3.1(d).

"Delivery Term" has the meaning set forth in Section 3.1(c).

"Delivery Term Security" shall mean the Performance Assurance that Seller is required to maintain during the period and as otherwise specified in Section 8.4(a)[(ii)/(iii)] to secure performance of its obligations hereunder.

"Disclosing Party" has the meaning set forth in Section 13.1(a).

"Disclosure Order" has the meaning set forth in Section 13.1(a).

"Dispatch Down Period" means the period of curtailment of delivery of Product from the Project resulting from System Dispatch Down [For all Products other than Dispatchable Product: or Economic Dispatch Down].

"Dispatch Notice" means the operating instruction, and any subsequent updates given either by Buyer to Seller or by the CAISO to Seller, directing Seller to operate the Project at a specified megawatt output for the period of time set forth in such order.

[For Dispatchable Product only: "Dispatchable" means a Unit Firm Product for which Seller makes available capacity for Buyer to Schedule and dispatch up or down at Buyer's option in accordance with Section 3.3([g/h]).]

"Distribution Upgrades" has the meaning set forth in the CAISO Tariff.

"DUNS" means the Data Universal Numbering System, which is a unique nine character identification number provided by Dun and Bradstreet.

"Early Termination Date" has the meaning set forth in Section 5.2.

[For all Products other than Dispatchable Product: "Economic Dispatch Down" means curtailment of delivery of Product from the Project that is the result of economic curtailment where Buyer (as the Scheduling Coordinator) or a third party Scheduling Coordinator (in accordance with Buyer's directions) either submits a self-schedule with a binding Product quantity or an economic bid in the applicable CAISO market or fails to submit any such schedule or bid, in either case, that when implemented by the CAISO results in an otherwise available Product quantity not being scheduled or awarded in such CAISO market and such curtailment is not concurrently the result of a Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault.

"Electrical Losses" means all electrical losses associated with the transmission of Product to the Delivery Point, including if applicable, but not limited to, any transmission or transformation losses between the CAISO revenue meter and the Delivery Point.

"Eligible Renewable Energy Resource" or "ERR" has the meaning set forth in California Public Utilities Code Section 399.11, *et seq.*, as amended or supplemented from time to time.

"Energy" means electric energy measured in MWh and net of Station Service (unless otherwise specified).

"Energy Price" has the meaning set forth in Section 4.[1/2](a).

"Equitable Defenses" means any bankruptcy, insolvency, reorganization or other Laws affecting creditors' rights generally and, with regard to equitable remedies, the discretion of the court before which proceedings may be pending to obtain same.

[For Dispatchable Product only: "Equivalent Availability Factor" or "EAF" has the meaning set forth in Section 4.1(b).]

"Event of Default" has the meaning set forth in Section 5.1.

"Execution Date" means the date hereof as set forth in the preamble of the Cover Sheet.

"Executive(s)" has the meaning set forth in Section 12.2(a).

"FERC" means the Federal Energy Regulatory Commission or any successor government agency.

"Force Majeure" means any event or circumstance which wholly or partly prevents or delays the performance of any material obligation arising under this Agreement but only to the extent (1) such event is not within the reasonable control, directly or indirectly, of the Party seeking to have its performance obligation(s) excused thereby, (2) the Party seeking to have its performance obligation(s) excused thereby has taken all reasonable precautions and measures in order to prevent or avoid such event or mitigate the effect of such event on such Party's ability to perform its obligations under this Agreement and which by the exercise of due diligence such Party could not reasonably have been expected to avoid and which by the exercise of due diligence it has been unable to overcome, and (3) such event is not the direct or indirect result of the fault or negligence of the Party seeking to have its performance obligations excused thereby.

- (a) Subject to the foregoing, events that could qualify as Force Majeure include, but are not limited to the following:
- (i) acts of God, flooding, lightning, landslide, earthquake, fire, drought, explosion, epidemic, quarantine, storm, hurricane, tornado, volcano, other natural disaster or unusual or extreme adverse weather-related events;
- (ii) war (declared or undeclared), riot or similar civil disturbance, acts of the public enemy (including acts of terrorism), sabotage, blockade, insurrection, revolution, expropriation or confiscation; or
- (iii) except as set forth in subpart (b)(vii) below, strikes, work stoppage or other labor disputes (in which case the affected Party shall have no obligation to settle the strike or labor dispute on terms it deems unreasonable).
  - (b) Force Majeure shall not be based on:
- (i) Buyer's inability economically to use or resell the Product purchased hereunder;

- (ii) Seller's ability to sell the Product at a price greater than the price set forth in this Agreement;
- (iii) Seller's inability to obtain Governmental Approvals or other approvals of any type for the construction, operation, or maintenance of the Project;
- (iv) a lack of wind, sun or other fuel source of an inherently intermittent nature;
- (v) Seller's inability to obtain sufficient labor, equipment, materials, or other resources to build or operate the Project, except to the extent Seller's inability to obtain sufficient labor, equipment, materials, or other resources is caused by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iii) above;
- (vi) Seller's failure to obtain financing or other funds, including funds authorized by a state or the federal government or agencies thereof to supplement the payments made by Buyer pursuant to this Agreement;
- (vii) a strike, work stoppage or labor dispute limited only to any one or more of Seller, Seller's Affiliates, the EPC Contractor or subcontractors thereof or any other third party employed by Seller to work on the Project; or
- (viii) any equipment failure except if such equipment failure is caused solely by an event of Force Majeure of the specific type described in any of subsections (a)(i) though (a)(iii) above.

"Forced Outage" means any unplanned reduction or suspension of production of Product from the Project or unavailability of the Project in whole or in part that is not a Planned Outage or a willful withholding of Product when the Project is otherwise capable of delivering Product under Good Industry Practices.

"GAAP" has the meaning set forth in Section 13.4.

"Gains" means with respect to any Party, an amount equal to the present value of the economic benefit to it, if any (exclusive of Costs), resulting from the termination of this Agreement for the remaining Delivery Term, determined in a commercially reasonable manner, subject to Section 5.2 hereof. Factors used in determining economic benefit may include, without limitation, reference to information either available to it internally or supplied by one or more third parties, including, without limitation, quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets market referent prices for renewable power set by the CPUC, comparable transactions, forward price curves based on economic analysis of the relevant markets, settlement prices for comparable transactions at liquid trading hubs (e.g., NYMEX), all of which should be calculated for the remaining term of this Agreement and include the value, if any, of Capacity Attributes, and Green Attributes.

"Good Industry Practice" means those practices, methods and acts that would be implemented and followed by prudent operators of electric transmission facilities (with respect to

Buyer) or prudent operators of electric generation facilities similar to the Project (with respect to Seller) in the Western United States during the relevant time period, which practices, methods and acts, in the exercise of prudent and responsible professional judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result consistent with good business practices, reliability and safety, and shall include, at a minimum, those professionally responsible practices, methods and acts described in the preceding sentence that comply with manufacturers' warranties, restrictions in this Agreement, and the requirements of Governmental Authorities, WECC standards, the CAISO and applicable Law. Good Industry Practice is not intended to be the optimum practice, method or act to the exclusion of all others, but rather is intended to be any of the practices, methods and/or actions generally accepted in the region.

"Governmental Approval" means all authorizations, consents, approvals, waivers, exceptions, variances, filings, permits, orders, licenses, exemptions and declarations of or with any governmental entity and, with respect to the Seller, shall include those siting and operating permits and licenses, and any of the foregoing under any applicable environmental Law, that are required for the construction, use, and operation of the Project.

"Governmental Authority" means any federal, state, local or municipal government, governmental department, commission, board, bureau, agency, or instrumentality, or any judicial, regulatory or administrative body, having jurisdiction as to the matter in question.

"Governmental Charges" has the meaning set forth in Section 9.2.

"Green Attributes" means, subject to the limitations in the final sentence of this definition, any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Project, and its avoided emission of pollutants. Green Attributes include but are not limited to Renewable Energy Credits, as well as: (1) any avoided emission of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants; (2) any avoided emissions of carbon dioxide (CO2), methane (CH4), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by Law, to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere; and (3) the reporting rights to these avoided emissions, such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of a Green Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state Law, if applicable, and to a federal or state agency or any other party at the Green Tag Purchaser's discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local Law, regulation or bill, and international or foreign emissions trading program. Green Tags are accumulated on a MWh basis and one Green Tag represents the Green Attributes associated with one (1) MWh of Energy. Green Attributes do not

Avoided emissions may or may not have any value for GHG compliance purposes. Although avoided emissions are included in the list of Green Attributes, this inclusion does not create any right to use those avoided emissions to comply with any GHG regulatory program.

include (i) any energy, capacity, reliability or other power attributes from the Project, (ii) production tax credits associated with the construction or operation of the Project and other financial incentives in the form of credits, reductions, or allowances associated with the Project that are applicable to a state or federal income taxation obligation, (iii) fuel-related subsidies or "tipping fees" that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or (iv) emission reduction credits encumbered or used by the Project for compliance with local, state, or federal operating and/or air quality permits. If the Project is a biomass facility and Seller receives any tradable Green Attributes based on the greenhouse gas reduction benefits or other emission offsets attributed to its fuel usage, it shall provide Buyer with sufficient Green Attributes to ensure that there are zero net emissions associated with the production of electricity from the Project and for all electric generation using biomethane as fuel, Seller shall transfer to Buyer sufficient Green Attributes of biomethane production and capture to ensure that there are zero net emissions associated with the Project using the biomethane.

"Guaranteed Energy Production" has the meaning set forth in Section 3.1(e).

"Guarantor" means, with respect to Seller, any person that (a) does not already have an
material credit exposure to Buyer under any other agreements, guarantees, or other arrangemen
at the time its Guaranty is issued, (b) is an Affiliate of Seller, or other third party reasonable
acceptable to Buyer, (c) has a Credit Rating of [] or better from S&P or a Credit Rating of
or better from Moody's, (d) has a tangible net worth of at least [], (e)
incorporated or organized in a jurisdiction of the United States and is in good standing in suc
jurisdiction, and (f) executes and delivers a Guaranty for the benefit of Buyer substantially in the
form attached hereto as Exhibit C. [SDG&E will consider accepting a Guaranty based on the
Project, the amount of Performance Assurance, and the identity of the Seller and Guarantor]

"Guaranty" means a guaranty from a Guarantor provided for the benefit of Buyer substantially in the form attached hereto as Exhibit C. [SDG&E will consider accepting a Guaranty based on the Project, the amount of Performance Assurance, and the identity of the Seller and Guarantor]

"Imbalance Energy" means the amount of Energy, in any given settlement interval, by which the amount of Delivered Energy deviates from the amount of Scheduled Energy.

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"Initial Delivery Date" means [ , 20 ].
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"Initial Negotiation End Date" has the meaning set forth in Section 12.2(a).

"Interest Amount" means, with respect to an Interest Period, the amount of interest derived from the product of (a) the sum of (i) the principal amount of Performance Assurance in the form of cash held by Buyer during that Interest Period, and (ii) the sum of all accrued and unpaid Interest Amounts accumulated prior to such Interest Period; multiplied by (b) the Interest Rate in effect on the first day of the Interest Period; multiplied by (c) the number of days in that Interest Period; divided by (d) 360.

"Interest Payment Date" means the date on which cash held as Performance Assurance is returned pursuant to the terms of this Agreement.

"Interest Period" means the monthly period beginning on the first day of each month and ending on the last day of each month or the shorter period during which Performance Assurance in the form of cash is held by Buyer.

"Interest Rate" means for any date the rate per annum equal to the Commercial Paper (non-financial, 3 months) rate as published the prior month in the Federal Reserve Statistical Release, H.15. Should publication of the interest rate on Commercial Paper (non-financial, 3 months) be discontinued, then the interest rate on commercial paper, which most closely approximates the discontinued rate, published the prior month in the Federal Reserve Statistical Release, H.15, or its successor publication.

"Law" means any statute, law, treaty, rule, regulation, ordinance, code, Governmental Approval, enactment, injunction, order, writ, decision, authorization, judgment, decree or other legal or regulatory determination or restriction by a court or Governmental Authority of competent jurisdiction, including any of the foregoing that are enacted, amended, or issued after the Execution Date, and which become effective prior to the end of the Delivery Term; or any binding interpretation of the foregoing by a Governmental Authority.

"Letter(s) of Credit" means one or more irrevocable, standby letters of credit issued by a U.S. commercial bank or a U.S. branch of a foreign bank with with such bank having a Credit Rating of at least [A-] with an outlook designation of "stable" from S&P or [A3] with an outlook designation of "stable" from Moody's, in substantially the form as contained in Exhibit B to this Agreement.

"Locational Marginal Price" has the meaning set forth in the CAISO Tariff.

"Losses" means with respect to any Party, an amount equal to the present value of the economic loss to it, if any (exclusive of Costs), resulting from a Terminated Transaction for the remaining term of this Agreement, determined in a commercially reasonable manner. Factors used in determining the loss of economic benefit may include, without limitation, reference to information either available to it internally or supplied by one or more third parties including without limitation, quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets, market referent prices for renewable power set by the CPUC, comparable transactions, forward price curves based on economic analysis of the relevant markets, settlement prices for comparable transactions at liquid trading hubs (e.g. NYMEX), all of which should be calculated for the remaining term of this Agreement and include the value, if any, of Capacity Attributes, and Green Attributes.

"Manager" has the meaning set forth in Section 12.2(a).

[For Dispatchable Product only: "Monthly Capacity Payment" has the meaning set forth in Section 4.1(b).]

"Monthly Energy Payment" has the meaning set forth in Section 4.[1/2]([b/c]).

[For Dispatchable Product only: "Monthly Shaping Factor" has the meaning set forth in Section 4.1(b).]

"Moody's" means Moody's Investor Services, Inc., or its successor.

"MWh" means megawatt-hour.

"Negative Imbalance Energy" has the meaning set forth in Section 4.[2/3].

"NERC" means the North American Electric Reliability Corporation or a successor organization that is responsible for establishing reliability criteria and protocols.

"NERC Holiday" means any of the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. Three of these days, Memorial Day, Labor Day, and Thanksgiving Day, occur on the same day each year. Memorial Day is the last Monday in May; Labor Day is the first Monday in September; and Thanksgiving Day is the fourth (4<sup>th</sup>) Thursday in November. New Year's Day, Independence Day, and Christmas Day occur on the same date each year, but in the event any of these holidays occur on a Sunday, the "NERC Holiday" is celebrated on the Monday immediately following that Sunday; and if any of these holidays occur on a Saturday, the "NERC Holiday" remains on that Saturday.

"Non-Availability Charges" shall mean Non-Availability Charges as defined in FERC filing ER09-1064 or such other similar term as modified and approved by FERC thereafter to be incorporated in the CAISO Tariff or otherwise applicable to CAISO.

"Non-Defaulting Party" has the meaning set forth in Section 5.2.

"Notice" shall, unless otherwise specified in the Agreement, mean written communications by a Party to be delivered by hand delivery, United States mail, overnight courier service, facsimile or electronic messaging (e-mail).

"Outage Notification Form" means the completed document from Seller notifying Buyer or the CAISO of an outage of the Project substantially in the form attached hereto as Exhibit D. Buyer reserves the right to reasonably revise or change the form upon Notice to Seller.

*[For intermittent As-Available Product:* "Participating Intermittent Resource" shall have the meaning set forth in the CAISO Tariff.]

"Participating Transmission Owner" or "Participating TO" means an entity that (a) owns, operates and maintains transmission lines and associated facilities and/or has entitlements to use certain transmission lines and associated facilities that are interconnected to the Delivery Point and (b) has transferred to the CAISO operational control of such facilities and/or entitlements to be made part of the CAISO Grid. As of the Execution Date, the Participating Transmission Owner is *[San Diego Gas & Electric Company]*.

"Party" or "Parties" means the Buyer or Seller individually, or to both collectively.

[For Peaking Product only: "Peaking" means a Unit-Firm Product for which Energy must be delivered during hours ending 1200-1900 (11:00 am to 7:00 pm) on Monday-Friday, excluding NERC Holidays, for the months July through October and during hours ending 1400-2100 (1:00 pm to 9:00 pm) on Monday-Friday, excluding NERC Holidays, for the months November and December.] [Note: Buyer will consider other firm products such as 6x16: "6x16 Block" means a Unit-Firm Product for which Energy must be delivered during hours ending 0700-2200 (6:00 am to 10:00 pm) on Monday-Saturday throughout the Delivery Term.]

"Performance Assurance" means collateral provided by Seller to Buyer to secure Seller's obligations hereunder and includes *[For Agreements with Delivery Terms greater than two years:* CPUC Approval Security,] Pre-Delivery Term Security, and Delivery Term Security.

[For As-Available, Baseload, Peaking Product: "Performance Measurement Period" has the meaning set forth in Section 3.1(e).]

"Planned Outage" means any planned reduction or suspension of the electrical output from the Project or unavailability of the Project in whole or in part as a result of the inspection, maintenance, or repair of equipment that is scheduled in accordance with Section 3.7(a).

"PNode" has the meaning set forth in the CAISO Tariff.

"Positive Imbalance Energy" has the meaning set forth in Section 4.[2/3].

"Pre-Delivery Term Security" shall mean the Performance Assurance that Seller is required to maintain during the period and as otherwise specified in Section 8.4(a)[(i)/(ii)] to secure performance of its obligations hereunder.

"Product" has the meaning set forth in Section 3.1(a).

[For Projects receiving PTCs: "Production Tax Credit" or "PTC" means the tax credit for electricity produced from certain renewable generation resources described in Section 45 of the Internal Revenue Code of 1986, as it may be amended from time to time.]

"Project" means all of the *[insert technology]* electric generating units, the Site at which the generating facility is located, the utility interconnection facilities up to the point of change in ownership to the applicable utility's facilities, and the other assets, tangible and intangible, that compose the generation facility as more particularly described on Exhibit A.

"Recording" has the meaning set forth in Section 13.6.

"Reductions" has the meaning set forth in Section 3.2(c).

"Referral Date" has the meaning set forth in Section 12.2(a).

"Renewable Energy Credit" has the meaning set forth in California Public Utilities Code Section 399.12(h) and CPUC Decision 08-08-028, as each may be amended from time to time or as further defined or supplemented by Law.

"Replacement Price" means the price (in dollars per megawatt hour) at which Buyer, acting in a commercially reasonable manner, purchases for delivery at the Delivery Point (or any other reasonably equivalent delivery point for Buyer) a replacement for any Product (including its associated Green Attributes) that was not Scheduled and delivered by Seller, plus (a) costs (calculated in dollars per megawatt hour) reasonably incurred by Buyer in purchasing such replacement Product and (b) additional transmission charges (calculated in dollars per megawatt hour), if any, reasonably incurred by Buyer for such replacement Product, or absent a purchase, the market price at the Delivery Point (or any other reasonably equivalent delivery point for Buyer) for such replacement Product for the hours impacted by such failure to Schedule or deliver such Product as determined by Buyer in a commercially reasonable manner. The Replacement Price also shall include all CAISO and other charges and penalties calculated in dollars per megawatt hour with respect to the deviation from the Scheduled supply resulting from Seller's failure to Schedule or deliver; provided, however, in no event shall such price include any ratcheted demand or similar charges, nor shall Buyer be required to utilize or change its utilization of its owned or controlled assets or market positions to minimize Seller's liability. For the purposes of this definition, Buyer shall be considered to have purchased replacement Product to the extent Buyer shall have entered into one or more arrangements in a commercially reasonable manner whereby Buyer repurchases its obligation to sell and deliver the Product to another party. If for any reason a Replacement Price is unavailable when Seller fails to deliver or Schedule Product, then the Replacement Price for the hours when a Replacement Price is unavailable shall be the last available Replacement Price together with any charges and penalties allocated to Buyer during such time.

"Resource Adequacy" means the procurement obligation of load serving entities, including Buyer, as such obligations are described in CPUC Decisions 04-01-050, 04-10-035, 05-10-042, 06-04-040, 06-06-064, 06-07-031, 07-06-029, 08-06-031, 09-06-028, 10-06-036, 11-06-022, 12-06-025, 13-06-024, and subsequent CPUC decisions addressing Resource Adequacy issues, as those obligations may be altered from time to time in the CPUC Resource Adequacy Rulemakings (R.) 04-04-003 and (R.) 05-12-013 or by any successor proceeding, and all other Resource Adequacy obligations established by any other entity, including the CAISO.

"Sales Price" means the price (in dollars per megawatt hour) at which Seller, acting in a commercially reasonable manner, resells any Product not Scheduled and received by Buyer, deducting from such proceeds any (a) costs (calculated in dollars per megawatt hour) reasonably incurred by Seller in reselling such Product including all costs charged by CAISO to Schedule and deliver the Product into the CAISO System, and (b) additional transmission charges (calculated in dollars per megawatt hour), if any, reasonably incurred by Seller in Scheduling and delivering such Product to the third party purchasers, or absent a sale despite commercially reasonable efforts to resell the Product, zero. The Sales Price shall also be reduced by all CAISO and other costs, charges and penalties with respect to the deviation from the Scheduled supply, in each case, resulting from Buyer's failure to take Product and calculated in dollars per megawatt hour; provided, however, in no event shall such price include any ratcheted demand or similar charges, nor shall Seller be required to utilize or change its utilization of its owned or controlled assets, including contractual assets, or market positions to minimize Buyer's liability. The Sales Price may be less than zero.

"S&P" means the Standard & Poor's Rating Group (a division of McGraw-Hill, Inc.) or its successor.

"Schedule" means the actions of Seller, Buyer and/or their designated representatives, or Scheduling Coordinators, including each Party's Transmission Providers, if applicable, of notifying, requesting and confirming to each other and the CAISO the quantity and type of Product to be delivered at any given time at a specified Delivery Point.

"Scheduling Coordinator" or "SC" means an entity certified by the CAISO as qualifying as a Scheduling Coordinator pursuant to the CAISO Tariff, for the purposes of undertaking the functions specified in "Responsibilities of a Scheduling Coordinator," of the CAISO Tariff, as amended from time-to-time.

"Scheduled Energy" means the Energy that clears under the applicable CAISO market based on the final Schedule developed in accordance with this Agreement, the operating procedures developed by the Parties pursuant to Section 3.9, and the applicable CAISO Tariff, protocols and Scheduling practices.

"SEC" means the U.S. Securities and Exchange Commission.

"Seller" shall have the meaning set forth on the Cover Sheet.

"Settlement Amount" means, with respect to the Non-Defaulting Party, the Losses or Gains, and Costs, expressed in U.S. Dollars, which such Party incurs as a result of the liquidation of a Terminated Transaction pursuant to Sections 5.2 and 5.3.

"Site" shall mean the location of the Project as described in Exhibit A.

"Station Service" means the electric energy produced by the Project that is used within the Project to power the lights, motors, control systems and other auxiliary electrical loads that are necessary to support the operation of the Project.

"System Dispatch Down" means curtailment of delivery of Product from the Project resulting from (a) curtailment ordered by the CAISO (whether directly or through the Scheduling Coordinator or the Participating Transmission Owner), for any reason, including, but not limited to, an Exceptional Dispatch (as defined in the CAISO Tariff), any system emergency as defined in the CAISO Tariff ("System Emergency"), any warning of an anticipated System Emergency, or any warning of an imminent condition or situation which could jeopardize the CAISO's or Participating Transmission Owner's electric system integrity or the integrity of other systems to which the CAISO or Participating Transmission Owner is connected, any warning, forecast, or anticipated overgeneration conditions, including a request from CAISO to manage over-generation conditions; (b) curtailment ordered by the Participating Transmission Owner or distribution operator (if interconnected to distribution or sub-transmission system) for reasons including, but not limited to, (i) any situation that affects normal function of the electric system including, but not limited to, any abnormal condition that requires action to prevent circumstances such as equipment damage, loss of load, or abnormal voltage conditions, (ii) any warning, forecast or anticipation of conditions or situations that jeopardize the Participating Transmission Owner's electric system integrity or the integrity of other systems to which the Participating Transmission Owner is connected; (c) curtailment ordered by the Participating Transmission Owner or distribution operator (if interconnected to distribution or sub-transmission system) as a result of scheduled or unscheduled maintenance or construction on the Participating Transmission Owner's transmission facilities or distribution operator's facilities (if interconnected to distribution or subtransmission system) that instructs the Seller not to deliver, or prevents the receipt of Delivered Energy to or at the Delivery Point, (d) curtailment in accordance with Seller's obligations under its interconnection agreement with the Participating Transmission Owner or distribution operator, *[If the Project is located outside of the CAISO:* or (e) curtailment ordered by the Transmission Provider provided, that Seller has contracted for firm transmission with such Transmission Provider for the Product to be delivered to the Delivery Point and such curtailment is due to "force majeure" or "uncontrollable force" or a similar term as defined under the Transmission Provider's tariff]; *[For Dispatchable Product only:* or ([e/f]) curtailment ordered by Buyer pursuant to a Dispatch Notice.*] [For all Products other than Dispatchable:* provided, however, that System Dispatch Down shall not include Economic Dispatch Down].

"Terminated Transaction" means the termination of this Agreement in accordance with Section 5.2 of this Agreement.

"Termination Payment" has the meaning set forth in Section 5.2.

"Transmission Provider" means any entity or entities transmitting or transporting the Product on behalf of Seller or Buyer to or from the Delivery Point.

[For Baseload, Peaking, or Dispatchable Product only: "Unit Firm" means, with respect to a Product, that the Product is intended to be supplied from the Project, and subject to the terms of this Agreement, Seller is excused from selling and delivering the Product to Buyer, and Seller shall not be liable to Buyer for any damages determined pursuant to Section 3.1(h) of the Agreement, in the event that Seller fails to deliver the Product to Buyer for any of the following reason:

- (a) if the Project is unavailable as a result of a Forced Outage and such Forced Outage is not the result of Seller's negligence or willful misconduct;
- (b) Force Majeure;
- (c) by the Buyer's failure to perform;
- (d) by a Planned Outage of the Project; or
- (e) a reduction in output as ordered under Dispatch Down Periods.

The following products shall be considered "Unit Firm" products: Peaking, Baseload, and Dispatchable.

*[For an intermittent As-Available Product only:* "VER Forecasting Program" means the rules, protocols, procedures and standards for Participating Intermittent Resources under the CAISO's Eligible Intermittent Resource Protocol, as may be amended from time to time, as set forth in the CAISO Tariff.]

"WECC" means the Western Electricity Coordinating Council or successor agency.

"WREGIS" means the Western Renewable Energy Generating Information System or any successor renewable energy tracking program.

- 1.2 <u>Interpretation</u>. The following rules of interpretation shall apply:
- (a) The term "month" shall mean a calendar month unless otherwise indicated, and a "day" shall be a 24-hour period beginning at 12:00:01 a.m. Pacific Prevailing Time and ending at 12:00:00 midnight Pacific Prevailing Time; provided that a "day" may be 23 or 25 hours on those days on which daylight savings time begins and ends.
- (b) Unless otherwise specified herein, all references herein to any agreement or other document of any description shall be construed to give effect to amendments, supplements, modifications or any superseding agreement or document as then exist at the applicable time to which such construction applies.
- (c) Capitalized terms used in this Agreement, including the appendices hereto, shall have the meaning set forth in Article 1, unless otherwise specified.
- (d) Unless otherwise specified herein, references in the singular shall include references in the plural and vice versa, pronouns having masculine or feminine gender will be deemed to include the other, and words denoting natural persons shall include partnerships, firms, companies, corporations, joint ventures, trusts, associations, organizations or other entities (whether or not having a separate legal personality). Other grammatical forms of defined words or phrases have corresponding meanings.
- (e) The term "including" when used in this Agreement shall be by way of example only and shall not be considered in any way to be in limitation.
- (f) References to a particular article, section, subsection, paragraph, subparagraph, appendix or attachment shall, unless specified otherwise, be a reference to that article, section, subsection, paragraph, subparagraph, appendix or attachment in or to this Agreement.
- (g) Any reference in this Agreement to any natural person, Governmental Authority, corporation, partnership or other legal entity includes its permitted successors and assigns or to any natural person, Governmental Authority, corporation, partnership or other legal entity succeeding to its functions.
  - (h) All references to dollars are to U.S. dollars.

#### ARTICLE TWO: EFFECTIVENESS OF AGREEMENT; CONDITIONS PRECEDENT

2.1 <u>Effectiveness of Agreement Prior to CP Satisfaction Date</u>. Commencing on the Execution Date until the CP Satisfaction Date, this Agreement shall be in full force and effect, enforceable and binding only to the extent required to give full effect to, and enforce, the rights and obligations of the Parties under this Article 2, including, as it relates to Article 2, the rights and obligations under Articles 1, 5, 7, 8, 9, 10, 11, 12, and 13.

- 2.2 <u>Obligations of the Parties</u>. The Parties shall cooperate with each other to cause the Conditions Precedent to be satisfied as soon as reasonably practical.
- Seller's Obligations. Prior to the CP Satisfaction Date, Seller shall (i) use commercially reasonable efforts to pursue satisfaction of the Conditions Precedent set forth in Sections [ ], and (ii) otherwise comply with its obligations, covenants, representations, and warranties under Articles 7-13. [For Agreements with Delivery Terms greater than two years: Upon an Event of Default of Seller prior to the CPUC Approval Date, Buyer may terminate this Agreement in which case Seller shall owe Buyer liquidated damages in the amount of the CPUC Approval Security.] Upon an Event of Default of Seller [For Agreements with Delivery Terms greater than two years: on or after the CPUC Approval Date but] prior to the CP Satisfaction Date, Buyer may terminate this Agreement in which case Seller shall owe Buyer liquidated damages in the amount of the Pre-Delivery Term Security. Buyer may retain such Performance Assurances to pay such liquidated damages. Each Party agrees and acknowledges that (a) the actual damages that Buyer would incur due to an Event of Default of Seller prior to the CP Satisfaction Date would be difficult or impossible to predict with certainty, (b) the liquidated damages set forth in this section are a reasonable and appropriate approximation of such damages, and (c) the liquidated damages set forth in this section are the exclusive remedy for an Event of Default of Seller prior to the CP Satisfaction Date.
- (b) <u>Buyer's Obligations</u>. Prior to the CP Satisfaction Date, Buyer shall (i) use commercially reasonable efforts to pursue satisfaction of the Conditions Precedent set forth in Sections 2.3(a), and (ii) otherwise comply with its obligations, covenants, representations, and warranties under Articles 7-13. *[For Agreements with Delivery Terms greater than two years:* Upon an Event of Default of Buyer prior to the CPUC Approval Date, Seller may terminate this Agreement in which case Buyer shall owe Seller liquidated damages in the amount of the CPUC Approval Security.] Upon an Event of Default of Buyer *[For Agreements with Delivery Terms greater than two years:* on or after the CPUC Approval Date but] prior to the CP Satisfaction Date, Seller may terminate this Agreement in which case Buyer shall owe Seller liquidated damages in the amount of the Pre-Delivery Term Security. Each Party agrees and acknowledges that (a) the actual damages that Seller would incur due to an Event of Default of Buyer prior to the CP Satisfaction Date would be difficult or impossible to predict with certainty, (b) the liquidated damages set forth in this section are a reasonable and appropriate approximation of such damages, and (c) the liquidated damages set forth in this section are the exclusive remedy for an Event of Default of Buyer prior to the CP Satisfaction Date.
- 2.3 <u>Conditions Precedent</u>. Subject to Section 2.1, the effectiveness of the remainder of this Agreement is conditioned upon the satisfaction (or waiver by the Party described in Section 2.4) of all of the following conditions precedent ("Conditions Precedent") by the deadline dates set forth below for each Condition Precedent without extension for Force Majeure or any other reason:
- (a) <u>CPUC Approval</u>. No later than [\_\_\_\_\_], Buyer shall have obtained CPUC Approval. Prior to this deadline, should the CPUC issue an order approving this Agreement but with conditions or modifications that materially alter the commercial aspects of this Agreement, the Parties agree to use good faith efforts to renegotiate this Agreement and file the amended agreement with the CPUC seeking CPUC Approval therefor. If, no later than the

earlier of (i) sixty (60) days after such order or (ii) the deadline date above, no agreement is reached, either Party may terminate this Agreement upon delivery of Notice to the other Party.

## (b) [Others, Major Governmental Approvals, Financing, etc.]

## 2.4 Failure to Meet All Conditions Precedent.

#### (a) Beneficiary Party.

- (i) Both of the Parties are the beneficiaries of the Conditions Precedent set forth in Sections 2.3(a), *[Others]*, and in order for a waiver of non-satisfaction of such Conditions Precedent to be effective, both of the Parties must waive (in their sole discretion) non-satisfaction by the deadline date therefor.
- (ii) Buyer shall be the sole beneficiary of the Conditions Precedent set forth in Sections [List], and in order for a waiver of non-satisfaction of such Conditions Precedent to be effective, Buyer alone must waive (in its sole discretion) non-satisfaction by the deadline date therefor.
- (iii) Seller shall be the sole beneficiary of the Conditions Precedent set forth in Sections *[Others]*, and in order for a waiver of non-satisfaction of such Conditions Precedent to be effective, Seller alone must waive (in its sole discretion) non-satisfaction by the deadline date therefor.
- (b) <u>Termination</u>. If any of the Conditions Precedent is not satisfied or waived in writing by the beneficiary Parties thereto on or before the date that is fifteen (15) days after the applicable deadline date therefor, then this Agreement shall automatically terminate with no further obligation to either Party (other than as set forth in Sections 2.4(b)(i)-(ii) below and any other payment obligations which are accrued and payable at the time of termination).
- (i) Upon a termination of this Agreement for any reason under Section 2.4 other than as described in Section 2.4(b)(ii) below, Seller shall forfeit to Buyer an amount equal to the Performance Assurance then required to be delivered to Buyer hereunder. Buyer may retain such Performance Assurance to pay such amount.
- (ii) Upon a termination of this Agreement under this Section 2.4 as a result of the failure of the Conditions Precedent set forth in Sections 2.3(a) to be satisfied (or waived by both Parties) or as a result of the failure of the Conditions Precedent set forth in Sections [*Others*] to be satisfied or waived by Buyer, Buyer shall return to Seller the Performance Assurances then held by Buyer.
- 2.5 Effectiveness of Agreement on and after CP Satisfaction Date. This Agreement shall be in full force and effect, enforceable and binding in all respects as of the CP Satisfaction Date until the conclusion of the Delivery Term or earlier termination pursuant to the terms of this Agreement; provided however, that this Agreement shall remain in effect until (i) the Parties have fulfilled all obligations under this Agreement, including payment in full of amounts due for the Product delivered prior to the end of the Delivery Term, the Settlement Amount, indemnification payments or other damages (whether directly or indirectly such as through set-off or netting) and

(ii) the undrawn portion of the *[For Agreements with Delivery Terms greater than two years:* CPUC Approval Security,] Pre-Delivery Term Security, or Delivery Term Security, as applicable, is released and/or returned as applicable (if any is due). All indemnity rights shall survive the termination or expiration of this Agreement for the longer of twelve (12) months or the expiration of the statute of limitations period of the claim underlying the indemnity obligation.

#### ARTICLE THREE: OBLIGATIONS AND DELIVERIES

#### 3.1 Transaction.

- (a) <u>Product</u>. The "Product" to be delivered and sold by Seller and received and purchased by Buyer under this Agreement is *[Seller to select:* As-Available, Baseload, Peaking, or Dispatchable Energy, Capacity Attributes, Green Attributes, and other ancillary products, services or attributes similar to the foregoing which are or can be produced by or associated with the Project (net of Station Service) in accordance with the terms hereof.
- (b) <u>Transaction</u>. Unless specifically excused by the terms of this Agreement during the Delivery Term, Seller shall sell and deliver, or cause to be delivered, and Buyer shall purchase and receive, or cause to be received, the Product at the Delivery Point, and Buyer shall pay Seller for the Product in accordance with the terms hereof. In no event shall Seller have the right to procure any element of the Product from sources other than the Project for sale or delivery to Buyer under this Agreement [If the Project is located outside of the CAISO: except with respect to Imbalance Energy from the Transmission Provider].
- (c) <u>Delivery Term.</u> The Parties agree that the period of Product delivery is [\_\_\_\_] Contract Years. As used herein, "Delivery Term" shall mean the period of Contract Years specified above beginning on the Initial Delivery Date and continuing until the end of the last Contract Year unless terminated earlier as provided by the terms of this Agreement.
- (d) <u>Delivery Point</u>. The Delivery Point shall be [the point of interconnection of the Project to the CAISO Grid] [Seller may specify another delivery point; for a Project located outside the CAISO Grid, the Delivery Point should be a CAISO Scheduling Point as defined by the CAISO] and for financial settlement purposes under the applicable CAISO market, the PNode corresponding to such point.
- (e) [For Baseload, Peaking, As-Available Product: Contract Quantity and Guaranteed Energy Production. The quantity of Bundled Green Energy that Seller expects to be able to deliver to Buyer during each Contract Year is [\_\_\_\_] MWh ("Contract Quantity"). Throughout the Delivery Term, Seller shall be required to deliver to Buyer no less than the Guaranteed Energy Production (as defined below) in any [twelve (12)] [twenty-four (24)] consecutive calendar month period during the Delivery Term ("Performance Measurement Period"). "Guaranteed Energy Production" means an amount of Bundled Green Energy, as measured in MWh, equal to [two times] [\_\_\_\_\_]% of the Contract Quantity. Notwithstanding the excuses to performance set forth in the definition of the Product type (as such Product type is specified in Section 3.1(a)), Seller shall be excused from achieving the Guaranteed Energy Production during any Performance Measurement Period only to the extent of any Force Majeure events, Buyer's failure to perform, or Dispatch Down Periods. For purposes of determining

whether Seller has achieved the Guaranteed Energy Production, Seller shall be deemed to have delivered to Buyer an amount of Bundled Green Energy that it could reasonably have delivered to Buyer but was prevented from delivering to Buyer by reason of any Force Majeure events or Buyer's failure to perform, or was instructed not to deliver Dispatch Down Periods.] *[For Dispatchable Product: Contact Quantity.* The quantity of Bundled Green Energy that Seller expects to be able to deliver to Buyer during each Contract Year is [\_\_\_\_] MWh ("Contract Quantity").]

- of the Project net of all Station Service which shall be [For As-Available Product: no less than MW] and no greater than [\_\_\_\_] MW] [For Baseload, Peaking, or Dispatchable Product only: an amount determined periodically pursuant to a Capacity Test as set forth below]. Throughout the Delivery Term, Seller shall sell and Schedule all Product associated with the Contract Capacity of the Project solely to Buyer, except in the case of an Event of Default of Buyer or an unexcused failure by Buyer to Schedule, receive, and pay for Product under Section 3.1(h)(ii) [If the Project is located outside of the CAISO: or the sale of Imbalance Energy to the Transmission Provider]. [For Dispatchable Product: Throughout the Delivery Term, Seller shall make the Contract Capacity available solely to Buyer at all times, except in the case of an Event of Default of Buyer or an unexcused failure by Buyer to Schedule, receive, and pay for Product under Section 3.1(h)(ii) [If the Project is located outside of the CAISO: or the sale of Imbalance Energy to the Transmission Provider].]
- (i) *[For Baseload, Peaking, Dispatchable Product:* Initial Capacity Testing. Upon no less than fourteen (14) days prior Notice to Buyer, Seller shall schedule and complete a Capacity Test prior to the Initial Delivery Date for the Project. Such initial Capacity Test shall establish the Contract Capacity for the Project for the first Contract Year.]
- (ii) *[For Baseload, Peaking, Dispatchable Product:* Annual Capacity Testing. Thereafter, at least once per Contract Year within the first quarter of each Contract Year, upon no less than 14 days prior Notice to Buyer, Seller shall schedule and complete a Capacity Test. In addition, Buyer shall have the right to require a retest of the Capacity Test at any time upon five (5) days prior written Notice to Seller if Buyer reasonably believes that the actual Contract Capacity has varied materially from the results of the most recent tests. Seller shall have the right to run a retest of the Capacity Test at any time upon two (2) days prior written Notice to Buyer (or any shorter period reasonably acceptable to Buyer consistent with Good Industry Practices).]
- (iii) [For Baseload, Peaking, Dispatchable Product: Witness at Capacity Tests. Buyer shall have the right to send one or more representative(s) to witness all Capacity Tests.]
- (iv) *[For Baseload, Peaking, Dispatchable Product:* Capacity Test Reporting. No later than fourteen (14) days following any Capacity Test, Seller shall submit a testing report detailing results and findings of the test. The report shall include meter readings and plant log sheets verifying the operating conditions and output of the Project. The Contract Capacity determined pursuant to a Capacity Test shall become the new Contract Capacity at the beginning of the day following the completion of the test for all purposes under this Agreement.]

- (v) [For Baseload, Peaking, Dispatchable Product: Capacity Test Costs and Payments. Buyer shall pay the [Monthly Energy Payment] in respect of the Product produced during the initial Capacity Test prior to the Initial Delivery Date and each annually scheduled Capacity Test thereafter. In addition, Buyer shall pay the [Monthly Energy Payment] in respect of the Product produced during any other Buyer requested test unless the results of such test demonstrate that the actual Contract Capacity has varied by more than two percent (2%) from the results of the most recent tests, in which case Buyer shall pay the lesser of the [Monthly Energy Payment] in respect of the Product produced during such test and the applicable CAISO real-time hourly average energy price. In addition, Buyer shall pay the lesser of the [Monthly Energy Payment] in respect of the Product produced during any Seller requested test and the applicable CAISO real-time hourly average energy price]. Buyer is responsible for all costs, expenses and fees payable or reimbursable to its representative(s) witnessing Capacity Testing. All other costs of any Capacity Tests shall be borne by Seller.]
- (g) <u>Project</u>. All Product provided by Seller pursuant to this Agreement shall be supplied from the Project only *[If the Project is located outside of the CAISO:* except with respect to Imbalance Energy from the Transmission Provider]. Other than maintenance in accordance with Good Industry Practices, Seller shall not make any alteration or modification to the Project which results in a change to the Contract Capacity of the Project or any other material changes to the Project without Buyer's prior written consent. The Project is further described in Exhibit A.

#### (h) Performance Excuses.

- sell the Product shall be excused only for the reasons set forth in the definition of *[Seller to select:* "As-Available" or "Unit Firm". If Seller fails to Schedule, deliver, or sell all or part of the Product, for a period or a series of periods that is cumulatively longer than thirty (30) days, and such failure is not excused as described above, then such failure shall be an Event of Default. If Seller fails to Schedule, deliver, or sell all or part of the Product for any period prior to an Early Termination Date, and such failure is not excused as described above, then Seller shall pay Buyer, on the date payment would otherwise be due in respect of the month in which the failure occurred an amount for such Product deficiency equal to the positive difference, if any, obtained by subtracting (A) the product of the Energy Price times the Product deficiency, from (B) the product of the Replacement Price times the Product deficiency. The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount.
- (ii) Buyer Excuses. The performance of Buyer to Schedule, receive, and pay for the Product shall be excused only (A) during periods of Force Majeure, (B) by Seller's failure to perform or (C) during Dispatch Down Periods [For all Products other than Dispatchable Product: (except that Buyer shall not be excused from paying for the Product as required under Section 3.4 during periods of Economic Dispatch Down)]. If Buyer fails to Schedule, receive, or purchase all or part of the Product for a period or a series of periods that is cumulatively longer than thirty (30) days and such failure is not excused as described above, then then such failure shall be an Event of Default. If Buyer fails to Schedule, receive, or purchase all or part of the Product for any period prior to an Early Termination Date and such failure is not excused as described above, then Buyer shall pay Seller, on the date payment would otherwise be due in respect of the month in which the failure occurred an amount for such Product deficiency

equal to the positive difference, if any, obtained by subtracting (Y) the product of the Sales Price times the Product deficiency from (Z) the product of the Energy Price times the Product deficiency. The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount.

- Green Attributes. Seller hereby provides and conveys all Green Attributes associated with all electricity generation from the Project to Buyer as part of the Product being delivered. Seller represents and warrants that Seller holds the rights to all Green Attributes from the Project, and Seller agrees to convey and hereby conveys all such Green Attributes to Buyer as included in the delivery of the Product from the Project. For all electric generation using biomethane as fuel, neither Buyer nor Seller may make a marketing, regulatory, or retail claim that asserts that a procurement contract to which that entity was a party resulted, or will result, in greenhouse gas reductions related to the destruction of methane if the capture and destruction is required by Law. If the capture and destruction of the biomethane is not required by Law, neither Buyer nor Seller may make a marketing, regulatory, or retail claim that asserts that a procurement contract to which that entity was a party resulted, or will result, in greenhouse gas reductions related to the destruction of methane, unless the environmental attributes associated with the capture and destruction of the biomethane pursuant to that contract are transferred to Buyer and retired on behalf of the retail customers consuming the electricity associated with the use of that biomethane, or unless Seller's procurement contract with the source of biomethane prohibits the source of biomethane from separately marketing the environmental attributes associated with the capture and destruction of the biomethane sold pursuant to that contract, and such attributes have been retired.
- (j) Resource Adequacy. During the Delivery Term, Seller grants, pledges, assigns and otherwise commits to Buyer all of the Project's Contract Capacity, including Capacity Attributes, from the Project for Buyer to use in meeting its Resource Adequacy or successor program requirements, as the CPUC, CAISO or other regional entity may prescribe. Seller understands that the CPUC is updates or modifies the requirements for Resource Adequacy from time to time, and these requirements and the implementation thereof are subject to change. Seller agrees that it shall take all commercially reasonable actions and execute any and all documents or instruments reasonably necessary to enable Buyer to use all of the Contract Capacity, including Capacity Attributes, to be committed by Seller to Buyer pursuant to this Agreement for the Resource Adequacy requirements of Buyer. Seller agrees that the Project is subject to the terms of the Availability Standards.
- (k) <u>WREGIS</u>. Prior to the initial delivery of Energy to Buyer, Seller shall register the Project in WREGIS, execute a CAISO Qualified Reporting Entity Service Agreement to allow CAISO, on the Seller's behalf, to upload generation information directly into WREGIS, and take all other actions necessary to ensure that the Green Attributes produced from the Project in an amount equal to the amount of Delivered Energy are issued and tracked for purposes of satisfying the requirements of the California Renewable Portfolio Standard and transferred to Buyer, including payment of all fees required to register the facility in WREGIS, issue WREGIS certificates, and transfer such certificates to Buyer. Within seventy-five (75) days after the initial delivery of energy to Buyer, Seller shall provide to Buyer written approval from WREGIS for Seller's generation to be reported to WREGIS.

the Renewable Energy Credits transferred to Buyer to be tracked in WREGIS will be taken prior to the first delivery under the Agreement.

(l) <u>Prevailing Wage</u>. To the extent applicable, Seller shall comply with the prevailing wage requirements of California Public Utilities Code Section 399.13, subdivision (h).

#### 3.2 Transmission.

- Seller's Transmission Service Obligations. During the Delivery Term, Seller shall arrange and be responsible for transmission service for delivery of the Product to and at the Delivery Point and bear all risks and costs associated with such transmission service, including, but not limited to, all Transmission Provider costs and charges, electric transmission losses, and any transmission outages or curtailment, except as provided otherwise in this Agreement in respect of Dispatch Down Periods. [For Projects located outside of CAISO: Seller shall obtain and maintain during the Delivery Term firm transmission service to deliver the Product from the Site to the Delivery Point from all intermediary Transmission Providers between the Site and the Delivery Point. At Buyer's request, Seller shall provide to Buyer a copy of all firm transmission service agreements and any amendments thereto.] Seller shall fulfill all contractual, metering and applicable interconnection requirements, including those set forth in Participating Transmission Owner's applicable tariffs, the CAISO Tariff and implementing CAISO standards and requirements, including, but not limited to, executing applicable interconnection agreements, Participating Generator Agreement and Meter Service Agreement so as to be able to deliver Energy to the CAISO Grid. Seller shall arrange for any interconnection agreement with the CAISO and such interconnection agreement is separate from and not a part of this Agreement.
- (b) <u>Buyer's Transmission Service Obligations</u>. During the Delivery Term, Buyer shall arrange and be responsible for transmission service for delivery of the Product from the Delivery Point and bear all risks and costs associated with such transmission service, including, but not limited to, all Transmission Provider costs and charges, electric transmission losses, and any transmission outages or curtailment, except as provided otherwise in this Agreement in respect of Dispatch Down Periods.
- (c) <u>Congestion Charges</u>. Seller shall be responsible for all costs of congestion for transmission of the Product up to and at the Delivery Point. Buyer shall be responsible for all costs of congestion for transmission of the Product from the Delivery Point. To the extent that Seller is reimbursed for or receives any refunds, credits, or benefits from the CAISO for congestion charges or losses in respect of transmission of the Product from the Delivery Point, whether due to differences between the locational marginal pricing at the Delivery Point and Buyer's load aggregation point or any other point downstream of the Delivery Point, congestion revenue rights associated with any transmission path downstream of the Delivery Point, or any other hedging instruments associated with the transmission of the Product from the Delivery Point (collectively, any such refunds, credits or benefits are referred to as "Reductions"), then, at Buyer's option, either (i) Seller shall transfer any such Reductions and their related rights to Buyer; or (ii) Buyer shall reduce payments due to Seller under this Agreement in amounts equal to the Reductions and Seller shall retain the Reductions.

# 3.3 <u>Scheduling</u>.

Requirements. Seller shall cause the Project to become a Participating Intermittent Resource including executing all necessary documents to become a Participating Intermittent Resource. Seller shall be responsible for all CAISO forecasting fees and related charges associated with the Project becoming a Participating Intermittent Resource and participating in the VER Forecasting Program. Seller and Buyer shall comply with the VER Forecasting Program, and all additional protocols issued by the CAISO relating to Participating Intermittent Resources, including the VER Forecasting Program, for the Delivery Term. Seller shall provide Buyer with a copy of the notice from the CAISO certifying the Project as a Participating Intermittent Resource prior to the Initial Delivery Date. In the event that the VER Forecasting Program or the CAISO Tariff and/or any protocols relating thereto are changed, amended, modified replaced or terminated, Seller and Buyer agree to comply with such revisions and, to the extent practical, to implement such revisions in a manner that maintains the relative economic positions of the Parties as of the date of this Agreement.]

## (b) <u>Scheduling Coordinator</u>.

## [When Seller is SC for the Project, include the following two paragraphs:

Seller as Scheduling Coordinator for the Project. Delivery Term, Seller shall be its own Scheduling Coordinator or designate a qualified third party to provide Scheduling Coordinator services with its Transmission Provider to Schedule and deliver the Product to the Delivery Point and Buyer shall be its own Scheduling Coordinator or designate a qualified third party to provide Scheduling Coordinator services with its Transmission Provider to Schedule and receive the Product at the Delivery Point. Throughout the Delivery Term, Buyer and Seller shall submit inter-SC trades for scheduling all Product from the Project at the Delivery Point (including Energy, Integrated Forward Market Load Uplift Obligations in respect of selfscheduled Energy, and other Product from time to time contemplated under the CAISO Tariff to be subject to inter-SC trades), based on a final Schedule developed in compliance with this Agreement. During the Delivery Term, each Party or each Party's SC shall conduct all Scheduling in accordance with the operating procedures developed by the Parties pursuant to Section 3.9 and in full compliance with the applicable CAISO Tariff, protocols and Scheduling practices for Product on a day-ahead, hour-ahead, or real time basis, as determined by Buyer. [For As-Available intermittent Product only: Whenever the VER Forecasting Program is available, Seller shall submit Schedules and any updates to such Schedules to the CAISO based on the most current forecast of Delivered Energy consistent with the VER Forecasting Program.] In all cases, [For all Products other than Dispatchable: consistent with its Economic Dispatch Down curtailment rights,] Buyer may direct the Scheduling Coordinator to submit, and Seller shall cause the Scheduling Coordinator to submit in accordance with such Buyer's directions, a self-schedule or an economic bid in the applicable CAISO market in order to Schedule the Product with the CAISO. It is the intent of the Parties that neither Party be subject to a double payment or a double charge for Product from the Project through this Agreement and CAISO settlement process and that the more detailed Scheduling and operating procedures developed pursuant to Section 3.9 complement the CAISO settlement process to produce a final economic result between them that is consistent with the fundamental transaction of this Agreement.

<u>CAISO Costs and Revenues</u>. Seller shall be responsible for CAISO costs (including penalties and other charges) and shall be entitled to all CAISO revenues (including credits and other payments) as the Scheduling Coordinator for the Project, in each case, associated with Imbalance Energy, including all CAISO charges or penalties incurred as a consequence of the Project not being available, the Seller not notifying the CAISO and Buyer of outages in a timely manner (in accordance with the CAISO Tariff and as set forth in Section 3.7), any other failure by Seller to abide by the CAISO Tariff, and any other deviations between Delivered Energy and Scheduled Energy that are attributable to Seller, the Project, or any event, circumstance, act, or incident occurring prior to or at the Delivery Point, including without limitation uninstructed deviation penalties. The Parties agree that any Availability Incentive Payments are for the benefit of the Seller and for Seller's account and that any Non-Availability Charges or other CAISO charges associated with the Project not providing sufficient Resource Adequacy capacity are the responsibility of the Seller and for Seller's account. In addition, if during the Delivery Term, the CAISO implements or has implemented any sanction or penalty related to scheduling, outage reporting, or generator operation, the cost of the sanctions or penalties shall be the Seller's responsibility. Buyer shall be entitled to all credits, payments, or revenues from the CAISO in respect of the Contract Energy from the Project, including revenues associated with CAISO dispatches, inter-SC trade credits, and bid cost recovery.

## [When SDG&E is SC for the Project, include the following seven paragraphs:

Buyer as Scheduling Coordinator for the Project. [During the Delivery Term], Buyer shall be the Scheduling Coordinator or designate a qualified third party to provide Scheduling Coordinator services with the CAISO for the Project for both the delivery and the receipt of the Product at the Delivery Point. At least thirty (30) days prior to the [Initial Delivery Date of the Project], Seller shall take all actions and execute and deliver to Buyer and the CAISO all documents necessary to authorize or designate Buyer as Seller's Scheduling Coordinator for the Project effective as of [the beginning of the Delivery Term]. [During the Delivery Term], Seller shall not authorize or designate any other party to act as Seller's Scheduling Coordinator, nor shall Seller perform for its own benefit the duties of Scheduling Coordinator, and Seller shall not revoke Buyer's authorization to act as Seller's Scheduling Coordinator unless agreed to by Buyer. Buyer (as Seller's SC) shall submit Schedules to the CAISO based on the final Schedule developed in accordance with this Agreement, the operating procedures developed by the Parties pursuant to Section 3.9, and the applicable CAISO Tariff, protocols and Scheduling practices for Product on a day-ahead, hour-ahead, or real time basis, as determined by Buyer. [For As-Available intermittent Product only: Buyer (as Seller's SC) shall submit Schedules and any updates to such Schedules to the CAISO based on the most current forecast of Delivered Energy consistent with the VER Forecasting Program whenever the VER Forecasting Program is available, and consistent with Buyer's best estimate based on the information reasonably available to Buyer including Buyer's forecast whenever the VER Forecasting Program is not available.] In all cases, /For all Products other than Dispatchable: consistent with its Economic Dispatch Down curtailment rights,] Buyer (as the Scheduling Coordinator) may, or may direct the third party Scheduling Coordinator to, submit a self-schedule or an economic bid in the applicable CAISO market in order to Schedule the Product with the CAISO.

(iv) <u>Notices</u>. Buyer (as Seller's SC) shall provide Seller with access to a web based system through which Seller shall submit to Buyer and the CAISO all notices and

updates required under the CAISO Tariff regarding the Project's status, including, but not limited to, all outage requests, forced outages, forced outage reports, clearance requests, or must offer waiver forms. In accordance with Section 3.7 and this Section 3.2, Seller will cooperate with Buyer to provide such notices and updates. If the web based system is not available, Seller shall promptly submit such information to Buyer and the CAISO (in order of preference) telephonically, by electronic mail, or facsimile transmission to the personnel designated to receive such information.

<u>CAISO Costs and Revenues</u>. Except as otherwise set forth below, (v) [For all Products other than Dispatchable Product: in Section 3.4(c)(ii),] and elsewhere in this Agreement, Buyer (as Seller's SC) shall be responsible for CAISO costs (including penalties, [For As-Available Product VER Forecasting Program Participants only: Negative Imbalance Energy costs or revenues,] and other charges) and shall be entitled to all CAISO revenues (including credits, [For As-Available Product VER Forecasting Program Participants only: Positive Imbalance Energy revenues or costs,] and other payments) as the Scheduling Coordinator for the Project, including revenues associated with CAISO dispatches, bid cost recovery, inter-SC trade credits, or other credits in respect of the Product Scheduled or delivered from the Project; provided, however that during periods when the Project is under curtailment for both System Dispatch Down and Economic Dispatch Down during the same CAISO settlement interval, Imbalance Energy costs and revenues shall be allocated in accordance with Section 3.4(c)(ii). [For As-Available Product VER Forecasting Program Participants only: Seller shall be responsible for all CAISO charges or penalties net of credits and payments (including without limitation all Imbalance Energy costs), in each case, resulting from the Seller not notifying the CAISO and Buyer (as Seller's SC) of outages or other unavailability of Project capacity in a timely manner (in accordance with the CAISO Tariff and as set forth in Section 3.7) or any other failure by Seller to abide by the CAISO Tariff.] [For all Products other than As-Available Product VER Forecasting Program Participants: Seller shall be responsible for all CAISO charges or penalties net of credits and payments, in each case, resulting from the Project not being available, the Seller not notifying the CAISO and Buyer (as Seller's SC) of outages in a timely manner (in accordance with the CAISO Tariff and as set forth in Section 3.7), any other failure by Seller to abide by the CAISO Tariff, and deviations between Delivered Energy and Scheduled Energy that are attributable to Seller, the Project, or any event, circumstance, act, or incident occurring prior to or at the Delivery Point, including without limitation uninstructed deviation penalties.] The Parties agree that any Availability Incentive Payments are for the benefit of the Seller and for Seller's account and that any Non-Availability Charges or other CAISO charges associated with the Project not providing sufficient Resource Adequacy capacity are the responsibility of the Seller and for Seller's account. In addition, if during the Delivery Term, the CAISO implements or has implemented any sanction or penalty related to scheduling, outage reporting, or generator operation, and any such sanctions or penalties are imposed upon the Project or to Buyer as Scheduling Coordinator due to the actions or inactions of Seller, the cost of the sanctions or penalties shall be the Seller's responsibility.

(vi) <u>CAISO Settlements</u>. Buyer (as Seller's SC) shall be responsible for all settlement functions with the CAISO related to the Project. Buyer shall render a separate invoice to Seller for any CAISO charges or penalties ("CAISO Charges Invoice") for which Seller is responsible under this Agreement. CAISO Charges Invoices shall be rendered after settlement information becomes available from the CAISO that identifies any CAISO charges. Notwithstanding the foregoing, Seller acknowledges that the CAISO will issue additional invoices

reflecting CAISO adjustments to such CAISO charges. Seller shall pay the amount of CAISO Charges Invoices within ten Business Days of Seller's receipt of the CAISO Charges Invoice. If Seller fails to pay such CAISO Charges Invoice within that period, Buyer may net or offset any amounts owing to it for these CAISO Charges Invoices against any future amounts it may owe to Seller under this Agreement. The obligations under this section with respect to payment of CAISO Charges Invoices shall survive the expiration or termination of this Agreement.

- (vii) <u>Dispute Costs</u>. Buyer (as Seller's SC) may be required to dispute CAISO settlements in respect of the Project. Seller agrees to pay Buyer's costs and expenses (including reasonable attorneys' fees, including reasonably allocated costs of in-house counsel of the Buyer) associated with its involvement with such CAISO disputes. In no event shall Buyer (or its third party designee, as Scheduling Coordinator) be liable to Seller for the actions, inactions, errors, or omissions of the CAISO or its agents in the performance of their scheduling functions and/or market operations.
- (viii) <u>Terminating Buyer's Designation as Scheduling Coordinator</u>. At least thirty (30) days prior to expiration of this Agreement or as soon as reasonably practicable upon an earlier termination of this Agreement, the Parties will take all actions necessary to terminate the designation of Buyer as Scheduling Coordinator for the Project as of 11:59 p.m. on such expiration date.
- (ix) <u>Master File and Resource Data Template</u>. Seller shall provide the data to the CAISO (and to Buyer) that is required for the CAISO's Master File and Resource Data Template (or successor data systems) for this Project consistent with this Agreement. Neither Party shall change such data without the other Party's prior written consent.]
- (c) <u>Annual Delivery Schedules</u>. No later than forty-five (45) days before (A) the first day of the first Contract Year of the Delivery Term and (B) the beginning of each calendar year for every subsequent Contract Year during the Delivery Term, Seller shall provide a non-binding forecast of each month's average-day expected Delivered Energy, by hour, for the following calendar year.
- (d) <u>Monthly Delivery Schedules</u>. Ten (10) Business Days before the beginning of each month during the Delivery Term, Seller shall provide a non-binding forecast of each day's average expected Delivered Energy, by hour, for the following month ("Monthly Delivery Forecast").
- (e) <u>Daily Delivery Schedules</u>. By 5:30 AM Pacific Prevailing Time on the Business Day immediately preceding the date of delivery, Seller shall *[When Seller is SC for the Project:* cause its Scheduling Coordinator to] provide Buyer with a *[For As-Available intermittent Product only:* non-binding VER forecast of the Project's available capacity (or if the VER Forecasting Program is not available for any reason, the expected Delivered Energy)] *[For all Products other than As-Available intermittent:* binding forecast of the expected Delivered Energy] for each hour of the immediately succeeding day ("Day-Ahead Forecast") *[For all Products other than As-Available intermittent: [When Seller is SC for the Project:* concurrent with delivery to the CAISO] *[When SDGE is SC for the Project:* and Buyer shall submit a Schedule to the CAISO consistent with such Day-Ahead Forecast], it being understood that, *[For all Project: Project: Concurrent Project: Concurrent Caise Schedule to the CAISO consistent with such Day-Ahead Forecast]*, it being understood that, *[For all Caise Ca*

all Products other than Dispatchable: consistent with its Economic Dispatch Down curtailment rights, Buyer (as the Scheduling Coordinator) may, or may direct the third party Scheduling Coordinator to, submit a self-schedule or an economic bid in the applicable CAISO market in order to Schedule the Product with the CAISO]. A Day-Ahead Forecast provided in a day prior to any non-Business Day(s) shall include Schedules for the immediate day, each succeeding non-Business Day and the next Business Day. Each Day-Ahead Forecast shall clearly identify, for each hour, Seller's best estimate of [For As-Available intermittent Product only: the Project's available capacity (or if the VER Forecasting Program is not available for any reason, the expected Delivered Energy)] [For all Products other than As-Available intermittent: the expected Delivered Energy]. Seller may not change such Schedule past the deadlines provided in this section except in the event of a Forced Outage or Schedule change imposed by Buyer or the CAISO, in which case Seller shall promptly provide Buyer with a copy of any and all updates to such Schedule indicating changes from the then-current Schedule. These notices and changes to the Schedules shall be sent to Buyer's on-duty Scheduling Coordinator. If Seller fails to provide Buyer with a Day-Ahead Forecast as required herein, then for such unscheduled delivery period only Buyer shall rely on the delivery Schedule provided in the Monthly Delivery Forecast or Buyer's best estimate based on information reasonably available to Buyer and Seller shall be liable for Scheduling and delivery based on such Monthly Delivery Forecast or Buyer's best estimate.

- (f) Real Time Delivery Schedules. Notwithstanding anything to the contrary herein, in the event Seller makes a change to its Schedule on the actual date of delivery for any reason including Forced Outages (other than a scheduling change imposed by Buyer or CAISO) which results in a change to its deliveries (whether in part or in whole), Seller shall notify Buyer immediately by calling Buyer's on-duty Scheduling Coordinator. Seller shall notify Buyer and the CAISO of Forced Outages in accordance with Section 3.7. Seller shall keep Buyer informed of any developments that will affect either the duration of the outage or the availability of the Project during or after the end of the outage.
- (g) *[For Dispatchable Product Only:* Availability Notices. During the Delivery Term, no later than two (2) Business Days before each Schedule day for the day-ahead market in accordance with WECC scheduling practices, Seller shall provide Buyer with an hourly Schedule of the capacity that the Project is expected to have available for each hour of such Schedule day (the "Availability Notice"). Seller will notify Buyer immediately if the available capacity of the Project may change after Buyer's receipt of an Availability Notice. Seller shall accommodate Buyer's reasonable requests for changes in the time of delivery of Availability Notices. Seller shall provide Availability Notices using the form developed by the Parties under Section 3.9 by (in order of preference) electronic mail, facsimile transmission or, telephonically to Buyer personnel designated to receive such communications.]
- (h) *[For Dispatchable Product Only:* Dispatch Notices. Buyer or the CAISO will have the right to dispatch the Project, seven days per week and 24 hours per day (including holidays), by providing Dispatch Notices and updated Dispatch Notices to Seller electronically, subject to the requirements and limitations set forth in this Agreement, including the system requirements under Section 3.4(b) and the Project operating restrictions set forth in Exhibit E. Each Dispatch Notice will be effective unless and until Buyer modifies such Dispatch Notice by providing Seller with an updated Dispatch Notice. In addition to any other requirements set forth

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or referred to in this Agreement, all Dispatch Notices and updated Dispatch Notices will be made in accordance with the timelines as specified in the CAISO Tariff.]

## 3.4 <u>Dispatch Notices</u>.

- (a) <u>General</u>. Seller shall adjust delivery amounts as directed by the CAISO, the Participating Transmission Owner, Buyer, or a Transmission Provider during any Dispatch Down Period.
- System Requirements. Seller shall acquire, install, and maintain such (b) facilities, communications links and other equipment, and implement such protocols and practices, as necessary (i) for Seller to respond and follow instructions, including an electronic signal conveying real time instructions, to operate the Project as directed by the Buyer and/or the CAISO, including to implement a System Dispatch Down or an Economic Dispatch Down in accordance with the then-current methodology used to transmit such instructions as it may change from time to time, and (ii) for Buyer and/or the CAISO to control the quantity of Product generated by the Project in order to implement a System Dispatch Down or an Economic Dispatch Down, in each case, in accordance with the then-current methodology used to transmit such instructions as it may change from time to time. As of the Execution Date, the systems required to comply with clause (i) include at a minimum the CAISO's Automatic Dispatch System (as described in the CAISO website) and the systems required to comply with clause (ii) include at a minimum the CAISO'S Application Programming Interfaces (as described in the CAISO website). If at any time during the Delivery Term Seller's facilities, communications links or other equipment, protocols or practices are not in compliance with then-current methodologies, Seller shall take all commercially reasonable steps necessary to become compliant as soon as possible. Seller shall be liable pursuant to Section [For all Products other than Dispatchable Product: 3.4(c)(ii)] [For Dispatchable **Product:** 3.3(b)[(ii)/(iii)]/ for failure to comply with an order directing a Dispatch Down Period, during the time that Seller's facilities, communications links or other equipment, protocols or practices are not in compliance with then-current methodologies. For the avoidance of doubt, an order directing a Dispatch Down Period via such systems and facilities shall have the same force and effect on Seller as any other form of communication. If an electronic submittal is not possible, Buyer and/or the CAISO may provide Dispatch Notices by (in order of preference) electronic mail, telephonically, or facsimile transmission to Seller's personnel designated to receive such communications, as provided by Seller in writing and Seller shall maintain communications systems necessary to permit such transmittal of Dispatch Notices. The Parties shall describe with more specificity the Economic Dispatch Down process (including the automated communication process for Dispatch Notices) in the operating procedures developed by the Parties pursuant to Section 3.9.
- (c) [For all Products other than Dispatchable Product: Economic Dispatch Down. Each of Buyer and the CAISO has the right to order Seller to curtail deliveries of Energy from the Project to the Delivery Point for Economic Dispatch Down purposes, seven days per week and 24 hours per day (including holidays), by providing Dispatch Notices and updated Dispatch Notices to Seller electronically via the communications systems described in Section 3.4(b), subject to the requirements and limitations set forth in this Agreement, including the Project operating restrictions set forth in Exhibit E. Each Dispatch Notice will be effective unless and until Buyer (or the CAISO) modifies such Dispatch Notice by providing Seller with an updated

Dispatch Notice. In addition to any other requirements set forth or referred to in this Agreement, all Dispatch Notices and updated Dispatch Notices will be made in accordance with the timelines as specified in the CAISO Tariff. Seller agrees to adjust the Project's Delivered Energy as set forth in a Dispatch Notice that meets the requirements of Economic Dispatch Down.]

- (i) [Buyer Payments. Buyer shall pay Seller, on the date payment would otherwise be due in respect of the month in which any such Economic Dispatch Down occurred an amount equal to the positive difference, if any, of (Y) the product of the Energy Price, times the amount of Deemed Bundled Green Energy resulting from such Economic Dispatch Down [For Projects receiving PTCs: plus the product of the after tax value of any lost PTC benefits (in dollars per megawatt hour) that Seller has not been able to mitigate after use of reasonable efforts, times the amount of Deemed Bundled Green Energy resulting from such Economic Dispatch Down], minus (Z) the product of the positive value of the Sales Price, if received, times the amount of Deemed Bundled Green Energy resulting from such Economic Dispatch Down. [For Projects receiving PTCs: Seller shall provide Buyer with documentation that establishes to Buyer's reasonable satisfaction (A) that Seller would have been entitled to receive PTCs for the Deemed Bundled Green Energy if it had actually been generated; and (B) the after tax value of any lost PTC benefits (in dollars per megawatt hour) due under this Section 3.4(c)(i).]]
- (ii) [Failure to Comply. If Seller fails to comply with a Dispatch Notice that is in compliance with this Agreement, then, for the deviation between the Delivered Energy and the amount set forth in the Dispatch Notice, Seller shall pay Buyer an amount equal to the sum of (A) + (B) + (C), where: (A) is the amount, if any, paid to Seller by Buyer for any Delivered Energy in excess of the amount set forth in the Dispatch Notice, and (B) is all Imbalance Energy costs or charges (excluding any revenues or credits), and (C) is any penalties or other charges resulting from Seller's failure to comply with the Dispatch Notice.]

#### 3.5 Standards of Care.

- (a) <u>General Operation</u>. Seller shall comply with all applicable requirements of Law, the CAISO, NERC and WECC relating to the Project (including those related to safety, construction, ownership and/or operation of the Project).
- (b) <u>CAISO and WECC Standards</u>. Each Party shall perform all generation, scheduling and transmission services in compliance with all applicable (i) operating policies, criteria, rules, guidelines, tariffs and protocols of the CAISO, (ii) WECC scheduling practices and (iii) Good Industry Practices.
- (c) <u>Reliability Standard</u>. Seller agrees to abide by all (i) NERC, WECC and CAISO reliability requirements, including all such reliability requirements for generator owners and generator operators, and, if applicable, CPUC General Order No.167, "Enforcement of Maintenance and Operation Standards for Electrical Generating Facilities," and (ii) all applicable requirements regarding interconnection of the Project, including the requirements of the interconnected Transmission Provider.

- (d) <u>CAISO Interconnection</u>. Seller shall perform all studies, pay all fees, obtain all necessary approvals and execute all necessary agreements with the CAISO and the Participating Transmission Owner to Schedule and deliver the Product from the Project to the Delivery Point [*For Projects Providing Resource Adequacy:* under "Full Capacity Deliverability Status" (as defined in the CAISO Tariff)].
- (e) <u>Permitting</u>. Seller shall maintain all Governmental Approvals and other approvals necessary for the construction, operation, and maintenance of the Project.
- (f) <u>Diverse Business Entities</u>. At Buyer's request, Seller shall provide information to Buyer relating to Seller's or Seller's contractor's use, during Project construction or operation, of "Women-Owned Businesses" or "Minority-Owned Businesses" or "Disabled Veteran Business Enterprises" as defined in CPUC General Order 156, and the number of new employees hired by Seller or Seller's contractors and the number of women, minority, and disabled veterans trained or hired by Seller or Seller's contractor's as contemplated under Cal. Public Utilities Code §910(a)(8), as each such group of entities and individuals may be amended from time to time or further defined, supplemented, or superseded by applicable Law or replaced with similar designations or certifications. [Include other covenants related to "women-owned business" or "minority-owned business" as may be applicable to the Seller's RFO bid.]

# 3.6 <u>Metering</u>.

- (a) <u>CAISO Revenue Meter</u>. All output from the Project per the terms of this Agreement must be delivered through a single CAISO revenue meter and that meter must be dedicated exclusively to the Project described herein. All Product purchased under this Agreement must be measured by the Project's CAISO revenue meter to be eligible for payment under this Agreement. Seller shall bear all costs relating to all metering equipment reasonably necessary to accommodate the Project. In addition, Seller hereby agrees to provide all meter data to Buyer in a form acceptable to Buyer, and consents to Buyer obtaining from the CAISO the CAISO meter data applicable to the Project and all inspection, testing and calibration data and reports. Seller shall grant Buyer the right to retrieve the meter reads from the CAISO meter reporting website and/or directly from the CAISO meter(s) at the Project site. If the CAISO makes any adjustment to any CAISO meter data for a given time period, Seller agrees that it shall submit revised monthly invoices, pursuant to Section 6.2, covering the entire applicable time period in order to conform fully such adjustments to the meter data. Seller shall submit any such revised invoice no later than thirty (30) days from the date on which the CAISO provides to Seller such binding adjustment to the meter data.
- (i) <u>Testing and Calibration</u>. Seller shall perform or cause to be performed, at its expense, annual testing and calibration of the electric meters in accordance with Good Industry Practice and the CAISO Tariff. Seller shall give Buyer reasonable advance notice of any inspection, testing or calibration of the electric meters. Buyer shall have the right to have a representative or designee present at such inspection, test or calibration of the electric meters. Buyer shall have the right to require, at Buyer's expense, except as required below, a test of any of the electric meters not more often than two (2) times every twelve (12) months.

- (ii) <u>Inaccurate Meters</u>. If any of the electric meters is deemed to be inaccurate under the Meter Service Agreement, deliveries shall be measured by reference to Seller's check-meters, if any are installed and registering accurately, or the meter readings for the period of inaccuracy shall be adjusted as far as can be reasonably ascertained by Seller from the best available data, subject to review and approval by Buyer. If the period of the inaccuracy cannot be ascertained reasonably, any such adjustment shall be for a period equal to one-half of the time elapsed since the preceding test by applying the percentage of inaccuracy so found. Seller shall promptly cause such electric meters to be corrected and, where such inaccuracy was determined pursuant to a test required by Buyer, Seller shall bear the expense of any such test.
- (iii) <u>Delivered MWh Adjustments</u>. In the event that, due to correction for inaccurate electric meters deemed to be inaccurate under the Meter Service Agreement, the Delivered Energy is increased or decreased, the revised Delivered Energy shall be used for purposes of calculating payments. If any of such amounts for any period have already been calculated using the previous amount of Delivered Energy, they shall be recalculated using the revised amount of Delivered Energy. If the recalculation changes the amount payable for the period in question, revised payments shall be made by Buyer or Seller, as applicable, in accordance with Section 6.2.
- (b) Real Time Telemetry. Seller shall install, activate and maintain metering, communication and telemetry equipment for the Project in a centralized system to which Buyer shall have real time access. Seller shall link its system to Buyer via an approved Buyer communication network, utilizing existing industry standard network protocol, as reasonably approved by Buyer. Seller shall correct any problems with such equipment as soon as practicable.
- Meteorological Station. Seller, at its own expense, shall install and maintain such stand-alone meteorological stations at the Project as may be required under the VER Forecasting Program and the CAISO Tariff to monitor and report weather data to both the CAISO and Buyer's weather station data collection system. Each station shall be equipped with instruments and equipment that meet the specifications of the VER Forecasting Program and shall measure, collect, record, format, and communicate the data required under the VER Forecasting Program. Seller shall submit to Buyer for review and approval, which shall not be unreasonably withheld, its technical specifications for the meteorological station along with a site plan showing the location of the station within the Project. Seller shall correct any problems with such equipment as soon as practicable.

#### 3.7 Outage Notification.

(a) <u>Planned Outages</u>. Seller shall schedule Planned Outages for the Project in accordance with Good Industry Practices and with the prior written consent of Buyer, which consent may not be unreasonably withheld or conditioned. The Parties acknowledge that in all circumstances, Good Industry Practices shall dictate when Planned Outages should occur. Seller shall notify Buyer of its proposed Planned Outage schedule for the Project for the following calendar year by submitting a written Planned Outage schedule no later than October 1<sup>st</sup> of each year during the Delivery Term. The Planned Outage schedule is subject to Buyer's approval, which approval may not be unreasonably withheld or conditioned. Buyer shall promptly respond

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with its approval or with reasonable modifications to the Planned Outage schedule and Seller shall use its best efforts in accordance with Good Industry Practices to accommodate Buyer's requested modifications. Notwithstanding the submission of the Planned Outage schedule described above, Seller shall also submit a completed Outage Notification Form to Buyer no later than fourteen (14) days prior to each Planned Outage and all appropriate outage information or requests to the CAISO in accordance with the CAISO Tariff. Seller shall contact Buyer with any requested changes to the Planned Outage schedule if Seller believes the Project must be shut down to conduct maintenance that cannot be delayed until the next scheduled Planned Outage consistent with Good Industry Practices. Seller shall not change its Planned Outage schedule without Buyer's approval, not to be unreasonably withheld or conditioned. Seller shall use its best efforts in accordance with Good Industry Practices not to schedule Planned Outages during the months of July, August, September and October. At Buyer's request, Seller shall use commercially reasonable efforts to reschedule Planned Outage so that it may deliver Product during CAISO declared or threatened emergency periods. Seller shall not substitute Energy from any other source for the output of the Project during a Planned Outage.

- (b) <u>Forced Outages</u>. Within *[When Seller is the SC for the Project:* Within two hours of any Forced Outage,] *[When SDG&E is the SC for the Project:* Within one-half of the notification time prescribed under the CAISO Tariff for Forced Outages,] Seller shall submit a completed Outage Notification Form to the Buyer in accordance with the instructions shown on the form and shall submit outage information to the CAISO in accordance with the CAISO Tariff *[When SDG&E is the SC for the Project:* and Section 3.3(b)(ii) above]. Seller shall not substitute Energy from any other source for the output of the Project during a Forced Outage.
- (c) <u>Coordination with CAISO</u>. Seller shall be responsible *[When SDG&E is SC for the Project:* in accordance with Section 3.3(b)(ii)] for all outage coordination communications with the CAISO. Buyer shall cooperate with Seller in arranging and coordinating all Project outages with the CAISO.

#### 3.8 Operations Logs and Access Rights.

- (a) Operations Logs. Seller shall maintain a complete and accurate log of all material operations and maintenance information on a daily basis. Such log shall include, but not be limited to, information on power production, fuel consumption, efficiency, availability, maintenance performed, outages, results of inspections, manufacturer recommended services, replacements, electrical characteristics of the generators, control settings or adjustments of equipment and protective devices. Seller shall maintain this information for at least two (2) years and shall provide this information electronically to Buyer within one day of Buyer's request.
- (b) <u>Access Rights</u>. Buyer, its authorized agents, employees and inspectors shall have the right of ingress to and egress from the Project during normal business hours upon reasonable advance Notice and for any purposes reasonably connected with this Agreement.
- 3.9 Operating Procedures. No later than forty-five (45) days before the Initial Delivery Date, and from time to time as reasonably determined necessary by the Parties, the Parties shall meet to address how each Party will perform its respective obligations under this Agreement, including, but not limited to: (1) the method of day-to-day communications; (2) key personnel lists

for each Party; (3) procedures for Forced Outage and Planned Outage reporting; (4) procedures for delivery forecasting; (5) procedures for record keeping; (6) Scheduling procedures; and (7) invoicing and payment procedures; <u>provided</u>, that the failure to agree on these operating procedures will not relieve the Parties of their respective obligations under this Agreement, and any failure to agree shall be resolved in accordance with the dispute resolution procedures in Article 12.

#### ARTICLE FOUR: COMPENSATION; MONTHLY PAYMENTS

- 4.1 *[For Dispatchable Product Only:* Capacity Payment.
  - (a) <u>Capacity Price</u>.

Contract Year	Capacity Price (\$/KW)
1	( )

(b) <u>Monthly Capacity Payment</u>. For each month, Buyer shall pay Seller for the Product the amount calculated as follows ("Monthly Capacity Payment"):

$$MCP = CC \times CP \times SF \times AAF$$

Where:

*MCP* is the Monthly Capacity Payment expressed in Dollars for such month of the Delivery Term.

CC is the Contract Capacity, expressed in kW, rounded to the nearest 100 kW.

*CP* is the Capacity Price expressed in Dollars per kW-year, for the applicable month.

SF is the Monthly Shaping Factor for the applicable month, as set forth in the following table:

Month	<b>Monthly Shaping Factor (%)</b>	
January	6.7	
February	5.0	
March	5.0	
April	5.8	
May	6.3	

Month	<b>Monthly Shaping Factor (%)</b>
June	8.3
July	15.8
August	17.5
September	11.7
October	5.8
November	5.8
December	6.3

AAF is the Availability Adjustment Factor for each month, expressed as a three-place decimal and determined as follows:

- (a) If the Equivalent Availability Factor ("EAF") for the month is less than or equal to 0.980, then the AAF equals EAF / 0.98.
- (b) If the EAF for the month is greater than 0.980 but less than 0.990, then the AAF equals 1.0.
- (c) If the EAF for the month is greater than or equal to 0.990, then the AAF equals EAF / 0.99.

EAF is the Equivalent Availability Factor for each month determined as follows:

$$EAF = (PH - (EDH - EEDH)) / PH$$

Where:

*PH* is the number of period hours;

EDH is the number of equivalent derate hours calculated as the sum, for each derate, of the product of the number of hours of full or partial derate hours times the size of the reduction from the Contract Capacity divided by the Contract Capacity for the month. For the purposes of this calculation, a derate includes all outages for any reason, including without limitation, Forced Outages, Force Majeure events, Dispatch Down Periods, Planned Outages, Buyer's failure to perform, and other times when any portion of the Contract Capacity is not available and when the Delivered Energy of the Project is less than the amount of Energy dispatched by Buyer; and

*EEDH* is the number of equivalent excused derate hours solely due to either Dispatch Down Periods or Buyer's

failure to perform (and for no other reason), calculated as the sum, for each excused derate, of the product of the number of hours of full or partial derate hours times the size of the reduction from the Contract Capacity, divided by the Contract Capacity for the month.

# 4.2 <u>Energy Payment</u>.

(a) <u>Energy Price</u>. The price for the Bundled Green Energy and Deemed Bundled Green Energy that is delivered to Buyer in each Contract Year shall be as follows ("Energy Price"):

Contract Year	Energy Price (\$/MWh)	

provided, however, that:

(i) if Seller delivers Bundled Green Energy in the aggregate for any CAISO settlement interval (not to exceed one hour) in excess of the product of the Contract Capacity times the length of such settlement interval, expressed in hours, then the Energy Price for such excess Bundled Green Energy in such settlement interval shall be reduced to zero dollars (\$0), and if the real time Locational Marginal Price for the Delivery Point during such settlement interval is less than zero dollars (\$0), Seller shall pay to Buyer an amount equal to the absolute value of such negative Locational Marginal Price times such excess Bundled Green Energy;

(ii) if Seller delivers Bundled Green Energy plus Deemed Bundled Green Energy in the aggregate for any Contract Year during the Delivery Term in excess of one hundred fifteen percent (115%) of the annual Contract Quantity, then the Energy Price for such excess Bundled Green Energy and Deemed Bundled Green Energy, if any, for each settlement interval for the remainder of that Contract Year shall be reduced to zero dollars (\$0) and Seller shall be entitled to the CAISO revenues (including positive Locational Marginal Prices, credits and other payments) in respect of such excess amounts and Seller shall be responsible for the CAISO costs (including negative Locational Marginal Prices, penalties, sanctions and other charges) in respect of such excess amounts.

(iii)	Reserved
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## (b) Reserved

(c) <u>Monthly Energy Payment</u>. For each month, Buyer shall pay Seller for the Product an amount equal to the sum for each hour in the month of the product of the Energy Price times the sum of Bundled Green Energy plus Deemed Bundled Green Energy in each hour ("Monthly Energy Payment").

Monthly Energy Payment =  $\sum$  Energy Price x (Bundled Green Energy + Deemed Bundled Green Energy)

For any period where the quantity of Bundled Green Energy is less than the quantity of Delivered Energy and the quantity of Bundled Green Energy cannot practicably be determined for each settlement interval during such period (for example, where WREGIS does not specify in which settlement intervals Renewable Energy Credits were delivered or not delivered), then the quantity of Bundled Green Energy for any settlement interval during the entire period shall be equal to the product of the quantity of Delivered Energy for a settlement interval multiplied by the quotient of the aggregate quantity of Green Attributes that are delivered to Buyer during such entire period divided by the aggregate quantity of Delivered Energy that is delivered to Buyer during such entire period.

4.3 <u>Imbalance Energy</u>. Seller shall use commercially reasonable efforts to deliver Energy in accordance with the Scheduled Energy. Buyer and Seller recognize that from time to time the amount of Delivered Energy will deviate from the amount of Scheduled Energy. When

Delivered Energy minus Scheduled Energy is a positive amount, it shall be considered "Positive Imbalance Energy;" when Delivered Energy minus Scheduled Energy is a negative amount, the absolute (i.e., positive) value of that amount shall be considered the "Negative Imbalance Energy." [When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program: Seller shall be responsible for settlement of Imbalance Energy with the CAISO and all fees, liabilities, assessments, or similar charges assessed by the CAISO in connection with Imbalance Energy.] Buyer and Seller shall cooperate to minimize charges and imbalances associated with Imbalance Energy to the extent possible. Seller shall promptly notify Buyer as soon as possible of any material imbalance that is occurring or has occurred. [When SDG&E is SC for the Project and Project is in the VER Forecasting Program: Buyer shall receive all Green Attributes for the Positive Imbalance Energy in all settlement intervals.]

# [When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program, include the following two paragraphs:

- (a) <u>Positive Imbalance Energy (Over Deliveries)</u>. In the event that Delivered Energy for any CAISO settlement interval is equal to or greater than Scheduled Energy for such CAISO settlement interval, Buyer shall have no payment obligation in respect of the Positive Imbalance Energy. Buyer shall receive all Green Attributes for the Positive Imbalance Energy in such CAISO settlement interval regardless as to whether it was sold into the CAISO. Seller shall be entitled to all payments or credits from the CAISO to Seller's SC and Seller shall make all payments to the CAISO in respect of the Positive Imbalance Energy.
- (b) <u>Negative Imbalance Energy (Under Deliveries)</u>. In the event that Delivered Energy for any CAISO settlement interval is less than Scheduled Energy for such CAISO settlement interval, Buyer shall have no payment obligation in respect of the Negative Imbalance Energy. Seller shall make all payments to the CAISO and Seller shall be entitled to all payments or credits from the CAISO to Seller's SC in respect of the Negative Imbalance Energy required under the CAISO Tariff.]
- 4.4 <u>Additional Compensation</u>. To the extent not otherwise provided for in this Agreement, in the event that Seller is compensated by a third party for any Product produced by the Project, including, but not limited to, compensation for Resource Adequacy or Green Attributes, Seller shall remit all such compensation directly to Buyer; provided that for avoidance of doubt, nothing herein precludes Seller from retaining credits related to transmission upgrades funded by Seller.

#### ARTICLE FIVE: EVENTS OF DEFAULT; FORCE MAJEURE

#### 5.1 Events of Default. An "Event of Default" shall mean,

- (a) with respect to a Party that is subject to the Event of Default the occurrence of any of the following:
- (i) the failure by such Party to make, when due, any payment required pursuant to this Agreement and such failure is not remedied within five (5) Business Days after Notice thereof:

- (ii) any representation or warranty made by such Party herein is false or misleading in any material respect when made or when deemed made or repeated, and such default is not remedied within thirty (30) days after Notice thereof;
- (iii) the failure by such Party to perform any material covenant or obligation set forth in this Agreement (except to the extent constituting a separate Event of Default, and except for such Party's unexcused failure to perform its obligations to Schedule, deliver, or receive (as applicable), or sell or purchase (as applicable) the Product for a period or a series of periods that is cumulatively no longer than thirty (30) days, the exclusive remedy for which is provided in Section 3.1(h)) and such failure is not remedied within thirty (30) days after Notice thereof;
- (iv) the failure by such Party to perform its obligations to Schedule, deliver or receive (as applicable), or sell or purchase (as applicable) the Product for a period or a series of periods that is cumulatively longer than thirty (30) days and such failure is not excused as described in Section 3.1(h);

#### (v) such Party becomes Bankrupt;

- (vi) such Party assigns this Agreement or any of its rights hereunder other than in compliance with Section 13.2; or
- (vii) such Party consolidates or amalgamates with, or merges with or into, or transfers all or substantially all of its assets to, another entity and, at the time of such consolidation, amalgamation, merger or transfer, the resulting, surviving or transferee entity fails to assume all the obligations of such Party under this Agreement to which it or its predecessor was a party by operation of Law or pursuant to an agreement reasonably satisfactory to the other Party.
- (b) with respect to Seller as the Defaulting Party, the occurrence of any of the following:
- (i) if at any time, Seller delivers or attempts to deliver to the Delivery Point for sale under this Agreement Energy that was not generated by the Project [If the Project is located outside of the CAISO: other than Imbalance Energy from the Transmission Provider];
- (ii) **For Baseload, Peaking, Dispatchable Product:** the Contract Capacity at the Initial Delivery Date or at any other time pursuant to a Capacity Test is less than MW and such default is not remedied within thirty (30) days after Notice thereof;
- (iii) **[For Baseload, Peaking, As-Available Product:** the failure by Seller to achieve the Guaranteed Energy Production requirement during any Performance Measurement Period as set forth in Section 3.1(e) of this Agreement] **[For Dispatchable Product:** the Default Availability Factor of the Project is less than [ ] percent for any rolling twelve (12) consecutive calendar month period];
- (iv) failure by Seller to satisfy the collateral requirements pursuant to Sections 8.3 or 8.4 of this Agreement;

- (v) with respect to any Guaranty provided for the benefit of Buyer, the failure by Seller to provide for the benefit of Buyer either (1) cash, (2) a replacement Guaranty from a different Guarantor meeting the criteria set forth in the definition of Guarantor, or (3) a replacement Letter of Credit from an issuer meeting the criteria set forth in the definition of Letter of Credit, in each case, in the amount required hereunder within five (5) Business Days after Seller receives Notice of the occurrence of any of the following events:
  - (A) if any representation or warranty made by the Guarantor in connection with this Agreement is false or misleading in any material respect when made or when deemed made or repeated, and such default is not remedied within thirty (30) days after Notice thereof;
  - (B) the failure of the Guarantor to make any payment required or to perform any other material covenant or obligation in any Guaranty;
    - (C) the Guarantor becomes Bankrupt;
  - (D) the Guarantor shall fail to meet the criteria for an acceptable Guarantor as set forth in the definition of Guarantor;
  - (E) the failure of the Guaranty to be in full force and effect (other than in accordance with its terms) prior to the indefeasible satisfaction of all obligations of Seller hereunder; or
  - (F) the Guarantor shall repudiate, disaffirm, disclaim, or reject, in whole or in part, or challenge the validity of any Guaranty; or
- (vi) with respect to any outstanding Letter of Credit provided for the benefit of Buyer that is not then required under this Agreement to be canceled or returned, the failure by Seller to provide for the benefit of Buyer either (1) cash, or (2) a substitute Letter of Credit from a different issuer meeting the criteria set forth in the definition of Letter of Credit, in each case, in the amount required hereunder within five (5) Business Days after Seller receives Notice of the occurrence of any of the following events:
  - (A) the issuer of the outstanding Letter of Credit shall fail to maintain a Credit Rating of at least "A-" by S&P or "A3" by Moody's;
    - (B) the issuer of such Letter of Credit becomes Bankrupt;
  - (C) the issuer of the outstanding Letter of Credit shall fail to comply with or perform its obligations under such Letter of Credit and such failure shall be continuing after the lapse of any applicable grace period permitted under such Letter of Credit;
  - (D) the issuer of the outstanding Letter of Credit shall fail to honor a properly documented request to draw on such Letter of Credit;

- (E) the issuer of the outstanding Letter of Credit shall disaffirm, disclaim, repudiate or reject, in whole or in part, or challenge the validity of, such Letter of Credit;
- (F) such Letter of Credit fails or ceases to be in full force and effect at any time; or
- (G) Seller shall fail to renew or cause the renewal of each outstanding Letter of Credit on a timely basis as provided in the relevant Letter of Credit and as provided in accordance with this Agreement, and in no event less than sixty (60) days prior to the expiration of the outstanding Letter of Credit.
- Remedies; Declaration of Early Termination Date. If an Event of Default with respect to a Defaulting Party shall have occurred and be continuing, the other Party ("Non-Defaulting Party") shall have the right (a) to send Notice, designating a day, no earlier than the day such Notice is deemed to be received and no later than twenty (20) days after such Notice is deemed to be received, as an early termination date of this Agreement ("Early Termination Date") that terminates this Agreement and ends the Delivery Term effective as of the Early Termination Date, to accelerate all amounts owing between the Parties, and to collect liquidated damages calculated in accordance with Section 5.3 below ("Termination Payment"); (b) to withhold any payments due to the Defaulting Party under this Agreement; (c) to suspend performance; and (d) to exercise any other right or remedy available at law or in equity, including specific performance or injunctive relief, except to the extent such remedies are expressly limited under this Agreement.
- <u>Termination Payment</u>. The Termination Payment for a Terminated Transaction shall be the aggregate of all Settlement Amounts plus any and all other amounts due to the Non-Defaulting Party netted into a single amount. Except in the case of a termination of this Agreement by the Non-Defaulting Party solely as a result of an Event of Default by the Defaulting Party under Section 5.1(a)(iv) [Bankruptcy], if the Non-Defaulting Party's aggregate Gains exceed its aggregate Losses and Costs, if any, resulting from the termination of this Agreement, the Termination Payment shall be zero. The Non-Defaulting Party shall calculate, in a commercially reasonable manner, a Settlement Amount for the Terminated Transaction as of the Early Termination Date. Third parties supplying information for purposes of the calculation of Gains or Losses may include, without limitation, dealers in the relevant markets, end-users of the relevant product, information vendors and other sources of market information. The Settlement Amount shall not include consequential, incidental, punitive, exemplary, indirect or business interruption damages; provided, however, that any lost Capacity Attributes and Green Attributes shall be deemed direct damages covered by this Agreement. Without prejudice to the Non-Defaulting Party's duty to mitigate, the Non-Defaulting Party shall not have to enter into replacement transactions to establish a Settlement Amount. Each Party agrees and acknowledges that (a) the actual damages that the Non-Defaulting Party would incur in connection with a Terminated Transaction would be difficult or impossible to predict with certainty, (b) the Termination Payment described in this section is a reasonable and appropriate approximation of such damages, and (c) the Termination Payment described in this section is the exclusive remedy of the Non-Defaulting Party in connection with a Terminated Transaction but shall not otherwise act to limit any of the

Non-Defaulting Party's rights or remedies if the Non-Defaulting Party does not elect a Terminated Transaction as its remedy for an Event of Default by the Defaulting Party.

- 5.4 <u>Notice of Payment of Termination Payment</u>. As soon as practicable after a Terminated Transaction, Notice shall be given by the Non-Defaulting Party to the Defaulting Party of the amount of the Termination Payment and whether the Termination Payment is due to the Non-Defaulting Party. The Notice shall include a written statement explaining in reasonable detail the calculation of such amount and the sources for such calculation. The Termination Payment shall be made to the Non-Defaulting Party, as applicable, within ten (10) Business Days after such Notice is effective.
- 5.5 <u>Disputes With Respect to Termination Payment</u>. If the Defaulting Party disputes the Non-Defaulting Party's calculation of the Termination Payment, in whole or in part, the Defaulting Party shall, within five (5) Business Days of receipt of the Non-Defaulting Party's calculation of the Termination Payment, provide to the Non-Defaulting Party a detailed written explanation of the basis for such dispute. Disputes regarding the Termination Payment shall be determined in accordance with Article 12.
- 5.6 <u>Rights And Remedies Are Cumulative</u>. Except where liquidated damages are provided as the exclusive remedy, the rights and remedies of a Party pursuant to this Article 5 shall be cumulative and in addition to the rights of the Parties otherwise provided in this Agreement.
- 5.7 <u>Mitigation</u>. Any Non-Defaulting Party shall be obligated to mitigate its Costs, losses and damages resulting from any Event of Default of the other Party under this Agreement.
- Force Majeure. To the extent either Party is prevented by Force Majeure from carrying out, in whole or part, its obligations under this Agreement and such Party gives Notice and details of the Force Majeure to the other Party as detailed below, then, the Party impacted by Force Majeure shall be excused from the performance of its obligations to the extent impacted. Within forty-eight (48) hours of commencement of an event of Force Majeure, the non-performing Party shall provide the other Party with oral notice of the event of Force Majeure, and within two (2) weeks of the commencement of an event of Force Majeure the non-performing Party shall provide the other Party with Notice in the form of a letter describing in detail the particulars of the occurrence giving rise to the Force Majeure claim. Seller shall not substitute Product from any other source for the output of the Project during an outage resulting from Force Majeure. The suspension of performance due to a claim of Force Majeure must be of no greater scope and of no longer duration than is required by the Force Majeure. Buyer shall not be required to make any payments for any Product that Seller fails to Schedule, deliver or provide as a result of Force Majeure during the term of a Force Majeure. This Agreement may be terminated by the nonclaiming Party with no further obligation to the Force-Majeure-claiming Party if a Force Majeure event prevents the performance of a material portion of the obligations of the Force-Majeureclaiming Party hereunder and such Force Majeure event is not resolved within eight (8) months after the commencement of such Force Majeure event.

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#### ARTICLE SIX: PAYMENT

- Billing and Payment. On or about the tenth (10<sup>th</sup>) day of each month beginning 6.1 with the second month of the first Contract Year and every month thereafter, and continuing through and including the first month following the end of the Delivery Term, Seller shall provide to Buyer (a) records of metered data, including CAISO metering and transaction data sufficient to document and verify the generation of Product by the Project for any CAISO settlement time interval during the preceding months, (b) access to any records, including invoices or settlement data from CAISO, necessary to verify the invoice; and (c) an invoice, in a format reasonably specified by Buyer, covering the services provided in the preceding month determined in accordance with Article 4 (which may include preceding months), with all component charges and unit prices identified and all calculations used to arrive at invoiced amounts described in reasonable detail. Buyer shall pay the undisputed amount of such invoices on or before thirty (30) days after receipt of the invoice. If either the invoice date or payment date is not a Business Day, then such invoice or payment shall be provided on the next following Business Day. Each Party will make payments by electronic funds transfer, or by other mutually agreeable method(s), to the account designated by the other Party. Any undisputed amounts not paid by the due date will be deemed delinquent and will accrue interest at the Default Rate, such interest to be calculated from and including the due date to but excluding the date the delinquent amount is paid in full. Invoices should be compiled in the form of an Excel spreadsheet or other electronic form acceptable to Buyer and may be sent by facsimile or e-mail.
- 6.2 Disputes and Adjustments of Invoices. A Party may, in good faith, dispute the correctness of any invoice or any adjustment to an invoice, rendered under this Agreement or adjust any invoice for any arithmetic or computational error within twelve (12) months of the date the invoice, or adjustment to an invoice, was rendered. In the event an invoice or portion thereof, or any other claim or adjustment arising hereunder, is disputed, payment of the undisputed portion of the invoice shall be required to be made when due. Any invoice dispute or invoice adjustment shall be in writing and shall state the basis for the dispute or adjustment. Payment of the disputed amount shall not be required until the dispute is resolved. Upon resolution of the dispute, any required payment shall be made within two (2) Business Days of such resolution along with interest accrued at the Default Rate from and including the original due date to but excluding the date paid. Inadvertent overpayments shall be returned upon request or deducted by the Party receiving such overpayment from subsequent payments, with interest accrued at the Interest Rate from and including the date of such overpayment to but excluding the date repaid or deducted by the Party receiving such overpayment. Any dispute with respect to an invoice is waived if the other Party is not notified in accordance with this Section 6.2 within twelve (12) months after the invoice is rendered or subsequently adjusted, except to the extent any misinformation was from a third party not Affiliated with any Party and such third party corrects its information after the twelve-month period. If an invoice is not rendered within twelve (12) months after the close of the month during which performance occurred, the right to payment for such performance is waived.
- 6.3 <u>Netting of Payments</u>. The Parties hereby agree that they shall discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts owed by each Party to the other Party for the purchase and sale of Product during the monthly billing period under this Agreement, including any related damages calculated

pursuant to Section 3.1(h), interest, and payments or credits, shall be netted so that only the excess amount remaining due shall be paid by the Party who owes it.

## ARTICLE SEVEN: LIMITATIONS

Limitation of Remedies, Liability and Damages. EXCEPT AS SET FORTH HEREIN, THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY AND ALL IMPLIED WARRANTIES ARE THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND DISCLAIMED. MEASURES OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF. FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY, THE OBLIGOR'S LIABILITY SHALL BE LIMITED AS SET FORTH IN SUCH PROVISION AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED, UNLESS THE PROVISION IN QUESTION PROVIDES THAT THE EXPRESS REMEDIES ARE IN ADDITION TO OTHER REMEDIES THAT MAY BE AVAILABLE. EXCEPT FOR A PARTY'S INDEMNITY OBLIGATION IN RESPECT OF THIRD PARTY CLAIMS OR AS OTHERWISE EXPRESSLY HEREIN PROVIDED, NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE. UNLESS EXPRESSLY HEREIN PROVIDED, AND SUBJECT TO THE PROVISIONS OF SECTION 11.2 (INDEMNITIES), IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE. TO THE EXTENT ANY DAMAGES REQUIRED TO BE PAID HEREUNDER ARE LIQUIDATED, THE PARTIES ACKNOWLEDGE THAT THE DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE, OR OTHERWISE OBTAINING AN ADEQUATE REMEDY IS INCONVENIENT AND THE DAMAGES CALCULATED HEREUNDER CONSTITUTE A REASONABLE APPROXIMATION OF THE HARM OR LOSS.

## ARTICLE EIGHT: CREDIT AND COLLATERAL REQUIREMENTS

8.1 Buyer Financial Information. If requested by Seller, Buyer shall deliver (i) within one hundred twenty (120) days following the end of each fiscal year, a copy of Buyer's annual report containing audited consolidated financial statements for such fiscal year and (ii) within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of Buyer's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases the statements shall be for the most recent accounting period and prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as Buyer diligently pursues the preparation, certification and delivery of the statements. Buyer shall be deemed to have satisfied such delivery requirement if the applicable report is publicly available.

- 8.2 <u>Seller Financial Information</u>. Seller shall provide the following financial information:
- (a) If requested by Buyer, Seller shall deliver (i) within one hundred twenty (120) days following the end of each fiscal year, a copy of Seller's annual report containing audited consolidated financial statements for such fiscal year and (ii) within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of Seller's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases the statements shall be for the most recent accounting period and prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as Seller diligently pursues the preparation, certification and delivery of the statements.
- by Buyer, Seller shall deliver (i) within one hundred twenty (120) days following the end of each fiscal year, a copy of Guarantor's annual report containing audited consolidated financial statements for such fiscal year and (ii) within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of Guarantor's quarterly report containing unaudited consolidated financial statements for such fiscal quarter certified by an officer of Guarantor. In all cases the statements shall be for the most recent accounting period and prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as Guarantor diligently pursues the preparation, certification and delivery of the statements. Seller shall be deemed to have satisfied such delivery requirement if the applicable report is publicly available.]
- Grant of Security Interest/Remedies. To secure its obligations under this Agreement and to the extent Seller delivers Performance Assurance hereunder, Seller hereby grants to Buyer a present and continuing first priority security interest in, and lien on (and right of setoff against), and assignment of, all cash collateral and cash equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, Buyer, and each Party agrees to take such action as the other Party reasonably requires in order to perfect the Buyer's first-priority security interest in, and lien on (and right of setoff against), such collateral and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence and during the continuation of an Event of Default by Seller or an Early Termination Date as a result thereof, Buyer may do any one or more of the following: (i) exercise any of the rights and remedies of a secured party with respect to all Performance Assurance, including any such rights and remedies under Law then in effect; (ii) exercise its rights of setoff against such collateral and any and all proceeds resulting therefrom or from the liquidation thereof; (iii) draw on any outstanding Letter of Credit issued for its benefit; and (iv) liquidate all or any portion of any Performance Assurance then held by or for the benefit of Buyer free from any claim or right of any nature whatsoever of Seller, including any equity or right of purchase or redemption by Seller. Buyer shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce the Seller's obligations under the Agreement (Seller remaining liable for any amounts owing to Buyer after such application),

subject to Buyer's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

## 8.4 <u>Performance Assurance</u>.

(a) [For Agreements with Delivery Terms greater than two years: CPUC
Approval Security, Pre-Delivery Term Security, Delivery Term Security. To secure its
obligations under this Agreement Seller agrees to deliver to Buyer and maintain in full force and effect for the period set forth below, the following Performance Assurance:
(i) [For Agreements with Delivery Terms greater than two years: CPUC Approval Security, in the amount of [] in the form of cash or a Letter of Credit [or a Guaranty] from the Execution Date of this Agreement until the return date specified in Section 8.4(b)(i) below;]
(ii) Pre-Delivery Term Security in the amount of [] in the form of cash or a Letter of Credit [or a Guaranty] from <i>[For Agreements with Delivery Terms greater than two years:</i> the CPUC Approval Date] <i>[For all other Agreements:</i> the Execution Date of this Agreement] until the return date specified in Section 8.4(b)[(i)/(ii)] below;
(iii) Delivery Term Security in the amount of [] in the form of cash or a Letter of Credit [or a Guaranty] from the commencement of the Delivery Term until the return date specified in Section 8.4(b)[(ii)/(iii)] below.
Except as set forth in Section 2.2 as it pertains to [For Agreements with Delivery Terms greater than two years: the CPUC Approval Security and] the Pre-Delivery Term Security, any such Performance Assurance shall not be deemed a limitation of damages.
(b) <u>Return of Performance Assurance</u> .
(i) <b>[For Agreements with Delivery Terms greater than two years:</b> Buyer shall promptly return to Seller the unused portion of the CPUC Approval Security after the earlier of (A) the date on which Seller has delivered the Pre-Delivery Term Security or the Delivery Term Security, as applicable, and (B) termination of the Agreement under Section 2.4(b)(ii).
(ii) Buyer shall promptly return to Seller the unused portion of the Pre-Delivery Term Security after the earlier of (A) the date on which Seller has delivered the Delivery Term Security, (B) termination of the Agreement under Section 2.4(b)(ii), and (C) the date that all payment obligations of the Seller arising under this Agreement, including compensation for penalties, Termination Payment, indemnification payments or other damages are paid in full (whether directly or indirectly such as through set-off or netting) after an Early Termination Date.
(iii) Buyer shall promptly return to Seller the unused portion of the Delivery Term Security after the following have occurred: (A) the Delivery Term has expired or terminated early; and (B) all payment obligations of the Seller arising under this Agreement, including compensation for penalties, Termination Payment, indemnification payments or other damages are paid in full (whether directly or indirectly such as through set-off or netting).

- 8.5 <u>Interest on Cash.</u> If Seller provides Performance Assurance in the form of cash, Buyer shall pay interest on such cash held as *[For Agreements with Delivery Terms greater than two years:* CPUC Approval Security,] Pre-Delivery Term Security, or Delivery Term Security, as applicable, at the Interest Rate. On or before each Interest Payment Date, Buyer shall transfer the sum of all accrued and unpaid Interest Amounts due to Seller for such security in the form of cash by wire transfer to the bank account specified under "Wire Transfer" in the Cover Sheet.
- 8.6 Costs of Letter of Credit. If Seller provides Performance Assurance in the form of a Letter of Credit, in all cases, the reasonable costs and expenses of (including but not limited to the reasonable costs, expenses, and attorneys' fees, including reasonably allocated costs of inhouse counsel of the Buyer) establishing, renewing, substituting, canceling, increasing and reducing the amount of (as the case may be) one or more Letters of Credit shall be borne by the Seller.

### ARTICLE NINE: GOVERNMENTAL CHARGES

- 9.1 <u>Cooperation</u>. Each Party shall use reasonable efforts to implement the provisions of and to administer this Agreement in accordance with the intent of the Parties to minimize all taxes, so long as neither Party is materially adversely affected by such efforts.
- 9.2 Governmental Charges. Seller shall pay or cause to be paid all taxes imposed by any governmental authority ("Governmental Charges") on or with respect to the Product or the transaction under this Agreement arising prior to and at the Delivery Point, including, but not limited to, ad valorem taxes and other taxes attributable to the Project, land, land rights or interests in land for the Project. Buyer shall pay or cause to be paid all Governmental Charges on or with respect to the Product or the transaction under this Agreement from the Delivery Point. In the event Seller is required by Law or regulation to remit or pay Governmental Charges which are Buyer's responsibility hereunder, Buyer shall promptly reimburse Seller for such Governmental Charges. If Buyer is required by Law or regulation to remit or pay Governmental Charges which are Seller's responsibility hereunder, Buyer may deduct such amounts from payments to Seller with respect to payments under the Agreement; if Buyer elects not to deduct such amounts from Seller's payments, Seller shall promptly reimburse Buyer for such amounts upon request. Nothing shall obligate or cause a Party to pay or be liable to pay any Governmental Charges for which it is exempt under the Law.

## ARTICLE TEN: REPRESENTATIONS AND WARRANTIES; COVENANTS

- 10.1 <u>General Representations and Warranties</u>. On the Execution Date and the CP Satisfaction Date, each Party represents and warrants to the other Party that:
- (a) it is duly organized, validly existing and in good standing under the Laws of the jurisdiction of its formation;
- (b) it has all Governmental Approvals necessary for it to perform its obligations under this Agreement, except for as of the Execution Date (i) CPUC Approval in the case of Buyer, and (ii) all Governmental Approvals necessary to construct, operate and maintain the Project and related interconnection facilities in the case of Seller:

- (c) the execution, delivery and performance of this Agreement is within its powers, have been duly authorized by all necessary action and do not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any applicable Law;
- (d) this Agreement and each other document executed and delivered in accordance with this Agreement constitutes a legally valid and binding obligation enforceable against it in accordance with its terms, subject to any Equitable Defenses;
- (e) it is not Bankrupt and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming Bankrupt;
- (f) except as may be set forth in its reports filed with the SEC, there is not pending or, to its knowledge, threatened against it or any of its Affiliates any legal proceedings that could materially adversely affect its ability to perform its obligations under this Agreement;
- (g) no Event of Default with respect to it has occurred and is continuing and no such event or circumstance would occur as a result of its entering into or performing its obligations under this Agreement;
- (h) it is acting for its own account, has made its own independent decision to enter into this Agreement and as to whether this Agreement is appropriate or proper for it based upon its own judgment, is not relying upon the advice or recommendations of the other Party in so doing, and is capable of assessing the merits of and understanding, and understands and accepts, the terms, conditions and risks of this Agreement; and
- (i) it has entered into this Agreement in connection with the conduct of its business and it has the capacity or the ability to make or take delivery of the Product as provided in this Agreement.

## 10.2 Seller Representations and Warranties.

- (a) Seller, and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement that: (i) the Project qualifies and is certified by the CEC as an Eligible Renewable Energy Resource ("ERR") as such term is defined in Public Utilities Code Section 399.12 or Section 399.16; and (ii) the Project's output delivered to Buyer qualifies under the requirements of the California Renewables Portfolio Standard. To the extent a change in Law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in Law.
- (b) Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement the Renewable Energy Credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in CPUC Decision 08-08-028, and as may be modified by subsequent decision of the CPUC or by subsequent legislation. To the extent a change in Law occurs after execution of this Agreement that causes this representation and warranty to be

# materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in Law.

(c) [Include other appropriate representations, warranties, and covenants to satisfy the California RPS content category requirements.]

### 10.3 Covenants.

- (a) <u>General Covenants</u>. Each Party covenants that throughout the Delivery Term:
- (i) it shall continue to be duly organized, validly existing and in good standing under the Laws of the jurisdiction of its formation;
- (ii) it shall maintain (or obtain from time to time as required, including through renewal, as applicable) all Governmental Approvals necessary for it to legally perform its obligations under this Agreement;
- (iii) it shall perform its obligations under this Agreement in a manner that does not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any applicable Law; and
- (iv) it shall not dispute its status as a "forward contract merchant" within the meaning of the United States Bankruptcy Code.

## (b) Seller Covenants.

- (i) Seller covenants throughout the Delivery Term that it, or its permitted successors or assigns, shall maintain ownership of a fee, easement, long-term leasehold interest, or other similar asset ownership interest in the Project.
- (ii) Seller covenants throughout the Delivery Term that it shall maintain market based rate authority from the FERC to sell Product to Buyer under the terms of this Agreement.
- (iii) If at any time during the Delivery Term, Seller's representations and warranties set forth in Section 10.2 become materially false or misleading, Seller covenants that it shall provide prompt Notice to Buyer describing such default along with a description of its efforts to cure such default.
- (iv) [Include other appropriate representations, warranties, and covenants to satisfy the California RPS content category requirements.]
- (v) [Include other appropriate covenants regarding the use of contractors that may be diverse business enterprises.]

## ARTICLE ELEVEN: TITLE, RISK OF LOSS, INDEMNITIES

11.1 <u>Title and Risk of Loss</u>. Title to and risk of loss related to the Product shall transfer from Seller to Buyer at the Delivery Point. Seller warrants that it will deliver to Buyer the Product free and clear of all liens, security interests, claims and encumbrances or any interest therein or thereto by any person arising prior to or at the Delivery Point.

## 11.2 Indemnities.

- Indemnity by Seller. Seller shall release, indemnify, defend, and hold harmless Buyer, its Affiliates, and its and their directors, officers, employees, agents, and representatives against and from any and all actions, suits, losses, costs, damages, injuries, liabilities, claims, demands, penalties and interest, including reasonable costs and attorneys' fees ("Claims") resulting from, or arising out of or in any way connected with (i) any event, circumstance, act, or incident relating to the Product delivered under this Agreement up to and at the Delivery Point, (ii) Seller's development, permitting, construction, ownership, operation and/or maintenance of the Project, (iii) the failure by Seller or the failure of the Project to comply with applicable Law, including without limitation the CAISO Tariff, (iv) any Governmental Charges for which Seller is responsible hereunder, or (v) any liens, security interests, encumbrances, or other adverse claims against the Product delivered hereunder made by, under, or through Seller, in all cases including, without limitation, any Claim for or on account of injury, bodily or otherwise, to or death of persons, or for damage to or destruction of property belonging to Buyer, Seller, or others, excepting only such Claim to the extent caused by the willful misconduct or gross negligence of Buyer, its Affiliates, and its and their directors, officers, employees, agents, and representatives.
- (b) <u>Indemnity by Buyer</u>. Buyer shall release, indemnify, defend, and hold harmless Seller, its Affiliates, and its and their directors, officers, employees, agents, and representatives against and from any and all Claims resulting from, or arising out of or in any way connected with (i) any event, circumstance, act, or incident relating to the Product received by Buyer under this Agreement after the Delivery Point, (ii) the failure by Buyer to comply with applicable Law, including without limitation the CAISO Tariff, or (iii) any Governmental Charges for which Buyer is responsible hereunder, in all cases including, without limitation, any Claim for or on account of injury, bodily or otherwise, to or death of persons, or for damage to or destruction of property belonging to Buyer, Seller, or others, excepting only such Claim to the extent caused by the willful misconduct or gross negligence of Seller, its Affiliates, and its and their directors, officers, employees, agents, and representatives.

#### ARTICLE TWELVE: DISPUTE RESOLUTION

12.1 <u>Intent of the Parties</u>. Except as provided in the next sentence, the sole procedure to resolve any claim arising out of or relating to this Agreement or any related agreement is the dispute resolution procedure set forth in this Article 12. Either Party may seek a preliminary injunction or other provisional judicial remedy if such action is necessary to prevent irreparable harm or preserve the status quo, in which case both Parties nonetheless will continue to pursue resolution of the dispute by means of the dispute resolution procedure set forth in this Article 12.

## 12.2 Management Negotiations.

- (a) The Parties will attempt in good faith to resolve any controversy or claim arising out of or relating to this Agreement or any related agreements by prompt negotiations between each Party's authorized representative designated in writing as a representative of the Party (each a "Manager"). Either Manager may, by Notice to the other Party, request a meeting to initiate negotiations to be held within ten (10) Business Days of the other Party's receipt of such request, at a mutually agreed time and place (either in person or telephonically). If the matter is not resolved within fifteen (15) Business Days of their first meeting ("Initial Negotiation End Date"), the Managers shall refer the matter to the designated senior officers of their respective companies that have authority to settle the dispute ("Executive(s)"). Within five (5) Business Days of the Initial Negotiation End Date ("Referral Date"), each Party shall provide one another Notice confirming the referral and identifying the name and title of the Executive who will represent the Party.
- (b) Within five (5) Business Days of the Referral Date, the Executives shall establish a mutually acceptable location and date, which date shall not be greater than thirty (30) days from the Referral Date, to meet. After the initial meeting date, the Executives shall meet, as often as they reasonably deem necessary, to exchange relevant information and to attempt to resolve the dispute.
- (c) All communication and writing exchanged between the Parties in connection with these negotiations shall be confidential and shall not be used or referred to in any subsequent binding adjudicatory process between the Parties.
- (d) If the matter is not resolved within forty-five (45) days of the Referral Date, or if the Party receiving the Notice to meet, pursuant to Section 12.2(a) above, refuses or does not meet within the ten (10) Business Day period specified in Section 12.2(a) above, either Party may initiate arbitration of the controversy or claim by providing Notice of a demand for binding arbitration at any time thereafter.
- 12.3 <u>Arbitration</u>. Any dispute that cannot be resolved by management negotiations as set forth in Section 12.2 above shall be resolved through binding arbitration by a retired judge or justice from the [AAA][JAMS] panel conducted in San Diego, California, administered by and in accordance with [AAA's Commercial Arbitration Rules] [JAMS [Comprehensive][Streamlined] Arbitration Rules and Procedures] ("Arbitration").
- (a) Any arbitrator shall have no affiliation with, financial or other interest in, or prior employment with either Party and shall be knowledgeable in the field of the dispute. The Parties shall cooperate with one another in selecting the arbitrator within sixty (60) days after Notice of the demand for arbitration. If, notwithstanding their good faith efforts, the Parties are unable to agree upon a mutually-acceptable arbitrator, the arbitrator shall be appointed as provided for in [AAA's Commercial Arbitration Rules] [JAMS [Comprehensive][Streamlined] Arbitration Rules and Procedures].
- (b) At the request of a Party, the arbitrator shall have the discretion to order depositions of witnesses to the extent the arbitrator deems such discovery relevant and appropriate.

Depositions shall be limited to a maximum of three (3) per Party and shall be held within thirty (30) days of the making of a request. Additional depositions may be scheduled only with the permission of the arbitrator, and for good cause shown. Each deposition shall be limited to a maximum of six (6) hours duration unless otherwise permitted by the arbitrator for good cause shown. All objections are reserved for the Arbitration hearing except for objections based on privilege and proprietary and confidential information. The arbitrator shall also have discretion to order the Parties to exchange relevant documents. The arbitrator shall also have discretion to order the Parties to answer interrogatories, upon good cause shown.

- (c) The arbitrator shall have no authority to award punitive or exemplary damages or any other damages other than direct and actual damages and the other remedies contemplated by this Agreement.
- (d) The arbitrator shall prepare in writing and provide to the Parties an award including factual findings and the reasons on which their decision is based.
- (e) The arbitrator's award shall be made within nine (9) months of the filing of the notice of intention to arbitrate (demand) and the arbitrator shall agree to comply with this schedule before accepting appointment. However, this time limit may be extended by agreement of the Parties or by the arbitrator, if necessary.
  - (f) Judgment on the award may be entered in any court having jurisdiction.
- (g) The prevailing Party in this dispute resolution process is entitled to recover its costs. Until such award is made, however, the Parties shall share equally in paying the costs of the Arbitration.
- (h) The arbitrator shall have the authority to grant dispositive motions prior to the commencement of or following the completion of discovery if the arbitrator concludes that there is no material issue of fact pending before the arbitrator.
- (i) The existence, content, and results of any Arbitration hereunder is confidential information that is subject to the provisions of Section 13.1.

## ARTICLE THIRTEEN: MISCELLANEOUS

## 13.1 Confidentiality.

(a) General. Neither Party shall disclose the non-public terms or conditions of this Agreement or any transaction hereunder to a third party, other than (i) the Party's Affiliates and its and their officers, directors, employees, lenders, counsel, accountants or advisors who have a need to know such information and have agreed to keep such terms confidential, (ii) for disclosure to the Buyer's Procurement Review Group, as defined in CPUC Decision (D) 02-08-071, subject to a confidentiality agreement, (iii) to the CPUC under seal for purposes of review, (iv) disclosure of terms specified in and pursuant to Section 13.1(b) of this Agreement; (v) in order to comply with any applicable Law, regulation, or any exchange, control area or CAISO rule, or order issued by a court or entity with competent jurisdiction over the disclosing Party ("Disclosing Party"), other than to those entities set forth in subsection (vi); or (vi) in order to comply with any

applicable regulation, rule, or order of the CPUC, CEC, or the Federal Energy Regulatory Commission. In connection with requests made pursuant to clause (v) of this Section 13.1(a) ("Disclosure Order") each Party shall, to the extent practicable, use reasonable efforts to prevent or limit such disclosure. After using such reasonable efforts, the Disclosing Party shall not be: (i) prohibited from complying with a Disclosure Order or (ii) liable to the other Party for monetary or other damages incurred in connection with the disclosure of the confidential information. Except as provided in the preceding sentence, the Parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with, this confidentiality obligation.

- (b) <u>RPS Confidentiality</u>. Notwithstanding Section 13.1(a) of this Agreement, at any time on or after the date on which the Buyer makes its filing seeking CPUC Approval for this Agreement, either Party shall be permitted to disclose the following terms with respect to this Agreement: Party names, resource type, Delivery Term, Project location, Contract Capacity, anticipated Initial Delivery Date, Contract Quantity, and Delivery Point.
- (c) <u>Publicity</u>. Except as otherwise agreed to in this Section 13.1 above, no announcement, publicity, advertising, press release, promotional or marketing materials regarding the arrangement contemplated under this Agreement, including the existence hereof, shall be made by either Party without the prior written approval of the other Party which approval shall not be unreasonably withheld or delayed.
- Assignment. Neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent shall not be unreasonably withheld. For purposes hereof, the transfer of more than fifty percent (50%) of the equity ownership or voting interest of Seller (or any parent entity holding directly or indirectly at least fifty percent (50%) of the equity ownership or voting interest of Seller if such interest constitutes more than twenty percent (20%) of the fair market value of the assets of such parent entity) to a person that is not an Affiliate of Seller shall also constitute an assignment of this Agreement requiring Buyer's prior written consent. Notwithstanding the foregoing, either Party may, without the consent of the other Party (and without relieving itself from liability hereunder), transfer, sell, pledge, encumber, or assign this Agreement or the accounts, revenues or proceeds hereof to its financing providers. In connection with any financing or refinancing of the Project by Seller, Buyer shall in good faith negotiate and agree upon a consent to collateral assignment of this Agreement in a form that is commercially reasonable and customary in the industry. Notwithstanding the foregoing, Buyer may, without the consent of the Seller (and therefor relieving itself from liability hereunder), assign this Agreement to a Qualified Assignee. Qualified Assignee shall mean: any community choice aggregation entity or joint powers authority formed in the State of California or any legal entity that is established by statute or by the CPUC to serve load as a central procurement entity. Notwithstanding the foregoing, Buyer may, without the consent of the Seller (and thereby relieving itself from liability hereunder), assign this Agreement to a Qualified Assignee. Qualified Assignee shall mean: any community choice aggregation entity or joint powers authority formed in the State of California or any legal entity that is established by statute or by the CPUC to serve load as a central procurement entity. Any assignment in violation of this Section 25.5 shall be null and void.
- 13.3 <u>Audit</u>. Each Party has the right, at its sole expense and during normal working hours, to examine the records of the other Party to the extent reasonably necessary to verify the

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accuracy of any statement, charge or computation made pursuant to this Agreement including amounts of Delivered Energy or Scheduled Energy. If any such examination reveals any inaccuracy in any statement, the necessary adjustments in such statement and the payments thereof will be made promptly and shall bear interest calculated at the Default Rate from the date the overpayment or underpayment was made until paid; provided, however, that no adjustment for any statement or payment will be made unless objection to the accuracy thereof was made prior to the lapse of twelve (12) months from the rendition thereof, and thereafter any objection shall be deemed waived except to the extent any misinformation was from a third party not Affiliated with any Party and such third party corrects its information after such twelve-month period. In addition, Buyer shall have the right, at its sole expense and during normal working hours, to examine the records of Seller to the extent reasonably necessary to verify Seller's compliance with its representations and warranties set forth in Section 10.2.

- 13.4 <u>Sarbanes-Oxley and SEC Requirements</u>. The Parties acknowledge that accounting principles generally accepted in the United States of America ("GAAP") and SEC rules require Buyer and its independent auditor to evaluate whether Buyer must consolidate Seller's financial information (but not financial information of Seller's constituent members unless deemed to be included in the entity under GAAP). Buyer may require access to information concerning Seller's organizational structure, including its debt/capital structure, as well as to personnel of Seller to determine if consolidated financial reporting is required. If Buyer and its independent auditor determine at any time that the Buyer must consolidate the Seller's financial statements to comply with GAAP and/or SEC rules regarding consolidated financial reporting, then:
- (a) Buyer shall require from Seller and Seller agrees to provide to Buyer the following during the Term of this Agreement:
- (i) Unaudited financial statements of the Seller prepared in accordance with GAAP as of the end of the quarterly period. The financial statements should include quarter to date and year to date information and are to be provided within fifteen (15) calendar days of the end of the applicable reporting period (or the Business Day thereafter);
- (ii) Unaudited financial schedules of the Seller, as deemed necessary for Buyer to prepare its consolidated financial statements and related footnotes to the financial statements in accordance with GAAP as of the end of the quarterly period. The financial schedules should include quarter to date and year to date information underlying the financial statements and footnotes to the financial statements and are to be provided within fifteen (15) calendar days of the end of the applicable reporting period (or the Business Day thereafter);
- (iii) Access to Seller's accounting and other records, and accounting and management personnel as reasonably determined by both Buyer and Seller so that (A) Buyer's independent auditor or its internal auditors may conduct financial audits (in accordance with the standards of the Public Company Accounting Oversight Board (United States)) as well as internal control audits (in accordance with Section 404 of the Sarbanes-Oxley Act of 2002) and (B) Buyer can be provided analytical information, as needed, to enable Buyer to meet its SEC filing requirements, including but not limited to those under Item 2 on Form 10-Q, and Item 7 on Form 10-K, "Management's Discussion and Analysis of Financial Condition and Results of Operations;"

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- (iv) Upon the request of Buyer, such certifications by a duly authorized representative(s) of Seller as may be reasonably requested by Buyer (which certifications shall presumptively be reasonable if the certifications are substantially identical to those required by Buyer or its parent of business units of Buyer or its parent); and
- (v) As reasonably requested by Buyer, such information or schedules, similar to the items noted in clauses (i)-(iv) above, to enable Buyer to prepare consolidated financial statements and schedules as may be required for Buyer to obtain financing or to prepare other reports as required by regulatory bodies, such as the SEC, for periods other than as of the end of the monthly, quarterly or year to date periods then ended.
- (b) If Buyer (i) in its sole discretion determines that the financial statements of the Seller would be considered material to the Buyer or its parent company's financial statements, financial condition, or internal controls over financial reporting, and (ii) reasonably determines Seller's internal controls over financial reporting are not operating effectively or have resulted in a control deficiency, Buyer shall provide Notice to Seller. Upon receipt of such Notice, Seller will have thirty (30) days to remediate any deficiency in Seller's internal controls over financial reporting identified by the Buyer, which Buyer and Buyer's independent auditor deem to be necessary to ensure Seller's internal controls over financial reporting are adequate, during or as a result of the audits permitted under Section 13.4(a)(iii) or any other provision of this Agreement.
- (c) As soon as possible, but in no event later than two (2) Business Days following any occurrence that would affect Seller in any material way, Seller shall provide to Buyer a Notice describing such occurrence in sufficient detail to permit the Buyer to file a report on SEC Form 8-K. Such occurrences include all reportable events on the then current Form 8-K that applies to Buyer and its parent company at such time, including but not limited to a material acquisition or disposition of assets, a material direct financial obligation or off-balance sheet financing arrangement, material litigation, and the execution or termination of a material contract.
- (d) Any information provided to Buyer shall be treated as confidential except that it may be disclosed in connection with the preparation, review, certification and publication of Buyer's financial statements.
- (e) Seller shall notify Buyer at any time during the term of this Agreement of any services provided or proposed to be provided to Seller by Buyer's independent auditor. Seller, and any of Seller's Affiliates, are prohibited from engaging Buyer's independent auditor for any services or in any consulting agreement without the express written consent of partner in charge of Buyer's independent audit.
- 13.5 <u>Entire Agreement</u>. This Agreement, together with the Cover Sheet and each and every appendix, attachment, amendment, schedule and any written supplements hereto, if any, between the Parties constitutes the entire agreement between the Parties.
- 13.6 <u>Recording</u>. Unless a Party expressly objects to a Recording (defined below) at the beginning of a telephone conversation, each Party consents to the creation of a tape or electronic recording ("Recording") of all telephone conversations between the Parties to this Agreement, and that any such Recordings will be retained in confidence, secured from improper access, and may

be submitted in evidence in any proceeding or action relating to this Agreement. Each Party waives any further notice of such monitoring or recording, and agrees to notify its officers and employees of such monitoring or recording and to obtain any necessary consent of such officers and employees.

- 13.7 <u>Forward Contract</u>. The Parties acknowledge and agree that this Agreement constitutes a "forward contract" within the meaning of the United States Bankruptcy Code.
- 13.8 Governing Law. THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. TO THE EXTENT ENFORCEABLE AT SUCH TIME, EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY LITIGATION ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT.
- 13.9 <u>Attorneys' Fees</u>. In any proceeding brought to enforce this Agreement or because of the breach by any Party of any covenant or condition herein contained, the prevailing Party shall be entitled to reasonable attorneys' fees (including reasonably allocated fees of in-house counsel) in addition to court costs and any and all other costs recoverable in said action.
- 13.10 General. This Agreement shall be considered for all purposes as prepared through the joint efforts of the Parties and shall not be construed against one Party or the other as a result of the preparation, substitution, submission or other event of negotiation, drafting or execution hereof. Except to the extent provided for herein, no amendment or modification to this Agreement shall be enforceable unless reduced to writing and executed by both Parties. This Agreement shall not impart any rights enforceable by any third party (other than a permitted successor or assignee bound to this Agreement). Waiver by a Party of any default by the other Party shall not be construed as a waiver of any other default. The headings used herein are for convenience and reference purposes only. This Agreement shall be binding on each Party's successors and permitted assigns.
- 13.11 <u>Severability</u>. If any provision in this Agreement is determined to be invalid, void or unenforceable by any court having jurisdiction, such determination shall not invalidate, void, or make unenforceable any other provision, agreement or covenant of this Agreement and the Parties shall use their best efforts to modify this Agreement to give effect to the original intention of the Parties.
- 13.12 <u>Counterparts</u>. This Agreement may be executed in one or more counterparts each of which shall be deemed an original and all of which shall be deemed one and the same Agreement. Delivery of an executed counterpart of this Agreement by fax will be deemed as effective as delivery of an originally executed counterpart. Any Party delivering an executed counterpart of this Agreement by facsimile will also deliver an originally executed counterpart, but the failure of any Party to deliver an originally executed counterpart of this Agreement will not affect the validity or effectiveness of this Agreement.

13.13 Notices. Whenever this Agreement requires or permits delivery of a "Notice" (or requires a Party to "notify"), the Party with such right or obligation shall provide a written communication delivered personally, by a nationally recognized overnight courier, mailed by registered or certified mail (return receipt requested), or by facsimile or e-mail (if facsimile numbers or e-mail addresses are identified on the Cover Sheet or by subsequent Notice) to the receiving Party at the addresses identified on the Cover Sheet (or at such other addresses as such receiving Party shall identify by like Notice to the other Party); provided, however, that notices of Outages or other Scheduling or dispatch information or requests, shall be provided in accordance with the terms set forth in the relevant section of this Agreement. Invoices may be sent by facsimile or e-mail (if facsimile numbers or e-mail addresses are identified on the Cover Sheet or by subsequent Notice). A Notice delivered in accordance herewith shall be deemed received (i) on the date of delivery, if hand delivered, (ii) two Business Days after the date of sending, if sent by a nationally recognized overnight courier, or at such earlier time as is confirmed by the receiving Party, (iii) three Business Days after the date of mailing, if mailed by registered or certified mail, return receipt requested, or at such earlier time as is confirmed by the receiving Party, and (iv) on the Business Day on which such Notice was transmitted by facsimile transmission or e-mail (where permitted); provided, however, that a Notice delivered in accordance with this Section but received on any day other than a Business Day or after 5:00 p.m. in the place of receipt will be deemed received on the next Business Day. Each Party shall provide Notice to the other Party of the persons authorized to nominate and/or agree to a Schedule or Dispatch Order for the delivery or acceptance of the Product or make other Notices on behalf of such Party and specify the scope of their individual authority and responsibilities, and may change its designation of such persons from time to time in its sole discretion by providing Notice.

13.14 Mobile Sierra. Notwithstanding any provision of this Agreement, neither Party shall seek, nor shall they support any third party in seeking, to prospectively or retroactively revise the rates, terms or conditions of service of this Agreement through application or complaint to FERC pursuant to the provisions of Section 205, 206 or 306 of the Federal Power Act, or any other provisions of the Federal Power Act, absent prior written agreement of the Parties. Further, absent the prior agreement in writing by both Parties, the standard of review for changes to the rates, terms or conditions of service of this Agreement proposed by a Party, a non-Party or the FERC acting *sua sponte* shall be the "public interest" application of the "just and reasonable" standard of review set forth in United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 US 332 (1956) and Federal Power Commission v. Sierra Pacific Power Co., 350 US 348 (1956) and clarified by Morgan Stanley Capital Group Inc. v. Pub. Util. Dist. No. 1 of Snohomish County, 128 S. Ct. 2733 (2008).

IN WITNESS WHE date first above writ	REOF, the Parties have caused this Agreen.	eement to be duly executed as of the
a [	COMPAN	GO GAS & ELECTRIC IY ia corporation
By: Name: Title:		ame:

## Exhibit A

## PROJECT DESCRIPTION INCLUDING DESCRIPTION OF SITE

PROJECT DESCRIPTION
Project name
Project Site name:
Project physical address:
Total number of electric generating units at the Project (committed and not committed to Buyer)
Technology Type:
Substation:
The term "Site" as defined in the Agreement means the following parcel description upon which the Project is located:
Latitude and Longitude of Project:
The nameplate capacity of the Project is
The electric generating units utilized as generation assets as part of the Project are described below:

[INSERT MAP]

## Exhibit B

## FORM OF LETTER OF CREDIT

[DATE]

То:	San Diego Gas & Electric Company 555 W. Fifth Street Mail Code: ML 18A3 Los Angeles, CA 90013
Re:	Our Irrevocable Standby Letter of Credit No In the Amount of US
Ladies	s and Gentlemen:
Beneficaddre of US	ereby open our irrevocable standby Letter of Credit Number in favor of [name of iciary] ("Beneficiary"), by order and for account of [name of Applicant] ("Applicant"), ass of Applicant], available at sight upon demand at our counters, at [location] for an amount [amount spelled out and xx/100 U.S. Dollars] against presentation one of llowing documents:
1-	Statement signed by a person purported to be an authorized representative of Beneficiary stating that: "[name of Applicant] ("Applicant") is in default under the Power Purchase Agreement between Beneficiary and Applicant dated or under any transaction contemplated thereby (whether by failure to perform or pay any obligation thereunder or by occurrence of a "default", "event of default" or similar term as defined in such agreement, any other agreement between Beneficiary and Applicant, or otherwise). The amount due to Beneficiary is U.S. \$"
or	
2-	Statement signed by a person purported to be an authorized representative of Beneficiary stating that: "[name of Applicant] ("Applicant") has forfeited all or part of its <i>[For Agreements with Delivery Terms greater than two years:</i> CPUC Approval Security or] Pre-Delivery Term Security as set forth and defined in the Power Purchase Agreement between Beneficiary and Applicant dated The amount due to Beneficiary, whether or not a default has occurred, is U.S. \$"
or	
3-	Statement signed by a person purported to be an authorized representative of Beneficiary stating that: "as of the close of business on [insert date, which is less than

60 days prior to the expiration date of the Letter of Credit] you have provided written

notice to us indicating your el	lection not t	o permit ext	tension of	f this Le	tter of	Credit
beyond its current expiry date.	The amount	due to Bene	ficiary, w	hether o	r not a c	lefault
has occurred, is U.S. \$	.,,					

## **Special Conditions:**

- All costs and banking charges pertaining to this Letter of Credit are for the account of Applicant.
- Partial and multiple drawings are permitted.
- Fax of Document 1 or 2 or 3 above is acceptable. Notwithstanding anything to the contrary herein, any drawing hereunder may be requested by transmitting the requisite documents as described above to us by facsimile at \_\_\_\_\_\_ or such other number as specified from time to time by us. The facsimile transmittal shall be deemed delivered when received. It is understood that drawings made by facsimile transmittal are deemed to be the operative instrument without the need of originally signed documents.

This Letter of Credit expires on \_\_\_\_\_ at our counters.

We hereby engage with Beneficiary that upon presentation of a document as specified under and in compliance with the terms of this Letter of Credit, this Letter of Credit will be duly honored in the amount stated in Document 1, 2, or 3 above. If a document is so presented by 1:00 pm on any New York banking day, we will honor the same in full in immediately available New York funds on that day and, if so presented after 1:00 pm on a New York banking day, we will honor the same in full in immediately available New York funds by noon on the following New York banking day.

It is a condition of this Letter of Credit that it shall be deemed automatically extended without an amendment for a one year period beginning on the present expiry date hereof and upon each anniversary of such date, unless at least ninety (90) days prior to any such expiry date we have sent you written notice by regular and registered mail or courier service that we elect not to permit this Letter of Credit to be so extended beyond, and will expire on its then current expiry date. No presentation made under this Letter of Credit after such expiry date will be honored.

We agree that if this Letter of Credit would otherwise expire during, or within 30 days after, an interruption of our business caused by an act of god, riot, civil commotion, insurrection, act of terrorism, war or any other cause beyond our control or by any strike or lockout, then this Letter of Credit shall expire on the 30th day following the day on which we resume our business after the cause of such interruption has been removed or eliminated and any drawing on this Letter of Credit which could properly have been made but for such interruption shall be permitted during such extended period.

This Letter of Credit is subject to the Uniform Customs and Practice for Documentary Credits (2007 Revision) International Chamber of Commerce, Publication No. 600 ("UCP"), except to the extent that the terms hereof are inconsistent with the provisions of the UCP, including but not limited to Articles 14(b) and 36 of the UCP, in which case the terms of this Letter of Credit shall

govern. Matters not covered by the UCP shall be governed and construed in accordance with the laws of the State of California.
[Name of Bank]
Authorized Signature(s)

### **Exhibit C**

#### FORM OF GUARANTY

#### **GUARANTY**

In consideration of San Diego Gas & Electric Company ("Company") entering into a power purchase agreement with [NAME OF COUNTERPARTY] (hereinafter referred to as "Applicant"), [NAME OF GUARANTOR], a [TYPE OF LEGAL ENTITY i.e. California corporation], (hereinafter referred to as "Guarantor") agrees with Company as follows:

- 1. The term "Obligations" shall mean all obligations, liabilities and indebtedness of any kind whatsoever arising in connection with \_\_\_\_\_\_ or arising in connection with or under any security agreement or other agreement between the Company and Applicant. The amount of Obligations existing from time to time shall be calculated after giving effect to all contractual netting arrangements between Applicant and the Company.
- 2. Guarantor unconditionally and irrevocably guarantees to Company the full, prompt and faithful payment and performance when due of each and all of the Obligations.
- 3. This is a continuing guaranty relating to the Obligations. Guarantor acknowledges that there is a continuing consideration to Guarantor for this Guaranty and therefore Guarantor waives and relinquishes the right to revoke or terminate this Guaranty as provided in California Civil Code Section 2815.
- 4. Any of the Obligations may be amended, modified, waived, or increased (whether or not beyond any dollar limitation hereunder), further agreements may be entered into between Company and Applicant, Company may provide additional goods or services or credit to Applicant or increase or decrease the dollar value of such goods, services or credit, and further obligations (including, without limitation, the provision or pledging of security to Company for any obligation), indebtedness and liabilities may be entered into or incurred from time to time by Applicant and without further authorization from or notice to Guarantor and no such action shall terminate, release, impair, reduce, discharge, diminish or in any way affect any of the obligations of Guarantor hereunder or any security furnished by Guarantor or give Guarantor any recourse or defense against Company. Company need not inquire into the power of Applicant or the authority of its officers, directors, partners or agents acting or purporting to act in its behalf.
- 5. With respect to all Obligations, this is a guaranty of payment and performance and not of collection, and Guarantor waives and agrees not to assert or take advantage of:
- (a) any right to require Company to proceed against Applicant or any other person or to resort to, proceed against or exhaust any security held by it at any time or to pursue any other remedy in its power before proceeding against any Guarantor;
- (b) demand, presentment, protest and notice of any kind including, without limiting the generality of the foregoing, notice of nonperformance, protest, dishonor and acceptance of this Guaranty, notice under Section 9611 of the California Commercial Code, and

notice of the existence, creation or incurring of any new or additional indebtedness or obligation or of any action or non-action on the part of Applicant, Company, a guarantor under this or any other instrument, or creditor of Applicant or any other person whomsoever, in connection with any of the Obligations or any collateral for any of the Obligations or in connection with any of the Obligations; and

- any suretyship defenses and suretyship rights of every nature otherwise available under California law and the laws of any other state or jurisdiction, including, without limitation, all defenses and rights arising under Sections 2787 through 2855 of the California Civil Code (the "Suretyship Provisions") and any successor provisions to those Sections. Without limiting the generality of the foregoing, Guarantor acknowledges his, her or its understanding that the Suretyship Provisions provide various partial or complete defenses to the recovery by Company from Guarantor and/or grant Guarantor rights the enforcement of which could reduce or eliminate entirely Guarantor's liability hereunder to Company. Among the defenses and rights contained in the Suretyship Provisions are the following: (1) Section 2809 of the Civil Code, which provides, in part, that the obligation of a surety must not be either larger in amount or in other respects more burdensome than that of the principal; (2) Section 2810 of the Civil Code, which provides, in part, that a surety is not liable if for any reason other than the mere personal disability of the principal there is no liability upon the part of the principal at the time of execution of the contract, or the liability of the principal thereafter ceases; (3) Section 2819 of the Civil Code, which provides, in part, that a surety is exonerated if the creditor alters the original obligation of the principal without the consent of the surety; (4) Section 2845 of the Civil Code, which provides, in part, that a surety is exonerated to the extent that the creditor fails to proceed against the principal, or to pursue any other remedy in the creditor's power which the surety cannot pursue and which would lighten the surety's burden; (5) Section 2846 of the Civil Code, which provides that a surety may compel his principal to perform the obligation when due; (6) Section 2847 of the Civil Code, which provides, in part, that if a surety satisfies the principal obligation, or any part thereof, the principal is obligated to reimburse the surety for the amounts paid by the surety; (7) Section 2848 of the Civil Code, which provides, in part, that a surety, upon satisfaction of the obligation of the principal is entitled to enforce remedies which the creditor then has against the principal; (8) Section 2849 of the Civil Code, which provides, in part, that a surety is entitled to the benefit of security held by the creditor for the performance of the principal obligation held by the creditor; (9) Section 2850 of the Civil Code, which provides, in part, that whenever the property of a surety is hypothecated with property of the principal, the surety is entitled to have the property of the principal first applied to the discharge of the obligation; and (10) Section 2822 of the Civil Code, which provides, in part, for a right to have the principal designate the portion of any obligation to be satisfied by the surety in the event that the principal provides partial satisfaction of such obligation.
- 6. All existing and future indebtedness of Applicant to Guarantor ("Intercompany Obligations") is subordinated to all Obligations hereby guaranteed. All of Guarantor's right, title and interest in and to the Intercompany Obligations and rights to receive any payments of the Intercompany Obligations are hereby granted and assigned to Company as continuing security for the Obligations hereby guaranteed, and, in the event of any default in the payment of any of the Obligations when due and until the Obligations guaranteed hereby have been paid in full (a) at the Company's request, Applicant shall forthwith pay to the Company all or any part of such Intercompany Obligations and any capital which Guarantor is entitled to withdraw until all of the

Obligations guaranteed hereby have been paid in full, and (b) Guarantor shall pay to Company immediately any payments of such Intercompany Obligations received by Guarantor.

- 7. Guarantor agrees to pay all attorneys' fees (including without limitation, reasonably allocated fees of in-house counsel) and all other costs and expenses which may be incurred by Company in the enforcement of this Guaranty against Guarantor.
- 8. This Guaranty is not assignable by Guarantor without Company's consent. This Guaranty shall inure to the benefit of Company and its successors and assigns, including the assignees of any Obligations, and bind the heirs, executors, administrators, successors and permitted (if any) assigns of Guarantor. This Guaranty is assignable by Company with respect to all or any portion of the Obligations, and when so assigned Guarantor shall be liable to the assignees under this Guaranty without in any manner affecting the liability of Guarantor hereunder with respect to any Obligations retained by Company.
- 9. This Guaranty shall be governed by and construed in accordance with the laws of the State of California, without reference to its choice of law provisions. Guarantor hereby irrevocably and unconditionally agrees that any legal action or proceeding against Guarantor or any of Guarantor's property with respect to this Guaranty may be brought in the courts of the State of California in the County of San Diego or the courts of the United States in the County of San Diego, as Company may elect, and by executing and delivering this Guaranty Guarantor hereby submits to and accepts with regard to any such action or proceeding for himself, herself or itself and in respect of his, her or its property, generally, irrevocably and unconditionally, the jurisdiction of the above mentioned courts. Guarantor hereby irrevocably appoints the Secretary of State of the State of California as his, her or its agent for service of process in any suit or proceeding if the Guarantor is located outside the State of California at the time of service or cannot reasonably be located by Company. The foregoing, however, shall not limit the right of Company as it may elect to bring any legal action or proceeding or to obtain execution of judgment in any other appropriate jurisdiction including but not limited to any other jurisdiction in which Guarantor or his, her or its property is located.
- 10. Except as provided in any other written agreement now or at any time hereafter in force between Company and Guarantor, this Guaranty shall constitute the entire agreement of Guarantor with Company with respect to the subject matter hereof and no representation, understanding, promise or condition concerning the subject matter hereof shall be binding upon Company unless expressed herein.
- 11. All notices, demands, requests and other communications required or permitted hereunder shall be in writing and shall be given personally, by certified or registered mail, postage prepaid, return receipt requested, or by reliable overnight courier to the address of the Company set forth below (or to such new address as Company may designate hereafter in a notice to Guarantor) in the case of a communication to the Company and to the address appearing next to Guarantor's signature on this Guaranty (or to such new address as Guarantor may designate hereafter in a notice to Company) in the case of a communication to Guarantor. Any notice served personally shall be deemed delivered upon receipt, and any notice served by certified or registered mail or by reliable overnight courier shall be deemed delivered on the date of receipt as shown on

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the addressee's registry or certification of receipt or on the date receipt is refused as shown on the records or manifest of the U.S. Postal Service or such courier.

San Diego Gas & Electric Company 555 W. Fifth Street Attn: Major Markets 18A3, Credit Manager

Los Angeles, CA 90013 Fax No.: (213) 244-8316

- 12. Until all of the Obligations guaranteed hereby have been satisfied in full, Guarantor shall have no right of subrogation or reimbursement from the Applicant which Guarantor may have as a result of any payment by Guarantor under this Guaranty, and waives any right to enforce any remedy which Company now has or may hereafter have against the Applicant as a result of such payment by Guarantor under this Guaranty and waives any right under section 2849 of the California Civil Code and any other benefit of or right to participate in any security now or hereafter held by Company.
- 13. All amounts payable by Guarantor hereunder shall be paid without set-off or counterclaim and without any deduction or withholding whatsoever unless and to the extent that Guarantor shall be prohibited by law from doing so, in which case Guarantor shall pay to Company such additional amount as shall be necessary to ensure that Company receives the full amount it would have received if no such deduction or withholding had been made.
- 14. If any portion of this Guaranty is held to be unenforceable by a court of competent jurisdiction, the remainder of this Guaranty shall remain in full force and effect.

IN WITNESS WHEREOF, the undersigned Guarantor has executed this Guaranty on [MONTH AND DAY], [YEAR].

GUARANTOR: [NAME OF GUARANTOR]	
Signature	
Title	
Printed Name of Person Signing t	for

Guarantor's Address	
City, State, Zip	
Guarantor's Phone No.	

## Exhibit D

## **OUTAGE NOTIFICATION FORM**

Request Type:		Previous Notifica	ation (if applicable)
New Scheduled Maintenan	ce Outage	Date Sent:	mm/dd/yyyy
		Time Sent:	hh:mm
		_	
			(For times, use 24hr format)
Address:		_ Today's Date: _ Current Time:	
		_ Current time	
		- Outage Start Date:	mm/dd/yyyy
Contact Name:		O Ot Ti	
Phone Number:		- -	
Email		_ Outage End Date: _	
Hammada Nama		Outage End Time: _	hh:mm
Iternate Name:		Outago Duration:	
ernate Number: Email:		_ Outage Duration: _ MW Available Dui	ring Outage:
		MW Unavailable Dui	
		1	RMR Unit? Yes/No
System (Select One			Safety Environmental
Boiler     Codes 0010-1999	Generator Codes 4500-4899	Regulatory	, Safety, Environmental
Boiler	Generator	Regulatory	7720
Boiler     Codes 0010-1999     Balance of Plant	Generator Codes 4500-4899 Pollution Control E	Regulatory Codes 9504-9 quipment Others	7720
Boiler     Codes 0010-1999     Balance of Plant     Codes 3110-3999     Steam Turbine	Generator Codes 4500-4899 Pollution Control E Codes 8000-8835 External	Regulatory Codes 9504-9 quipment Others	7720
Boiler     Codes 0010-1999     Balance of Plant     Codes 3110-3999     Steam Turbine     Codes 4000-4499	Generator Codes 4500-4899 Pollution Control E Codes 8000-8835 External	Regulatory Codes 9504-9 quipment Others Codes 9900-9	7720
Boiler     Codes 0010-1999     Balance of Plant     Codes 3110-3999     Steam Turbine     Codes 4000-4499	Generator Codes 4500-4899 Pollution Control E Codes 8000-8835 External Codes 9000-9040	Regulatory Codes 9504-9 quipment Others Codes 9900-9	7720
Boiler Codes 0010-1999  Balance of Plant Codes 3110-3999  Steam Turbine Codes 4000-4499  Cause Code Rai	Generator Codes 4500-4899 Pollution Control E Codes 8000-8835 External Codes 9000-9040	Regulatory Codes 9504-9 quipment Others Codes 9900-9	7720
Boiler Codes 0010-1999  Balance of Plant Codes 3110-3999  Steam Turbine Codes 4000-4499  Cause Code Rai  (Select One)	Generator Codes 4500-4899 Pollution Control E Codes 8000-8835 External Codes 9000-9040	Regulatory Codes 9504-9 quipment Others Codes 9900-9	7720
Boiler     Codes 0010-1999     Balance of Plant     Codes 3110-3999     Steam Turbine     Codes 4000-4499  Cause Code Rai  (Select One)	Generator Codes 4500-4899 Pollution Control E Codes 8000-8835 External Codes 9000-9040  nges / Affected C	Regulatory Codes 9504-9 quipment Others Codes 9900-9	7720
Boiler Codes 0010-1999  Balance of Plant Codes 3110-3999  Steam Turbine Codes 4000-4499  Cause Code Rai  (Select One)	Generator Codes 4500-4899 Pollution Control E Codes 8000-8835 External Codes 9000-9040  nges / Affected C	Regulatory Codes 9504-9 quipment Others Codes 9900-9	7720
Boiler Codes 0010-1999  Balance of Plant Codes 3110-3999  Steam Turbine Codes 4000-4499  Cause Code Rai  (Select One)	Generator Codes 4500-4899 Pollution Control E Codes 8000-8835 External Codes 9000-9040  nges / Affected C	Regulatory Codes 9504-9 quipment Others Codes 9900-9	7720

#### Exhibit E

## PROJECT OPERATING RESTRICTIONS

Operational characteristics of the Project must be equal to or greater than the resource flexibility reflected in the resource Master File, as such term is defined in the CAISO Tariff. Buyer may request that CAISO modify the Master File for the Project to reflect the findings of a CAISO audit of the Project and to ensure that the information provided by Seller is true and accurate. Seller agrees to coordinate with Buyer and any third party Scheduling Coordinator to ensure all information provided to the CAISO regarding the operational and technical constraints in the Master File for the Project are accurate and are actually based on physical characteristics of the resource. The Parties agree to make reasonable modifications to this Exhibit E to modify existing operating restrictions or add additional operating restrictions that may be necessary to address changes in the CAISO Tariff or applicable Law applicable to the Products provided from this Project.

Nameplate capac	city of the Project:MW
Minimum opera	ting capacity:MW
Advance notifica	ation required for a Dispatch Notice:
Ramp Rate:	MW/minute

# APPENDIX 7 RPS Plus Storage

## RENEWABLE ENERGY AND ENERGY STORAGE POWER PURCHASE AGREEMENT

between

SAN DIEGO GAS & ELECTRIC COMPANY

as Buyer

and

[INSERT NAME OF SELLER]

as Seller

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	•	
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7.5	Additional Required Testing	
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# RENEWABLE ENERGY AND ENERGY STORAGE POWER PURCHASE AGREEMENT

This Renewable Energy and	d Energy Storage Power P	Purchase Agreement ("Agreement") is
made and entered into as of this _	day of	, 20 (" <u>Effective Date</u> ") by
SAN DIEGO GAS & ELECTRIC	COMPANY, a Californ	nia corporation ("Buyer"), and [insert
name and type of legal entity] ("	Seller"). Buyer and Sel	ler are sometimes referred to herein
individually as a "Party" and jointly	y as the "Parties." All cap	pitalized terms used in this Agreement
are used with the meanings ascribe	d to them in Appendix A	to this Agreement.

### **RECITALS**

This Agreement is made with reference to the following facts, among others:

- A. Buyer is an investor-owned electric utility serving customers in San Diego and Orange counties.
- B. Seller will develop, permit, design, procure, construct, commission, test, own, operate and maintain [insert description of facility] as more particularly described in <u>Appendix 1.2.1</u> attached hereto ("<u>Project</u>"), consisting of a [insert type: ] (the "<u>Generation Facility</u>") and [insert number] [insert type: ] (the "<u>Energy Storage System</u>"). The Project shall be constructed on an approximately [insert number] acre parcel of land (the "<u>Site</u>") located adjacent to [insert name of substation] in [enter city and state]. [NOTE to Bidders: conforming changes needed if multiple Energy Storage Systems.]
- C. Seller wishes to sell and deliver to Buyer, and Buyer wishes to purchase from Seller, Contract Capacity, Energy (including Bundled Green Energy), Resource Adequacy Benefits, Green Attributes, Ancillary Services, and all other products that may be produced from the Project, under the conditions set forth in this Agreement.

#### **AGREEMENT**

NOW, THEREFORE, for good and valuable consideration, the Parties agree as follows.

## ARTICLE 1 PURCHASE AND SALE OF PRODUCT

1.1 Product. During the Delivery Period, Seller shall operate the Project and make available, deliver, and sell the Product therefrom to Buyer, and Buyer shall purchase and receive the Product therefrom, subject to the terms and conditions of this Agreement, including the Operating Restrictions set forth in Appendix 1.1. Seller represents and warrants that it will deliver the Product to Buyer free and clear of all liens, security interests, claims and encumbrances. Seller shall not substitute or purchase any Contract Capacity, Capacity Attributes, Delivered Energy (including Bundled Green Energy), Green Attributes, Charging Energy, Ancillary Services or Resource Adequacy Benefits from any other resource or the market for delivery or charging hereunder, nor shall Seller sell, assign or otherwise transfer any Product, or any portion thereof, to any third party other than to Buyer or CAISO pursuant to this Agreement.

- **1.1.1** Capacity. During the Term, Buyer shall have the exclusive right to the Contract Capacity and Capacity Attributes of the Generation Facility and Energy Storage System.
- (a) <u>Generation Facility Capacity</u>. The Contract Capacity of the Generation Facility shall be the full generation capacity (in  $MW_{AC}$  or  $MW_{DC}$ ) of the Generation Facility as specified in the Commercial Operation Certificate, which Contract Capacity shall be no greater than the Expected Generation Facility Contract Capacity and no less than [ MW<sub>DC</sub>].
- (b) Energy Storage System Capacity. As of the Effective Date, the Contract Capacity of the Energy Storage System shall equal the Expected Energy Storage Contract Capacity of the Energy Storage System, without adjustment for temperature, pressure, humidity or other adjustment factors. The actual Contract Capacity of the Energy Storage System will be determined upon the completion of the Commercial Operation Test and Contract Capacity Test for the Energy Storage System and each year of the Delivery Period in accordance with the testing procedures of Sections 7.2 and 7.3, as applicable. Such tests will demonstrate the Contract Capacity of the Energy Storage System, which shall be the Contract Capacity for the Energy Storage System from and after such tests; provided, that in no event shall the Contract Capacity of the Energy Storage System exceed (i) PMAX for the Energy Storage System (i.e., the Contract Capacity for the Energy Storage System shall be limited to PMAX until such time as Seller gets PMAX increased to the tested Contract Capacity), (ii) the [NOTE based on bid: system RA quantity, local RA quantity and flex RA quantity], nor (iii) the Energy Storage System's Expected Energy Storage Contract Capacity as identified in Appendix 1.1.1. Seller agrees that the Energy Storage System is subject to the terms of the Availability Standards.
- **1.1.2** <u>Energy</u>. Buyer shall have the exclusive right to the Delivered Energy (including Bundled Green Energy) of each Project System.
- Bundled Green Energy. The quantity of Generation Facility Bundled Green Energy that Seller expects to be able to deliver to Buyer during each Contract Year is MWh ("Contract Quantity"). Throughout the Delivery Period, Seller shall be required to deliver Generation Facility Bundled Green Energy to Buyer no less than the Guaranteed Energy Production (as defined below) in any twenty-four (24) consecutive calendar month period during the Delivery Period ("Performance Measurement Period"). "Guaranteed Energy Production" means an amount of Generation Facility Bundled Green Energy, as measured in MWh, equal to Seller shall be excused from achieving the Guaranteed Energy Production during any Performance Measurement Period only to the extent of any Force Majeure events, Buyer's failure to perform, or Dispatch Down Periods. For purposes of determining whether Seller has achieved the Guaranteed Energy Production, Seller shall be deemed to have produced from the Generation Facility an amount of Generation Facility Bundled Green Energy that it could reasonably have delivered to Buyer but was prevented from delivering to Buyer by reason of any Force Majeure events, Buyer's failure to perform, or Dispatch Down Periods.
- (b) <u>Energy Storage System Energy</u>. Subject to the terms and conditions of this Agreement, Seller commits to make the Energy Storage System available to accept Charging Energy and to deliver any and all Stored Energy to Buyer, and Buyer shall have the

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<sup>&</sup>lt;sup>1</sup> **NTD**: This should be 70% of the Contract Quantity.

exclusive rights to schedule Charging Energy to the Energy Storage System and receive any and all Stored Energy of the Energy Storage System, subject to the Operating Restrictions set forth in Appendix 1.1 and Availability Notices provided in accordance with Section 18.1, including pursuant to a forward schedule or a Supplemental Energy instruction from CAISO. The actual Round-Trip Efficiency Rate of the Energy Storage System will be determined upon the completion of the Commercial Operation Test for the Project and from time to time in accordance with the testing procedures of Section 7.4. Such test will demonstrate the Tested Round-Trip Efficiency Rate of the Energy Storage System applicable from and after the completion of such test.

1.1.3 <u>Ancillary Services</u>. Buyer shall have the exclusive rights to any and all Ancillary Services Capacity and Associated Ancillary Services Energy associated with the Project with characteristics determined in accordance with the Tariff, in the amounts set forth in the following table(s): [NOTE TO BIDDERS: Include all bid ancillary services only.]

Ancillary Service Type	Ancillary Service Amount (MW or MW	
	range, as applicable)	
Spinning Reserve	Minimum Operating Level (PMIN) to	
	Contract Capacity (PMAX)	
Non-Spinning Reserve	Minimum Operating Level (PMIN) to	
	Contract Capacity (PMAX)	
Regulation Up		
Regulation Down		
Black Start		

1.1.4 Resource Adequacy Benefits. Seller shall maintain ownership of and demonstrable exclusive rights to the Project throughout the Term. Subject to the terms and conditions of this Agreement, Seller grants, pledges, assigns and otherwise commits to Buyer the full Contract Capacity and any other Capacity Attributes of each of the Generation Facility and the Energy Storage System for use by Buyer in meeting its resource adequacy obligations under any Resource Adequacy Rulings. The Parties shall cooperate and take commercially reasonable actions (including amending this Agreement, executing such documents or instruments as is reasonably necessary, and complying with all applicable Tariff provisions and applicable decisions of the CPUC and/or any other Governmental Authority that address Resource Adequacy Benefits performance obligations and penalties hereunder) to effect the use of the Resource Adequacy Benefits of each of the Generation Facility and the Energy Storage System for Buyer's sole benefit through the Delivery Period. Without in any way limiting the foregoing, with respect to Capacity Attributes:

- (a) Seller shall, on a timely basis, submit Annual Supply Plans and Monthly Supply Plans in accordance with the Tariff, and any other decisions or orders of the CPUC associated with providing the Capacity Attributes under this Agreement, to identify and confirm the Expected Capacity Attributes provided to Buyer for each Showing Month.
- (b) Seller shall submit written notification to Buyer, no later than fifteen (15) Business Days before the applicable RA Compliance Showing deadlines for each Showing

Month, that Buyer will be credited with the Expected Capacity Attributes for each such Showing Month in the Supply Plan.

- (c) Seller shall (i) execute all other documents or instruments necessary, and provide all information otherwise needed, for the Product to be shown on Supply Plans and RA Compliance Showings and to be used to satisfy RA Compliance Obligations, including providing information with respect to the amount of Flexible Capacity and Inflexible Capacity available to be included in any applicable Supply Plan and RA Compliance Showing and (ii) execute all documents or instruments necessary and provide any information requested by Buyer related to each of the Generation Facility or the Energy Storage System that is required to be provided to the CAISO or CPUC in order for Buyer to comply with Applicable Laws.
- (d) At Buyer's request, the Parties shall execute such documents and instruments, and Seller shall reasonably cooperate with Buyer with respect to any testing or measurements that may be reasonably required to effect recognition and transfer of Capacity Attributes, if any, to Buyer.
- (e) The Parties shall use commercially reasonable efforts to cause any Resource ID and the benefitting load serving entity SC identification number to be included in all applicable Supply Plans and to communicate changes in such information to each other promptly throughout the Delivery Period.

### **1.1.5** Changes in Terminology Arising from CAISO RA Enhancement.

- (a) If the CAISO RA Enhancement is implemented, then this Agreement shall be interpreted in accordance with the following from and after the effective date of such implementation, and references to Capacity Attributes and Expected Capacity Attributes in this Agreement (including in the calculation of payments due hereunder) shall be construed with reference to the value adopted by the CAISO RA Enhancement with respect to each of the Generation Facility and the Energy Storage System that takes into account historical forced outages of a facility (referred to herein as "UCAP" regardless of the term ultimately adopted by the CAISO for such value) instead of "NQC".
- (b) The Parties intend, by the revisions described in this Section 1.1.5, to implement the structural changes contemplated by the CAISO RA Enhancement and to ensure that Seller's performance is measured based on the value that Buyer may utilize to meet its Resource Adequacy Requirements, without materially shifting the benefits, burdens and obligations of the Parties set forth in this Agreement as of the Effective Date. The Parties understand and agree that the revised contract interpretation described above is consistent with their intent, because Seller will bear the risk of forced outages under both the current Resource Adequacy framework and the CAISO RA Enhancement (through RAAIM (as defined in the Tariff), in the current framework, and through the calculation of UCAP, in the CAISO RA Enhancement).
- (c) The Parties shall execute appropriate amendments to this Agreement to document the above revisions and any other similar amendments that are consistent with the Parties' intent as described in this Section 1.1.6.

### 1.1.6 Change in Electric Market Design.

- (a) Subject to Section 1.5, if a change in any Applicable Laws after the Effective Date other than the CAISO RA Enhancement renders this Agreement or any terms herein incapable of being performed or administered, then either Party, on Notice, may request the other Party to enter into negotiations to make the minimum changes to this Agreement necessary to make this Agreement capable of being performed and administered, while attempting to preserve to the maximum extent possible the benefits, burdens and obligations set forth in this Agreement as of the Effective Date.
- (b) Upon receipt of a Notice requesting negotiations, the Parties shall negotiate in good faith.
- (c) If the Parties are unable, within sixty (60) days after the sending of the Notice requesting negotiations, either to agree upon changes to this Agreement or to resolve issues relating to changes to this Agreement, then either Party may submit issues pertaining to changes to this Agreement to the dispute resolutions procedures provided in <u>Article 22</u>.
- (d) A change in cost will not in itself be deemed to render this Agreement or any terms therein incapable of being performed or administered, or constitute, or form the basis of, a Force Majeure.
- 1.1.7 <u>Green Attributes</u>. Seller hereby provides and conveys all Green Attributes associated with all electricity generation from the Generation Facility to Buyer as part of the Product being delivered. Seller represents and warrants that Seller holds the rights to all Green Attributes from the Generation Facility, and Seller agrees to convey and hereby conveys all such Green Attributes to Buyer as included in the delivery of the Product from the Generation Facility.
- shall register the Project in WREGIS, execute a CAISO Qualified Reporting Entity Service Agreement to allow CAISO, on the Seller's behalf, to upload generation information directly into WREGIS, and take all other actions necessary to ensure that the Green Attributes produced from the Project in an amount equal to the amount of Delivered Energy are issued and tracked for all regulatory reporting purposes, including (but not limited to) compliance with the requirements of the California Renewable Portfolio Standard and transferred to Buyer, including payment of all fees required to register the facility in WREGIS, issue WREGIS certificates, and transfer such certificates to Buyer. Within seventy-five (75) days after the initial delivery of energy to Buyer, Seller shall provide to Buyer written approval from WREGIS for Seller's generation to be reported to WREGIS. Seller warrants that all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in WREGIS will be taken prior to the first delivery under the Agreement.
- (b) <u>Green-e<sup>©</sup> Energy Certification</u>. Throughout the Term, Seller must comply with Green-e<sup>©</sup> Energy eligibility criteria, requirements and best practices, as specified on the Green-e<sup>©</sup> Energy website at <u>www.green-e.org/energy</u>, and Seller must disclose requested information to the Buyer and/or Green-e<sup>©</sup> Energy for Green-e<sup>©</sup> Energy certification, including disclosure and other information to Buyers or its auditors for annual verification.

**1.1.8** Exclusive Rights. Buyer shall have exclusive rights to the Product and all benefits derived therefrom, including the exclusive right to use, market or sell the Product and the right to all revenues generated from the use, resale or remarketing of the Product.

### 1.2 Project.

- 1.2.1 Product; Capacity. All Product provided by Seller pursuant to this Agreement shall be supplied from the Project only. Seller shall not make any alteration or modification to the Project, without Buyer's prior written consent, which results in (a) a change to the Contract Capacity of the Generation Facility that exceeds the Expected Generation Facility Contract Capacity, (b) a change to the Contract Capacity of the Energy Storage System that exceeds the Expected Energy Storage System Contract Capacity; or (c) any other material changes to the Project without Buyer's prior written consent, which may be provided in Buyer's sole and absolute discretion. For the avoidance of doubt, any of the following shall be subject to Buyer's consent: (a) any increase in the nameplate capacity (in MWdc) of the Generation Facility above the maximum amount specified therefor in Appendix 1.2.1, (b) any change in the physical location of the site for the Project specified therefor in Appendix 1.2.1, or (d) any change in the technology type of the Generation Facility specified therefor in Appendix 1.2.1, or (d) any change in the technology type of the Energy Storage Facility specified therefor in Appendix 1.2.1.
- **1.2.2** <u>Delivery of Energy</u>. Delivered Energy from the Project shall be delivered to the Energy Delivery Point at a nominal voltage of [\_\_\_\_\_] volts line-to-line.
- 1.2.3 Energy Storage Systems. The Energy Storage System will consist of [insert description of storage system] and additional equipment, as described on Appendix 1.2.1 attached hereto. The Stored Energy Measuring Device for the Energy Storage System shall be capable of measuring the instantaneous amount of Stored Energy (in increments of no larger than kilowatthours (kWh<sub>DC</sub>)), Maximum Energy Capacity (in kWh<sub>DC</sub>) and State of Energy (as a %), utilizing a reasonably accurate methodology consistent with applicable Industry Standards, and providing such amount of Stored Energy, Maximum Energy Capacity and State of Energy on a real-time basis to Buyer. Any changes to Appendix 1.2.1 shall require Buyer's written consent in an amendment to be exercised in Buyer's sole discretion.
- **1.2.4** <u>Station Use</u>. The Project may serve Station Use to the extent the Project is designed in a manner which allows or requires it to do so, and all Product stored or delivered hereunder will be net of Station Use.
- **1.2.5** <u>Charging Energy</u>. During the Delivery Period, Charging Energy for the Energy Storage System may be provided by the Generation Facility or from the CAISO Grid, at Buyer's election.

### **1.3** Delivery Points.

1.3.1 Energy Delivery Point. The Energy Delivery Point shall be the PNode at the Project's first point of interface with the CAISO Grid (as described and set forth in the single-line diagram of grid interconnection attached hereto as Appendix 1.3.1). Seller retains title and bears risk of loss related to Delivered Energy up to the Energy Delivery Point, and Buyer shall take title and bear risk of loss related to Delivered Energy at and from the Energy Delivery Point.

Buyer retains title and bears risk of loss related to Charging Energy up to the Energy Delivery Point, and Seller shall take title and bear risk of loss related to Charging Energy at and from the Energy Delivery Point. Notwithstanding the above, Seller acknowledges and agrees that any other agreement between it and Buyer, including any interconnection agreement, is separate and apart from this Agreement such that no other agreement shall modify or add to the Parties' obligations under this Agreement.

- 1.3.2 <u>Electric Retail Delivery Point</u>. Without limiting the provisions of <u>Section 1.2.3</u>, the Electric Retail Delivery Point is the point at which the Project receives retail electricity from the Retail Electricity Provider for Station Use. Prior to the Project receiving retail electricity from the Retail Electricity Provider for Station Use, Seller shall provide Buyer a true and accurate description and depiction of such Electric Retail Delivery Point, and such description and depiction shall be attached hereto as <u>Appendix 1.3.2</u>.
- 1.4 Change in RA Law. In the event of a Change in RA Law or if a Change in RA Law is likely to be implemented, then the Parties agree that the maximum aggregate amount of out-of-pocket costs and expenses that Seller shall be required to incur to comply with such Change in RA Law, including actions required to provide the Qualified RA Capacity for each Energy Storage System (and Resource Adequacy Benefits associated with such Qualified RA Capacity to Buyer) in at least the amount of the Expected Energy Storage Contract Capacity under such Change in RA Law ("Expenditures") shall be capped at no more than Twenty-Five Thousand Dollars (\$25,000) per MW of Contract Capacity for the duration of the Term (the "Compliance Expenditure Cap"), in the aggregate, at the time that the Change in RA Law takes effect.
- 1.5 <u>Compliance Actions</u>. Any actions required for Seller to comply with its obligations set forth in <u>Section 1.4</u> above, the cost of which will be included in the Compliance Expenditure Cap, shall be referred to collectively as the "<u>Compliance Actions</u>." If Seller reasonably anticipates the need to incur Expenditures to take Compliance Actions, Seller shall provide Notice to Buyer of such anticipated Expenditures and the anticipated date to complete such Compliance Actions ("<u>Compliance Deadline</u>"). Seller shall have no obligation to take any Compliance Actions that (i) cannot be implemented in accordance with Accepted Electrical Practices or (ii) that would result in a loss of tax credits (including investment tax credits), in which case Seller's Notice shall indicate as such.
- days to evaluate the Notice provided in Section 1.5 above (during which time period Seller is not obligated to take any Compliance Actions described in the Notice) and shall, within such time, either (a) elect for Seller to take such Compliance Actions (unless Seller is not required to take such Compliance Actions pursuant to the last sentence of Section 1.5 above), in which case Buyer shall reimburse Seller for all of the Expenditures that exceed the remaining unused amount of the Compliance Expenditure Cap in respect of such Change in RA Law up to the anticipated Expenditures specified in such Notice (such Buyer-agreed reimbursement amount, the "Accepted Expenditures"), or (b) waive Seller's obligation to take such Compliance Actions in respect of such Change in RA Law, in which case of Buyer's waiver Seller shall pay Buyer an amount equal to the lesser of (i) the anticipated Expenditures specified in such Notice, or (ii) the remaining unused amount of the Compliance Expenditure Cap. For clarity, if Seller is not required to take such Compliance Actions pursuant to the last sentence of Section 1.5 above, then Seller shall be

required to make the payment set forth in clause (b) above. If Buyer does not respond to a Notice given by Seller under Section 1.5 within sixty (60) days after Buyer's receipt of same, Buyer shall be deemed to have waived its rights to require Seller to take the Compliance Actions that are the subject of the Notice, and, without limiting Seller's obligation to make the payment specified in clause (b) above, Seller shall have no further obligation to take, and no liability for any failure to take, such Compliance Actions for the remainder of the Term. If Buyer agrees to reimburse Seller for the Accepted Expenditures, then Seller shall take such Compliance Actions as agreed upon by the Parties, and Buyer shall reimburse Seller for Seller's actual costs to effect the Compliance Actions, not to exceed the Accepted Expenditures, within sixty (60) days from the time that Buyer receives an invoice and documentation of such costs from Seller.

# ARTICLE 2 TERM; CONDITIONS PRECEDENT; DELIVERY PERIOD

- **2.1** <u>Term.</u> The "<u>Term</u>" of this Agreement shall commence upon the Effective Date and shall continue, unless terminated earlier in accordance with the terms of this Agreement, until the expiration of the Delivery Period.
- **2.2** Effectiveness of Agreement Prior to CP Satisfaction Date. Commencing on the Effective Date until the CP Satisfaction Date, this Agreement shall be in full force and effect, enforceable and binding only to the extent required to give full effect to, and enforce, the rights and obligations of the Parties under this Section 2, including, as it relates to Section 2, the rights and obligations under Sections 3, 5, 6, 10, 11, 12, 13, 18, 19, 20, 21, 22, 23, 24 and 25, Appendix A and the other appendices referenced in the foregoing Sections.
- **2.3** <u>Obligations of the Parties.</u> The Parties shall reasonably cooperate with each other to cause the Conditions Precedent to be satisfied as soon as reasonably practical.
- **2.3.1** Seller's Obligations. Prior to the CP Satisfaction Date, Seller shall (i) use commercially reasonable efforts to pursue satisfaction of the Conditions Precedent set forth in Sections 2.4.2 and [insert others], (ii) use commercially reasonable efforts to pursue development of the Project in accordance with Sections 5 and 6, (iii) comply with Section 6 in achieving the applicable milestones in the Milestone Schedule that have due dates occurring prior to the CP Satisfaction Date, (iv) deliver the Monthly Progress Report in accordance with Section 6, and (v) otherwise comply with its obligations, covenants, representations, and warranties under Sections 3, 5, 6, 10, 11, 12, 13, 18, 19, 20, 21, 22, 23, 24 and 25. Upon an Event of Default of Seller prior to the CP Satisfaction Date, Buyer may terminate this Agreement in which case Seller shall owe Buyer liquidated damages in the full amount of the Pre-Construction Security. Buyer shall be entitled to recover such liquidated damages owed by Seller from the Pre-Construction Security held by Buyer if Seller has not paid such liquidated damages within five (5) Business Days following receipt of Notice of such Event of Default from Buyer. Each Party agrees and acknowledges that (a) the actual damages that Buyer would incur due to an Event of Default of Seller prior to the CP Satisfaction Date would be difficult or impossible to predict with certainty, (b) the liquidated damages set forth in this section are a reasonable and appropriate approximation of such damages, and (c) the liquidated damages set forth in this section are the exclusive remedy for an Event of Default of Seller prior to the CP Satisfaction Date.

- **2.3.2** <u>Buyer's Obligations.</u> Prior to the CP Satisfaction Date, Buyer shall (i) use commercially reasonable efforts to pursue satisfaction of the Conditions Precedent set forth in <u>Section 2.4.1</u>, and (ii) otherwise comply with its obligations, covenants, representations, and warranties under <u>Sections 3, 5, 6, 10, 11, 12, 13, 18, 19, 20, 21, 22, 23, 24</u> and <u>25</u>. Upon an Event of Default of Buyer prior to the CP Satisfaction Date, Seller may exercise remedies in accordance with <u>Section 3.3</u>.
- **2.4** Conditions Precedent. Subject to Section 2.2, the effectiveness of the remainder of this Agreement is conditioned upon the satisfaction (or waiver by the Party described in Section 2.5) of all of the following conditions precedent ("Conditions Precedent") by the deadline dates set forth below for each Condition Precedent without extension for Force Majeure or any other reason:
- **2.4.1** <u>CPUC Approval</u>. No later than [\_\_\_\_\_\_], Buyer shall have obtained CPUC Approval. Prior to this deadline, should the CPUC issue an order approving this Agreement with conditions or modifications that materially alter the commercial aspects of this Agreement, the Parties agree to use good faith efforts to renegotiate this Agreement and file the amended agreement with the CPUC seeking approval thereof. If, within sixty (60) days, no agreement is reached, either Party may terminate this Agreement upon delivery of Notice to the other Party.
- 2.4.2 <u>Electrical Interconnection</u>. No later than \_\_\_\_\_\_\_, Seller shall have entered into a [Large/Small] Generator Interconnection Agreement providing for the construction of Interconnection Facilities necessary to maintain the "Full Capacity Deliverability Status" (as defined in the Tariff) of the Project and setting forth:
- (a) an estimated in-service interconnection date for the "Participating TO's Interconnection Facilities," the "Network Upgrades," and the "Distribution Upgrades" (as each term is defined in the Tariff) of no later than months after Seller provides the Participating Transmission Owner with the appropriate security and written authorization to proceed under its [Large/Small] Generator Interconnection Agreement for the Project; and
- (b) no refundable cost for "Network Upgrades" (as defined in the Tariff) that Seller would be obligated to pay and would be entitled to reimbursement from the CAISO, a Participating Transmission Owner, or any other affected transmission provider thereunder.

### 2.4.3 [INSERT OTHERS IF APPLICABLE]

### **2.5** Failure to Meet All Conditions Precedent.

### **2.5.1** Beneficiary Party.

(a) Both of the Parties are the beneficiaries of the Conditions Precedent set forth in Section 2.4.2, and in order for a waiver of non-satisfaction of such Conditions Precedent to be effective, both of the Parties must waive (exercisable in their sole discretion) non-satisfaction by the deadline date therefor.

- (b) Buyer shall be the sole beneficiary of the Conditions Precedent set forth in <u>Section 2.4.1</u>, and in order for a waiver of non-satisfaction of such Conditions Precedent to be effective, Buyer alone must waive (exercisable in its sole discretion) non-satisfaction by the deadline date therefor.
- (c) [Seller shall be the sole beneficiary of the Conditions Precedents set forth in Section 2.4.3, and in order for a waiver of non-satisfaction of such Conditions Precedent to be effective, Seller alone must waive (exercisable in its sole discretion) non-satisfaction by the deadline date therefor.]
- 2.5.2 <u>Termination</u>. If the Condition Precedent set forth in <u>Section 2.4.1</u> is not satisfied or waived in writing by Buyer on or before the deadline date therefor, without extension for Force Majeure or any other reason, then this Agreement shall automatically terminate (with no additional actions required by either Party to effect such termination) with no further obligation to either Party (other than as set forth in <u>Section 2.5.2(b)</u> below and any other payment obligations which have accrued and are payable at the time of termination). If any of the Conditions Precedent is not satisfied or waived in writing by the beneficiary Party or Parties thereto on or before the applicable deadline date therefor, without extension for Force Majeure or any other reason, then either of the Parties may terminate this Agreement with no further obligation to either Party (other than as set forth in <u>Sections 2.5.2(a)</u> below and any other payment obligations which are accrued and payable at the time of termination) by delivery of Notice to the other Party within fifteen days after the applicable deadline date. If a Party has the right to terminate this Agreement pursuant to this <u>Section 2.5.2</u>, but fails to deliver Notice of termination within each fifteen day period after each deadline date, then such Party's termination right per this <u>Section 2.5.2</u> for such deadline date shall be deemed waived in its entirety.
- (a) Upon a termination of this Agreement by either Party for any reason under Section 2.5 other than the failure of the Conditions Precedent set forth in Section 2.4.1 to be satisfied or waived by Buyer, Seller shall pay to Buyer an amount equal to the full amount of the Pre-Construction Security. Buyer may retain and draw upon the Pre-Construction Security to pay such amount.
- (b) Upon a termination of this Agreement by either Party as a result of the failure of the Conditions Precedent set forth in <u>Section 2.4.1</u> to be satisfied or waived by Buyer, Buyer shall return to Seller the undrawn portion of Pre-Construction Security.
- 2.6 Effectiveness of Agreement on and after CP Satisfaction Date. This Agreement shall be in full force and effect, enforceable and binding in all respects as of the CP Satisfaction Date until the conclusion of the Delivery Period or earlier termination pursuant to the terms of this Agreement; *provided* however, that upon the conclusion of the Delivery Period or upon earlier termination this Agreement shall remain in effect until (i) the Parties have fulfilled all obligations under this Agreement, including payment in full of amounts due for the Product delivered prior to the end of the Delivery Period, the Termination Payment, indemnification payments or other damages, as applicable (whether directly or indirectly such as through set-off or netting) and (ii) the undrawn portion of the Pre-Construction Security, Construction Period Security, or Delivery Period Security, as applicable, is released and/or returned as applicable to Seller (if any is due).

- 2.7 <u>Guaranteed Initial Delivery Date.</u> Subject to <u>Section 2.10.2</u>, Seller shall achieve the Initial Delivery Date (as defined in <u>Section 2.8</u> below) by [insert date] ("<u>Guaranteed Initial Delivery Date</u>"). [NOTE to Bidders: for existing facilities, there will be a fixed start date and all facility construction related terms shall be removed.]
- **2.8** <u>Delivery Period.</u> The "<u>Delivery Period</u>" shall be the period during which the Product is available to Buyer, and will commence at 12:01 a.m. PPT on the Initial Delivery Date, and shall continue until midnight on the date that is the last day of the month in which the [(\_\_\_\_) anniversary of the Initial Delivery Date occurs. The "<u>Initial Delivery Date</u>" shall be the first day of the first month after which all the following conditions have been satisfied:
- (a) Seller has completed, to Buyer's satisfaction, Seller's obligations set forth in Articles 5, 6, and 7 in order to bring the Project into full operation as contemplated by this Agreement
  - (b) The Project has achieved Commercial Operation;
- (c) Seller has received its market based rate authority from FERC to sell Product to Buyer under the terms of this Agreement, and has received all other approvals and authorizations required for Seller to perform its obligations under this Agreement;
- (d) Seller has executed the Participating Generator Agreement, Meter Service Agreement, any contract for the provision of electric retail service (if required for the operation of the Project), and any other forms or agreements required by the CAISO or any Participating Transmission Owners with respect to the Project (and delivered true and complete copies of all such forms and agreements to Buyer);
- (e) The Parties have taken all actions, including executing all documents and instruments, required to authorize Buyer to act as Scheduling Coordinator;
- (f) Seller has entered into and complied with all obligations under all interconnection agreements, including the [Large/Small] Generator Interconnection Agreement, required to enable parallel operation of the Project with the Participating Transmission Owner's electric system and CAISO Grid;
- (g) Seller has taken all actions necessary to ensure that the Project is fully deliverable, as determined by the CAISO, for Resource Adequacy Benefits, including establishing the Net Qualifying Capacity of the Project and completing CAISO Certification, and Seller has delivered to Buyer a certification or other documentation from the CAISO that evidences that the Project is fully deliverable for the purposes of providing all such Resource Adequacy Benefits to Buyer;
- (h) Seller has delivered to Buyer evidence reasonably satisfactory to Buyer confirming its compliance with the requirements of <u>Article 4</u>;
- (i) Seller has provided Buyer Notice at least [x] days before the Initial Delivery Date;

- (j) Seller has delivered to Buyer the required Delivery Period Security and related documents and instruments as set forth in <u>Article 11</u>; and
- (k) The Priority Security Interest required under <u>Section 11.4</u> shall continue to be perfected and in full force and effect.

The Parties agree that, in order for Buyer to dispatch the Project on the Initial Delivery Date, the Parties may have to perform certain of their Delivery Period obligations in advance of the Initial Delivery Date, including, without limitation, Seller's delivering Availability Notices for the Initial Delivery Date as provided Section 15.1, and Buyer's delivering Dispatch Notices and submitting schedules for the Initial Delivery Date as provided in Article 15, in advance of the Initial Delivery Date. The Parties shall cooperate with each other in order for Buyer to be able to dispatch the Project on the Initial Delivery Date.

2.9 <u>Early Initial Delivery Date.</u> If Seller satisfies the conditions precedent set forth in Section 2.8 for the Initial Delivery Date prior to the applicable Guaranteed Initial Delivery Date, then such earlier date shall be the Initial Delivery Date under this Agreement; *provided*, however, in no event shall the Initial Delivery Date occur any earlier than [\_\_\_\_] without Buyer's prior written consent.

### 2.10 <u>Delayed Initial Delivery Date.</u>

**2.10.1** Daily Delay Damages. Seller may extend the Guaranteed Initial Delivery Date and, subject to the requirements set forth in Section 6.2, the deadline to achieve each milestone listed on the Milestone Schedule (any such extension, the "Cure Period") by paying to Buyer liquidated damages in an amount equal to the Daily Delay Damages per day for each day (or portion thereof) from and including the original Guaranteed Initial Delivery Date to and excluding the actual date that the Project achieves the Initial Delivery Date or from and including the original deadline to achieve each milestone listed on the Milestone Schedule to and excluding the actual date that the Project achieves such milestone. To extend the Guaranteed Initial Delivery Date or any milestone listed on the Milestone Schedule, Seller must, at any time prior to, but no later than 6:00 a.m. on the third Business Day immediately prior to the first day of the proposed extension, provide Buyer with Notice of its election to extend the Guaranteed Initial Delivery Date or milestone, as applicable, along with Seller's estimate of the duration of the extension and its payment of Daily Delay Damages for the full estimated extension period. This process shall apply to the original extension period and any subsequent extensions. Any extension under this <u>Section</u> 2.10.1 shall extend each milestone listed on the Milestone Schedule and the Guaranteed Initial Delivery Date by the same number of days. The Daily Delay Damages payments applicable to days included in any Guaranteed Initial Delivery Date extension are nonrefundable and are in addition to, and not a part of, the Pre-Construction Security or the Construction Period Security, as applicable. In no event shall the aggregate Cure Period exceed sixty (60) calendar days.

**2.10.2** Excused Delays. For all purposes under this Agreement, the Guaranteed Initial Delivery Date and the deadline to achieve each milestone listed on the Milestone Schedule will be extended on a day for day basis without imposition of any Daily Delay Damages to the extent that Seller is delayed in achieving any such milestone or achieving the Initial Delivery Date by the Guaranteed Initial Delivery Date due to Force Majeure, provided that all extensions of any

deadline listed on the Milestone Schedule or the Guaranteed Initial Delivery Date for the Project due to Force Majeure shall not exceed ninety (90) calendar days in the aggregate ("Maximum Force Majeure Delay") and any delay by Seller in excess of the Maximum Force Majeure Delay shall be subject to Daily Delay Damages in accordance with Section 2.10.1.

# ARTICLE 3 EVENTS OF DEFAULT; REMEDIES; TERMINATION

- 3.1 <u>Events of Default.</u> An "Event of Default" shall mean, with respect to either Party (a "Defaulting Party"), the occurrence of any of the following:
- (a) The failure to make, when due, any payment in a material amount required under this Agreement if such failure is not remedied within three (3) Business Days after receipt of Notice;
- (b) Any representation or warranty made by such Party herein is false or misleading in any material respect when made or when deemed made or repeated, and such failure is not cured within ten (10) days after receipt of Notice;
- (c) The failure to perform any material covenant or obligation set forth in this Agreement (except to the extent constituting a separate Event of Default), if such failure is not remedied within ten (10) days of receipt of Notice, or such longer period not to exceed sixty (60) days if the failure is not capable of being cured within such ten (10) days with the exercise of reasonable diligence, so long as the Defaulting Party has commenced and is diligently pursuing a cure during such initial ten (10) day period and such additional cure period could not reasonably be expected have a material adverse impact upon the non-Defaulting Party;
  - (d) Such Party becomes Bankrupt; or
- (e) Such Party assigns this Agreement or any of its rights hereunder other than in compliance with Section 25.5.
- 3.2 <u>Seller Events of Default.</u> An "Event of Default" shall mean, with respect to Seller as the "Defaulting Party", the occurrence of any of the following:
  - (a) Seller fails to comply with any of its covenants under Section 19.5;
- (b) Seller consolidates or amalgamates with, or merges with or into, or transfers all or substantially all its assets to, another entity and, at the time of such consolidation, amalgamation, merger or transfer, the resulting, surviving or transfere entity fails to assume all the obligations of Seller under this Agreement by operation of Law or pursuant to an agreement reasonably satisfactory to Buyer;
- (c) Seller fails to comply with its obligations under <u>Article 11</u>, including without limitation failing to post or maintain the applicable Performance Assurance, within three (3) Business Days of receipt of Notice of such failure;

- (d) Seller makes any material misrepresentation or omission in any report, including status and metering report, or any Milestone Schedule or Availability Notice (including without limitation the log, records and reports required under Sections 8.1.2, 8.1.3, 8.1.4, 17.1, and Appendices 6.1(a) and (b), and Article 15) required to be made or furnished by Seller pursuant to this Agreement;
- (e) Seller fails to deliver or sell the Product from a Generation Facility for a period or a series of periods that is cumulatively longer than thirty (30) days, except to the extent such failure is due to one of the following:
  - (i) The Generation Facility is unavailable as a result of a Forced Outage that is not the result of Seller's negligence or willful misconduct;
  - (ii) Force Majeure;
  - (iii) Buyer's failure to perform;
  - (iv) The Generation Facility is unavailable as a result of a Scheduled Outage;
  - (v) A reduction in output as ordered under Dispatch Down Periods; or
  - (vi) Insufficient solar power for such Generating Facilities to generate energy;
- (f) Seller sells, assigns, or otherwise transfers, or commits to sell, assign, or otherwise transfer, for delivery during the Delivery Period, the Product, or any portion thereof, to any party other than Buyer or pursuant to CAISO instruction;
- (g) Seller delivers or attempts to deliver to the Energy Delivery Point for sale under this Agreement Energy from the CAISO Grid (other than, for the avoidance of doubt, any such Energy that was utilized as Charging Energy);
- (h) Seller fails to achieve the Guaranteed Energy Production during any Performance Measurement Period;
- (i) During the Delivery Period, the Equivalent Availability Factor for the Energy Storage Facility is below 0.90 on average for a rolling period of twelve (12) consecutive months;
- (j) During the Delivery Period, the Contract Capacity the Energy Storage System falls below seventy percent (70%) of the Expected Energy Storage Contract Capacity on average for a rolling period of twelve (12) consecutive months;
- (k) During the Delivery Period, the Round-Trip Efficiency Rate Factor of the Energy Storage System is below 0.90 for more than six (6) months during any rolling period

of twelve (12) consecutive months (for the avoidance of doubt, such six (6) months need not be continuous);

- (l) Seller fails to achieve the Initial Delivery Date for the Project by the Guaranteed Initial Delivery Date as extended by the Cure Period in accordance with <u>Section</u> 2.10.1;
- (m) Seller fails to achieve a milestone listed on the Milestone Schedule (other than the Guaranteed Initial Delivery Date, which is governed by <u>Section 3.2(1)</u> above) by the applicable deadline listed therein (or the Milestone Extension Date therefor if such deadline is extended pursuant to Section 6.2 below);
- (n) The direct or indirect ownership interest in Seller is pledged or assigned or caused or permitted to be pledged or assigned as collateral to any party other than pursuant to a Permitted Lien or in accordance with <u>Section 12.1</u> or <u>Section 25.5</u>;
- (o) Seller fails to remediate any deficiency in internal controls over financial reporting in accordance with <u>Section 21.2</u>;
- (p) Seller defaults under any Security Document in any material respect and such default is not cured within the applicable cure period, if any, set forth in the Security Document, or Seller repudiates, disaffirms, disclaims or rejects, in whole or in part, or challenges the validity of, any Security Document;
  - (q) With respect to Guarantor, if there is one:
    - (i) Any representation or warranty made by Guarantor in the Guaranty Agreement is false or misleading in any material respect when made or when deemed made or repeated, and such failure shall not be cured within 10 days after receipt of Notice:
    - (ii) The failure of Guarantor to make, when due, any payment required or to perform any other material covenant or obligation in the Guaranty Agreement, if such failure is not remedied within one (1) Business Day (in the case of a failure to pay) and three (3) Business Days (in all other cases) after receipt of Notice;
    - (iii) Guarantor becomes Bankrupt;
    - (iv) The failure by Guarantor to maintain a Credit Rating of at least "BBB-" by S&P or "Baa3" by Moody's and a tangible net worth of at least One Billion Dollars (\$1,000,000,000);
    - (v) The Guaranty Agreement fails to be in full force and effect for purposes of this Agreement (other than in accordance with its terms) prior to the indefeasible satisfaction of all of

- Seller's obligations hereunder to which such Guaranty Agreement relates; or
- (vi) Guarantor repudiates, disaffirms, disclaims, or rejects, in whole or in part, or challenges the validity of, its Guaranty Agreement; or
- (r) with respect to any outstanding Letter of Credit provided for the benefit of Buyer that is not then required under this Agreement to be canceled or returned, the failure by Seller to provide for the benefit of Buyer either (1) cash, or (2) a substitute Letter of Credit from a different issuer meeting the criteria set forth in the definition of Letter of Credit, in each case, in the amount required hereunder within five (5) Business Days after Seller receives Notice of the occurrence of any of the following events:
  - (i) the issuer of the outstanding Letter of Credit shall fail to maintain a Credit Rating of at least "A-" by S&P or "A3" by Moody's;
  - (ii) the issuer of the outstanding Letter of Credit shall fail to comply with or perform its obligations under such Letter of Credit and such failure shall be continuing after the lapse of any applicable grace period permitted under such Letter of Credit;
  - (iii) the issuer of the outstanding Letter of Credit shall disaffirm, disclaim, repudiate or reject, in whole or in part, or challenge the validity of, such Letter of Credit;
  - (iv) such Letter of Credit fails or ceases to be in full force and effect at any time;
  - (v) the issuer of such Letter of Credit becomes Bankrupt; or
  - (vi) the issuer of the outstanding Letter of Credit shall fail to honor a properly documented request to draw on such Letter of Credit.
- 3.3 Remedies. If an Event of Default with respect to a Defaulting Party shall have occurred and be continuing, the other Party (the "Non-Defaulting Party") shall have the right to (a) terminate this Agreement by providing Notice of such termination to the Defaulting Party, which termination shall be effective on a day no later than twenty (20) days after such Notice is effective ("Early Termination Date"), and the Defaulting Party shall pay the Non-Defaulting Party a Termination Payment as set forth below, (b) require immediate payment of all amounts owed but not yet paid by the Defaulting Party under this Agreement, (c) withhold any payments due to the Defaulting Party under this Agreement, (d) suspend performance, and (e) pursue any other remedies available at law or in equity, including where appropriate, specific performance or injunctive relief, except to the extent such remedies are expressly limited under this Agreement. If the Non-Defaulting Party elects to terminate this Agreement under clause (a) of this Section 3.3,

then the sole and exclusive remedy available to the Non-Defaulting Party shall be the Termination Payment as set forth below.

- **3.4** <u>Calculation of Termination Payment.</u> The Non-Defaulting Party shall calculate, in a commercially reasonable manner, the amounts owing between the Parties under this Agreement as of the Early Termination Date (the "<u>Termination Payment</u>") in accordance with this Section.
- **3.4.1** The Non-Defaulting Party shall calculate the Settlement Amount by calculating its Costs, and its Gains or Losses with respect to the Product from the Project in a commercially reasonable manner by reference to information supplied to it by one or more third parties including, without limitation, index prices, quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets. Third parties supplying such information may include, without limitation, dealers in the relevant markets, end-users of the relevant product, information vendors and other sources of market information, provided that such third parties shall not be Affiliates of either Party. Without prejudice to the Non-Defaulting Party's duty to mitigate, the Non-Defaulting Party shall not have to enter into replacement transactions to calculate its Gains and Losses.
- 3.4.2 Except in the case of an Event of Default of Seller prior to the Initial Delivery Date, the Termination Payment shall equal the Settlement Amount plus any or all other amounts due to the Non-Defaulting Party (less amounts due to the Defaulting Party) netted into a single amount. If the Non-Defaulting Party's aggregate Gains exceeds its aggregate Losses and Costs, if any, resulting from the termination of this Agreement, the net Settlement Amount shall be zero (0). [In the case of an Event of Default of Seller prior to the Initial Delivery Date, the Termination Payment shall be the remaining amount of the Performance Assurance (after giving effect to any draws thereon to pay any applicable Daily Delay Damages), plus any or all other amounts due to the Non-Defaulting Party (less amounts due to the Defaulting Party) netted into a single amount.]<sup>2</sup>
- 3.4.3 Each Party agrees and acknowledges that (a) the actual damages that the Non-Defaulting Party would incur in connection with a termination of this Agreement under Section 3.3(a) would be difficult or impossible to predict with certainty, (b) the Termination Payment described in this section is a reasonable and appropriate approximation of such damages, and (c) the Termination Payment described in this section is the exclusive remedy of the Non-Defaulting Party in connection with such termination but shall not otherwise act to limit any of the Non-Defaulting Party's rights or remedies if the Non-Defaulting Party does not elect to terminate this Agreement as its remedy for an Event of Default by the Defaulting Party.
- 3.5 Notice of Payment of Termination Payment. As soon as practicable, but in no event later than fifteen (15) Business Days following the Early Termination Date, the Non-Defaulting Party shall give the Defaulting Party Notice of the amount of the aggregate Termination Payment, if any. The Notice shall include a written statement explaining in reasonable detail the calculation of such amount. The aggregate Termination Payment, if any, shall be made by the Defaulting Party to the Non-Defaulting Party within two (2) Business Days after receipt of such Notice.

<sup>&</sup>lt;sup>2</sup> **NTD**: To be confirmed based on the amount of the Performance Assurance.

- 3.6 <u>Disputes Regarding Termination Payment.</u> If the Defaulting Party disputes the Non-Defaulting Party's calculation of the Termination Payment, in whole or in part, the Defaulting Party shall, within five (5) Business Days of receipt of the Non-Defaulting Party's calculation of the Termination Payment, provide to the Non-Defaulting Party a detailed written explanation of the basis for such dispute.
- 3.7 <u>Suspension of Performance.</u> Further to <u>Section 3.3(d)</u>, if an Event of Default occurs and shall be continuing, the Non-Defaulting Party shall have the right to suspend performance under this Agreement upon Notice to the Defaulting Party. At any time prior to or after the receipt of such Notice by the Defaulting Party, the Non-Defaulting Party may exercise any remedies available to it at law or in equity, including without limitation the right to seek damages or injunctive relief to prevent irreparable injury to the Non-Defaulting Party.
- 3.8 <u>Bankruptcy Without Early Termination.</u> In the event that Guarantor becomes Bankrupt, but Buyer does not declare an Early Termination Date, the bankruptcy shall not extinguish the Parties' obligations under this Agreement.
- 3.9 <u>Effect of Termination.</u> Termination of this Agreement shall not operate to discharge any liability which has been incurred by either Party prior to the effective date of such termination.

# ARTICLE 4 INSURANCE

- **4.1** Required Insurance. From the CP Satisfaction Date and thereafter throughout the Term, Seller shall, at its own expense, maintain in force throughout the remaining Term of this Agreement and until released by Buyer the following minimum insurance coverages:
- **4.1.1** Workers' Compensation insurance or self-insurance in accordance with the laws and regulations of the State of California, providing statutory benefits and covering loss resulting from injury, sickness, disability or death of employees of Seller. In lieu of such insurance, Seller may maintain a self-insurance program meeting the requirements of the State of California.
- **4.1.2** Employer's liability insurance in the amount of not less than One Million Dollars (\$1,000,000) per accident and per employee for disease.
- **4.1.3** Commercial General Liability Insurance insuring against liability for damages for personal injury (including bodily injury and death) and property damage. Such insurance shall provide premises/operations, products-completed operations, blanket contractual liability, explosion, collapse and underground coverage, broad form property damage, independent contractor's and personal injury insurance, punitive damages to the extent insurable under the laws of the State of California, in the amount of not less than One Million Dollars (\$1,000,000) per occurrence and Two Million Dollars (\$2,000,000) in the annual aggregate for combined bodily injury and property damage. There shall be no wildfire exclusion. Defense costs shall be provided as an additional benefit and may be included within the limits of liability.
- **4.1.4** Commercial or Business Automobile Liability Insurance insuring against liability for damages for bodily injury, death, or damage to property (including loss of use thereof),

and occurring in any way related to the use, loading or unloading of any of Seller's automobiles for coverage of owned, non-owned, leased and hired vehicles, in the amount of not less than One Million Dollars (\$1,000,000) combined single limit for bodily injury and property damage. Seller's automobile liability insurance coverage shall contain appropriate no-fault insurance provisions or other endorsements in accordance with applicable laws. Coverage shall be at least as broad as the Insurance Services Office Business Auto Coverage form covering Automobile Liability, code 1 "any auto". If the services involve hauling hazardous materials, coverage shall be endorsed to include MCS 90 endorsement.

**4.1.5** Excess or Umbrella Liability Insurance over and above the insurance required above in the amount of not less than [\_\_\_\_] Million Dollars (\$[\_\_\_],000,000.00) per occurrence/[\_\_\_\_] Million Dollars (\$[\_\_\_],000,000.00) aggregate.

The amounts of insurance required in <u>Sections 4.1.2</u> through <u>4.1.4</u>, may be satisfied by Seller purchasing coverage in the amounts specified or by any combination of primary and excess insurance, so long as the total amount of insurance meets the requirements specified above.

- 4.1.6 During the construction period for the Project, Builder's Risk insurance on an "all risk of physical loss or damage" basis, including coverage against damage or loss caused by earthquake, flood, windstorm, boiler, engine, and machinery accidents and performance testing and "Delay in Start-up" coverage. The Builder's Risk coverage shall include (i) coverage for the buildings, structures, boiler, machinery, equipment, facilities, fixtures, supplies, and other properties constituting a part of the Project, with an overall limit sufficient to cover repair or replacement; (ii) inland transit coverage for property and equipment that has been off-loaded from a vessel or aircraft until delivered to the Site; (iii) off-site coverage to insure any property or equipment described in (i) above not stored on the Site; (iv) removal of debris; (v) coverage for foundations and other property below the surface of the ground; (vi) expediting expenses; and (vii) hazardous substance cleanup. The Builder's Risk coverage shall modify the standard exclusion for damage caused by faulty workmanship, design or materials so as to insure resulting damage to property free of defective conditions.
- 4.1.7 After construction has been completed, All Risk property insurance coverage in the amount not less than the full replacement value of the Project, including a full replacement cost endorsement (no co-insurance) with no deduction for depreciation of property if actually replaced, providing, without limitation, (i) coverages against loss or damage by fire, lightning, windstorm, hail, explosion, riot, civil commotion, aircraft, vehicles, smoke, other risks from time to time included under "all risk" or "extended coverage" policies, earthquake, flood, collapse, sinkhole, subsidence and such other perils, (ii) off-site coverage as is sufficient to cover off-site equipment for which there have been progress payments, (iii) transit coverage (including ocean cargo where ocean transit will be required) as is sufficient to cover property in transit, and (iv) boiler and machinery coverage on a "comprehensive" basis including breakdown and repair with limits not less than the full replacement cost of the insured objects. The policy/policies shall include increased cost of construction coverage, debris removable, and building ordinance coverage to pay for loss of "undamaged" property which may be required to be replaced due to enforcement of local, state, or federal ordinances.

- **4.1.8** If applicable to the scope of work during construction phase of the term of this Agreement, Aircraft/Watercraft Insurance, for all owned, non-owned and hired aircraft or watercraft used in connection with the operation of the Project, with a \$10,000,000 limit per occurrence for property damage and bodily injury, including passengers and crew; *provided*, such insurance may be provided by the provider of the non-owned or hired aircraft or watercraft.
- **4.1.9** Pollution Liability Insurance insuring against liability arising out of activities contemplated hereunder or as might be required by federal, state, regional, municipal and local laws, with minimum limits of Two Million Dollars (\$2,000,000.00) per occurrence, Two Million Dollars (\$2,000,000.00) aggregate. Seller may satisfy this requirement under Commercial General Liability insurance and Excess or Umbrella Liability insurance policies if such policies provide coverage as is provided for under a Pollution Liability insurance policy. The Buyer shall have the right to review such coverage within such policy and accept the terms or require additional coverage in Buyer's reasonable discretion.

### **4.2** Additional Terms and Conditions.

- **4.2.1** All required insurance policies shall name Buyer, its parent, associated and affiliated companies and their respective directors, officers, agents, servants and employees as loss payees under the policy required in <u>Section 4.1.6</u> and <u>4.1.7</u> as its interest may appear under this Agreement, and as additional insureds by endorsements under the policies required in <u>Sections 4.1.3</u>, 4.1.5, and 4.1.9.
- **4.2.2** All policies required under <u>Sections 4.1.1</u>, <u>4.1.2</u>, <u>4.1.5</u>, and <u>4.1.9</u> shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this Agreement against Buyer.
- **4.2.3** All policies shall provide thirty (30) days' advance written notice to Buyer for cancellation or any material change in coverage or condition and ten (10) days' notice for non-payment.
- **4.2.4** All policies required under <u>Sections 4.1.3</u> and <u>4.1.5</u> shall contain provisions that specify that the policies are primary and are not excess to or contributing with any insurance or self-insurance maintained by Buyer and shall contain a severability of interest or cross-indemnity clause.
  - **4.2.5** Seller shall be responsible for its respective deductibles or retentions.
- **4.2.6** If any of the required insurance policies are written on a "claims made" basis, such policies shall be maintained in full force and effect for two (2) years after termination of this Agreement, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.
- **4.2.7** Certificates of insurance (including applicable endorsements and renewal certificates of insurance thereafter, executed by a duly authorized representative of each insurer, or by the insurance agent or broker authorized to do so, as evidence of all insurance policies under this Article) and summaries of all such insurance documents shall be sent to Buyer.

- **4.2.8** Buyer or Buyer's agent may inspect the original policies or require complete certified copies, at any time.
- **4.2.9** Seller shall require, and shall furnish Buyer with evidence of, the same insurance for its agents or contractors as Buyer requires of Seller.
- **4.2.10** The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by the Parties under this Agreement.

### **4.3** Market Practicability.

- 4.3.1 In the event any insurance required to be maintained hereunder shall not be reasonably available and commercially feasible in the commercial insurance market, Buyer shall waive such requirement to the extent the maintenance thereof is not so available and feasible; provided, however, that (a) Seller shall first request any such waiver in writing, which request shall be accompanied by written reports prepared by an independent insurance broker, or an insurance consultant selected by Seller and reasonably acceptable to Buyer, explaining the extent to which such insurance is not reasonably available and commercially feasible (and, in any case where the required amount is not so available, certifying as to the maximum amount which is so available) and explaining in detail the basis for such conclusions, the form and substance of such reports to be reasonably acceptable to Buyer; (b) at any time after the granting of any such waiver, but not more often than once a year, Buyer may request, and Seller shall furnish to Buyer supplemental reports reasonably acceptable to Buyer from such insurance broker updating its prior reports and reaffirming such conclusion; and (c) any such waiver shall be effective only so long as such insurance shall not be reasonably available and commercially feasible in the commercial insurance market.
- **4.3.2** If Buyer determines that the types or amounts of any insurance required to be maintained hereunder shall no longer be reasonably adequate, then Buyer may require revisions to the types or amounts of any insurance required hereunder but only if such revisions are commercially reasonable.
- 4.4 Application of Proceeds. Subject to the requirements of the Lenders' financing documents and the rights or remedies of the Lenders thereunder, Seller shall apply any and all insurance proceeds received in connection with the damage or destruction of the Project toward the repair, reconstruction or replacement of the Project; provided, however, that if the Project is damaged or destroyed due to an event of Force Majeure to an extent that results, or could reasonably be expected to result, in a repair schedule exceeding twelve (12) months, then, notwithstanding anything in this Agreement to the contrary, Seller shall not be obligated to repair, reconstruct or restore the Project unless and until Buyer waives termination under Section 18.3 for the reasonable duration of the repair. Seller shall use commercially reasonable efforts to include in the Lenders' financing documents an obligation on the part of Seller and the Lenders to apply the proceeds of physical damage, and similar insurance obtained by Seller in connection with the Project to repair and maintain the Project in order to effectuate Seller's obligations under this Agreement. In no event shall Seller enter into an agreement with the Lenders respecting the use

of insurance proceeds that is not consistent with generally accepted practices in similar financings within the electric industry.

### ARTICLE 5 DESIGN AND CONSTRUCTION OF PROJECT

### **5.1** Seller's Obligations. At no cost to Buyer, Seller shall:

- (a) Develop, design, procure, construct, commission, test, own, operate and maintain the Project as required for Seller to perform its obligations under this Agreement and in compliance with all Applicable Laws and Permit Requirements, including without limitation any Applicable Law related to safety, and any new or revised Required Permits or Applicable Laws that become effective during the Term;
- (b) Acquire and maintain all entitlements, consents, franchises, permits, certificates, licenses, authorizations and approvals required by any applicable Governmental Authority (other than the CPUC Approval and requirements of Buyer as the Scheduling Coordinator pursuant to <a href="Article 17">Article 17</a>) for the design, development, construction, installation, testing, interconnection, operation, maintenance, monitoring, removal, and ownership of the Project (the "Required Permits");
- (c) Pay all costs allocated to the Project related to acquiring and/or maintaining rights of way and upgrades to, and construction of, facilities required to interconnect the Project to the electric retail system and the Participating Transmission Owner's electric system and CAISO Grid under Full Capacity Deliverability Status (as defined in the Tariff), consistent with Applicable Laws and Seller's interconnection agreement.

### **5.2** Design Review.

- **5.2.1** In the event that construction of the Project has not commenced by the Effective Date, at Buyer's reasonable request, Seller shall provide to Buyer information related solely to operational characteristics of the Project for Buyer's review prior to finalizing design of the Project and before beginning construction work.
- **5.2.2** Seller shall provide to Buyer Notice of any changes Seller proposes to make to the Project which will materially impact its operational characteristics and the operational characteristics of such changes, for Buyer's review as far in advance as practicable, but in no event less than thirty (30) days before the changes are to be made.
- **5.2.3** Buyer may notify Seller in writing of the results of Buyer's review of the information provided by Seller pursuant to <u>Section 5.2.1</u> or <u>5.2.2</u>, within thirty (30) days of Buyer's receipt of the specifications for the Project or the change, as appropriate, including a description of any flaws perceived by Buyer in the design.
- **5.2.4** Seller shall in good faith consider any of Buyer's proposed revisions to Seller's design provided, however, that Seller shall be\_solely responsible for the final design and shall have no obligation to implement any of Buyer's proposed revisions to Seller's design.

# ARTICLE 6 CONSTRUCTION PERIOD AND MILESTONES

- Milestone Schedule. In order to meet the Guaranteed Initial Delivery Date, Seller shall meet the construction milestones set forth on Appendix 6.1(a) ("Milestone Schedule"), subject to Section 6.2. No later than the 10th day of each month while the Project has not yet met its Initial Delivery Date, Seller shall deliver to Buyer a monthly progress report, substantially in the form set forth in Appendix 6.1(b) ("Monthly Progress Report"), describing its compliance with the Milestone Schedule, including projected time to completion of any milestones, for the Project. Seller shall include in any Monthly Progress Report a list of all letters, notices, applications, approvals, authorizations and filings referring or relating to Required Permits, and provide any such documents as may be reasonably requested by Buyer; provided, however, that Seller may redact such documents as necessary to comply with third-party confidentiality obligations. In addition, Seller shall advise Buyer as soon as reasonably practicable of any problems or issues of which it is aware which could materially impact its ability to meet the Milestone Schedule. Within seven (7) days after completion of each milestone in the Milestone Schedule, Seller shall provide Buyer with Notice along with accompanying documentation (including reasonably redacted copies of applicable agreements, Required Permits, and certificates) to reasonably demonstrate the achievement of such construction milestone.
- 6.2 <u>Milestone Delay Damages and Recovery Plan</u>. If Seller fails to achieve any milestone listed on the Milestone Schedule on or before the applicable deadline listed therein (prior to giving to any extension thereof by the payment of Daily Delay Damages pursuant to <u>Section 2.10.1</u>), Seller shall cure such failure, subject to the following:
- **6.2.1** Within five (5) Business Days prior to any such failure, Seller shall submit to Buyer (i) a written description of the reason for the anticipated failure, (ii) the date Seller expects it will achieve completion of the applicable milestone ("Milestone Extension Date"), (iii) a written recovery plan for completing all necessary work to achieve completion of the missed milestone, the remaining milestones, and the Initial Delivery Date by the Guaranteed Initial Delivery Date (including plans for accelerating the work, for example, by using additional shifts, overtime, additional crews or resequencing of the work, as applicable) (the "Recovery Plan") and (iv) payment of Daily Delay Damages to extend such milestone deadline to the Milestone Extension Date, which payment shall concurrently serve to extend the Guaranteed Initial Delivery Date in accordance with Section 2.10.1. The Recovery Plan shall also include an updated Milestone Schedule with revised dates for each of the remaining milestones, which updated Milestone Schedule shall reflect the payment of any Daily Delay Damages in accordance with Section 2.10.1. Any such Recovery Plan shall be subject to the approval of Buyer, such approval not to be unreasonably withheld or delayed.
- **6.2.2** Seller shall commence the work contemplated by the Recovery Plan after approval thereof by Buyer.
- **6.2.3** Seller shall be solely responsible for any costs or expenses incurred by Seller as a result of the formulation and implementation of the Recovery Plan.

- **6.2.4** If Seller fails in any material respect, as reasonably determined by Buyer, to: (i) meet the requirements of the Recovery Plan; (ii) make sufficient progress in effecting the Recovery Plan; or (iii) achieve completion of the missed milestone by the Milestone Extension Date, Seller shall not be permitted to any further extensions of the milestone deadline unless Buyer determines that the Initial Delivery Date can still be achieved within the then-current Cure Period.
- 6.3 <u>Inspection Rights.</u> Buyer shall have the right, upon reasonable prior notice to Seller, during the Term to enter onto the Site, inspect the Project and otherwise inspect or audit Seller's EPC Contracts and its books and records in order to verify Seller's compliance with the Milestone Schedule. While on the Site, Buyer shall be responsible for compliance with all applicable safety and security protocols established by Seller, and Buyer shall not interfere with the normal operation of the Project.

# ARTICLE 7 COMMISSIONING; TESTING

- 7.1 Testing Costs. Seller will, at times and for durations reasonably agreed to by Buyer, conduct necessary testing set forth in this Article 7 to assess whether the Project and each of the Generation Facility and the Energy Storage System is functioning properly and is able to respond to Buyer Dispatch Notices or CAISO dispatch instructions. If a test is deemed a Buyer Cost Test hereunder, Buyer shall be obligated to provide (and pay for) the electricity required to charge the Energy Storage System relating to such test, and Energy from the Energy Storage System shall be treated as dispatched pursuant to Dispatch Notices by Buyer hereunder. For the avoidance of doubt, for any Buyer Cost Test Buyer be entitled to all CAISO revenues and other revenues associated with the Energy delivered from the Energy Storage System during such test. If a test is deemed a Seller Cost Test hereunder, (a) Seller shall be responsible for paying (i) the costs of all electricity required to charge the Energy Storage System relating to such test, (ii) the costs of purchasing, scheduling and delivering Charging Energy necessary to recharge the Energy Storage System so as to restore the Stored Energy that existed immediately prior to such test, and (iii) all CAISO costs and charges related to such test, and (b) Seller shall be entitled to all CAISO revenues and other revenues associated with the Energy delivered from the Energy Storage System during such test; provided, that at Buyer's election, Buyer may provide the Charging Energy necessary for such testing, in which case, Buyer shall be entitled to all CAISO revenues and other revenues associated with the Energy delivered from the Energy Storage System during such test. If a Seller Cost Test is performed during any period during which Buyer is the Scheduling Coordinator for the Project, Buyer shall pay Seller such revenues in the month following Buyer's receipt of such revenues.
- 7.2 <u>Commercial Operation Test.</u> At least seven (7) Business Days prior to the Initial Delivery Date, but no earlier than thirty (30) days prior to the Initial Delivery Date, Seller shall schedule and complete a Commercial Operation test for the Project (the "<u>Commercial Operation Test</u>"). Such Commercial Operation Test shall be scheduled and conducted in accordance with <u>Appendix 7</u> hereto and shall be deemed a Seller Cost Test. Seller shall undertake such activities in sufficient time to achieve Commercial Operation by the Guaranteed Initial Delivery Date and Buyer will reasonably cooperate with Seller to meet such deadline. The Commercial Operation Test shall establish the initial level of Contract Capacity and Tested Round-Trip Efficiency Rate for purposes of calculating the Monthly Capacity Payment under Section 9.2.

- 7.3 Annual Contract Capacity Testing. At least once per Contract Year after the initial Contract Year, upon no less than 24 hours prior Notice to Seller from Buyer (or any shorter period reasonably acceptable to Buyer consistent with Accepted Electrical Practices), subject to Article 17 and the Availability Notices delivered by Seller hereunder, Seller shall schedule and complete a Contract Capacity Test for the Energy Storage System in accordance with Appendix 7. Such Contract Capacity Test shall be deemed a Seller Cost Test. No more frequently than once per calendar quarter, Seller shall have the right to run a retest of the Contract Capacity Test at any time upon 24 hours prior written Notice to Buyer (or any shorter period reasonably acceptable to Buyer consistent with Accepted Electrical Practices) and such retest shall be a Seller Cost Test. For all purposes of this Agreement, including Section 1.1.1 and Appendix 9.2, the Contract Capacity for the Energy Storage System determined pursuant to a Contract Capacity Test shall become the new Contract Capacity for the Energy Storage System at the beginning of the day following the completion of the test, subject to the limitations in Section 1.1.1.
- 7.4 Efficiency Rate Testing. From time to time during the Delivery Period, upon no less than 48 hours prior Notice to Seller (or any shorter period reasonably acceptable to Buyer consistent with Accepted Electrical Practices), Buyer may schedule and complete an Efficiency Rate Test in accordance with Appendix 7. The Efficiency Rate Test shall be deemed a Buyer Cost Test. No more frequently than once per calendar quarter, Seller shall have the right to run a retest of an Efficiency Rate Test at any time upon 24 hours prior written Notice to Buyer (or any shorter period reasonably acceptable to Buyer consistent with Accepted Electrical Practices). For all purposes of this Agreement, including Sections 1.1.2, 1.2.2 and Appendix 9.2, the Tested Round-Trip Efficiency Rate determined pursuant to an Efficiency Rate Test shall become the new Tested Round-Trip Efficiency Rate at the beginning of the day following the completion of the test.
- 7.5 Additional Required Testing. From time to time during the Delivery Period, upon no less than twenty-four (24) hours prior Notice to Seller, Buyer, the CPUC, the CAISO or other Governmental Authority having jurisdiction may require additional tests to be performed from time to time (including tests of the Generation Facility's or Energy Storage System's Capacity for Resource Adequacy capacity requirements). Such tests shall be deemed a Buyer Cost Test. No more frequently than once per calendar quarter, Seller shall have the right to run a retest of such additional test at any time upon twenty-four (24) hours prior written Notice to Buyer (or any shorter period reasonably acceptable to Buyer consistent with Accepted Electrical Practices), and such Seller-requested retest shall be a Seller Cost Test.
- 7.6 Seller-Initiated Tests. Seller may conduct any other discretionary tests, at times and for durations reasonably agreed to by Buyer (provided that it shall be deemed reasonable for Buyer to require such discretionary test to be performed on a day in which Buyer has not dispatched the Energy Storage System or the Generation Facility, as applicable), that Seller deems necessary for purposes of reliably operating the Project, the Energy Storage System, or the Generation Facility, or for re-performing a required test within a reasonable number of days of the initial required test (considering the circumstances that led to the need for a retest) ("Seller Initiated Test"). All such Seller Initiated Tests shall be considered Seller Cost Tests. Buyer shall (at Seller's request and in Buyer's capacity as the Scheduling Coordinator hereunder) take commercially reasonable efforts to submit schedules to CAISO in accordance with the Tariff, Applicable Laws, and Accepted Electrical Practices for the Product delivered in connection with each such Seller Initiated Test. Seller shall notify Buyer of any Seller-Initiated Test no later than 24 hours prior

thereto (or any shorter period reasonably acceptable to Buyer consistent with Accepted Electrical Practices).

- 7.7 <u>Independent Witness.</u> Buyer shall be entitled to have an independent third party witness any testing under this <u>Article 7</u>, provided that (a) such third party enters into a confidentiality agreement reasonably satisfactory to Seller, and (b) Buyer is responsible for all costs, expenses and fees payable or reimbursable to such third party.
- 7.8 <u>Test Results.</u> Seller will provide all CAISO certification test results for the Project, the Generating Facility, or the Energy Storage System within five (5) Business Days of Seller's receipt for any initial or subsequent test throughout the Term of this Agreement.

# ARTICLE 8 SELLER'S OPERATION, MAINTENANCE AND REPAIR OBLIGATIONS

### 8.1 <u>Seller's Operation Obligations.</u>

- **8.1.1** When notified of a dispatch by Buyer (or the CAISO), Seller shall operate the Project in accordance with Accepted Electrical Practices, Applicable Laws, Permit Requirements and applicable California utility industry standards, including without limitation the standards established by the California Electricity Generation Facilities Standards Committee, pursuant to Public Utilities Code Section 761.3, and enforced by the CPUC, and CAISO-mandated standards, as set forth in Section 5 of the Tariff (collectively, "Industry Standards"). In addition, Seller shall at all times maintain and operate the Energy Storage System in a safe manner as required by Accepted Electrical Practices, Industry Standards, statutes, regulations or other Applicable Law.
- 8.1.2 Seller shall maintain a daily operations log for the Project and the Energy Storage System which shall include but not be limited to information on power production, electricity consumption and efficiency (if applicable), availability, hourly average Stored Energy of the Energy Storage System, hourly average Maximum Energy Capacity of the Energy Storage System, maintenance performed, outages, changes in operating status, inspections and any other significant events related to the maintenance or operation of the Project. In addition, Seller shall maintain all records applicable to the Project, including the electrical characteristics of the Project and settings or adjustments to the control equipment and protective devices of the Project. Information maintained pursuant to this Section 8.1.2 shall be provided to Buyer, within 15 days of Buyer's request.
- **8.1.3** Seller\_shall maintain accurate records with respect to the tests required under Article 7 above, including the outcomes of such tests.
- **8.1.4** Seller shall maintain and make available to Buyer and the CPUC, or any division thereof, records including logbooks, demonstrating that the Project is operated and maintained in accordance with Accepted Electrical Practices, Applicable Law and Industry Standards, including those related to safety. Seller shall comply with all reporting requirements and permit on-site audits, investigations, tests and inspections permitted or required under any Industry Standards or Applicable Laws.

- **8.1.5** Buyer or the CAISO may require Seller, at Seller's expense, to demonstrate to Buyer's commercially reasonable satisfaction the correct calibration and operation of Seller's Protective Apparatus at any time Buyer or the CAISO has reason to believe that said Protective Apparatus may impair the integrity of the Participating Transmission Owner's electric system or CAISO Grid. Buyer will reimburse Seller for all costs Seller incurs in such demonstration if the demonstration shows that the Protective Apparatus was functioning properly.
- **8.1.6** Seller shall, during the Term, only employ appropriately qualified (determined in Seller's reasonable opinion consistent with Accepted Electrical Practices) personnel for the purposes of operating and maintaining the Project. Seller shall at all times require such personnel to adhere to all applicable safety standards in accordance with Accepted Electrical Practices, Applicable Law and Industry Standards.
- 8.2 <u>Seller's Maintenance and Repair Obligations.</u> Seller shall inspect, maintain and repair the Project, and any portion thereof, in accordance with applicable Industry Standards and Accepted Electrical Practices. Seller shall maintain and deliver maintenance and repair records of the Project to Buyer's scheduling representative upon request. Seller shall ensure that any contractor or subcontractor performing maintenance, repair, inspection or other work on the Project during the Term, only employ appropriately qualified (determined in Seller's reasonable opinion consistent with Accepted Electrical Practices) personnel for the purposes of operating and maintaining the Project. Seller shall at all times require such personnel to adhere to all applicable safety standards in accordance with Accepted Electrical Practices, Applicable Law and Industry Standards.

## ARTICLE 9 COMPENSATION

- 9.1 <u>Compensation.</u> Compensation to Seller shall consist of (a) a Monthly Capacity Payment calculated in accordance with <u>Section 9.2</u>, and (b) a Monthly Energy Payment calculated in accordance with <u>Section 9.3</u>. The Monthly Capacity Payment and Monthly Energy Payment will be paid each month, in arrears in accordance with <u>Article 10</u>, for each month of the Delivery Period.
- 9.2 <u>Monthly Capacity Payment.</u> Once the Project has achieved its Initial Delivery Date, Buyer shall pay Seller a monthly capacity payment determined in accordance with the calculation set forth in <u>Appendix 9.2</u> (the "<u>Monthly Capacity Payment</u>"); *provided*, that Buyer shall not be required to pay the Monthly Capacity Payment for any month in which the Equivalent Availability Factor for the Energy Storage System is less than 0.90 or the Round-Trip Efficiency Rate Factor for the Energy Storage System is less than 0.90.
- **9.3** Monthly Energy Payment. Once the Project has achieved its Initial Delivery Date, Buyer shall pay Seller a monthly energy payment determined in accordance with the calculations set forth in <u>Appendix 9.3</u> (the "<u>Monthly Energy Payment</u>").
- 9.4 <u>Additional Compensation.</u> Except with respect to revenue derived from a Seller Cost Test as set forth in <u>Article 7</u> or Availability Incentive Payments as contemplated by <u>Section</u> 14.4, in the event that Seller is compensated by a third party for any Product produced by the

Project, including, but not limited to, compensation for Resource Adequacy or Green Attributes, Seller shall remit all such compensation directly to Buyer.

### ARTICLE 10 PAYMENT AND BILLING

- 10.1 <u>Billing Period.</u> The calendar month shall be the standard period for all payments under this Agreement (other than Termination Payment). As soon as practicable after the end of each month (but no later than ten (10) Business Days after the end of each month), each Party will render to the other Party an invoice for the payment obligations, if any, incurred hereunder during the preceding month, together with all supporting documentation and calculation necessary to evidence all amounts charged thereunder.
- 10.2 <u>Timeliness of Payment.</u> All undisputed amounts in invoices under this Agreement shall be due and payable in accordance with each Party's invoice instructions on or before the later of the twentieth (20<sup>th</sup>) day of each month, or the tenth (10<sup>th</sup>) day after receipt of the invoice, or, if such day is not a Business Day, then on the next Business Day. Each Party will make payments by electronic funds transfer, or by other mutually agreeable methods, to the account designated by the other Party. Any amounts not paid by the due date will be deemed delinquent and will accrue interest at the Default Rate, such interest to be calculated from and including the due date to but excluding the date the delinquent amount is paid in full.
- Disputes and Adjustments of Invoices. A Party may, in good faith, dispute the correctness of any invoice, or any adjustment to an invoice rendered under this Agreement or adjust any invoice for any arithmetic or computational error, within twenty-four (24) months of the date of invoice or adjustment. Any dispute with respect to an invoice is waived unless the other Party receives Notice under this Section 10.3 within twenty-four (24) months after the invoice is rendered or any specific adjustment to the invoice is made. In the event an invoice or portion thereof, or any other claim or adjustment arising hereunder, is disputed, payment of the undisputed portion of the invoice shall be required to be made when due, with Notice of the objection given to the other Party. Any invoice dispute or invoice adjustment shall be in writing and shall state the basis for the dispute or adjustment. Payment of the disputed amount shall not be required until the dispute is resolved. Upon resolution of the dispute, any required payment shall be made within three (3) Business Days of such resolution along with interest accrued at the Default Rate from and including the due date to but excluding the date paid. Inadvertent overpayments shall be returned upon written request (the "Overpayment Notice") or deducted by the Party receiving such overpayment from subsequent payments, with interest accrued at the Default Rate from and including the date that is three (3) Business Days following receipt of an Overpayment Notice to but excluding the date repaid or deducted by the Party receiving such overpayment.
- 10.4 <u>Netting of Payments.</u> The Parties hereby agree that they shall discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts owed by each Party to the other Party for the purchase and sale of Product during the monthly billing period under this Agreement, interest, and payments or credits, shall be netted so that only the excess amount remaining due shall be paid by the Party who owes it.

10.5 <u>Payment Obligation Absent Netting.</u> If no mutual debts or payment obligations exist and only one Party owes a debt or obligation to the other during the monthly billing period, including, but not limited to, interest and payments or credits, that Party shall pay such sum in full when due.

### ARTICLE 11 CREDIT AND COLLATERAL

- 11.1 <u>Financial Information</u>. If requested by one Party, the other Party shall deliver:
- (a) Within one hundred twenty (120) days following the end of each fiscal year, a copy of its (and, if applicable, its Guarantor's) annual report containing audited consolidated financial statements for such fiscal year;
- (b) Within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of its (and, if applicable, its Guarantor's) quarterly report containing unaudited consolidated financial statements for such fiscal quarter.

A Party shall have satisfied this requirement if such statements are posted and publicly available within the time frames specified above on a Party or its Guarantor's corporate website or the U.S. Securities and Exchange commission website (http://www.sec.gov/). In all cases the statements shall be for the most recent accounting period and prepared in accordance with generally accepted accounting principles; *provided*, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as the producing Party diligently pursues the preparation, certification and delivery of the statements.

### 11.2 Seller's Credit Requirements.

11.2.1 <u>Credit Requirement During Pre-Construction Period</u>. From the Effective Date to the CP Satisfaction Date, Seller shall provide and maintain Performance Assurance in an amount equal to \$ [ (the "<u>Pre-Construction Security</u>") in order to secure Seller's obligations hereunder. Except to the extent Seller elects to apply the Pre-Construction Security to the Construction Period Security, Buyer shall promptly return to Seller the unused portion of the Pre-Construction Security after the earlier of (a) the date on which Seller has delivered the Construction Period Security, and (b) termination of the Agreement by either Party under <u>Section 2.5.2(b)</u>.

11.2.2 <u>Credit Requirement During Construction Period</u>. From the CP Satisfaction Date to the Initial Delivery Date, Seller shall provide and maintain additional Performance Assurance so that the total amount of Performance Assurance is equal to \$\[ \] (the "<u>Construction Period Security</u>") in order to secure Seller's obligations hereunder. Except to the extent Seller elects to apply the Construction Period Security to the Delivery Period Security, Buyer shall promptly return to Seller the unused portion of the Construction Period Security after the earlier of (a) the date on which Seller has delivered the Delivery Period Security, and (b) the date that all payment obligations of the Seller arising under this Agreement, including compensation for penalties, Termination Payment, indemnification payments or other damages are

paid in full (whether directly or indirectly such as through set-off or netting) after an Early Termination Date.

Period, Seller shall provide and maintain Performance Assurance to Buyer in an amount equal to secure Seller's obligations hereunder ("Delivery Period Security"). Buyer shall promptly return to Seller the unused portion of the Delivery Period Security after the following have occurred: (a) the Delivery Period has expired or terminated early; and (b) all payment obligations of the Seller arising under this Agreement, including compensation for penalties, Termination Payment, indemnification payments or other damages are paid in full (whether directly or indirectly such as through set-off or netting).

### **11.3** Form of Performance Assurance.

- 11.3.1 <u>Cash</u>. In the event that Seller elects to provide cash as the applicable Performance Assurance, Buyer shall deposit (or cause to be deposited) such cash in an account bearing interest at the rate per annum equal to the Interest Rate. Interest shall be calculated monthly (without compounding) at a monthly rate of 1/12 of such Interest Rate, shall be retained in such account, and shall be applied toward the amount of the applicable Performance Assurance, and any amount in excess of the required amount of applicable Performance Assurance on the last Business Day of each calendar year shall be returned to Seller.
- 11.3.2 <u>Letters of Credit</u>. Performance Assurance provided in the form of a Letter of Credit shall be subject to the following provisions:
- (a) Each Letter of Credit shall be maintained for the benefit of Buyer. Seller shall cause the renewal of each outstanding Letter of Credit on a timely basis as provided in the relevant Letter of Credit and as provided in accordance with this Agreement, and in no event less than sixty (60) days prior to the expiration of the outstanding Letter of Credit. If Seller fails to renew or cause the renewal of any outstanding Letter of Credit on a timely basis as provided in this Section 11.3.2, Buyer shall have the right to draw the entire amount of such Letter of Credit.
- (b) Upon, or at any time after it has been determined that Seller has forfeited all or part of its Pre-Construction Security, then Buyer may draw on any undrawn portion of any outstanding Letter of Credit upon submission to the bank issuing such Letter of Credit of one or more certificates specifying that Seller has forfeited all or part of its Pre-Construction Security in the amount set forth in Section 2.3.1 or 2.5.2 as applicable. Cash proceeds received by Buyer from drawing upon the Letter of Credit shall be for the account of Buyer.
- (c) In the event Seller incurs Daily Delay Damages pursuant to <u>Section 2.10.1</u>, then Buyer may draw on any undrawn portion of any outstanding Letter of Credit upon submission to the bank issuing such Letter of Credit one or more certificates specifying that such Daily Delay Damages have been incurred and are unpaid. Cash proceeds received by Buyer from drawing upon the Letter of Credit shall be for the account of Buyer in satisfaction of Seller's obligations hereunder.
- (d) Upon, or at any time after, the occurrence and continuation of an Event of Default by Seller, then Buyer may draw on the entire undrawn portion of any outstanding

Letter of Credit upon submission to the bank issuing such Letter of Credit of one or more certificates specifying that such Event of Default has occurred and is continuing. Cash proceeds received by Buyer from drawing upon the Letter of Credit shall be used to offset Buyer's damages and to the extent in excess of Buyer's damages shall be deemed Performance Assurance as security for the Seller's obligations to Buyer and Buyer shall at all times have the exclusive dominion and control of, and at no time shall Seller have any rights or powers to direct or control such cash proceeds. Notwithstanding Buyer's receipt of cash proceeds of a drawing under the Letter of Credit, Seller shall remain liable (i) for any failure to provide sufficient Performance Assurance as required under this Agreement, and (ii) for any amounts owing to Buyer and remaining unpaid after the application of the amounts so drawn by Buyer.

- (e) In all cases, the costs and expenses of establishing, renewing, substituting, canceling, amending and increasing the amount of a Letter of Credit shall be borne by Seller.
- 11.3.3 <u>Guaranty</u>. Performance Assurance provided in the form of the Guaranty Agreement, if offered from Seller, shall be from a Guarantor reasonably acceptable to Buyer and satisfying the following: (i) the Guarantor shall maintain a Credit Rating of at least "BBB-" by S&P or "Baa3" by Moody's and (ii) a tangible net worth of at least One Billion Dollars (\$1,000,000,000).
- First Priority Security Interest. To secure Seller's performance of its obligations under this Agreement, and until released as provided herein, Seller hereby grants to Buyer a present and continuing first-priority security interest ("Priority Security Interest") in, and lien on (and right of setoff against), and assignment of, Seller's rights in respect of the Performance Assurance, and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of Buyer, and Seller agrees to take such action and execute all such documents, instruments, agreements and certifications (to be effective as the same time as such Performance Assurance is required to be provided) as Buyer reasonably requires in order to perfect Buyer's Priority Security Interest in, and lien on (and right of setoff against), such collateral, any and all amounts deposited therein, and any and all proceeds resulting therefrom or from the liquidation thereof. In addition, Seller authorizes Buyer to file such Uniform Commercial Code financing statements and to take such further action and execute such further instruments as shall reasonably be required by Buyer to confirm and continue the validity, priority, and perfection of the Priority Security Interests. Upon or any time after the occurrence or deemed occurrence and during the continuation of an Event of Default or an Early Termination Date, Buyer may do any one or more of the following if amounts due and owing by Seller remain unpaid:
- (a) Exercise any of its rights and remedies with respect to all Performance Assurance, including any such rights and remedies under law then in effect;
- (b) Exercise its rights of setoff against any and all property of Seller in Buyer's possession;
  - (c) Draw on any outstanding Letter of Credit issued for its benefit; or

(d) Liquidate all Performance Assurance then held by or for the benefit of Buyer free from any claim or right of any nature whatsoever of Seller, including any equity or right of purchase or redemption by Seller.

Buyer shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce Seller's obligations under this Agreement (Seller remaining liable for any amounts owing to Buyer after such application), subject to Buyer's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

Buyer does not have and will not have any obligation to post margin, provide letters of credit, pay deposits, make any other prepayments or provide any other financial assurances, in any form whatsoever. Seller agrees that it shall not have any grounds for insecurity with respect to the creditworthiness of Buyer, and hereby waives all implied rights relating to financial assurances arising from Section 2-609 of the Uniform Commercial Code or case law applying similar doctrines.

### ARTICLE 12 COLLATERAL ASSIGNMENT

12.1 Consent to Collateral Assignment. Subject to the provisions of this Article, Seller shall have the right to assign all its rights, title and interests in the Project, Site, other real, personal and other of its properties, and this Agreement as collateral for any financing or refinancing of the Project. In connection with any such collateral assignment, Seller shall enter into a consent to collateral assignment of this Agreement ("Collateral Assignment Agreement") in the form attached hereto as Appendix 12.1. Any requests for a Collateral Assignment Agreement must be received by Buyer at least forty-five (45) days in advance of the anticipated closing date for the transaction in question. Seller shall also be responsible for Buyer's reasonable costs associated with the preparation, review, execution and delivery of documents in connection with any such assignment, including attorneys' fees.

# ARTICLE 13 GOVERNMENTAL AND ENVIRONMENTAL CHARGES

13.1 Governmental Charges. Seller shall pay or cause to be paid all taxes, charges or fees imposed by a Government Authority ("Governmental Charges") on or with respect to the Product prior to the Energy Delivery Point. For the avoidance of doubt, such Governmental Charges shall include ad valorem taxes of Seller that are related to the Project, and franchise or income taxes that are related to the sale of the Product to Buyer and which arise or are imposed prior to the Energy Delivery Point. Buyer shall pay or cause to be paid all Governmental Charges on or with respect to Product which arise or are imposed at and from the Energy Delivery Point. In the event Seller is required by Applicable Laws to remit or pay Governmental Charges which are Buyer's responsibility hereunder, Buyer shall promptly reimburse Seller for such Governmental Charges. If Buyer is required by Applicable Laws to remit or pay Governmental Charges which are Seller's responsibility hereunder, Buyer may deduct the amount of any such Governmental Charge from the sum due to Seller under Article 10. Nothing shall obligate or cause a Party to pay or be liable to pay any Governmental Charges for which it is exempt under the law.

This Section shall not apply to CAISO charges, penalties, costs, or revenues associated with operation of the Project or transmission of the Product allocated pursuant to <u>Section 14.4</u>.

- 13.2 <u>Compliance with Laws and Indemnification.</u> Seller shall be solely responsible for any fines, penalties or other charges which result from Seller's failure to obtain or maintain such Required Permits and/or operate the Project in accordance with Applicable Laws and Permit Requirements. No such fines, penalties or charges shall be passed through to Buyer.
- 13.3 <u>Environmental Costs.</u> Seller shall be solely responsible for all Environmental Costs with respect to the Project.

### ARTICLE 14 SCHEDULING COORDINATOR

- 14.1 <u>VER Forecasting Program Requirements.</u> Seller shall cause the Generation Facility to become a Participating Intermittent Resource, including by executing all necessary documents to become a Participating Intermittent Resource. Seller shall be responsible for all CAISO forecasting fees and related charges associated with the Generation Facility becoming a Participating Intermittent Resource and participating in the VER Forecasting Program. Seller and Buyer shall comply with the VER Forecasting Program, and all additional protocols issued by the CAISO relating to Participating Intermittent Resources, including the VER Forecasting Program, for the Delivery Period. Seller shall provide Buyer with a copy of the notice from the CAISO certifying the Generation Facility as a Participating Intermittent Resource prior to the Commercial Operation Date. In the event that the VER Forecasting Program or the Tariff and/or any protocols relating thereto are changed, amended, modified replaced or terminated, Seller and Buyer agree to comply with such revisions and, to the extent practical, to implement such revisions in a manner that maintains the relative economic positions of the Parties as of the date of this Agreement.
- 14.2 <u>Buyer Scheduling Coordinator</u>. At least thirty (30) days prior to the beginning of testing of the Generation Facility or Energy Storage System, Seller shall take all actions and execute and deliver to Buyer and the CAISO all documents necessary to authorize or designate Buyer as Seller's Scheduling Coordinator for the Generation Facility or Energy Storage System (as appliable) effective as of the start-up, testing and commissioning thereof. During the Term, Seller shall not authorize or designate any other party to act as Seller's Scheduling Coordinator, nor shall Seller perform for its own benefit the duties of Scheduling Coordinator, and Seller shall not revoke Buyer's authorization to act as Seller's Scheduling Coordinator unless agreed to by Buyer. Buyer may withhold all Monthly Capacity Payments and Monthly Energy Payments that would otherwise be due to Seller until Buyer is fully authorized as the Scheduling Coordinator for the Generation Facility or Energy Storage System (as appliable). Upon Buyer's reasonable determination that it is fully authorized to act as Scheduling Coordinator for the Project, Buyer shall pay all withheld Monthly Capacity Payments or Monthly Energy Payments on the next applicable payment date therefor.[NOTE to Bidders: parties to discuss SC duties during precommercial operation testing.]
- 14.3 <u>Notices.</u> Buyer shall provide Seller with access to a web-based system through which Seller shall submit to Buyer and the CAISO all notices and updates required under the Tariff regarding the Project's status, including, but not limited to, all Outage Management System Outage

Requests, OMS Forced Outages, or CAISO Forced Outage Reports (in each case, as defined in the Tariff). In accordance with this Article and <u>Article 18</u>, Buyer will cooperate with Seller to provide such notices and updates. If the web based system is not available, Seller shall promptly submit such information to Buyer and the CAISO (in order of preference) telephonically, by electronic mail, or facsimile transmission to the personnel designated to receive such information.

- CAISO Costs and Revenues. Except as otherwise set forth below or elsewhere in this Agreement, Seller shall be responsible for all CAISO charges and penalties associated with the operation of the Project, transmission of Delivered Energy to the Energy Delivery Point, and receiving at and transmitting Charging Energy from the Energy Delivery Point, and Buyer shall be responsible for all CAISO charges and penalties associated with transmitting Charging Energy to the Energy Delivery Point and receiving Delivered Energy at the Energy Delivery Point. Except as otherwise set forth below or elsewhere in this Agreement, Buyer shall be responsible for CAISO costs (including penalties and other charges (including Negative Imbalance Energy costs or revenues)) and receive all CAISO revenues (including credits and other payments (including Positive Imbalance Energy revenues or costs)) incurred as a result of providing Scheduling Coordinator services, including costs and revenues associated with CAISO dispatches. Notwithstanding anything contained herein to the contrary, Seller shall be responsible for (a) Non-Availability Charges, (b) Uninstructed Imbalance Energy charges and Uninstructed Deviation Penalties, (c) Ancillary Services No-Pay charges, and (d) all CAISO charges or payments incurred as a consequence of Seller either failing to notify Buyer of outages in a timely manner as set forth in Article 17 or failing to abide by the Tariff (including deviations from Scheduled Energy that are attributable to Seller's failure to abide by the Tariff). Furthermore, the Parties agree that any Availability Incentive Payments are for the benefit of the Seller and for Seller's account and that any Non-Availability Charges are the responsibility of the Seller and for Seller's account.
- 14.4.1 Generation Facility Imbalance Energy. Seller shall use commercially reasonable efforts to deliver Energy in accordance with the Generation Facility Scheduled Energy. Buyer and Seller recognize that from time to time the amount of Generation Facility Grid Delivered Energy will deviate from the amount of Generation Facility Scheduled Energy. When Generation Facility Grid Delivered Energy minus Generation Facility Scheduled Energy is a positive amount, it shall be considered "Positive Imbalance Energy;" when Generation Facility Grid Delivered Energy minus Generation Facility Scheduled Energy is a negative amount, the absolute (i.e., positive) value of that amount shall be considered the "Negative Imbalance Energy." Buyer shall receive all Green Attributes for the Positive Imbalance Energy in all settlement intervals.
- 14.5 <u>CAISO Settlements.</u> Buyer shall be responsible for all settlement functions with the CAISO related to the Project. Buyer shall render a separate invoice to Seller for all CAISO charges or payments ("<u>CAISO Charges Invoice</u>") for which Seller is responsible under this Agreement in accordance with the applicable billing and payment methodologies utilized for the specific CAISO charge type as set forth in the Tariff and/or related CAISO procedure. CAISO Charges Invoices shall be rendered after final settlement information becomes available from the CAISO that identifies any CAISO charges. Notwithstanding the foregoing, Seller acknowledges that the CAISO will issue additional invoices reflecting CAISO adjustments to such CAISO charges. Seller shall pay the amount of CAISO Charges Invoices within ten (10) Business Days of Seller's receipt of the CAISO Charges Invoice. If Seller fails to pay such CAISO Charges

Invoice within that period, Buyer may net or offset any amounts owing to it for these CAISO Charges Invoices against any future amounts it may owe to Seller under this Agreement. The obligations under this Section with respect to payment of CAISO Charges Invoices shall survive the expiration or termination of this Agreement.

- 14.6 Terminating Buyer's Designation as Scheduling Coordinator. The Parties will take all actions necessary to terminate the designation of Buyer as Scheduling Coordinator for each of the Generation Facility and the Energy Storage System as of 11:59 p.m. on the date that is the earlier of the expiration of the Term or the Early Termination Date ("SC Replacement Date"), regardless of which Party designated such expiration or termination date. The necessary actions include the following, to be performed no later than thirty (30) days prior to such date: (a) Seller shall (i) submit to the CAISO a designation of a new Scheduling Coordinator therefor to replace Buyer effective as of the SC Replacement Date and (ii) cause its newly designated Scheduling Coordinator to submit a letter to the CAISO accepting the designation; and (b) Buyer shall submit a letter to the CAISO resigning as Scheduling Coordinator therefor effective as of the SC Replacement Date. Seller bears sole responsibility for locating, selecting and reaching agreement about terms with any replacement Scheduling Coordinator.
- 14.7 <u>CAISO Sanctions.</u> If during the Delivery Period, the CAISO implements or has implemented any sanction or penalty related to scheduling, outage reporting, or generator operation, and any such sanctions or penalties are imposed upon the Project, the Generation Facility or Energy Storage System or to Buyer as Scheduling Coordinator due to the actions or inactions of Seller, the cost of the sanctions or penalties shall be the Seller's responsibility.
- 14.8 <u>Master Data File and Resource Data Template.</u> Seller shall provide the data to the CAISO (and to Buyer) that is required for the CAISO's Master Data File and Resource Data Template (or successor data systems) for the Generation Facility and the Energy Storage System. Buyer, as Scheduling Coordinator, shall not change such data without Seller's prior written consent.

# ARTICLE 15 SCHEDULING, DISPATCH NOTICES and OPERATING RESTRICTIONS

- 15.1 <u>Scheduling Generally.</u> Buyer shall submit schedules to the CAISO for each of the Generation Facility and the Energy Storage System in accordance with Tariff protocols for Day-Ahead and Hour-Ahead Schedules and Supplemental Energy and Ancillary Services bids as applicable and in accordance with the Operating Procedures, and provide such other services described in this Article. Buyer will submit bids to the CAISO that are in accordance with the Operating Restrictions of the Energy Storage System as specified in <u>Appendix 1.1</u>.
- 15.2 System Requirements. For the Generation Facility and Energy Storage System, Seller shall acquire, install, and maintain such facilities, communications links and other equipment, and implement such protocols and practices, as necessary (a) for Seller to respond and follow instructions, including an electronic signal conveying real time instructions, to operate the Generation Facility and Energy Storage System as directed by the Buyer and/or the CAISO (including to implement a System Dispatch Down or an Economic Dispatch Down) in accordance with the then-current methodology used to transmit such instructions as it may change from time

to time, and (b) for Buyer and/or the CAISO to control the quantity of Product generated or delivered by the Generation Facility and Energy Storage System, in each case, in accordance with the then-current methodology used to transmit such instructions as it may change from time to time. As of the Effective Date, the systems required to comply with clause (i) include at a minimum the CAISO's Automatic Dispatch System (as described in the CAISO website) and the systems required to comply with clause (ii) include at a minimum the CAISO'S Application Programming Interfaces (as described in the CAISO website). If at any time during the Delivery Period Seller's facilities, communications links or other equipment, protocols or practices are not in compliance with then-current methodologies, Seller shall take all commercially reasonable steps necessary to become compliant as soon as possible. Seller shall be liable pursuant to Section 15.6 for failure to comply with a Dispatch Notice during the time that Seller's facilities, communications links or other equipment, protocols or practices are not in compliance with thencurrent methodologies. For the avoidance of doubt, a Dispatch Notice (including an order directing a Dispatch Down Period) provided via such systems and facilities shall have the same force and effect on Seller as any other form of communication. If an electronic submittal is not possible, Buyer and/or the CAISO may provide Dispatch Notices by (in order or preference) electronic mail, telephonically, or facsimile transmission to Seller's personnel designated to receive such communications, as provided by Seller in writing and Seller shall maintain communications systems necessary to permit such transmittal of Dispatch Notices.

- 15.3 <u>Generation Facility Scheduling and Dispatch Down</u>. The following provisions of this <u>Section 15.3</u> shall apply to the Generation Facility:
- 15.3.1 <u>VER Forecasting Program Requirements</u>. For the Generation Facility, consistent with the requirements of <u>Section 15.1</u>, Buyer's Schedules and any updates to such Schedules to the CAISO shall be based on the most current forecast of Generation Facility Delivered Energy consistent with the VER Forecasting Program whenever the VER Forecasting Program is available, and consistent with Buyers' best estimate based on the information reasonably available to Buyer including Buyer's forecast whenever the VER Forecasting Program is not available. In all cases, consistent with its Economic Dispatch Down curtailment rights, Buyer (as the Scheduling Coordinator) may submit a self-schedule or an economic bid in the applicable CAISO market in order to Schedule a Generation Facility's Product with the CAISO.
- 15.3.2 <u>Annual Delivery Schedules</u>. No later than forty-five (45) days before (a) the first day of the first Contract Year of the Delivery Period and (b) the beginning of each calendar year for every subsequent Contract Year during the Delivery Period, Seller shall provide a non-binding forecast of each month's average-day expected Generation Facility Delivered Energy for each Project System, by hour, for the following calendar year.
- 15.3.3 <u>Monthly Delivery Schedules</u>. Ten (10) Business Days before the beginning of each month during the Delivery Period, Seller shall provide a non-binding forecast of each day's average expected Generation Facility Delivered Energy for each Project System, by hour, for the following month ("<u>Monthly Delivery Forecast</u>").
- 15.3.4 <u>Daily Delivery Schedules</u>. By 5:30 AM Pacific Prevailing Time on the Business Day immediately preceding the date of delivery, for the Generation Facility, Seller shall provide Buyer with a non-binding forecast of the Generation Facility's Available Generation

Capacity (or if the VER Forecasting Program is not available for any reason, the expected Generation Facility Delivered Energy) for each hour of the immediately succeeding day ("Day-Ahead Forecast"), it being understood that, consistent with its Economic Dispatch Down curtailment rights, Buyer (as the Scheduling Coordinator) may submit a self-schedule or an economic bid in the applicable CAISO market in order to Schedule the Generation Facility's Product with the CAISO. A Day-Ahead Forecast provided in a day prior to any non-Business Day(s) shall include Schedules for the immediate day, each succeeding non-Business Day and the next Business Day. Each Day-Ahead Forecast shall clearly identify, for each hour, Seller's best estimate of the Generation Facility's Available Generation Capacity (or if the VER Forecasting Program is not available for any reason, the expected Generation Facility Delivered Energy). Seller may not change such Schedule past the deadlines provided in this section except in the event of a Forced Outage or Schedule change imposed by Buyer or the CAISO, in which case Seller shall promptly provide Buyer with a copy of any and all updates to such Schedule indicating changes from the then-current Schedule. These notices and changes to the Schedules shall be sent to Buyer's on-duty Scheduling Coordinator. If Seller fails to provide Buyer with a Day-Ahead Forecast as required herein, then for such unscheduled delivery period only Buyer shall rely on the delivery Schedule provided in the Monthly Delivery Forecast or Buyer's best estimate based on information reasonably available to Buyer and Seller shall be liable for Scheduling and delivery based on such Monthly Delivery Forecast or Buyer's best estimate.

15.3.5 Real Time Delivery Schedules. Notwithstanding anything to the contrary herein, in the event Seller makes a change to its Generation Facility Schedule on the actual date of delivery for any reason including Forced Outages (other than a scheduling change imposed by Buyer or CAISO) which results in a change to its deliveries (whether in part or in whole) from a Generation Facility, Seller shall notify Buyer immediately by calling Buyer's on-duty Scheduling Coordinator. Seller shall notify Buyer and the CAISO of Forced Outages in accordance with Article 17. Seller shall keep Buyer informed of any developments that will affect either the duration of the outage or the availability of the Generation Facility during or after the end of the outage.

## 15.3.6 Dispatch Down Periods.

- (a) <u>Generally</u>. Seller shall reduce delivery amounts from a Generation Facility as directed by the CAISO, the Participating Transmission Owner, Buyer, or a Transmission Provider during any Dispatch Down Period for the Generation Facility.
- (b) <u>Economic Dispatch Down</u>. Each of Buyer and the CAISO has the right to order Seller to curtail deliveries of Energy from a Generation Facility to the Energy Delivery Point for Economic Dispatch Down purposes, seven (7) days per week and twenty-four (24) hours per day (including holidays), by providing Dispatch Notices and Updated Dispatch Notices to Seller electronically via the communications systems described in <u>Section 15.2</u>, subject to the requirements and limitations set forth in this Agreement, including the Operating Restrictions. Each such Dispatch Notice will be effective unless and until Buyer (or the CAISO) modifies such Dispatch Notice by providing Seller with an Updated Dispatch Notice. In addition to any other requirements set forth or referred to in this Agreement, all Dispatch Notices and Updated Dispatch Notices will be made in accordance with the timelines as specified in the Tariff.

Seller agrees to adjust the Generation Facility Delivered Energy as set forth in a Dispatch Notice that meets the requirements of Economic Dispatch Down.

- (i) <u>Buyer Payments</u>. Buyer shall pay Seller, on the date payment would otherwise be due in respect of the month in which any such Economic Dispatch Down occurred, an amount equal to the product of (A) the amount of Deemed Generation Facility Bundled Green Energy resulting from such Economic Dispatch Down, multiplied by (B) the Energy Price, except to the extent Seller received a Sales Price for such Deemed Generation Facility Bundled Green Energy, in which case clause (B) above shall be the amount that the Energy Price exceeds such Sales Price for such Deemed Generation Facility Bundled Green Energy.
- (ii) <u>Additional Provisions</u>. The Parties shall describe with more specificity the Economic Dispatch Down and Charging Energy process (including the automated communication process for Dispatch Notices) in the Operating Procedures.
- 15.4 <u>Energy Storage System Scheduling and Dispatch.</u> The following provisions of this <u>Section 15.4</u> shall apply to the Energy Storage System:
- 15.4.1 <u>Availability Notices</u>. Subject to <u>Section 15.7</u>, during the Delivery Period (or earlier to enable dispatches and deliveries on the Initial Delivery Date), no later than two (2) Business Days before each schedule day for the Day-Ahead Market in accordance with WECC scheduling practices, Seller shall provide Buyer with an hourly schedule of the Available Storage Capacity that the Energy Storage System is expected to have for each hour of such schedule day (the "<u>Availability Notice</u>"). Seller will notify Buyer immediately if the Available Storage Capacity of the Project may change after Buyer's receipt of an Availability Notice. Seller shall accommodate Buyer's reasonable requests for changes in the time of delivery of Availability Notices. Seller shall provide Availability Notices using the form attached in <u>Appendix 15.4.1</u> by (in order of preference) electronic mail, facsimile transmission or, telephonically to Buyer personnel designated to receive such communications.
- 15.4.2 <u>Charging Energy Responsibilities.</u> Except as expressly set forth in this Agreement, during the Delivery Period, Seller shall be responsible, at Seller's sole cost and expense, for delivering all of the Charging Energy from the Generation Facility to the Energy Storage System in accordance with <u>Section 15.4.3</u>.
- 15.4.3 <u>Dispatch Notices</u>. Subject to the Availability Notices delivered by Seller hereunder, Buyer and CAISO will each have the right to dispatch the Energy Storage System for charging or discharging seven (7) days per week and twenty-four (24) hours per day (including holidays), by providing Dispatch Notices and Updated Dispatch Notices to Seller electronically (in the forms attached to this Agreement in <u>Appendix 15.4.3</u> or such other form as may be agreed to by the Parties in the Operating Procedures), and subject to the requirements and limitations set forth in this Agreement and the Operating Restrictions. Subject to <u>Section 15.7</u>, each Dispatch

Notice will be effective unless and until Buyer modifies such Dispatch Notice by providing Seller with an Updated Dispatch Notice. If an electronic submittal is not possible for reasons beyond Buyer's or Seller's control, Buyer may provide Dispatch Notices and Updated Dispatch Notices by (in order or preference) electronic mail, telephonically, or facsimile transmission to Seller's personnel designated to receive such communications, as provided by Seller in writing. In addition to any other requirements set forth or referred to in this Agreement, all Dispatch Notices and Updated Dispatch Notices will be made in accordance with Market Notice Timelines for dispatches as specified in the Tariff. In dispatching the Energy Storage System, Buyer, as Scheduling Coordinator for the Energy Storage System, shall assume a Round-Trip Efficiency Rate equal to the then most-recent Tested Round-Trip Efficiency Rate. During the Term, Seller shall not operate an Energy Storage System (including the charging and discharging of Energy) other than (a) as dispatched by Buyer or CAISO or (b) for testing of the Energy Storage System in accordance with Article 7.

- 15.5 <u>CAISO Dispatch.</u> Any dispatch by the CAISO for any reason, whether pursuant to an RMR Contract or in connection with any Seller's must-offer obligations or otherwise, shall be deemed to be dispatches by Buyer, and the Energy dispatched is for Buyer's benefit hereunder, and Buyer shall pay all associated costs for such CAISO dispatches in accordance with the terms of this Agreement as if such dispatches were directed by Buyer. Buyer shall be entitled to receive and retain for its own account any and all CAISO revenue for such dispatches, including without limitation any availability payments under an RMR Contract for the Project.
- Notice (or Updated Dispatch Notice) that is in compliance with this Agreement, then, to the extent of the deviation resulting from such failure, Seller shall pay Buyer an amount equal to the sum of (A) + (B) + (C), where: (A) is the amount, if any, paid to Seller by Buyer for any excess Delivered Energy caused by such failure to comply (for example, the Energy Price), and (B) is all Imbalance Energy costs or charges (excluding any revenues or credits) associated therewith, and (C) is any penalties, charges, or other direct economic losses resulting from Seller's failure to comply with the Dispatch Notice.
- 15.7 Operating Restrictions. All Operating Restrictions associated with the Product are specified on Appendix 1.1 and are subject to change from time to time based on changes in Applicable Laws or Required Permits, in each case, occurring after the CP Satisfaction Date. If Buyer submits a Dispatch Notice or an Updated Dispatch Notice that does not conform with the Operating Restrictions, then Seller shall notify Buyer of the non-conformity, and Buyer will modify its Dispatch Notice or Updated Dispatch Notice to conform to the applicable Operating Restrictions. Until such time as Buyer submits a modified Dispatch Notice or Updated Dispatch Notice, Seller shall deliver the Product in accordance with the Operating Restrictions.
- 15.8 <u>Daily Operating Report.</u> Seller shall provide Buyer the Daily Operating Report, as attached in <u>Appendix 15.8</u>, the day immediately after each operating day, for the Generation Facility and Energy Storage System.
- 15.9 <u>Writing Requirements.</u> In documenting and confirming Dispatch Notices, conversations between the Parties' personnel and contractors may be recorded by tape or other

electronic means and any such recording will satisfy any "writing" requirements under Applicable Law.

- **15.10** <u>Communication Protocols</u>. Parties shall agree to the communication protocols outlined in <u>Appendix 15.10</u> to facilitate exchange of information between the parties.
- Date of the Project, and from time to time thereafter as reasonably determined necessary by the Parties, the Parties shall meet to address how each Party will perform its respective obligations under this Agreement, including, but not limited to: (1) the method of day-to-day communications; (2) key personnel lists for each Party; (3) procedures for Forced Outage and Scheduled Outage reporting; (4) procedures for delivery forecasting; (5) charging and discharging procedures; (6) procedures for record keeping; (7) Scheduling procedures; and (8) invoicing and payment procedures; provided, that the failure to agree on these operating procedures ("Operating Procedures") will not relieve the Parties of their respective obligations under this Agreement, and any failure to agree shall be resolved in accordance with the dispute resolution procedures in Article 22.

#### 15.12 Standards of Care.

- **15.12.1** CAISO and WECC Standards. Each Party shall perform all generation, scheduling and transmission services in compliance with all applicable (a) operating policies, criteria, rules, guidelines, tariffs and protocols of the CAISO, (b) WECC scheduling practices and (c) Accepted Electrical Practices.
- 15.12.2. Reliability Standard. Seller agrees to abide by all (a) NERC, WECC and CAISO reliability requirements, including all such reliability requirements for generator owners and generator operators, and, if applicable, CPUC General Order No.167, "Enforcement of Maintenance and Operation Standards for Electrical Generating Facilities," and (ii) all applicable requirements regarding interconnection of the Project, including the requirements of the interconnected Transmission Provider.
- 15.13 <u>Co-Located Projects</u>. The Parties acknowledge that this Agreement, including <u>Articles 15</u> and <u>16</u>, anticipate that the Generation Facility and Energy Storage System will be "colocated" with separate resource IDs for the Generation Facility and Energy Storage System.

# ARTICLE 16 METERING, COMMUNICATIONS, and TELEMETRY

16.1 <u>Electric Metering, Communication, Telemetry, and Access.</u> Seller shall install, activate and maintain metering, communication and telemetry equipment as required by the Tariff, this Agreement, and Seller's [Large/Small] Generator Interconnection Agreement, including without limitation, the installation of separate CAISO revenue meters as necessary to ensure a separate resource ID with the CAISO for the Generation Facility and Energy Storage System, separate communication equipment for the Generation Facility and Energy Storage System, and other requirements as may be necessary to permit separate dispatch and identification of costs for the Generation Facility and Energy Storage System. Communication equipment must be capable

at a minimum of supporting the Communication Protocols in <u>Appendix 15.10</u>. Seller shall provide Buyer access to the information provided to CAISO under the Tariff.

- 16.1.1 <u>Testing and Calibration</u>. Seller shall perform or cause to be performed, at its expense, annual testing and calibration of the electric meters in accordance with Accepted Electrical Practices and the Tariff. Seller shall give Buyer reasonable advance notice of any inspection, testing or calibration of the electric meters. Buyer shall have the right to have a representative or designee present at such inspection, test or calibration of the electric meters. Buyer shall have the right to require, at Buyer's expense, except as required below, a test of any of the electric meters not more often than two (2) times every twelve (12) months.
- 16.1.2 <u>Inaccurate Meters</u>. If any of the electric meters is deemed to be inaccurate under the Meter Service Agreement, deliveries shall be measured by reference to Seller's checkmeters, if any are installed and registering accurately, or the meter readings for the period of inaccuracy shall be adjusted as far as can be reasonably ascertained by Seller from the best available data, subject to review and reasonable approval by Buyer. If the period of the inaccuracy cannot be ascertained reasonably, any such adjustment shall be for a period equal to one-half of the time elapsed since the preceding test by applying the percentage of inaccuracy so found. Seller shall promptly cause such electric meters to be corrected and, where such inaccuracy under the terms of the Meter Service Agreement was determined pursuant to a test required by Buyer, Seller shall bear the expense of any such test.
- 16.1.3 <u>MWh Adjustments</u>. In the event that, due to correction for inaccurate electric meters deemed to be inaccurate under the Meter Service Agreement, the Delivered Energy is increased or decreased, the revised Delivered Energy shall be used for purposes of calculating payments. If any of such amounts for any period have already been calculated using the previous amount of Delivered Energy, they shall be recalculated using the revised amount of Delivered Energy. If the recalculation changes the amount payable for the period in question, revised payments shall be made by Buyer or Seller, as applicable, in accordance with <u>Section 10.3</u>.
- 16.2 <u>Real-Time Telemetry.</u> Seller shall install, activate and maintain metering, communication and telemetry equipment for the Generation Facility and Energy Storage System in a centralized system to which Buyer shall have real time access. Seller shall link its system to Buyer via an approved Buyer communication network, utilizing existing industry standard network protocol, as reasonably approved by Buyer. Seller shall correct any problems with such equipment as soon as practicable.
- 16.3 <u>Retail Electric Meter.</u> To the extent the Project is not designed in a manner which allows or requires it to serve Station Use, then during the Delivery Period, Seller shall have installed and maintained an electric retail meter as further described in <u>Appendix 1.2.1</u> in accordance with the Project's applicable retail electric service provider's tariff rules for retail electric service. [*Parties to discuss Station Use*]

## ARTICLE 17 OUTAGES

#### 17.1 <u>Scheduled Outages</u>.

17.1.1 No later than October 1 of each calendar year during the Delivery Period, and at least sixty (60) days prior to the anticipated Initial Delivery Date, Seller shall submit to Buyer Seller's schedule of proposed Scheduled Outages ("Outage Schedule") for the Generation Facility and Energy Storage System for the following calendar year in a form reasonably agreed to by Buyer. Within twenty (20) Business Days after its receipt of an Outage Schedule, Buyer shall notify Seller in writing of any reasonable request for changes to the Outage Schedule, and Seller shall, consistent with Industry Standards, accommodate Buyer's requests regarding the timing of any Scheduled Outage. Seller may propose changes to any previously scheduled outage fifteen (15) days prior to such scheduled outage. Buyer shall review each such change and shall advise Seller within three (3) days of Buyer's receipt thereof, in Buyer's sole discretion but consistent with Industry Standards and Accepted Electrical Practices, whether such change is acceptable or Buyer may propose alternate dates for the requested scheduled maintenance. Seller shall cooperate with Buyer to arrange and coordinate all Scheduled Outages with the CAISO. Seller will communicate to Buyer all changes to a Scheduled Outage and estimated time of return of the Project as soon as practicable after the condition causing the change becomes known to Seller.

- 17.1.2 If reasonably required in accordance with Accepted Electrical Practices, Seller may perform maintenance at a different time than maintenance scheduled pursuant to Section 17.1.1. Seller shall provide Notice to Buyer within the time period determined by the CAISO, as a "Resource Adequacy Resource" that is subject to the Availability Standards, to qualify for an "Approved Maintenance Outage" under the Tariff (or such shorter period as may be reasonably acceptable to Buyer based on the likelihood of dispatch by Buyer), and Seller shall limit maintenance repairs performed pursuant to this Section 17.1.2 to periods when Buyer does not reasonably believe the Generation Facility or Energy Storage System, as applicable, will be dispatched.
- 17.2 <u>No Scheduled Outages During Summer Months.</u> Except as scheduled by the Parties under <u>Section 17.1.2</u>, no outages shall be scheduled or planned from June 1 through October 31 during each year of the Delivery Period. In the event that the Seller has a previously Scheduled Outage that becomes coincident with a CAISO-declared System Emergency, Seller shall make all reasonable efforts to reschedule such Scheduled Outage.
- 17.3 Notice of Unscheduled Outages. Seller shall notify Buyer by telephoning Buyer's Dispatch Desk no later than ten (10) minutes following the occurrence of an Unscheduled Outage of the Generation Facility or Energy Storage System, or if Seller has knowledge that an Unscheduled Outage thereof will occur, within twenty (20) minutes of determining that such Unscheduled Outage will occur, utilizing an outage notification form reasonably prescribed by Buyer by Notice to Seller. Seller shall relay outage information to Buyer as required by the Tariff within twenty (20) minutes of the Unscheduled Outage and to CAISO in accordance with the outage notification requirements of the Tariff. Seller will communicate to Buyer the estimated time of return of the Generation Facility or Energy Storage System, as applicable, as soon as

practical after Seller has knowledge thereof. Seller shall be responsible for all outage coordination communications with the CAISO.

- 17.4 <u>Inspection.</u> In the event of an Unscheduled Outage, Buyer shall have the option to inspect the Project and all records relating thereto on any Business Day and at a reasonable time and Seller shall reasonably cooperate with Buyer during any such inspection. Buyer shall comply with Seller's safety and security rules and instructions during any inspection and shall not interfere with work on or operation of the Project.
- 17.5 <u>Reports of Outages.</u> Seller shall promptly prepare and provide to Buyer, all reports of Unscheduled Outages or Scheduled Outages that Buyer may reasonably require for the purpose of enabling Buyer to comply with CAISO requirements or any Applicable Laws. Seller shall also report all Unscheduled Outages or Scheduled Outages in the Daily Operating Report.

## ARTICLE 18 FORCE MAJEURE

- 18.1 No Default for Force Majeure. A Party shall not be in default in the performance of its obligations under this Agreement when and to the extent that the failure or delay of its performance is due to an event of Force Majeure. However, a failure to make payments when due shall not be excused, except to the extent such failure is caused solely by a Force Majeure event that disables physical or electronic facilities necessary to transfer funds to the payee Party.
- 18.2 <u>Force Majeure Claim.</u> If, because of a Force Majeure, either Party is unable to perform its obligations under this Agreement, such Party shall be excused from whatever performance is affected by the Force Majeure only to the extent so affected. The following procedure shall apply in the event there occurs a Force Majeure:
- (a) The Claiming Party, as soon as reasonably practical (but in no event more than five (5) Business Days after the occurrence of such Force Majeure), shall give the other Party written Notice describing the particulars of the occurrence; *provided*, that the failure to timely provide such Notice as required pursuant to this <u>Section 18.2(a)</u> shall constitute an irrevocable waiver of the right of the Claiming Party to declare a Force Majeure under this <u>Section 18.2</u> with respect to any such Force Majeure for which notice is not timely provided pursuant to this Section 18.2(a);
- (b) The Claiming Party, within five (5) Business Days of providing Notice of occurrence of the Force Majeure under clause (a) above, shall provide evidence reasonably sufficient to establish that the occurrence constitutes a Force Majeure as defined in this Agreement;
- (c) The suspension of performance shall be of no greater scope and of no longer duration than is required by the Force Majeure;
- (d) The Claiming Party shall use commercially reasonable efforts to remedy its inability to perform as soon as possible; and

- (e) As soon as Claiming Party is able to resume performance of its obligations under this Agreement, it shall do so and shall promptly give the other Party Notice of this resumption.
- 18.3 Termination for Force Majeure. If any Force Majeure event shall suspend performance by a Claiming Party for more than six (6) months from the date of Notice provided by such Claiming Party in Section 18.2(a), then, unless such Force Majeure event was caused by the Event of Default of the other Party or other delay or failure of the other Party in performing a material obligation under this Agreement, such other Party may, at any time following the end of such six (6)-month period, terminate this Agreement upon thirty (30) days prior written Notice to the Claiming Party, without further obligation by the terminating Party, except as to the payment of any costs and liabilities incurred prior to the effective date of such termination. Except to the extent Buyer may be entitled to Daily Delay Damages under Section 2.10.1, if this Agreement is terminated by Buyer under this Section 18.3, then within five (5) days following such termination, Buyer shall return to Seller any and all Letters of Credit, cash deposit, or any other forms of security or credit support previously provided by Seller and held at that time by Buyer.

# ARTICLE 19 REPRESENTATIONS, WARRANTIES AND COVENANTS

- 19.1 <u>Representations and Warranties of Both Parties.</u> As of the Effective Date and/or the CP Satisfaction Date (as applicable), each Party represents and warrants to the other Party that:
- **19.1.1** It is duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation;
- 19.1.2 As of the CP Satisfaction Date, it has all regulatory authorizations necessary for it to legally perform its obligations under this Agreement, other than with respect to Seller, any of those Required Permits that satisfy all of the following: it is not required prior to the start of construction of the Project, it is not subject to the discretionary action of the applicable Governmental Authority, and it otherwise can be obtained in the ordinary course of business;
- 19.1.3 The execution, delivery and performance of this Agreement are within its power, have been duly authorized by all necessary action and do not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any Applicable Laws;
- 19.1.4 This Agreement constitutes its legally valid and binding obligation enforceable against it in accordance with its terms, subject to any Equitable Defenses;
- 19.1.5 It is not Bankrupt and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming Bankrupt;
- 19.1.6 Except as may be set forth in its reports filed with the SEC, there is not pending or, to its knowledge, threatened against it or in Seller's case, Guarantor, if applicable, any legal proceedings that could materially adversely affect such party's ability to perform its obligations under this Agreement or the Guaranty Agreement, as applicable;

- 19.1.7 No Event of Default with respect to it has occurred and is continuing and no such event or circumstance would occur as a result of its entering into or performing its obligations under this Agreement;
- 19.1.8 It is acting for its own account, has made its own independent decision to enter into this Agreement and as to whether this Agreement is appropriate or proper for it based upon its own judgment, is not relying upon the advice or recommendations of the other Party in so doing, and is capable of assessing the merits of and understanding, and understands and accepts, the terms, conditions and risks of this Agreement;
- 19.1.9 It is a "forward contract merchant" within the meaning of the United States Bankruptcy Code and an "eligible contract participant" within the meaning of the Commodity Exchange Act;
- 19.1.10 It has entered into this Agreement in connection with the conduct of its business and it has the capacity or ability to make or take delivery of all Product under this Agreement; and
  - **19.1.11** As of the Effective Date, it is not subject to an event of Force Majeure.
- 19.2 <u>Additional Representations and Warranties of Seller</u>. Seller represents, warrants and covenants to Buyer that:
- 19.2.1 As of the CP Satisfaction Date and subject to Permitted Liens, Seller has Site Control and will maintain Site Control for the remainder of the Term;
- 19.2.2 Seller will execute a PGA and MSA prior to the Delivery Period, Seller will deliver to Buyer a true and complete copy of such PGA and MSA, and such PGA and MSA, as originally executed by Seller, shall remain in full force and effect throughout the entire Delivery Period, subject to such amendments or modifications as are deemed desirable or necessary by Seller and the CAISO, subject to approval of such amendments or modifications by Buyer, which approval shall not be unreasonably delayed or withheld;
- 19.2.3 Seller will execute all necessary grid connection, maintenance, or transmission facility services agreements prior to the commencement of the Delivery Period, Seller will deliver to Buyer a true and complete copy of such agreements, and such agreements, as originally executed by Seller, shall remain in full force and effect throughout the entire Delivery Period, subject to such amendments or modifications as are deemed desirable or necessary by Seller and the counter-party to such agreements, subject to approval of such amendments or modifications by Buyer, which approval shall not be unreasonably delayed or withheld;
- 19.2.4 Seller shall take all commercially reasonable actions required to qualify for Green-e<sup>©</sup> Energy eligibility and provide any information reasonably requested by Buyer in connection with same;
- 19.2.5 Throughout the Delivery Period that: (a) the Generation Facility and Energy Storage System qualifies and is certified by the CEC as an Eligible Renewable Energy Resource as such term is defined in Public Utilities Code Section 399.12 or Section 399.16; and (ii) the

output of the Generation Facility and Energy Storage System delivered to Buyer qualifies under the requirements of the California Renewables Portfolio Standard;

- 19.2.6 Throughout the Delivery Period the Renewable Energy Credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in CPUC Decision 08-08-028, and as may be modified by subsequent decision of the CPUC or by subsequent legislation; =
- 19.2.7 As of the Effective Date, Seller has not used, granted, pledged, assigned or otherwise committed to deliver during the Delivery Period any Contract Capacity of the Project to meet the Resource Adequacy requirement of, or confer Resource Adequacy Benefits upon, any entity other than Buyer; and
- 19.2.8 [To be added if the Delivery Period is 15 years or greater] Seller has considered long-term climate risks to the Project as required by Ordering Paragraph 14 of CPUC decision D.20-08-046.
- 19.3 <u>Additional Covenants of Both Parties.</u> Each Party covenants that through the Delivery Period:
- 19.3.1 It shall continue to be duly organized, validly existing and in good standing under the Applicable Laws of the jurisdiction of its formation;
- 19.3.2 It shall maintain (or obtain from time to time as required, including through renewal, as applicable, prior to such performance) all Governmental Authority approvals and Required Permits necessary for it to legally perform its obligations under this Agreement;
- 19.3.3 It shall perform its obligations under this Agreement in a manner that does not violate any of the terms and conditions of its governing documents, any contracts to which it is a party or any Applicable Law; and
- **19.3.4** It shall not dispute its status as a "forward contract merchant" within the meaning of the United States Bankruptcy Code.

#### **19.4** Seller's Affirmative Covenants.

- 19.4.1 Seller shall maintain and preserve its existence as a [limited liability company] formed under the laws of the State of [\_\_\_\_] and all material rights, privileges and franchises necessary or desirable to enable it to perform its obligations under this Agreement.
- 19.4.2 Seller shall, from time to time as requested by Buyer, execute, acknowledge, record, register, deliver and/or file all such notices, statements, instruments and other documents as may be necessary or advisable to render fully valid and enforceable under all Applicable Laws the rights, liens and priorities of Buyer with respect to its Priority Security Interest furnished pursuant to this Agreement.

19.4.3 Seller covenants throughout the Delivery Period that Seller shall maintain ownership of a fee, easement, long-term leasehold interest, or other similar asset ownership interest in the Project.

## 19.5 Seller's Negative Covenants.

- 19.5.1 Except for Permitted Liens, Seller shall not create, incur, assume or suffer to be created by it or any subcontractor, employee, laborer, materialman, other supplier of goods or services or any other person any lien on Seller's interest in the Site, the Project, or any part thereof or interest therein. Seller shall promptly pay or discharge, or shall cause its contractors to promptly pay and discharge, and discharge of record, any such lien for labor, materials, supplies or other obligations upon Seller's interest in the Site, the Project, or any part thereof or interest therein, unless Seller is disputing any such lien in good faith and only for so long as it does not create an imminent risk of a sale or transfer of the Site, the Project or a material part thereof or interest therein. Seller shall promptly notify Buyer of any attachment or imposition of any lien against Seller's interest in the Site, the Project, or any part thereof or interest therein
- 19.5.2 Seller shall not hold any material assets, become liable for any material obligations or engage in any material business activities other than directly associated with the development, construction, ownership or operation of the Project.
- 19.5.3 Seller shall not own, form or acquire, or otherwise conduct any of its activities through, any direct or indirect subsidiary.
- 19.5.4 Seller will not use, grant, pledge, assign or otherwise commit to deliver during the Delivery Period any Contract Capacity of the Project to meet the Resource Adequacy requirement of, or confer Resource Adequacy Benefits upon, any entity other than Buyer.
- 19.5.5 Seller shall not charge or discharge the Energy Storage System other than (a) as dispatched by Buyer or CAISO pursuant to Article 15, or (b) pursuant to a test in accordance with Article 7.
- 19.6 <u>Additional Representations, Warranties and Covenants of Buyer.</u>Buyer represents, warrants, and covenants to Seller that:
- **19.6.1** Buyer shall cooperate with Seller to obtain approval(s) from any applicable Governmental Authorities with respect to governmental approvals needed by Seller.
- 19.6.2 Buyer shall ensure that Buyer personnel that enter the Site for any reason shall comply at all times with the safety and security procedures established by Seller and Seller's contractor(s).
- 19.6.3 Buyer shall not schedule, or allow the CAISO or any third party to schedule, the Project in violation of the Operating Restrictions or as otherwise not permitted in this Agreement.
- **19.6.4** Buyer, in its role as Scheduling Coordinator, shall not violate the Tariff or Industry Standards, or any combination of the foregoing.

## ARTICLE 20 LIMITATIONS

Limitation of Remedies, Liability and Damages. THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ANY PRODUCT, AND ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED. THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND MEASURE OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF. UNLESS EXPRESSLY PROVIDED OTHERWISE IN THIS AGREEMENT, FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES SHALL BE THE SOLE AND EXCLUSIVE PROVISION AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY (OTHER THAN INJUNCTIVE RELIEF AS PROVIDED IN THIS AGREEMENT) ARE WAIVED. IF NO REMEDY OR MEASURE OF DAMAGES IS EXPRESSLY PROVIDED HEREIN, THE OBLIGOR'S LIABILITY SHALL BE LIMITED TO DIRECT ACTUAL DAMAGES ONLY, SUCH DIRECT ACTUAL DAMAGES TO BE THE SOLE AND EXCLUSIVE REMEDY AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY (OTHER THAN INJUNCTIVE RELIEF AS PROVIDED IN THIS AGREEMENT) ARE WAIVED. UNLESS EXPRESSLY HEREIN PROVIDED, NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, WHATSOEVER UNDER ANY THEORY, INCLUDING WITHOUT LIMITATION, BY STATUTE, IN TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE, (PROVIDED THAT THE FOREGOING EXCLUSION SHALL NOT PRECLUDE RECOVERY BY A PARTY OF THE TERMINATION PAYMENT OR ANY LIQUIDATED DAMAGES EXPRESSLY HEREIN PROVIDED, NOR SHALL IT BE CONSTRUED TO LIMIT RECOVERY BY AN INDEMNITEE UNDER ANY INDEMNITY PROVISION IN RESPECT OF A THIRD PARTY CLAIM), RESULTING FROM A PARTY'S PERFORMANCE OR NONPERFORMANCE OF ITS OBLIGATIONS UNDER OR TERMINATION OF THIS AGREEMENT. THE PARTIES INTEND THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE. TO THE EXTENT ANY DAMAGES REQUIRED TO BE PAID HEREUNDER ARE LIQUIDATED, THE PARTIES ACKNOWLEDGE THAT THE DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE OR OTHERWISE OBTAINING AN ADEQUATE REMEDY IS INCONVENIENT AND THE DAMAGES CALCULATED HEREUNDER CONSTITUTE A REASONABLE APPROXIMATION OF THE HARM OR LOSS. NOTHING IN THIS SECTION PREVENTS OR IS INTENDED TO PREVENT BUYER FROM PROCEEDING AGAINST OR EXERCISING ITS RIGHTS UNDER THE SECURITY DOCUMENTS.

20.2 <u>No Representation by Buyer.</u> Any review by Buyer of the Project or changes thereto, including, but not limited to, the design, construction or refurbishment, operation or maintenance of the Project, or otherwise, is solely for Buyer's information. By making such review, Buyer makes no representation as to the economic and technical feasibility, operational

capability, or reliability of the Project, and Seller shall in no way represent to any third party that any such review by Buyer of the Project, including, but not limited to, any review of the design, construction or renovation, operation, or maintenance of the Project by Buyer constitutes any such representation by Buyer. Seller is solely responsible for the economic and technical feasibility, operational capability, and reliability of the Project.

## ARTICLE 21 RECORDS

- 21.1 <u>Performance under this Agreement.</u> Each Party and its Representatives shall maintain records and supporting documentation relating to this Agreement, the Project, and the performance of the Parties hereunder in accordance with, and for the applicable time periods required by, all Applicable Laws, but in no event less than three (3) years after final payment is made under this Agreement.
- 21.2 <u>Sarbanes-Oxley and Securities and Exchange Commission Requirements.</u> The Parties acknowledge that accounting principles generally accepted in the United States of America ("<u>GAAP</u>") and SEC rules require Buyer and its independent auditor to evaluate whether Buyer must consolidate Seller's financial information (but not financial information of Seller's constituent members unless deemed to be included in the entity under GAAP). Buyer will require access to certain records, including but not limited to financial records, and personnel of Seller to determine if consolidated financial reporting is required. If Buyer and its independent auditor determine at any time that the Buyer must consolidate the Seller's financial statements to comply with GAAP and/or SEC rules regarding consolidated financial reporting, then:
- (a) Buyer shall require from Seller and Seller agrees to provide to Buyer the following during the Term of this Agreement:
  - (i) Unaudited financial statements of the Seller prepared in accordance with GAAP as of the end of the quarterly period. The financial statements should include quarter to date and year to date information and are to be provided within fifteen (15) calendar days of the end of the applicable reporting period (or the Business Day thereafter);
  - (ii) Unaudited financial schedules of the Seller, as deemed necessary for Buyer to prepare its consolidated financial statements and related footnotes to the financial statements in accordance with GAAP as of the end of the quarterly period. The financial schedules should include quarter to date and year to date information underlying the financial statements and footnotes to the financial statements and are to be provided within fifteen (15) calendar days of the end of the applicable reporting period (or the Business Day thereafter);

- (iii) Access to Seller's accounting and other records, and accounting and management personnel as reasonably determined by both Buyer and Seller so that (A) Buyer's independent auditor or its internal auditors may conduct financial audits (in accordance with the standards of the Public Company Accounting Oversight Board (United States)) as well as internal control audits (in accordance with Section 404 of the Sarbanes-Oxley Act of 2002) and (B) Buyer can be provided analytical information, as needed, to enable Buyer to meet its SEC filing requirements, including but not limited to those under Item 2 on Form 10-Q, and Item 7 on Form 10-K, "Management's Discussion and Analysis of Financial Condition and Results of Operations;"
- (iv) Upon the request of Buyer, such certifications by a duly authorized representative(s) of Seller as may be reasonably requested by Buyer (which certifications shall presumptively be reasonable if the certifications are substantially identical to those required by Buyer or its parent of business units of Buyer or its parent); and
- (v) As reasonably requested by Buyer, such information or schedules, similar to the items noted in clauses (i)-(iv) above, to enable Buyer to prepare consolidated financial statements and schedules as may be required for Buyer to obtain financing or to prepare other reports as required by regulatory bodies, such as the SEC, for periods other than as of the end of the monthly, quarterly or year to date periods then ended.
- (b) If Buyer (i) in its sole discretion determines that the financial statements of the Seller would be considered material to the Buyer or its parent company's financial statements, financial condition, or internal controls over financial reporting, and (ii) reasonably determines Seller's internal controls over financial reporting are not operating effectively or have resulted in a control deficiency, Buyer shall provide Notice to Seller. Upon receipt of such Notice, Seller will have thirty (30) days to remediate any deficiency in Seller's internal controls over financial reporting identified by the Buyer, which Buyer and Buyer's independent auditor deem to be necessary to ensure Seller's internal controls over financial reporting are adequate, during or as a result of the audits permitted under Section 21.2(a)(iii) or any other.
- (c) As soon as possible, but in no event later than two (2) Business Days following any occurrence that would affect Seller in any material way, Seller shall provide to Buyer a Notice describing such occurrence in sufficient detail to permit the Buyer to file a report on SEC Form 8-K. Such occurrences include all reportable events on the then current Form 8-K that applies to Buyer and its parent company at such time, including but not limited to a material

acquisition or disposition of assets, a material direct financial obligation or off-balance sheet financing arrangement, material litigation, and the execution or termination of a material contract.

- (d) Any information provided to Buyer shall be treated as Confidential Information except that it may be disclosed in connection with the preparation, review, certification and publication of Buyer's financial statements.
- (e) Seller shall notify Buyer at any time during the term of this Agreement of any services provided or proposed to be provided to Seller by Buyer's independent auditor. Seller, and any of Seller's Affiliates, are prohibited from engaging Buyer's independent auditor for any services or in any consulting agreement without the express written consent of partner in charge of Buyer's independent audit.
- 21.3 Other Regulatory and Governmental Requirements. At Buyer's request, Seller shall maintain and deliver to Buyer copies of records and supporting documentation with respect to the Project that Seller is not already required to maintain or deliver under Sections 21.1 and 21.2, in order to comply with all Applicable Laws.
- 21.4 <u>Audit Rights.</u> Either Party shall have the right, at its sole expense and during normal working hours, to audit the documents, records or data of the other Party to the extent reasonably necessary to verify the accuracy of any statement, claim, charge or calculation made pursuant to this Agreement. Each Party shall promptly comply with any reasonable request by the other Party and provide copies of such documents, records or data to the requesting Party. The rights and obligations under this <u>Section 21.4</u> shall survive the termination of this Agreement for a period of two (2) years.

## ARTICLE 22 DISPUTES

22.1 <u>Intent of the Parties.</u> Except as provided in the next sentence, the sole procedure to resolve any claim arising out of or relating to this Agreement or any related agreement is the dispute resolution procedure set forth in this <u>Article 22</u>. Either Party may seek a preliminary injunction or other provisional judicial remedy if such action is necessary to prevent irreparable harm or preserve the status quo, in which case both Parties nonetheless will continue to pursue resolution of the dispute by means of the dispute resolution procedure set forth in this <u>Article 22</u>.

#### **22.2** Management Negotiations.

22.2.1 The Parties will attempt in good faith to resolve any controversy or claim arising out of or relating to this Agreement or any related agreements by prompt negotiations between each Party's authorized representative designated in writing as a representative of the Party (each a "Manager"). Either Manager may, by Notice to the other Party, request a meeting to initiate negotiations to be held within ten (10) Business Days of the other Party's receipt of such request, at a mutually agreed time and place (either in person or telephonically). If the matter is not resolved within fifteen (15) Business Days of their first meeting ("Initial Negotiation End Date"), the Managers shall refer the matter to the designated senior officers of their respective companies that have authority to settle the dispute ("Executive(s)"). Within five (5) Business Days of the Initial Negotiation End Date ("Referral Date"), each Party shall provide one another Notice

confirming the referral and identifying the name and title of the Executive who will represent the Party.

- **22.2.2** Within five (5) Business Days of the Referral Date, the Executives shall establish a mutually acceptable location and date, which date shall not be greater than thirty (30) days from the Referral Date, to meet. After the initial meeting date, the Executives shall meet, as often as they reasonably deem necessary, to exchange relevant information and to attempt to resolve the dispute.
- **22.2.3** All communication and writing exchanged between the Parties in connection with these negotiations shall be confidential and shall not be used or referred to in any subsequent binding adjudicatory process between the Parties.
- **22.2.4** If the matter is not resolved within forty-five (45) days of the Referral Date, or if the Party receiving the Notice to meet, pursuant to <u>Section 22.2.1</u> above, refuses or does not meet within the ten (10) Business Day period specified in <u>Section 22.2.1</u> above, either Party may initiate arbitration of the controversy or claim by providing Notice of a demand for binding arbitration at any time thereafter.
- **22.3** <u>Arbitration</u>. Any dispute that cannot be resolved by management negotiations as set forth in <u>Section 22.2</u> above shall be resolved through binding arbitration by a retired judge or justice from the AAA panel conducted in San Diego, California, administered by and in accordance with AAA's Commercial Arbitration Rules ("Arbitration").
- **22.3.1** Any arbitrator shall have no affiliation with, financial or other interest in, or prior employment with either Party and shall be knowledgeable in the field of the dispute. The Parties shall cooperate with one another in selecting the arbitrator within sixty (60) days after Notice of the demand for arbitration. If, notwithstanding their good faith efforts, the Parties are unable to agree upon a mutually-acceptable arbitrator, the arbitrator shall be appointed as provided for in AAA's Commercial Arbitration Rules.
- 22.3.2 At the request of a Party, the arbitrator shall have the discretion to order depositions of witnesses to the extent the arbitrator deems such discovery relevant and appropriate. Depositions shall be limited to a maximum of three (3) per Party and shall be held within thirty (30) days of the making of a request. Additional depositions may be scheduled only with the permission of the arbitrator, and for good cause shown. Each deposition shall be limited to a maximum of six (6) hours duration unless otherwise permitted by the arbitrator for good cause shown. All objections are reserved for the Arbitration hearing except for objections based on privilege and proprietary and confidential information. The arbitrator shall also have discretion to order the Parties to exchange relevant documents. The arbitrator shall also have discretion to order the Parties to answer interrogatories, upon good cause shown.
- 22.3.3 The arbitrator shall have no authority to award punitive or exemplary damages or any other damages other than direct and actual damages and the other remedies contemplated by this Agreement.
- **22.3.4** The arbitrator shall prepare in writing and provide to the Parties an award including factual findings and the reasons on which their decision is based.

- **22.3.5** The arbitrator's award shall be made within nine (9) months of the filing of the Notice of intention to arbitrate (demand) and the arbitrator shall agree to comply with this schedule before accepting appointment. However, this time limit may be extended by agreement of the Parties or by the arbitrator, if necessary.
  - **22.3.6** Judgment on the award may be entered in any court having jurisdiction.
- **22.3.7** The prevailing Party in this dispute resolution process is entitled to recover its costs. Until such award is made, however, the Parties shall share equally in paying the costs of the Arbitration.
- **22.3.8** The arbitrator shall have the authority to grant dispositive motions prior to the commencement of or following the completion of discovery if the arbitrator concludes that there is no material issue of fact pending before the arbitrator.
- **22.3.9** The arbitrator shall not have the power to commit errors of law or legal reasoning, and the award may be vacated or corrected on appeal to a court of competent jurisdiction for any such error.
- **22.3.10** The existence, content, and results of any Arbitration hereunder is Confidential Information that is subject to the provisions of <u>Section 24.1</u>.
- **22.4** WAIVER OF JURY TRIAL. THE PARTIES WAIVE ANY RIGHT TO TRIAL BY JURY IN ANY LITIGATION ARISING UNDER THIS AGREEMENT TO THE EXTENT SUCH WAIVER IS CONSISTENT WITH APPLICABLE LAW.
- **22.5** Attorneys' Fees. In any proceeding brought to enforce this Agreement or because of the breach by any Party of any covenant or condition herein contained, the prevailing Party shall be entitled to reasonable attorneys' fees (including reasonably allocated fees of in-house counsel) in addition to court costs and any and all other costs recoverable in said action.

## ARTICLE 23 INDEMNIFICATION

#### **23.1** Indemnities

(a) <u>Indemnity by Seller</u>. Seller shall release, indemnify, defend, and hold harmless Buyer, its Affiliates, and its and their directors, officers, employees, agents, and representatives against and from any and all actions, suits, losses, costs, damages, injuries, liabilities, claims, demands, penalties and interest, including reasonable costs and attorneys' fees ("<u>Claims</u>") to the extent resulting from, or arising out of (i) any event, circumstance, act, or incident relating to the Product delivered by Seller under this Agreement up to the Energy Delivery Point or Charging Energy received by Seller under this Agreement after the Energy Delivery Point, (ii) Seller's development, permitting, construction, ownership, operation and/or maintenance of the Project, (iii) the failure by Seller or the failure of the Project to comply with Applicable Laws, including without limitation the Tariff, (iv) a breach of its covenants, representations, or warranties under this Agreement, (v) any Governmental Charges for which Seller is responsible hereunder, (vi) any liens, security interests, encumbrances, or other adverse claims against the Product

delivered hereunder made by, under, or through Seller, and (vii) the Project serving Station Use, in all cases including, without limitation, any Claim for or on account of injury, bodily or otherwise, to or death of persons, or for damage to or destruction of property belonging to Buyer, Seller, or others, excepting only such Claim if caused by the willful misconduct or gross negligence of Buyer, its Affiliates, and its and their directors, officers, employees, agents, and representatives.

- (b) <u>Indemnity by Buyer</u>. Buyer shall release, indemnify, defend, and hold harmless Seller, its Affiliates, and its and their directors, officers, employees, agents, and representatives against and from any and all Claims resulting from, or arising out of or in any way connected with (i) any event, circumstance, act, or incident relating to the Product received by Buyer under this Agreement after the Energy Delivery Point or Charging Energy delivered by Buyer under this Agreement up to the Energy Delivery Point, (ii) the failure by Buyer to comply with Applicable Laws, including without limitation the Tariff, (iii) a breach of its covenants, representations or warranties under this Agreement, or (iv) any Governmental Charges for which Buyer is responsible hereunder, in all cases including, without limitation, any Claim for or on account of injury, bodily or otherwise, to or death of persons, or for damage to or destruction of property belonging to Buyer, Seller, or others, excepting only such Claim to the extent caused by the willful misconduct or gross negligence of Seller, its Affiliates, and its and their directors, officers, employees, agents, and representatives.
- 23.2 <u>Insurance</u>. The provisions of this <u>Article 23</u> shall not be construed to relieve any insurer of its obligations to pay any insurance claims in accordance with the provisions of any valid insurance policy.
  - 23.3 <u>Survival</u>. All indemnity rights shall survive the termination of this Agreement.

## ARTICLE 24 CONFIDENTIALITY/REGULATORY DISCLOSURE

#### **24.1** Confidentiality.

**24.1.1** General. Neither Party shall disclose the non-public terms or conditions of this Agreement or any transaction hereunder to a third party, other than (i) the Party's Affiliates and its and their officers, directors, employees, Lenders, counsel, accountants or advisors who have a need to know such information and have agreed to keep such terms confidential, (ii) for disclosure to the Buyer's Procurement Review Group, as defined in CPUC Decision (D) 02-08-071, subject to a confidentiality agreement, (iii) to the CPUC under seal for purposes of review, (iv) disclosure of terms specified in and pursuant to Section 24.1.2; (v) in order to comply with any Applicable Law, regulation, or any exchange, control area or CAISO rule, or order issued by a court or entity with competent jurisdiction over the disclosing Party ("Disclosing Party"), other than to those entities set forth in clause (vii); (vi) to a Qualified Assignee subject to an appropriate non-disclosure agreement; or (vii) in order to comply with any applicable regulation, rule, or order of the CPUC, CEC, or the Federal Energy Regulatory Commission. In connection with requests made pursuant to clause (v) of this Section 24.1.1 ("Disclosure Order") each Party shall, to the extent practicable, use reasonable efforts to prevent or limit such disclosure. After using such reasonable efforts, the Disclosing Party shall not be (i) prohibited from complying with a Disclosure Order or (ii) liable to the other Party for monetary or other damages incurred in

connection with the disclosure of the confidential information. Except as provided in the preceding sentence, the Parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with, this confidentiality obligation.

- **24.1.2** Specific Terms. Notwithstanding Section 24.1.1, at any time on or after the date on which the Buyer makes its filing seeking CPUC Approval of this Agreement, either Party shall be permitted to disclose the following terms with respect to this Agreement: Party names, resource type, Delivery Period, Project location, Contract Capacity, Guaranteed Initial Delivery Date and Energy Delivery Point.
- **24.1.3** <u>Publicity</u>. Except as otherwise agreed to in this <u>Section 24.1</u>, no announcement, publicity, advertising, press release, promotional or marketing materials regarding the arrangement contemplated under this Agreement, including the existence hereof, shall be made by either Party without the prior written approval of the other Party which approval shall not be unreasonably withheld or delayed.
- 24.2 Ownership of Information. All Confidential Information shall be and remain the property of the Party providing it. Nothing in this Agreement shall be construed as granting any rights in or to Confidential Information to the Party or Representatives receiving it, except the right of use in accordance with the terms of this Agreement.
- **24.3** Enforcement. The Parties agree that irreparable damage would occur if the confidentiality obligations under this Agreement were not performed in accordance with its terms or were otherwise breached. Accordingly, a Party will be entitled to seek an injunction or injunctions to prevent breaches of this Article 24 and to enforce specifically its provisions in any court of competent jurisdiction, in addition to any other remedy to which the Party may be entitled by law or equity.

# ARTICLE 25 MISCELLANEOUS

- 25.1 General. This Agreement shall be considered for all purposes as prepared through the joint efforts of the Parties and shall not be construed against one Party or the other as a result of the preparation, substitution, submission or other event of negotiation, drafting or execution hereof. The term "including" when used in this Agreement shall be by way of example only and shall not be considered in any way to be in limitation. All references to time shall be in Pacific Prevailing Time unless stated otherwise. The headings used herein are for convenience and reference purposes only. This Agreement shall be binding on each Party's successors and permitted assigns. Each Party agrees if it seeks to amend any applicable wholesale power sales tariff during the term of this Agreement, such amendment will not in any way affect its obligations under the Agreement without the prior written consent of the other Party. Each Party further agrees that it will not assert, or defend itself, on the basis that any applicable tariff is inconsistent with this Agreement.
- 25.2 <u>Notices.</u> Unless otherwise provided in this Agreement, any Notice shall be in writing to the address provided below and delivered by hand delivery, United States mail, overnight courier service, facsimile, or electronic messaging (e-mail). Notice by facsimile,

electronic messaging (e-mail), or hand delivery shall be effective at the close of business on the day received, if the entire document was received during business hours on a Business Day, and otherwise shall be effective at the close of business on the next Business Day after it was sent for "next-day delivery" or its equivalent by a nationally-recognized overnight courier or personally delivered. Notice by overnight courier service shall be effective on the next Business Day after it was sent. Notice by United States mail shall be effective on the day it was received. A Party may change its address by providing Notice of same to the other Party in accordance with this <u>Section 25.2</u>.

To Buyer: San Diego Gas & Electric Company 8315 Century Park Court, CP21D San Diego, California 92123

Attention: Director of Procurement and Portfolio Design

Telephone: 858-650-6156 Facsimile: 858-650-6191

To Seller:	
Attention:	
Telephone:_	
Facsimile:	

- 25.3 Governing Law; Venue. This Agreement shall be construed under the laws of the State of California without giving effect to choice of law provisions that might apply the laws of a different jurisdiction. The Parties hereby consent to conduct all dispute resolution, judicial actions or proceedings arising directly, indirectly or otherwise in conjunction with, out of, related to or arising from this Agreement in the City of San Diego, California.
- **25.4** Amendment. This Agreement can only be amended by a writing signed by both Parties.
- 25.5 Assignment. Subject to Article 12, neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent shall not be unreasonably withheld. For purposes hereof, the transfer of at least fifty percent (50%) of the equity ownership or voting interest of Seller (or any parent entity holding directly or indirectly at least fifty percent (50%) of the equity ownership or voting interest of Seller if such interest constitutes more than twenty percent (20%) of the value of such parent entity) to a person that is not an Affiliate of Seller shall also constitute an assignment of this Agreement requiring Buyer's prior written consent. Notwithstanding the foregoing, Buyer may, without the consent of the Seller, assign this Agreement to a Qualified Assignee. Any assignment in violation of this Section 25.5 shall be null and void.

- **25.6** <u>Further Assurances</u>. If either Party determines in its reasonable discretion that any further instruments, assurances or other things are necessary or desirable to carry out the terms of this Agreement, the other Party shall execute and deliver all such instruments and assurances and do all things reasonably necessary or desirable to carry out the terms of this Agreement.
- 25.7 <u>Waiver</u>. None of the provisions of this Agreement shall be considered waived by either Party unless the Party against whom such waiver is claimed gives the waiver in writing. The failure of either Party to insist in any one instance upon strict performance of any the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishments of such rights for the future, but the same shall continue and remain in full force and effect. Waiver by either Party of any default of the other Party shall not be deemed a waiver of any other default.
- 25.8 Obligations Surviving Termination. Except as may be provided or limited by this Agreement, the obligations which by their nature are intended to survive termination of this Agreement, including, without limitation, representations, warranties, covenants and rights and obligations with respect to audits, indemnification, payment and settlement, confidentiality, shall so survive.
- 25.9 <u>No Third Party Beneficiaries</u>. This Agreement shall not impart any rights enforceable by any third party (other than a permitted successor or assignee bound by this Agreement).
- **25.10** Entire Agreement. Except for the Security Documents, this Agreement, when fully executed, constitutes the entire agreement by and between the Parties as to the subject matter hereof, and supersedes all prior understandings, agreements or representations by or between the Parties, written or oral to the extent they have related in any way to the subject matter hereof. Each Party represents that, in entering into this Agreement, it has not relied upon any promise, inducement, representation, warranty, agreement or other statement that is not set forth in this Agreement.
- **25.11** Severability. If any term, section, provision or other part of this Agreement, or the application of any term, section, provision or other part of this Agreement, is held to be invalid, illegal or void by a court or regulatory agency of proper jurisdiction, all other terms, sections, provisions or other parts of this Agreement shall not be affected thereby but shall remain in force and effect unless a court or regulatory agency holds that the provisions are not separable from all other provisions of this Agreement. In the event any such provision of this Agreement is so held invalid, illegal or void, the Parties shall promptly renegotiate in good faith new provisions to restore this Agreement as near as possible to its original intent and effect.
- **25.12** Forward Contract. The Parties acknowledge and agree that this Agreement constitutes a "forward contract" within the meaning of the United States Bankruptcy Code.
- **25.13** Mobile Sierra. Notwithstanding any provision of this Agreement, neither Party shall seek, nor shall they support any third party in seeking, to prospectively or retroactively revise the rates, terms or conditions of service of this Agreement through application or complaint to FERC pursuant to the provisions of Section 205, 206 or 306 of the Federal Power Act, or any other

provisions of the Federal Power Act, absent prior written agreement of the Parties. Further, absent the prior agreement in writing by both Parties, the standard of review for changes to the rates, terms or conditions of service of this Agreement proposed by a Party, a non-Party or the FERC acting *sua sponte* shall be the "public interest" application of the "just and reasonable" standard of review set forth in United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 US 332 (1956) and Federal Power Commission v. Sierra Pacific Power Co., 350 US 348 (1956) and clarified by Morgan Stanley Capital Group, Inc. v. Public Util. dist., No. 1 of Snohomish 554 US 527 (2008).

- 25.14 <u>Independent Contractors</u>. The Parties are independent contractors. Nothing contained herein shall be deemed to create an association, joint venture, partnership or principal/agent relationship between the Parties hereto or to impose any partnership obligation or liability on either Party. Neither Party shall have any right, power or authority to enter into any agreement or commitment, act on behalf of, or otherwise bind the other Party in any way.
- 25.15 <u>Counterparts</u>. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original. Any signature page of this Agreement may be detached from any counterpart of this Agreement without impairing the legal effect of any of the signatures thereon and may be attached to another counterpart of this Agreement identical in form hereto by having attached to it one or more signature pages.
- 25.16 Interpretation. The term "month" shall mean a calendar month unless otherwise indicated, and a "day" shall be a 24-hour period beginning at 12:00:01 a.m. Pacific Prevailing Time and ending at 12:00:00 midnight Pacific Prevailing Time; provided that a "day" may be 23 or 25 hours on those days on which daylight savings time begins and ends. Unless otherwise specified herein, all references herein to any agreement or other document of any description shall be construed to give effect to amendments, supplements, modifications or any superseding agreement or document as then exist at the applicable time to which such construction applies. Capitalized terms used in this Agreement, including the appendices hereto, shall have the meaning set forth in Appendix A, unless otherwise specified. Unless otherwise specified herein, references in the singular shall include references in the plural and vice versa, pronouns having masculine or feminine gender will be deemed to include the other, and words denoting natural persons shall include partnerships, firms, companies, corporations, joint ventures, trusts, associations, organizations or other entities (whether or not having a separate legal personality). Other grammatical forms of defined words or phrases have corresponding meanings. The term "including" when used in this Agreement shall be by way of example only and shall not be considered in any way to be in limitation. References to a particular article, section, subsection, paragraph, subparagraph, appendix or attachment shall, unless specified otherwise, be a reference to that article, section, subsection, paragraph, subparagraph, appendix or attachment in or to this Agreement. Any reference in this Agreement to any natural person, Governmental Authority, corporation, partnership or other legal entity includes its permitted successors and assigns or to any natural person, Governmental Authority, corporation, partnership or other legal entity succeeding to its functions. All references to dollars are to U.S. dollars.
- 25.17 No Agency. This Agreement is not intended, and shall not be construed, to create any association, joint venture, agency relationship or partnership between the Parties or to impose any such obligation or liability upon either Party. Neither Party shall have any right, power or

authority to enter into any Agreement, or undertaking for, or act as or be an agent or representative of, or otherwise bind, the other Party.

(Signature page follows)

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives.

[INSERT SELLER NAME]
By:
Name:
Title:
SAN DIEGO GAS & ELECTRIC COMPANY
By:
Name:
Title:

## APPENDIX A DEFINITIONS

"AAA" means the American Arbitration Association.

"Accepted Electrical Practices" means those practices, methods, applicable codes and acts engaged in or approved by a significant portion of the electric power industry during the relevant time period, or any of the practices, methods and acts which, in exercise of reasonable judgment in light of the facts known at the time a decision is made, could have been expected to accomplish a desired result at reasonable cost consistent with good business practices, reliability, safety and expedition. Accepted Electrical Practices are not intended to be limited to the optimum practices, methods or acts to the exclusion of other, but rather to those practices, methods and act generally accepted or approved by a significant portion of the electric power industry in the relevant region, during the relevant time period, as described in the immediately preceding sentence.

"Accepted Expenditures" has the meaning set forth in Section 1.5.1.

"ADS" means CAISO's Automatic Dispatching System.

"Affiliate" means, with respect to a Party, any entity that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with such Party. For this purpose, "control" means the direct or indirect ownership of fifty percent (50%) or more of the outstanding capital stock or other equity interests having ordinary voting power.

"<u>Agreement</u>" means this Renewable Energy and Energy Storage Power Purchase Agreement between Buyer and Seller, and any and all amendments as may be executed between Buyer and Seller from time to time.

"Ancillary Services" means spinning, non-spinning, regulation up, regulation down, frequency regulation, black start, voltage support, and any other ancillary services that the Project is capable of providing from time to time during the Delivery Period, consistent with the Operating Restrictions set forth in Appendix 1.1, as each is defined in the Tariff.[NOTE to Bidders: please tailor to reflect ancillary services bid.]

"Ancillary Services Capacity" or "A/S Capacity" means capacity associated with Ancillary Services available to Buyer within the scope of operations allowed Buyer under Section 1.1.3.

"Annual Supply Plan" has the meaning set forth in the Tariff.

"Applicable Laws" means all applicable statutes, laws, court decisions, ordinances, rules, order, writ, subpoena or regulations of any Governmental Authority, or the rules or regulations of any exchange or control grid operator.

"Arbitration" has the meaning set forth in Section 22.3.

"Associated Ancillary Services Energy" means the Energy expressed in megawatt-hours ("MWh") expressly associated with the Ancillary Services Capacity made available from the Energy Storage System at the instruction of the CAISO.

"Associated Energy" means the Energy expressed in megawatt-hours ("MWh") or kilowatt-hours ("KWh"), expressly associated with Contract Capacity dispatched under this Agreement.

"Availability Incentive Payments" shall mean Availability Incentive Payments as defined in the Tariff or such other similar term as modified and approved by FERC hereafter to be incorporated in the Tariff.

"Availability Notice" means an hourly schedule of the amounts of Available Storage Capacity that the Energy Storage System is expected to be available during each hour of the day to which the Availability Notice pertains, pursuant to Section 15.4.1.

"Availability Standards" shall mean Availability Standards as defined in the Tariff or such other similar term as modified and approved by FERC hereafter to be incorporated in the Tariff.

"Available Generation Capacity" means the capacity of the Generation Facility, expressed in MWs, that is available to generate Energy.

"Available Storage Capacity" means the amount of Charging Capacity and Discharging Capacity that is available to Buyer under this Agreement from the Energy Storage System on average during an hour.

"Bankrupt" means with respect to any entity, such entity (i) files a petition or otherwise commences, authorizes, or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar law, or has any such petition filed or commenced against it and such petition is not stayed or dismissed within ninety (90) days thereafter, (ii) makes an assignment or any general arrangement for the benefit of creditors, (iii) otherwise becomes bankrupt or insolvent (however evidenced), (iv) has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets, or (v) is generally unable to pay its debts as they fall due.

"<u>Bundled Green Energy</u>" means, with respect to each Project System, the Generation Facility Bundled Green Energy and Energy Storage System Bundled Green Energy for such Project System, without duplication.

"Business Day" means any day except a Saturday, Sunday, the Friday immediately following the United States Thanksgiving holiday, or a Federal Reserve Bank holiday.

"Buyer" has the meaning set forth in the introductory paragraph hereto.

"Buyer Cost Test" means any test requested by Buyer hereunder.

"CAISO" means the California Independent System Operator, a state chartered, nonprofit, public benefit corporation that controls certain transmission facilities of all Participating Transmission Owners and dispatches certain electric generation units and loads, or any successor entity performing the same functions.

"CAISO Certification" means the certification and testing requirements for a generating unit set forth in the Tariff, including certification and testing for all Ancillary Services (included in this Agreement) and PMAX and PMIN.

"CAISO Charges Invoice" has the meaning set forth in Section 14.5.

"CAISO Grid" means the system of transmission lines, distribution equipment and associated facilities of the Participating Transmission Owners that are within the CAISO's balancing authority.

"CAISO RA Enhancement" means a change to the CAISO's Resource Adequacy tariff provisions that (a) changes the basis for assessment of Resource Adequacy showings and supply plans from (i) a value reflecting installed capacity (currently, NQC) to (ii) a value that takes into account historical forced outages of a facility (such as "Unforced Capacity" or "UCAP," as referenced in CAISO's Fourth Revised Straw Proposal dated March 17, 2020) and (b) eliminates the application of Resource Adequacy Availability Incentive Mechanism (RAAIM) (as defined in the Tariff) charges to forced outage periods.

"California Energy Commission" or "CEC" means the State Energy Resources Conservation and Development Commission as defined and used in Section 25104 in the California Public Resources Code, Division 15, Energy Conservation and Development (Sections 25000, et seq) or its successor agency.

"Capacity Attributes" means any current or future defined characteristic, certificate, tag, credit, or ancillary service attribute, whether general in nature or specific as to the location or any other attribute of the Project intended to value any aspect of the capacity of a Project System to produce or deliver Energy or ancillary services, including but not limited to any accounting construct so that the Energy Storage Capacity of the Energy Storage System or capacity of the Generation Facility may be counted toward a Resource Adequacy obligation or similar measure in respect to the capacity of the Generation Facility or Energy Storage System to generate or deliver Energy by the CPUC, the CAISO, the FERC, or any other entity vested with the authority under federal or state Law, to require Buyer to procure, or to procure at Buyer's expense, Resource Adequacy or other similar products.

"Change in RA Law" means a change in Applicable Laws occurring after the Effective Date that would, absent further action by Seller, change the methodology for determining the Qualified RA Capacity for a Project System's Energy Storage System.

"Charging Capacity" means the maximum dependable operating capability of the Energy Storage System, measured in  $MW_{DC}$ , to charge electric energy into a partially or fully discharged storage device.

"Charging Energy" means, in respect of the Energy Storage System, for a given period of time, the amount of Energy (in MWhDc) used to charge (or recharge) the Energy Storage System during the period as measured by the Metering Equipment at the Charging Energy Delivery Point.

"Charging Energy Capacity" means the maximum amount of energy, in MWh<sub>DC</sub>, that the Energy Storage System is capable of being charged (assuming the Energy Storage System is fully discharged).

"<u>Charging Energy Delivery Point</u>" means the electrical point between the Generation Facility or the CAISO Grid, as applicable, and Energy Storage System at which the Charging Energy is measured.

"Claiming Party" means the Party claiming a Force Majeure under Article 18.

"Claims" has the meaning set forth in Section 23.1(a).

"Collateral Assignment Agreement" has the meaning set forth in Section 12.1.

"Commercial Operation" means that (a) the construction and installation of the Project has been completed in accordance with the Agreement and is ready for commercial operation in compliance with all Applicable Laws, Required Permits, and Accepted Electrical Practices, (b) the Project shall have successfully passed all Commercial Operation Tests at a level that demonstrates Contract Capacity of the Generation Facility of at least the Expected Generation Facility Contract Capacity, Contract Capacity of the Energy Storage System of at least the Expected Energy Storage Contract Capacity, and a Tested Round-Trip Efficiency Rate of the Energy Storage System of at least the Guaranteed Round-Trip Efficiency Rate, and complete test reports have been submitted to Buyer, and (c) Seller shall have delivered a true, correct, and complete Commercial Operation Certificate from Seller, the EPC Contractor, and a Licensed Professional Engineer, as set forth in a written Notice from Seller to Buyer specifying the date on which the requirements described in clauses (a) and (b) were satisfied, as confirmed in each case by Buyer and/or Buyer's engineer, and including such executed Commercial Operation Certificate; provided, however, that such confirmation must be made within twenty-one (21) days after receipt of complete test reports from Seller required pursuant to clause (b) and, if not made within such twenty-one (21) day period, shall be deemed to have been given unless Buyer or Buyer's engineer shall have provided the reasons for why such requirements have not been satisfied within such twenty-one (21) day period; provided, further, that upon such confirmation, Commercial Operation shall be deemed to have been achieved as of the date set forth in such Notice from Seller to Buyer.

"Commercial Operation Certificate" means the certificate of Commercial Operation of the Project to be executed by Seller, the EPC Contractor, and a Licensed Professional Engineer in the form of Appendix B.

"Commercial Operation Test" has the meaning set forth in Section 7.2.

"Compliance Actions" has the meaning set forth in Section 1.5.

"Compliance Deadline" has the meaning set forth in Section 1.5.

"Compliance Expenditure Cap" has the meaning set forth in Section 1.4.

"Conditions Precedent" has the meaning set forth in Section 2.4.

"Confidential Information" means any and all non-public proprietary written information, data, analyses, documents, and materials furnished or made available by a Party or its Representatives to the other Party or its Representatives in connection with this Agreement, and any and all analyses, compilations, studies, documents, or other material prepared by the receiving Party or its Representatives to the extent containing or based upon such information, data, analyses, documents, and materials, but does not include information, data, analyses, documents, or materials that (i) are when furnished or thereafter become available to the public other than as a result of a disclosure by the receiving Party or its Representatives in violation of this Agreement, or (ii) are already in the possession of or become available to the receiving Party or its Representatives, provided that, to the best knowledge of the receiving Party or its Representatives, as the case may be, such source is not and was not bound by an obligation of confidentiality to the disclosing Party or its Representatives can demonstrate has been independently developed without a violation of this Agreement.

"Construction Period Security" has the meaning set forth in Section 11.2.2.

"Contract Capacity" means (a) with respect to the Generation Facility, the full generation capacity of the Generation Facility, and (b) with respect to the Energy Storage System, Charging Capacity and Discharging Capacity of the Energy Storage System, each as determined pursuant to Section 1.1.1.

"Contract Capacity Tests" means the periodic testing of the Contract Capacity pursuant to Section 7.3 and further described in Appendix 7.

"Contract Conditions" means the following ambient (outdoor) temperature ranges: (a) for operation of the Energy Storage System, between [\_\_\_]°C and [\_\_\_]°C during charging, and between [\_\_\_]°C and [\_\_\_]°C during a discharging, and (b) during the storage of Energy, between [\_\_\_]°C and [\_\_\_]°C.

"Contract Quantity" has the meaning set forth in Section 1.1.2(a).

"Contract Year" means a period of twelve (12) consecutive months with (a) the first Contract Year commencing on the Initial Delivery Date and ending on the last day of the month that is twelve (12) months after the Initial Delivery Date, and (b) each subsequent Contract Year commencing on the anniversary of the first day of the month following the Initial Delivery Date.

"Costs" means with respect to the Non-Defaulting Party, brokerage fees, commissions and other similar third party transaction costs and expenses reasonably incurred by the Non-Defaulting Party either in terminating any arrangement pursuant to which it has hedged its obligations under the Agreement or entering into new arrangements which replace the Product, including any costs or penalties imposed upon the Non-Defaulting Party for the loss of Resource Adequacy Benefits or for replacing those Resource Adequacy Benefits.

"<u>CP Satisfaction Date</u>" means the date on which all of the Conditions Precedent have been satisfied (or waived in writing by the applicable Party(ies) described in <u>Section 2.5.1</u>).

"CPUC" means the California Public Utilities Commission or any successor thereto.

"<u>CPUC Approval</u>" means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to the Parties, or either of them, which approves this Agreement in its entirety, including payments to be made by the Buyer and all other relief as may be requested by Buyer in its submittal to the CPUC for approval, subject to CPUC review of the Buyer's administration of the Agreement.

"Credit Rating" means, with respect to any entity, on the relevant date of determination, the respective ratings then assigned to such entity's unsecured, senior long-term debt or deposit obligations (not supported by third party credit enhancement) by S&P or Moody's. If a party has outstanding multiple debt or deposit obligations meeting such criteria and differing ratings have been assigned by a single rating agency to such multiple obligations, the lowest of such ratings shall apply. If no rating is assigned to such entity's unsecured, senior long-term debt or deposit obligations by either S&P or Moody's, then "Credit Rating" shall mean the general corporate credit rating or long-term issuer rating assigned by S&P or Moody's, as the case may be.

"Cure Period" has the meaning set forth in Section 2.10.1.

"<u>Daily Delay Damages</u>" means liquidated damages paid by Seller to Buyer in the amount of \$[XX,XXX] per day for each day of delay. [NOTE to Bidders: this is the total Construction Period Security divided by the number of days in the Cure Period]

"Day-Ahead" has the meaning set forth in the Tariff.

"Day-Ahead Market" has the meaning set forth in the Tariff.

"<u>Day-Ahead Schedule</u>" has the meaning set forth in the Tariff.

"Deemed Delivery Forecast" means, with respect to the Generation Facility, the forecast of the Energy to be produced by the Generation Facility prepared by the CAISO or its agent in accordance with the VER Forecasting Program and communicated to the Scheduling Coordinator, which forecast is the last such forecast prepared by the CAISO that does not reflect curtailed production as a result of Economic Dispatch Down periods. As of the Effective Date, such Deemed Delivery Forecast is the CAISO forecast generated through its Resource Specific VER Forecast Usage Report.

"Deemed Generation Facility Bundled Green Energy" means, with respect to the Generation Facility, the amount of Generation Facility Bundled Green Energy that Seller could reasonably have delivered to Buyer at the Energy Delivery Point or to the Project System's Energy Storage System as Charging Energy, as applicable, but was prevented from so delivering by reason of Economic Dispatch Down. The quantity of Deemed Generation Facility Bundled Green Energy with respect to the Generation Facility during an Economic Dispatch Down period shall be equal to (a) the Deemed Delivery Forecast of Energy corresponding to the portion of such Economic Dispatch Down period, whether or not Seller is participating in the VER Forecasting Program during such events, less the amount of Energy scheduled under Economic Dispatch Down as specified in the Dispatch Notice during such portion of such Economic Dispatch Down period, and less any amount of Energy that was not delivered associated with any concurrent Scheduled Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault but only to the extent the Deemed Delivery Forecast does not already reflect the foregoing; provided that, if

the applicable amount calculated pursuant to this clause (a) is negative, the Deemed Generation Facility Bundled Green Energy shall be zero (0), or (b) if there is no such Deemed Delivery Forecast available during such portion of such Economic Dispatch Down period or if the Generation Facility Bundled Green Energy amount has historically not been determined based on clause (i) of the definition of Generation Facility Bundled Green Energy, the amount of Generation Facility Bundled Green Energy that Seller could reasonably have delivered to Buyer at the Energy Delivery Point or to the Project System's Energy Storage System as Charging Energy, as applicable, but was prevented as a result of Economic Dispatch Down as determined by Buyer in a commercially reasonable manner, which amount shall not include any amount of Energy that was not delivered associated with any concurrent Scheduled Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault.

"Default Rate" means, for any date, the lesser of (a) the per annum rate of interest equal to the bank prime lending rate as may from time to time be published by the Federal Reserve in their H.15 Statistical Release, Selected Interest Rates (daily) or any successor publication as published by the Board of Governors of the Federal Reserve System, on such date (or if not published on such day on the most recent preceding day on which published), plus two percent (2%), and (b) the maximum rate permitted by Applicable Law. The Federal Reserve H.15 Statistical Release, Rates (daily) may found Selected Interest be at the following address: www.federalreserve.gov/releases/H15/update.

"Defaulting Party" has the meaning set forth in Section 3.1.

"<u>Delivered Energy</u>" means, in respect of the Project, for a given period of time, the amount of Energy delivered by the Project for Buyer's account during the period at the Energy Delivery Point for the Project as measured by the Energy Delivery Point Metering Equipment, expressed in MWh<sub>AC</sub>. Delivered Energy shall be comprised only of Generation Facility Grid Delivered Energy and Energy Storage System Delivered Energy.

"Delivery Excuse" means (i) any Event of Default of Buyer under this Agreement; (ii) the delay or failure by Buyer in performing a material obligation under this Agreement; (iii) the delay or failure of Buyer to deliver Charging Energy or to accept Product as required under this Agreement for whatever reason which failure does not arise in each case as a result of Seller's non-performance under this Agreement; (iv) the delay or failure by the Participating Transmission Owner in performing a material obligation under any interconnection agreement to which it is a party with Seller, provided Seller assigns to Buyer any claim it may have against the Participating Transmission Owner related to such delay or failure; (v) the delay or failure by the electricity retail service provider in performing a material obligation under any interconnection agreement to which it is a party with Seller, provided Seller assigns to Buyer any claim it may have against the Participating Transmission Owner related to such delay or failure; and (vi) any curtailment ordered directly or indirectly from the CAISO (but not including any reduction of deliverable capacity of the Project in accordance with Section 40.4.6.1 or 40.4.2 of the Tariff).

"<u>Delivery Period</u>" has the meaning set forth in <u>Section 2.8</u>.

"Delivery Period Security" has the meaning set forth in Section 11.2.3.

"<u>Discharging Capacity</u>" means the maximum dependable operating capability of the Energy Storage System, measured in MW<sub>AC</sub>, to discharge energy from a partially or fully-charged storage device to the CAISO Grid.

"<u>Discharging Energy Capacity</u>" means the maximum amount of energy, in MWh<sub>AC</sub>, that is capable of being discharged from the Energy Storage System (assuming the Energy Storage System is Fully Charged).

"Disclosure Order" has the meaning set forth in Section 24.1.1.

"Disclosing Party" has the meaning set forth in Section 24.1.1.

"<u>Dispatch Down Period</u>" means, for the Generation Facility, the period of curtailment of delivery of Product from the Generation Facility resulting from System Dispatch Down or Economic Dispatch Down.

"<u>Dispatch Notice</u>" means the operating instruction, and any subsequent updates (an "Updated Dispatch Notice"), given by Buyer to Seller, directing the Generation Facility or the Energy Storage System to deliver Delivered Energy at a specified megawatt output at the Energy Delivery Point or, in the case of an Energy Storage System, receive Charging Energy, in accordance with the procedures set forth in <u>Section 15.3</u>.

"Early Termination Date" has the meaning set forth in Section 3.3.

"Economic Dispatch Down" means curtailment of delivery of Product from the Generation Facility that is the result of economic curtailment where Buyer either (a) submits (i) a self-schedule with a binding Product quantity or (ii) an economic bid in the applicable CAISO market (including in order to charge the Energy Storage System), or (b) fails to submit any such schedule or bid, in either case, that when implemented by the CAISO results in an otherwise available Product quantity not being scheduled or awarded in such CAISO market and such curtailment is not concurrently the result of a Scheduled Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault.

"Effective Date" is as set forth in the introductory paragraph of this Agreement.

"<u>Efficiency Rate Test</u>" means the periodic testing of the Round-Trip Efficiency Rate pursuant to <u>Section 7.4</u> and further described in <u>Appendix 7</u>.

"Electric Retail Delivery Point" means the point specified in Section 1.3.2.

"Eligible Renewable Energy Resource" has the meaning set forth in California Public Utilities Code Section 399.11, *et seq.*, as amended or supplemented from time to time.

"Energy" means, with respect to each Project System, all electrical energy generated by the Generation Facility measured in kilowatt-hours or megawatt-hours or multiple units thereof. Energy shall include without limitation, Charging Energy, Stored Energy, Delivered Energy, Unit Contingent Energy, Associated Energy, Associated Ancillary Services Energy, Supplemental

Energy, reactive power, and any other electrical energy products that may be developed or evolve from time to time during the Term.

"Energy Delivery Point" means the point specified in Section 1.3.1.

"Energy Delivery Point Metering Equipment" means, for a Project System, the meters and measuring equipment recognized by the CAISO at the Energy Delivery Point for the Project System, and which measures the Delivered Energy for such Project System delivered to the Energy Delivery Point.

"Energy Storage Capacity" means the Discharging Capacity of an Energy Storage System.

"Energy Storage System" has the meaning set forth in the Recitals.

"Energy Storage System Bundled Green Energy" means, with respect to the Energy Storage System, Energy, Green Attributes, and any other Product, the quantity of which is measured based on the amount of the Energy Storage System Delivered Energy. The quantity of Energy Storage System Bundled Green Energy shall be equal to the lesser of the quantity of (i) the Energy Storage System Delivered Energy, or (ii) the amount of Renewable Energy Credits that are delivered to Buyer in respect of the Energy Storage System Delivered Energy, unless a change in Applicable Laws occurs after the Effective Date that would, absent further action by Seller, change the methodology for determining the amount of Renewable Energy Credits delivered by the Energy Storage System such that the quantity of such Renewable Energy Credits is reduced as compared to the prior methodology, in which case the quantity of Energy Storage System Bundled Green Energy shall be equal to the Energy Storage System Delivered Energy.

"Energy Storage System Delivered Energy" means, with respect to the Energy Storage System, the portion of the Delivered Energy consisting of, or attributable to, Energy discharged from the Energy Storage System, as measured by the Metering Equipment.

"Energy Storage System Metering Equipment" means, for the Energy Storage System, the meters and measuring equipment recognized by the CAISO which measures the Charging Energy delivered to and Energy discharged from the Energy Storage System.

"Energy Storage System Scheduled Energy" means, for a Project System's Energy Storage System, the Scheduled Energy for the Energy Storage System.

"Environmental Costs" means costs incurred in connection with the acquiring and maintaining all environmental permits and licenses for the Project, and the Project's compliance with all applicable environmental laws, rules and regulations, including without limitation capital costs for pollution mitigation or installation of emissions control equipment required to permit or license the Project, all operating and maintenance costs for operation of pollution mitigation or control equipment, costs of permit maintenance fees and emission fees as applicable, and costs associated with the disposal and clean-up of hazardous substances introduced to the site where the Project is located, and the decontamination or remediation, on or off the site, necessitated by the introduction of such hazardous substances on the site.

"EPC Contract" means Seller's engineering, procurement and construction contract with the EPC Contractor, if any.

"EPC Contractor" means the entities chosen by Seller to perform the engineering, procurement and construction activities for the Project, if any.

"Equitable Defenses" means any bankruptcy, insolvency, reorganization and other laws affecting creditors' rights generally, and with regard to equitable remedies, the discretion of the court before which proceedings to obtain same may be pending.

"Equivalent Availability Factor" has the meaning set forth in Appendix 9.2.

"Executive(s)" has the meaning set forth in Section 22.2.1.

"Expected Capacity Attributes" means with respect to any particular day of any Showing Month, the Capacity Attributes (in MWs) for such day of such Showing Month as specified in Appendix 1.1.1.

"Expected Energy Storage Contract Capacity" means the expected Energy Storage Capacity of the Energy Storage System, as measured in megawatts (MW<sub>AC</sub>) at the location of the Energy Delivery Point, as set forth in <u>Appendix 1.1.1</u>.

"Expected Generation Facility Contract Capacity" means the expected maximum generation capacity of the Generation Facility, as measured in megawatts (MW<sub>AC</sub>) at the location of the Energy Delivery Point, as set forth in <u>Appendix 1.1.1</u>.

"Expenditures" has the meaning set forth in Section 1.4.

"FERC" means the Federal Energy Regulatory Commission, or any division thereof.

"Flexible Capacity" means with respect to any particular Showing Month of the Delivery Period, the MWs of Product which are eligible to satisfy a load-serving entity's Flexible RAR.

"Flexible RAR" means the flexible capacity requirements established for load-serving entities by the CAISO pursuant to the Tariff, the CPUC pursuant to the Resource Adequacy Rulings, or by any other Governmental Authority.

"Force Majeure" means any event or circumstance which wholly or partly prevents or delays the performance of any material obligation arising under this Agreement but only to the extent (1) such event is not within the reasonable control, directly or indirectly, of the Party seeking to have its performance obligation(s) excused thereby, (2) the Party seeking to have its performance obligation(s) excused thereby has taken all reasonable precautions and measures in order to prevent or avoid such event or mitigate the effect of such event on such Party's ability to perform its obligations under this Agreement and which by the exercise of due diligence such Party could not reasonably have been expected to avoid and which by the exercise of due diligence it has been unable to overcome, and (3) such event is not the direct or indirect result of the fault or negligence of the Party seeking to have its performance obligations excused thereby.

- (a) Subject to the foregoing, events that could qualify as Force Majeure include, but are not limited to the following:
  - (i) acts of God, flooding, lightning, landslide, earthquake, fire, drought, explosion, quarantine ordered by a Governmental Authority in response to disease epidemic, storm, hurricane, tornado, volcano, other natural disaster or unusual or extreme adverse weather-related events;
  - (ii) war (declared or undeclared), riot or similar civil disturbance, acts of the public enemy (including acts of terrorism), sabotage, blockade, insurrection, revolution, expropriation or confiscation; or
  - (iii) except as set forth in subpart (b)(vi) below, strikes, work stoppage or other labor disputes (in which case the affected Party shall have no obligation to settle the strike or labor dispute on terms it deems unreasonable).
  - (b) Force Majeure shall not be based on:
    - (i) Buyer's inability economically to use or resell the Product purchased hereunder;
    - (ii) Seller's ability to sell the Product at a price greater than the price set forth in this Agreement;
    - (iii) Seller's inability to obtain governmental approvals or other approvals of any type for the construction, operation, or maintenance of the Project;
    - (iv) Seller's inability to obtain (or delays in obtaining) sufficient labor, equipment, materials, or other resources to build or operate the Project, except to the extent Seller's inability to obtain (or delays in obtaining) sufficient labor, equipment, materials, or other resources is caused by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iii) above;
    - (v) Seller's failure to obtain additional funds, including funds authorized by a state or the federal government or agencies thereof, to supplement the payments made by Buyer pursuant to this Agreement;
    - (vi) a strike, work stoppage or labor dispute that is directed specifically at Seller, Seller's Affiliates, or the Project;

- (vii) any equipment failure except to the extent such equipment failure is caused solely by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iii) above;
- (viii) Seller's inability to obtain or maintain Site Control;
- (ix) Any risks, delays or increased costs arising or resulting from any disease epidemic, other than delays caused by a quarantine or shutdown ordered by a Governmental Authority having jurisdiction in respect to such disease epidemic; or
- (x) Seller's inability to obtain interconnection service under its [Large/Small] Generator Interconnection Agreement for the Project.

"Forced Outage" has the meaning set forth in the Tariff.

"<u>Fully Charged</u>" means the state at which the Stored Energy of the Energy Storage System is equal to the Charging Energy Capacity.

"GAAP" has the meaning set forth in Section 21.2.

"Gains" means, with respect to any Party, an amount equal to the present value of the economic benefit to such Party, if any (exclusive of Costs), resulting from the termination and liquidation of the Agreement, determined in a commercially reasonable manner.

"Generation Facility" has the meaning set forth in the Recitals.

"Generation Facility Bundled Green Energy" means, with respect to the Generation Facility, Energy, Green Attributes, and any other Product, the quantity of which is measured based on the amount of the Generation Facility Delivered Energy. The quantity of Generation Facility Bundled Green Energy shall be equal to the lesser of the quantity of (i) the Generation Facility Delivered Energy, or (ii) the amount of Renewable Energy Credits that are delivered to Buyer in respect of the Generation Facility Delivered Energy (or, if any such Generation Facility Delivered Energy is delivered to the Energy Storage System, the amount of Renewable Energy Credits that would reasonably have been expected to be delivered to Buyer in respect of such Generation Facility Delivered Energy if such Generation Facility Delivered Energy had been delivered to the Energy Delivery Point), unless a change in Applicable Laws occurs after the Effective Date that would, absent further action by Seller, change the methodology for determining the amount of Renewable Energy Credits delivered by the Generation Facility such that the quantity of such Renewable Energy Credits is reduced as compared to the prior methodology, in which case the quantity of Generation Facility Bundled Green Energy shall be equal to the Generation Facility Delivered Energy.

"<u>Generation Facility Delivered Energy</u>" means, with respect to the Generation Facility, (i) Generation Facility Grid Delivered Energy and (ii) any Energy generated by the Generation

Facility that is delivered by the Project to the Energy Storage System to be used as Charging Energy for the Energy Storage System, as measured by the Metering Equipment in [MWh<sub>AC</sub>]<sup>3</sup>.

"Generation Facility Grid Delivered Energy" means Energy generated by the Generation Facility that is delivered by the Project for Buyer's account at the Energy Delivery Point as measured by the Energy Delivery Point Metering Equipment, expressed in MWhac.

"Generation Facility Metering Equipment" means, for the Generation Facility, the meters and measuring equipment recognized by the CAISO which measures the Energy generated by the Generation Facility.

"Generation Facility Scheduled Energy" means, for the Generation Facility, the Scheduled Energy for the Generation Facility.

"Generation Management System" or "GMS" means the automated system employed by Buyer's real-time operations to remotely monitor and dispatch the Energy Storage System.

"Generation Operations Center" or "GOC" means the location of Buyer's real time operations personnel.

"Governmental Authority" means any federal, state, local, municipal, or other governmental, executive, administrative, judicial or regulatory entity, and the CAISO or any other transmission authority, having or asserting jurisdiction over a Party, the Project or this Agreement.

"Governmental Charges" has the meaning set forth in Section 13.1.

"Green Attributes" means, subject to the limitations in the final sentence of this definition, any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Project, and its avoided emission of pollutants. Green Attributes include but are not limited to Renewable Energy Credits, as well as: (1) any avoided emission of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants; (2) any avoided emissions of carbon dioxide (CO2), methane (CH4), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by Law, to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere; and (3) the reporting rights to these avoided emissions, such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of a Green Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state Law, if applicable, and to a federal or state agency or any other party at the Green Tag Purchaser's discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local Law, regulation or bill, and international or foreign emissions trading program. Green Tags are accumulated on a MWh basis and one Green Tag represents the Green Attributes associated with one (1) MWh of Energy. Green Attributes do not include (i) any energy, capacity, reliability or other power attributes from the Project, (ii) production tax credits associated with the construction or operation of the Project and other

<sup>&</sup>lt;sup>3</sup> **NTD**: If the Energy Storage System is DC coupled, then appropriate conversation methodology to be discussed.

financial incentives in the form of credits, reductions, or allowances associated with the Project that are applicable to a state or federal income taxation obligation, (iii) fuel-related subsidies or "tipping fees" that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or (iv) emission reduction credits encumbered or used by the Project for compliance with local, state, or federal operating and/or air quality permits.

"<u>Green-e<sup>©</sup> Energy</u>" means the national certification program for renewable energy administered by the Center for Resource Solutions, as such program may be amended, supplemented or otherwise changed from time to time, and about which information can be found at <a href="http://www.green-e.org/">http://www.green-e.org/</a> or any successor webpage.

"Grid Control Center" or "applicable Grid Control Center" means the location of the personnel responsible for operating the transmission grid and/or coordinating same with the CAISO.

"Guaranteed Energy Production" has the meaning set forth in Section 1.1.2(a).

"Guaranteed Initial Delivery Date" is the date set forth in Section 2.7 for the Project.

"Guaranteed Round-Trip Efficiency Rate" means the guaranteed Round-Trip Efficiency Rate for the Energy Storage System as set forth in <u>Appendix 1.1.1</u>.

"Guarantor" the entity identified as provided in Section 11.3.3.

"Guaranty Agreement" means, if a Guarantor has been identified as provided in <u>Section</u> 11.3.3, the guaranty agreement from the Guarantor in the form attached as Appendix 11.3.3 hereto.

"Hour-Ahead" has the meaning set forth in the Tariff.

"Hour-Ahead Schedule" has the meaning set forth in the Tariff.

"Imbalance Energy" means, with respect to the Energy Storage System or Generation Facility, the amount of Energy, in any given settlement interval, by which the amount of Energy Storage System Delivered Energy or Generation Facility Grid Delivered Energy (as applicable) deviates from the amount of Energy Storage System Scheduled Energy or Generation Facility Scheduled Energy (as applicable).

"Industry Standards" has the meaning set forth in Section 8.1.1.

"Inflexible Capacity" means with respect to any particular Showing Month of the Delivery Period, the MWs of the Product which are not eligible to satisfy a load-serving entity's Flexible RAR.

"Initial Delivery Date" has the meaning set forth in Section 2.8.

"Initial Negotiation End Date" has the meaning set forth in Section 22.2.1.

"Interconnection Facilities" means all apparatus installed to interconnect the Project to the Participating Transmission Owner's or other utility owned or managed electric system or to the CAISO Grid to make available to Buyer the Contract Capacity, Associated Energy, and Resource Adequacy Benefits, including, without limitation, connection, transformation, switching, metering, communications, control, and safety equipment, such as equipment required to protect (a) the Participating Transmission Owner's electric system (or other system to which the Participating Transmission Owner's electric system is connected, including the CAISO Grid) and Buyer's customers from faults occurring at the Project, and (b) the Project from faults occurring on the Participating Transmission Owner's electric system or on the systems of others to which the Participating Transmission Owner's electric system is directly or indirectly connected. Interconnection Facilities also include any necessary additions and reinforcements to the Participating Transmission Owner's electric system or CAISO Grid required as a result of the interconnection of the Project to the Buyer electric system, the CAISO Grid or electric systems of others to which the Buyer electric system is directly or indirectly connected.

"Interest Rate" means for any date the rate per annum equal to the Commercial Paper (prime, 3 months) rate as published the prior month in the Federal Reserve Statistical Release, H.15. Should publication of the interest rate on Commercial Paper (prime, 3 months) be discontinued, then the interest rate on commercial paper, which most closely approximates the discontinued rate, published the prior month in the Federal Reserve Statistical Release, H.15, or its successor publication.

"[Large/Small]<sup>4</sup> Generator Interconnection Agreement" means a [large/small] generator interconnection agreement entered into with the Transmission Provider.

"Lender" means any bank, financial institution or other entity (or any agent thereof) that provides development, bridge, construction, permanent debt, tax equity or other financing or refinancing for the Project to Seller consistent with <u>Section 12.1</u> (subject to the Collateral Assignment Agreement, if applicable).

"Letter of Credit" means an irrevocable standby letter of credit issued by a U.S. commercial bank or a U.S. branch of a foreign bank with such bank having a Credit Rating of at least "A-" from S&P and "A3" from Moody's, substantially in the form of <u>Appendix 11.3</u> and reasonably acceptable to Buyer.

"Licensed Professional Engineer" means a person acceptable to Buyer in its reasonable judgment who (a) is licensed to practice engineering in California, (b) has training and experience in the power industry specific to the technology of the Project, (c) has no economic relationship, association, or nexus with Seller or Buyer, other than to meet the obligations of Seller pursuant to this Agreement, (d) is not a representative of a consultant, engineer, contractor, designer or other individual involved in the development of the Project or of a manufacturer or supplier of any equipment installed at the Project, and (e) is licensed in an appropriate engineering discipline for the required certification being made.

NTD: If this will refer to a Small Generator Interconnection Agreement, the defined term should be moved to the applicable alphabetical order location.

"<u>Local RAR</u>" means, for Projects providing Capacity Attributes, the local Resource Adequacy Requirements established for load-serving entities by the CAISO pursuant to the Tariff, the CPUC pursuant to the Resource Adequacy Rulings, or by any other Governmental Authority.

"Losses" means with respect to either Party, an amount equal to the present value of the economic loss to it, if any (exclusive of Costs), resulting from termination and liquidation of the Agreement, determined in a commercially reasonable manner.

"Manager" has the meaning set forth in Section 22.2.1.

"<u>Maximum Energy Capacity</u>" means, any given time, the lesser of the Energy Storage System's Charging Energy Capacity or Discharging Energy Capacity.

"Maximum Force Majeure Delay" has the meaning set forth in Section 2.10.2.

"Maximum RA Capacity" means the maximum amount of Resource Adequacy capacity available from the Project operating within its Operating Restrictions and specifications as set forth in Appendix 1.1 and Appendix 1.2.1. [As of the Effective Date, such Maximum RA Capacity is the maximum capacity that the Project can achieve in a four (4)-hour period based on its Contract Capacity.] If the CAISO changes its methodology for determining the maximum amount of capacity available from a storage resource to provide a Resource Adequacy capacity, a new Maximum RA Capacity shall be determined for the Project based on the new CAISO methodology and the Operating Restrictions and such specifications of the Project.

"Meter Service Agreement" or "MSA" has the meaning set forth in the Tariff.

"<u>Metering Equipment</u>" means, as applicable, the Generation Facility Metering Equipment, the Energy Storage System Metering Equipment, and the Energy Delivery Point Metering Equipment.

"Milestone Extension Date" has the meaning set forth in Section 6.2.1.

"Milestone Schedule" means the schedule in the form of Appendix 6.1(a), setting forth Seller's development, design, procurement, construction, commissioning and testing milestones, as set forth in Section 6.1.

"Minimum Operating Level" means the minimum operating level of the Energy Storage System.

"Monthly Capacity Payment" has the meaning set forth in Section 9.2.

"Monthly Delivery Forecast" has the meaning set forth in Section 15.3.3.

"Monthly Energy Payment" has the meaning set forth in Section 9.3.

"Monthly Progress Report" means a monthly progress report, sent by Seller to Buyer no later than the tenth day of each month while the Project has not yet met its Initial Delivery Date, and within five (5) days of Buyer's request, substantially in the form set forth in Appendix 6.1(b)

and describing Seller's compliance with the Milestone Schedule, including projected time to complete any milestones, for the Project, as set forth in <u>Section 6.1</u>.

- "Monthly Supply Plan" has the meaning set forth in the Tariff.
- "Moody's" means Moody's Investor Services, Inc. or its successor.
- "MW" means mega-watt or mega-watts.
- "Negative Imbalance Energy" has the meaning set forth in Section 14.4.1.
- "NERC" means the North American Electric Reliability Council, or any successor thereto.
- "NERC Holidays" means "Additional Off-peak Days" as defined by NERC on the NERC website at http://www.nerc.com.
- "Non-Availability Charges" shall mean Non-Availability Charges as defined in the Tariff or such other similar term as modified and approved by FERC hereafter to be incorporated in the Tariff.
  - "Non-Defaulting Party" has the meaning set forth in Section 3.3.
- "Notice" shall, unless otherwise specified in the Agreement, mean written communications by a Party to be delivered by hand delivery, United States mail, overnight courier service, facsimile, or electronic messaging (e-mail) in accordance with this Agreement.
  - "Operating Procedures" has the meaning set forth in Section 15.11.
- "Operating Restrictions" means limitations on Buyer's ability to schedule and use Contract Capacity, Ancillary Services, and Energy that are identified in Appendix 1.1 to this Agreement.
  - "Outage Schedule" has the meaning set forth in Section 17.1.1.
- "<u>Pacific Prevailing Time</u>" or "<u>PPT</u>" means Pacific Daylight Time when California observes Daylight Savings Time and Pacific Standard Time otherwise.
  - "Participating Generator Agreement" or "PGA" has the meaning set forth in the Tariff.
  - "Participating Intermittent Resource" has the meaning set forth in the Tariff.
- "Participating Transmission Owner" means the transmission owner that has released to the CAISO operational control of its transmission facilities to which the Project is interconnected [or the owner of the distribution system to which the Project is interconnected]. As of the Effective Date, the Participating Transmission Owner is [San Diego Gas & Electric Company.] [NOTE to Bidders: to be modified if project is not connected directly to SDG&E's service territory.]
- "<u>Performance Assurance</u>" means collateral in the form of cash, Letter of Credit, Guaranty Agreement or other security acceptable to Buyer in its sole discretion required to be provided to Buyer under Section 11.2.

"Performance Measurement Period" has the meaning set forth in Section 1.1.2(a).

"Permit Requirements" means any requirement or limitation imposed as a condition of a permit or other authorization relating to construction or operation of the Project or related facilities (including but not limited to, limitations on any pollutant emissions levels, limitations on operational levels or operational time, and limitations on any specified operating constraint) or any other operational restriction or specification related to compliance with any laws or regulations applicable to the Project.

"<u>Permitted Liens</u>" means liens and encumbrances (a) imposed by the Priority Security Interest (including pursuant to any Security Document) or (b) imposed by any Lender.

"<u>Person</u>" means any individual, partnership, corporation, limited liability company, business trust, joint stock company, trust, unincorporated association, joint venture, firm, or other entity, or a Governmental Authority.

"PMAX" means the applicable CAISO-certified maximum operating level (in MW) of the Energy Storage System.

"PMIN" means the applicable CAISO-certified minimum operating level (in MW) of the Energy Storage System.

"Pnode" means the Pricing Node as set forth in the Tariff.

"Positive Imbalance Energy" has the meaning set forth in Section 14.4.1.

"Pre-Construction Security" has the meaning set forth in Section 11.2.1.

"Priority Security Interest" has the meaning set forth in Section 11.4.

"Product" means the capacity, Capacity Attributes, Energy (including Bundled Green Energy), Green Attributes, Ancillary Services, and Resource Adequacy Benefits of the Project and all other ancillary products, services or attributes similar to the foregoing which are or can be produced by or associated with the Project in accordance with the terms hereof.

"Project" has the meaning set forth in the Recitals.

"<u>Project System</u>" means the Generation Facility or the Energy Storage System, as applicable, as further described in <u>Appendix 1.2.1</u>.

"<u>Protective Apparatus</u>" means control devices (such as meters, relays, power circuit breakers and synchronizers) specified in the interconnection agreements for the Project.

"Qualified Assignee" means any community choice aggregation entity or joint powers authority formed in the State of California or any legal entity that is established by statute or by the CPUC to serve load as a central procurement entity.

"Qualified Flexible RA Capacity" means, with respect to any month of the Delivery Period, the number of MWs of Contract Capacity that are eligible, certified (if required), and counted to satisfy flexible capacity requirements established for load-serving entities or other persons by the CPUC, the CAISO, or by any other Governmental Authority having jurisdiction.

"Qualified RA Capacity" means, with respect to any month of the Delivery Period, the number of MWs of Contract Capacity that are eligible, certified (if required), and counted to satisfy Resource Adequacy capacity requirements established for load-serving entities or other persons by the CPUC, the CAISO, or by any other Governmental Authority having jurisdiction.

"RA Compliance Obligations" means RAR, Local RAR and Flexible RAR.

"RA Compliance Showings" means the (a) Local RAR compliance or advisory showings (or similar or successor showings), (b) RAR compliance or advisory showings (or similar or successor showings), and (c) Flexible RAR compliance or advisory showings (or similar successor showings), in each case, an entity is required to make to the CAISO pursuant to the Tariff, to the CPUC (and, to the extent authorized by the CPUC, to the CAISO) pursuant to the Resource Adequacy Rulings, or to any Governmental Authority.

"Ramp Rate" means the ability of the Energy Storage System to change between power output levels, expressed in MW<sub>AC</sub>/min.

"Recovery Plan" has the meaning set forth in Section 6.2.1.

"Referral Date" has the meaning set forth in Section 22.2.1.

"Reliability Must-Run Contract" or "RMR Contract" means a Must-Run Service Agreement between the owner of an RMR Unit (as defined in the Tariff) (or the output therefrom) and the CAISO.

"Renewable Energy Credit" has the meaning set forth in California Public Utilities Code Section 399.12(h) and CPUC Decision 08-08-028, as each may be amended from time to time or as further defined or supplemented by Law.

"Representatives" means the officers, directors, members, employees, legal counsel, accountants, lenders, advisors, or ratings agencies and other agents or representatives of a Party or of its Affiliates and in the case of Buyer, includes any Independent Evaluator (as such term is used in CPUC Decision 04-12-048) used by Buyer in connection with the Request for Offers from which this Agreement arose.

"Required Permits" has the meaning set forth in Section 5.1(b).

"Resource Adequacy" has the meaning set forth in the Resource Adequacy Rulings.

"Resource Adequacy Benefits" means the rights and privileges attached to any generating resource that satisfy any entity's resource adequacy obligations (including without limitation those related to flexible resource adequacy), as those obligations are set forth in any Resource Adequacy Rulings.

"Resource Adequacy Requirements" or "RAR" means the resource adequacy requirements applicable to an entity as established by the CAISO pursuant to the Tariff, the CPUC pursuant to the Resource Adequacy Rulings, or by any other Governmental Authority.

"Resource Adequacy Rulings" means CPUC Decisions D.04-10-035, D.05-10-042 and D.06-06-0064 and CPUC Resource Adequacy Rulemakings (R.)04-04-003 and (R.)05-12-013 and any subsequent CPUC ruling or decision, or any other resource adequacy laws, rules or regulations enacted, adopted or promulgated by any applicable Governmental Authority (including without limitation those related to flexible resource adequacy), as such Decisions, rulings, laws, rules or regulations may be amended or modified from time to time during the Term.

"Resource ID" has the meaning set forth in the Tariff.

"Retail Electricity Provider" means the provider of retail electricity to the Project at the Electric Retail Delivery Point. On the Effective Date, the Retail Electricity Provider is [San Diego Gas & Electric Company]. [NOTE to Bidders: to be modified if project receives retail electricity from another provider.]

"Round-Trip Efficiency Rate" means the efficiency of the Energy Storage System in recovering Charging Energy from the Energy Storage System, as measured at the Charging Energy Delivery Point to the Energy Delivery Point (based on AC-to-AC efficiency), and expressed as a percentage, rounded to two decimal places (*e.g.*, 85.45%).

"Round-Trip Efficiency Rate Factor" has the meaning set forth in Appendix 9.2.

"S&P" means Standard & Poor's Rating Group (a division of McGraw-Hill, Inc.) or its successor.

"Sales Price" means (i) the price (in dollars per megawatt hour) at which Seller, acting in a commercially reasonable manner, resells any Product not Scheduled and received by Buyer, deducting from such proceeds any (a) costs (calculated in dollars per megawatt hour) reasonably incurred by Seller in reselling such Product including all costs charged by CAISO to Schedule and deliver the Product into the CAISO System, and (b) additional transmission charges (calculated in dollars per megawatt hour), if any, reasonably incurred by Seller in Scheduling and delivering such Product to the third party purchasers, or (ii) absent a sale despite commercially reasonable efforts to resell the Product, zero. The Sales Price shall also be reduced by all CAISO and other costs, charges and penalties with respect to the deviation from the Scheduled supply, in each case, resulting from Buyer's failure to take Product and calculated in dollars per megawatt hour; provided, however, in no event shall such price include any ratcheted demand or similar charges, nor shall Seller be required to utilize or change its utilization of its owned or controlled assets, including contractual assets, or market positions to minimize Buyer's liability. The Sales Price may be less than zero.

"Schedule" means the actions of Seller, Buyer and/or their designated representatives, or Scheduling Coordinators, including each Party's Transmission Providers, if applicable, of notifying, requesting and confirming to each other and the CAISO the quantity and type of Product to be delivered on any given day or days at a specified delivery point.

"Scheduled Energy" means the Energy from the CAISO Grid expected to be delivered to the Energy Delivery Point for charging the Energy Storage System, or the Energy discharged from the Energy Storage System or generated by a Generation Facility, as applicable, in either case that is expected to be delivered to the Energy Delivery Point, in each case pursuant to (a) the latest Dispatch Notice, or (b) any CAISO instructions, including without limitation pursuant to (i) Supplemental Energy bids, (ii) a Reliability Must-Run Contract (as defined in the Tariff) between the CAISO and the Seller, (iii) any Waiver Denial Periods, or (iv) Ancillary Services exercised.

"Scheduled Outage" means a period during which the Project is either in whole or in part not capable of generating, charging, storing Energy or discharging Energy (as applicable) due to planned maintenance or repair that has been scheduled in advance in accordance with Section 17.1.

"Scheduling Coordinator" or "SC" means an entity certified by the CAISO for the purposes of undertaking the functions specified in <u>Article 14</u>.

"SEC" means the Securities and Exchange Commission.

"Security Documents" means those agreements, documents, instruments, or certifications in a form reasonably acceptable to Buyer that grant and perfect Buyer's Priority Security Interest.

"Seller" has the meaning set forth in the introductory paragraph hereto.

"Seller Cost Test" means any test requested or required to be undertaken by Buyer hereunder.

"Seller Initiated Test" has the meaning set forth in Section 7.6.

"Settlement Amount" means, with respect to the Non-Defaulting Party, the amount of Losses and Costs, net of Gains, expressed in U.S. Dollars, incurred by the Non-Defaulting Party as a result of the liquidation of the Agreement pursuant to Section 3.4.

"Showing Month" means the calendar month of the Delivery Period that is the subject of the RA Compliance Showing, as set forth in the Resource Adequacy Rulings and outlined in the Tariff.

"Site" has the meaning set forth in the Recitals.

"Site Control" means that Seller owns the Site and the Project or has demonstrable contractual rights to, or is the managing general partner of any partnership (or comparable manager of any other person) who owns or has demonstrable contractual rights to, with explicit authority to act in all matters relating to, the control and operation of, the Site and the Project in order to perform its obligations under this Agreement.

"State of Energy" means the amount of Stored Energy in an Energy Storage System in real time, expressed as a percent of Maximum Energy Capacity (*e.g.*, 95% SOE).

"Station Use" means Energy that is used to operate the Project's auxiliary equipment. The auxiliary equipment includes, but is not limited, to air conditioning or other cooling units, plant lighting and control systems.

"Stored Energy" means the amount of Energy stored in the Energy Storage System at any given time, in kWhDc, as indicated by Seller's Stored Energy Measuring Device.

"Stored Energy Measuring Device" means, for the Energy Storage System, the measuring equipment for the Energy Storage System which provides the Stored Energy amount, Maximum Energy Capacity and State of Energy of the Energy Storage System in real-time, as specified in Appendix 1.2.1.

"Supplemental Energy" is the Energy from the Project which has uncommitted capacity following finalization of the Hour-Ahead Schedules and which Energy shall be available to CAISO during the Real Time Market (as defined in the Tariff).

"Supply Plan" has the meaning set forth in the Tariff.

"Swap Obligations" means obligations in respect of any swaps, caps or collar agreements or similar arrangements to hedge against fluctuations in interest rates or currency exchange rates or the exchange of nominal interest obligations, either generally or under specific contingencies, in each case, valued at the aggregate net mark-to-market value.

"System Dispatch Down" means curtailment of delivery of Product from the Generation Facility or Energy Storage System resulting from (a) curtailment ordered by the CAISO (whether directly or through the Scheduling Coordinator or the Participating Transmission Owner), for any reason, including, but not limited to, an Exceptional Dispatch (as defined in the Tariff), any System Emergency, any warning of an anticipated System Emergency, or any warning of an imminent condition or situation which could jeopardize the CAISO's or Participating Transmission Owner's electric system integrity or the integrity of other systems to which the CAISO or Participating Transmission Owner is connected, any warning, forecast, or anticipated overgeneration conditions, including a request from CAISO to manage over-generation conditions; (b) curtailment ordered by the Participating Transmission Owner or distribution operator (if interconnected to distribution or sub-transmission system) for reasons including, but not limited to, (i) any situation that affects normal function of the electric system including, but not limited to, any abnormal condition that requires action to prevent circumstances such as equipment damage, loss of load, or abnormal voltage conditions, (ii) any warning, forecast or anticipation of conditions or situations that jeopardize the Participating Transmission Owner's electric system integrity or the integrity of other systems to which the Participating Transmission Owner is connected; (c) curtailment ordered by the Participating Transmission Owner or distribution operator (if interconnected to distribution or sub-transmission system) as a result of scheduled or unscheduled maintenance or construction on the Participating Transmission Owner's transmission facilities or distribution operator's facilities (if interconnected to distribution or sub-transmission system) that prevents the delivery or receipt of Delivered Energy to or at the Energy Delivery Point, (d) curtailment in accordance with Seller's obligations under its interconnection agreement with the Participating Transmission Owner or distribution operator; or (e) in the case of an Energy Storage System, curtailment ordered by Buyer pursuant to a Dispatch Notice; provided, however, that, for purpose of this definition,

System Dispatch Down for a Generation Facility shall not include Economic Dispatch Down of the Generation Facility.

"System Emergency" has the meaning set forth in the Tariff.

"System Response Time" means the amount of time for the Energy Storage System to change from an off-line state to the maximum discharge rate for the Energy Storage System and the amount of time for the Energy Storage System to change from an off-line state to discharging at the maximum discharge rate.

"<u>Tariff</u>" means the tariff and protocol provisions, as amended or supplemented from time to time, of the CAISO.

"Term" has the meaning set forth in Section 2.1.

"Termination Payment" has the meaning set forth in Section 3.4.

"Tested Round-Trip Efficiency Rate" means the Round-Trip Efficiency Rate of the Project determined as of the Initial Delivery Date by the Commercial Operation Test as set forth in Section 7.2 and Appendix 7 and thereafter pursuant to the Efficiency Rate Tests as set forth in Section 7.4 and Appendix 7.

"<u>Transmission Provider</u>" means any entity or entities transmitting or transporting the Product on behalf of Seller or Buyer to or from the Energy Delivery Point.

"Uninstructed Deviation Penalty" has the meaning set forth in the Tariff.

"Uninstructed Imbalance Energy" has the meaning set forth in the Tariff.

"<u>Unit Contingent Energy</u>" means Energy delivered by the Energy Storage System that is dependent upon the availability and operation of that Energy Storage System.

"<u>Unscheduled Outage</u>" means a period during which the Energy Storage System is not capable of providing service due to the need to maintain or repair a component thereof, which period has not been scheduled in advance in accordance with <u>Section 17.1</u>.

"VER Forecasting Program" has the meaning set forth in the Tariff.

"Waiver Denial Periods" has the meaning set forth in the Tariff.

"WECC" means the Western Electricity Coordinating Council, or any successor thereto.

#### APPENDIX B

#### **COMMERCIAL OPERATION CERTIFICATE**

The undersigned, [insert name and type of legal entity] ("EPC Contractor"), [insert name and type of legal entity] ("Generation Facility Equipment Supplier"), [insert name and type of legal entity] ("Energy Storage System Equipment Supplier"), [insert name and type of legal entity] ("Licensed Professional Engineer") and [insert name and type of legal entity] ("Owner") make the following certifications to San Diego Gas & Electric Company ("SDG&E"), dated as of [Date]. All capitalized terms not otherwise defined herein shall have the meaning given to them in the Renewable Energy and Energy Storage Power Purchase Agreement dated [Date] between Owner and SDG&E (the "Agreement").

Generation Facility Equipment Supplier hereby certifies that:
1. The [] comprising the Generation Facility have been erected and installed at the project site and have been commissioned as required under the [Insert Title of Supply Agreement] ("Generation Facility Supply Agreement") dated as of, by and between Generation Facility Equipment Supplier and Owner and each such [] has passed the performance testing required to be performed pursuant to the Generation Facility Supply Agreement.
2. The warranty period under the Generation Facility Supply Agreement has commenced.
Energy Storage System Equipment Supplier hereby certifies that:
1. The [] comprising the Energy Storage System have been erected and installed at the project site and have been commissioned as required under the [Insert Title of Supply Agreement] ("Energy Storage System Supply Agreement") dated as of, by and between Energy Storage System Equipment Supplier and Owner and each such [] has passed the performance testing required to be performed pursuant to the Energy Storage System Supply Agreement.
2. The warranty period under the Energy Storage System Supply Agreement has commenced.
EPC Contractor hereby certifies that:
All requirements necessary to achieve [Commercial Operation/Substantial Completion] as set forth in the agreement between the EPC Contractor and Owner dated ("EPC Contract") have been completed and the Project has successfully passed all performance tests at a level that demonstrates satisfaction of at least the [minimum performance guarantees].

Owner hereby certifies that:

safe operation of the Project, the Project has been completed in accordance with all applicable specifications and is ready for continuous commercial operation in compliance with all applicable laws and governmental approvals. The Project has successfully passed all performance tests at a level that demonstrates satisfaction of at least the [insert minimum performance guarantees], and complete test reports have been submitted to Buyer.
2. The Operation and Maintenance Agreement (O&M Agreement), by and between Owner and dated as of has commenced.
3. Owner has a valid leasehold or real property interest in the Project Site for a term of at least [] years from the Commercial Operation date.
4. The interconnection facilities have been completed in accordance with applicable specifications, tariffs, laws and governmental approvals to enable power generated by the Project to be received at the Delivery Point.
5. Owner has obtained all governmental approvals necessary for the continuous commercial operation of the Project and the Project is in compliance with all such governmental approvals and all other applicable laws.
6. The Contract Capacity of the Generation Facility is [] MWac and [] MWdc at [] conditions, and the Contract Capacity of the Energy Storage System is [] MWac and [] MWdc at [] conditions.
Licensed Professional Engineer certifies that:
1. We have read the Agreement, the Generation Facility Supply Contract, the Energy Storage System Supply Contract and the EPC Contract, and we understand the requirements for Commercial Operation under the Agreement, the specifications and performance testing requirements under the Generation Facility Supply Contract and the Energy Storage System Supply Contract, and the requirements for [Commercial Operation/Substantial Completion] under the EPC Contract.
2. We have reviewed the material and data made available to us by the Owner, the Generation Facility Equipment Supplier, Energy Storage System Equipment Supplier and the EPC Contractor for the Project

Energy Storage System Equipment Supplier and EPC Contractor above, and find the representations provided to be correct in all material respects.

performance testing for the Project and in the course of this review we have not discovered any

To the extent practical, we have reviewed the engineering, procurement, construction and

We have reviewed the certificates of Owner, Generation Facility Equipment Supplier,

DB2/ 43979155.11 90

4.

material errors or omissions in the work performed to date.

- 5. We have reviewed all Governmental Approvals and permits identified by the Owner as being required for the construction and operation of the Project and are of the opinion that the Project as completed is in compliance in all material respects with the environmental and technical requirements contained therein.
- 6. Based on our review of the aforementioned information and of information provided to us by others which we have not independently verified, we are of the opinion that, as of, Commercial Operation has occurred as defined in the Agreement.

Executed this	day of	_, 20
	vable Gener	Y EQUIPMENT SUPPLIER ration Equipment Supplier] on
By: Name: Title:		
	vable Gener	STEM EQUIPMENT SUPPLIER ration Equipment Supplier] on
By: Name: Title:		
EPC CONTRA [Name of EPC of a	Contractor]	on
By: Name: Title:		
OWNER [Name of Owner a limite		company
By: Name: Title:		
	sed Professi	NAL ENGINEER: sional Engineer]
By: Name: Title:		

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# ACCEPTED BY SAN DIEGO GAS & ELECTRIC COMPANY

By:		
•	Name:	
	Title:	_'
	Date:	-"

# APPENDIX 1.1

# OPERATING RESTRICTIONS<sup>5</sup>

<sup>5</sup> **Note to Draft**: Under Buyer review.

# APPENDIX 1.1.1

# CONTRACT CAPACITY, ROUND TRIP EFFICIENCY AND EXPECTED CAPACITY ATTRIBUTES $^6$

Expected Generation Facility Contract Capacity: MW <sub>AC</sub>
Expected Energy Storage Contract Capacity: MWAC
Guaranteed Round-Trip Efficiency Rate =00%
Expected Capacity Attributes: MW <sub>AC</sub>

<sup>&</sup>lt;sup>6</sup> **Note to Draft**: Under Buyer review.

# **APPENDIX 1.2.1**

# **PROJECT DESCRIPTION**<sup>7</sup>

Project Physical Address:
Project Latitude and Longitude:
Project Site: See map below
Generation Facility Technology Type:
Generation Facility Nameplate Capacity (in MWac and MWdc):
Description of Generation Facilities:
Energy Storage System Technology Type:
<u>Description of Energy Storage System</u> :[Description of building block and components, battery management system, e.g.]
<u>Description of Stored Energy Measuring Device</u> : [Description of how the Stored Energy amount will be measured, including which methodology (e.g. voltage or other) used to calculate Stored Energy]
Description of Generation Tie-Lines/Interconnection Facilities:
Shared Facilities:
Ramp Rate Guarantee: > MW/min
System Response Time Guarantee: < seconds
Map:

Note to Draft: Under Buyer review.

# APPENDIX 1.3.1

# **ENERGY DELIVERY POINT**

Single-line diagram depicting Energy Delivery Point

# APPENDIX 1.3.2

# ELECTRIC RETAIL DELIVERY POINT

To be inserted by the Parties pursuant to <u>Section 1.3.2</u>, if applicable.

# APPENDIX 6.1(a)

# MILESTONE SCHEDULE<sup>8</sup>

Milestone	Milestone Date
File application(s) for Required Permit(s)	
Receipt of Required Permit(s)	
Execution of [Large/Small] Generator	
Interconnection Agreement	
Site readiness for construction (including	
receipt of all zoning approvals, easements,	
rights of way, utility access)	
Commencement of Construction Activities	
Synchronization of the Energy Storage System	
to CAISO Grid	
Submittal of all operational documentation	
including successful acceptance testing and	
approved test report	
Completion of system commissioning and pre-	
operational testing	
Achievement of Initial Delivery Date	

<sup>8</sup> **Note to Draft**: Under Buyer review.

# APPENDIX 6.1(b) MONTHLY PROGRESS REPORT<sup>9</sup>

**Monthly Progress Report** 

 $\mathbf{of}$ 

[INSERT SELLER'S NAME]

provided to

San Diego Gas & Electric Company

[Date]

<sup>&</sup>lt;sup>9</sup> **Note to Draft**: Under Buyer review.

#### Instructions.

Seller shall review the status of each significant element of the Milestone Schedule and Seller shall identify such matters referenced in clauses (i)-(iii) below as known to Seller and which in Seller's reasonable judgment are expected to adversely affect the Project or the Milestone Schedule, and with respect to any such matters, shall state the actions which Seller intends to take to ensure that conditions precedent and the milestones will be attained by their required dates. Such matters may include, but shall not be limited to:

- (i) Any material matter or issue arising in connection with a Permit Requirement, or compliance therewith, with respect to which there is a dispute over the interpretation of a law or regulation, any organized public opposition to the granting of a necessary Permit Requirement, or any action or expenditure required for compliance or obtaining approval that Seller is unwilling to take or make, in each case which in Seller's reasonable opinion could reasonably be expected to materially threaten or prevent achieving Commercial Operation of the Energy Storage System by the Initial Delivery Date;
- (ii) A change in, or discovery by Seller of, any legal or regulatory requirement which would reasonably be expected to materially threaten Seller's ability to achieve Commercial Operation of the Energy Storage System by the Initial Delivery Date;
- (iii) The status of any matter or issue identified as outstanding in any prior Monthly Progress Report and any material change in the Seller's proposed actions to remedy or overcome such matter or issue.

Seller shall complete, certify, and deliver this form Monthly Progress Report to Buyer, together with all attachments and exhibits.

# <u>Major activities to be performed for each aspect of the Project during the current calendar month.</u>

Please provide a brief summary of the Major<sup>10</sup> activities to be performed for each of the following aspects of the Project during the current calendar month:

For Purposes of this Report, "Major" shall mean any activity, event, or occurrence which may have a material adverse impact on the construction of the Project or completion of the Project on a timely basis if such activity, event, or occurrence occurs or if such activity, event, or occurrence fails to occur as anticipated or scheduled, which material adverse impact includes, but is not limited to, Seller's inability to achieve a Milestone Date.

Design
Engineering
Major Equipment procurement
Construction
Milestone report
Permitting
Major activities scheduled to be performed in the previous calendar month but not completed as scheduled.
Please provide a brief summary of the Major activities which were scheduled to be performed in the previous calendar month and their status, including those activities that were not completed as scheduled:
Design
Engineering
Major Equipment procurement
Construction
Milestone report

### **Permitting**

#### Overall assessment of the Project status.

Please provide a brief summary of your assessment of the status and progress of each of the following aspects of the Project:

Design

Engineering

Major Equipment procurement

Construction

Milestone report

Permitting

#### **Exhibit 1: Progress Curve.**

The progress curve which shows the progress achieved on the construction of the Project through the current month against the current Monthly Progress Report is included herewith as Exhibit 1.

#### **Exhibit 2: Photos.**

The photos included with this Exhibit 2 indicate construction progress to-date at the Project site.

# **Safety and Health Reports**

Any work stoppage from the	he previous calendar month:
Work stoppage impact on o	construction of the Project:
that any and all information contained	f and as an authorized representative of, do hereby certify ed in the attached's Monthly Progress Report is e best of my knowledge, the current status of the construction d below.
Ву:	
Name:	-
Γitle:	_
Date:	_

#### APPENDIX 7

#### **TESTING PROTOCOLS**

#### **COMMERCIAL OPERATION,**

#### **CONTRACT CAPACITY TESTS, and**

#### EFFICIENCY RATE TESTS<sup>11</sup>

This <u>Appendix 7</u> sets forth the protocols for (i) the Commercial Operation Test that the Project must successfully complete in order to achieve Commercial Operation and which sets the level of Contract Capacity and Tested Round-Trip Efficiency Rate for the Project at the start of the Delivery Period, (ii) the Contract Capacity Test, and (iii) the Efficiency Rate Test. The Commercial Operation Test, the Contract Capacity Test and the Efficiency Rate Tests are sometimes referred to in this Appendix individually as a "<u>Test</u>" and together as the "<u>Tests</u>.

#### PART I. GENERAL.

- A. Test Performance. Each Test will be conducted consistent with Accepted Electrical Practices, Contract Conditions, Applicable Law, manufacturer recommendations, and the provisions of published test procedures developed by the Electric Power Research Institute (EPRI) Energy Storage Integration Council (ESIC) (or equivalent test procedures accepted as an Industry Standard for lithium ion battery energy storage systems). At all times during a Test, the Project shall not be operated with abnormal operating conditions such as unstable load conditions. If conditions occur during a Test that are contrary to any of the foregoing, Buyer may postpone or reschedule all or part of such Test in its reasonable discretion, in which case such Test shall be deemed an Incomplete Test.
- B. <u>Final Test Plan</u>. All Tests shall be conducted in accordance with the Final Test Plan for such Test, provided that such Final Test Plan is consistent with the requirements of Part I.A above.
- C. <u>Test Records</u>. Seller shall provide all records associated with a Test (including the conditions, inputs, assumptions, data and results) no later than four (4) Business Days following completion of a Test.
- D. <u>Incomplete Test</u>. If any Test is not completed in accordance herewith, such Test shall be deemed an "<u>Incomplete Test</u>", and Buyer may in its sole discretion: (i) accept the Test results up to the time the Test stopped (other than in the case such Test is the Commercial Operation Test); (ii) require that the portion of the Test not completed, be completed within a reasonable specified time period; or (iii) require that the Test be entirely repeated. Unless the reason a Test is an

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Note to Draft: Under Buyer review.

Incomplete Test, any repeat or re-starting of a Test that is a Buyer Cost Test shall cause such Test to be a Seller Cost Test instead.

- E. <u>Final Report</u>. Within fifteen (15) Business Days after the completion of a Test (including a retest of a Test), Seller shall prepare and submit to Buyer a written report of the Test (or retest). At a minimum, the report shall include:
  - (1) a description of the Final Test Plan for the Test;
  - (2) a record of the personnel present during all or any part of the Test, whether serving in an operating, testing, monitoring or other such participatory role;
  - (3) a record of Test conditions and assumptions, including any unusual or abnormal conditions or events that occurred during the Test and any actions taken in response thereto;
  - (4) the measured applicable Test data; and
  - (5) Seller's statement of either Seller's acceptance of the Test or Seller's rejection of the Test results and reason(s) therefore.

Within ten (10) Business Days after receipt of such report, Buyer shall notify Seller in writing of either Buyer's acceptance of the Test results or Buyer's rejection of the Test and reason(s) therefore. If Buyer reasonably rejects the results of any Test, such Test shall be repeated (and if such Test is a Buyer Cost Test, then such retest shall be a Seller Cost Test).

F. <u>Buyer Representative</u>. Buyer shall be entitled to have its representatives and any independent third party witness present to witness each Test and shall be allowed unrestricted access to the area from where the Project is being controlled (e.g., Project control room), and unrestricted access to inspect the instrumentation necessary for Test data acquisition prior to commencement of any Test. Buyer shall be responsible for all costs, expenses and fees payable or reimbursable to the representative and the third party, if any.

#### PART II. COMMERCIAL OPERATION TEST.

- A. <u>Test Elements</u>. The Commercial Operation Test required pursuant to <u>Section 7.2</u> shall consist of the following tests:
  - 1. Contract Capacity Test;
  - 2. Efficiency Rate Test; and
  - 3. Other tests required to confirm compliance with the Project's specifications in Appendix 1.2.1 ("Initial Compliance Tests").

- B. Test Plan. No less than sixty (60) days prior to the Initial Delivery Date, Seller shall prepare and submit to Buyer a proposed procedure and schedule in order to complete the Commercial Operation Test ("Seller's Proposed Test Plan"). Such Seller's Proposed Test Plan must describe, with supporting detail, the actions, processes, protocols, and schedules to comply with all of the requirements of each individual test as set forth in this Appendix. Within ten (10) Business Days after Buyer's receipt of Seller's Proposed Test Plan, Buyer shall notify Seller that (i) the Seller's Proposed Test Plan is accepted, and is now considered the Final Test Plan, or (ii) the Seller's Proposed Test Plan is not accepted. If Buyer does not accept Seller's Proposed Test Plan, then Buyer and Seller shall immediately commence work in good faith to finalize such Test procedures and schedules ("Final Test Plan"). If, after thirty (30) days from Buyer's receipt of Seller's Proposed Test Plan, Seller and Buyer have not agreed on a Final Test Plan, Buyer shall provide Seller with the Final Test Plan within seven (7) Business Days after the expiration of the thirty (30) day period. Failure by Buyer to provide Seller with written acceptance of any Seller's Proposed Test Plan shall not constitute acceptance of such Seller's Proposed Test Plan.
- C. Instrumentation and Metering. Seller shall provide all instrumentation, metering and data collection equipment required to perform the Commercial Operation Test. Instrumentation shall include all instruments permanently installed at the Project and the temporary instruments suggested by Seller or deemed necessary by Buyer in its sole judgement. Within thirty (30) days of Buyer's receipt of Seller's Proposed Test Plan, Buyer shall provide Seller with written notice of the temporary calibrated instrumentation deemed necessary by Buyer that will be used during the Commercial Operation Test. Wherever possible, the instrumentation, metering and data collection equipment that will be used after the Project achieves the Initial Delivery Date for monitoring and controlling the operation of the Project shall be used for the Commercial Operation Test. Seller shall calibrate or cause to be calibrated all such instrumentation, metering and data collection equipment no more than three (3) months prior to the date of the Commercial Operation Test. All electrical metering equipment shall utilize the Project's installed CAISO metering equipment calibrated to CAISO standards. Copies of all calbration sheets shall be provided to Buyer at least five (5) Business Days prior to the Commercial Operation Test.

#### PART III. INITIAL COMPLIANCE TEST.

- A. <u>Test Plan</u>. The Final Test Plan from the Commercial Operation Test for the Initial Compliance Test shall be used for the Initial Compliance Test, unless the Parties agree otherwise in writing.
- B. <u>Test Elements</u>. The Initial Compliance Tests shall include the following test elements (unless Buyer otherwise agrees in writing in its sole discretion):
  - 1. Measurement of Ramp Rates at six (6) different starting and ending points; and

- 2. Measurement of System Response Times from an off-line state to the maximum charging rate of the Project and from an off-line state to the maximum discharging rate of the Project.
- C. <u>Test Showing</u>. For satisfactory complication of the Initial Compliance Tests, Seller must demonstrate to Buyer's reasonable satisfaction, that the Project has met the guaranteed Ramp Rate and System Response Times set forth in <u>Appendix 1.2.1</u>.

#### PART IV. CONTRACT CAPACITY TEST

- A. <u>Test Plan</u>. The Final Test Plan from the Commercial Operation Test for the Contract Capacity Test shall be used for the Contract Capacity Test, unless the Parties agree otherwise in writing.
- B. <u>Test Measurements</u>. The Contract Capacity Tests shall include the following test measurements (unless Buyer otherwise agrees in writing in its sole discretion):
  - 1. Measurement of the Project's maximum Charging Capacity over four (4) continuous hours of charging from 0% State of Energy to 100% State of Energy.
  - 2. Measurement of the Project's maximum Discharging Capacity over four (4) continuous hours of discharging from 100% State of Energy 0% State of Energy.
- C. <u>Capacity Calculation</u>. The Contract Capacity of the Project shall be the lesser of the Project's Charging Capacity or Discharging Capacity measured pursuant to Part IV.B. above.

#### PART V. EFFICIENCY RATE TESTS

- A. <u>Test Plan</u>. The Final Test Plan from the Commercial Operation Test shall be used for the Efficiency Rate Test, unless the Parties agree otherwise in writing.
- B. <u>Test Elements</u>. The Efficiency Rate Tests shall be conducted as follows (unless Buyer otherwise agrees in writing in its sole discretion):
  - 1. At the start of the Efficiency Rate Test, the Stored Energy of the Energy Storage System shall be reduced to an amount equal or less than [20%] State of Energy, which Stored Energy amount ("Stored Energytest.0") shall be recorded.
  - 2. The Project shall be charged with Charging Energy to bring the Stored Energy of the Energy Storage System to at least [80%] State of Energy, at the then-applicable Contract Capacity, which Charging Energy amount ("Charging Energytest") and Stored Energy amount at the end of such charging ("Stored Energytest.1") shall be recorded.

- 3. Following the expiration of up to 24 hours after the end of such charging, the Scheduling Coordinator for the Project shall schedule the Project for discharging, at the Contract Capacity in an amount equal to the product of Charging Energy<sub>test</sub> multiplied by the Guaranteed Round-Trip Efficiency Rate. The Delivered Amount at the end of such discharging ("<u>Delivered Energytest</u>") and the Stored Energy amount at the end of such discharging ("<u>Stored Energytest</u>,2") shall be recorded.
- 4. The Tested Round-Trip Efficiency Rate (TRTER) shall be calculated as follows:

$$\begin{aligned} \text{TRTER} = & \left( \frac{\textit{Stored Energy}_{test,1} - \textit{Stored Energy}_{test,0}}{\textit{Charging Energy}_{test}} \right) \times \\ & \left( \frac{\textit{Delivered Energy}_{test}}{\textit{Stored Energy}_{test,1} - \textit{Stored Energy}_{test,2}} \right) \times 100\% \end{aligned}$$

#### **APPENDIX 9.2**

#### MONTHLY CAPACITY PAYMENT<sup>12</sup>

The Monthly Capacity Payment for each month of the Delivery Period shall be determined as follows:

 $MCP_m = CC_m \times CR \times SF_m \times EAF_m \times RTERF_m$ 

Where:

 $MCP_m$  is the Monthly Capacity Payment expressed in Dollars for month m of the Delivery Period. If month m is less than a full calendar month, then the Monthly Capacity Payment for such month shall be prorated based on the number of days of the Delivery Period during such month.

*CC<sub>m</sub>* is the Contract Capacity of the Energy Storage System in effect during month *m*, expressed in kW<sub>AC</sub>, rounded to the nearest 100 kW<sub>AC</sub>. If the Contract Capacity of the Energy Storage System changes during such month, then the Monthly Capacity Payment of the Energy Storage System for such month shall be prorated based on the applicable Contract Capacity of the Energy Storage System before such change and the applicable Contract Capacity of the Energy Storage System from and after such change.

CR is the Capacity Rate expressed in Dollars per kW<sub>AC</sub>-year,

$$CR = \frac{XXX}{kW_{AC}-year}$$

 $SF_m$  is the Monthly Shaping Factor for the applicable month m, as set forth in the following table:

Month	Monthly Shaping Factor (%)
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	

Note to Draft: Under Buyer review.

Month	Monthly
	Shaping
	Factor (%)
December	

Notwithstanding the foregoing, Buyer may modify the Monthly Shaping Factors by providing Notice to Seller of its modifications no later than ninety (90) days prior to the start of the next Contract Year; *provided*, however, the sum of the twelve (12) Monthly Shaping Factors in any Contract Year must equal one hundred percent (100%).

 $EAF_m$  or the "Equivalent Availability Factor" of the Energy Storage System for month m is the equivalent availability factor computed as follows:

$$EAF_{m} = \sum_{i}^{p} \frac{Availability_{i}}{p}$$

Where:

p is the number of hours in month m.

i is the hour in month m.

*Availabilityi* is the lesser of the following, for hour *i*:

- (a) the quotient of (i) the sum of (A) the lesser of the Charging Capacity (unless the Energy Storage System is Fully Charged during such hour) or Discharging Capacity (unless the Energy Storage System is Fully Discharged during such hour) of the Energy Storage System applicable for such hour, plus (B) the amount that such lesser amount determined in clause (A) is unavailable as a result of Delivery Excuse, divided by (ii) the Contract Capacity (expressed in MW<sub>AC</sub>) of the Energy Storage System applicable for such hour; or
- (b) if the Energy Storage System has been assigned a Qualified RA Capacity or Qualified Flexible RA Capacity, the quotient of (i) the sum of (A) the lesser of the Qualified RA Capacity (if available), expressed in MW, or the Qualified Flexible RA Capacity (if available), expressed in MW, of the Energy Storage System applicable for such Settlement Interval, plus (B) the amount that such lesser amount determined in clause (A) is unavailable as a result of Delivery Excuse, divided by (ii) the Maximum RA Capacity, expressed in MW, associated with the Contract Capacity of the Energy Storage System for the month;

provided, however, that (x) if either the Charging Capacity or Discharging Capacity used in clause (a) above used for hour *i* exceeds the Contract Capacity applicable for such hour, then such Charging Capacity or Discharging Capacity, as applicable, shall equal the Contract Capacity for such hour, and (y) Availability shall in no event exceed 1.00 for any hour.

 $RTERF_m$  or the "Round-Trip Efficiency Rate Factor" of the Energy Storage System for month m shall be computed as follows:

(a) If the Tested Round-Trip Efficiency Rate in effect during month *m* is less than the Guaranteed Round-Trip Efficiency Rate, then:

$$RTERF_m = \frac{\textit{Tested Round-Trip Efficiency Rate}_m}{\textit{Guaranteed Round-Trip Efficiency Rate}}$$

Where:

Tested Round-Trip Efficiency Rate<sub>m</sub> is the Tested Round-Trip Efficiency Rate for the Energy Storage System in effect during month m (subject to clause (c) below).

- (b) If the Tested Round-Trip Efficiency Rate in effect during month m is equal or greater than the Guaranteed Round-Trip Efficiency Rate, then RTERF<sub>m</sub> = 1.
- (c) If the Round-Trip Efficiency Rate changes during such month, then the Monthly Capacity Payment for such month shall be prorated based on the applicable Tested Round-Trip Efficiency Rate (and resulting Round-Trip Efficiency Rate Factor) before such change and the applicable Tested Round-Trip Efficiency Rate (and resulting Round-Trip Efficiency Rate Factor) from and after such change.

#### APPENDIX 9.3

#### **MONTHLY ENERGY PAYMENT**

The Monthly Energy Payment for each month of the Delivery Period shall be determined as follows:

- 1. <u>Monthly Energy Payment</u>. The Monthly Energy Payment shall equal the sum for each hour in the month of the product of (a) the Energy Price times (b) the Generation Facility Bundled Green Energy of the Project expressed in MWh in each such hour.
- 2. <u>Energy Price</u>. The price for the Generation Facility Bundled Green Energy that will be applicable in each Contract Year shall be as follows ("<u>Energy Price</u>"):

Contract Year	Energy Price (\$/MWh)

Provided, however, that:

- (a) if Seller provides Generation Facility Bundled Green Energy, expressed in MWh, in the aggregate for any CAISO settlement interval (not to exceed one hour) in excess of the product of the Contract Capacity for the Generation Facility times the length of such settlement interval, expressed in hours, then the Energy Price for such excess Generation Facility Bundled Green Energy in such settlement interval shall be reduced to zero dollars (\$0), and if the real time Locational Marginal Price for the Delivery Point during such settlement interval is less than zero dollars (\$0), Seller shall pay to Buyer an amount equal to the absolute value of such negative Locational Marginal Price times such excess Generation Facility Bundled Green Energy; and
- (b) if Seller provides Generation Facility Bundled Green Energy in the aggregate for any Contract Year during the Delivery Period in excess of one hundred five percent (105%) of the annual Contract Quantity, then for any such portion of such Generation Facility Bundled Green Energy (i) in excess of one hundred five percent (105%) of the annual Contract Quantity up to one hundred ten percent (110%) of the annual Contract Quantity, the Energy Price for such excess Generation Facility Bundled Green Energy for the remainder of that Contract Year shall be reduced to the lesser of (x) the Energy Price for such Contract Year multiplied by fifty percent (50%) and (y) the real time Locational Marginal Price for the Delivery Point during the CAISO settlement interval when such Generation Facility Bundled Green Energy was delivered and (ii) in excess of one hundred ten percent (110%) of the annual Contract Quantity, the Energy Price for such excess Generation Facility Bundled Green Energy for the remainder of that Contract

Year shall be reduced to zero dollars (\$0); and, in each case, for each CAISO settlement interval during the time in which the real time Locational Marginal Price for any such excess Generation Facility Bundled Green Energy is less than zero dollars (\$0), Seller shall pay to Buyer an amount equal to the absolute value of such negative Locational Marginal Price times the Generation Facility Bundled Green Energy provided during such settlement interval.

# **APPENDIX 11.3**

# LETTER OF CREDIT FORM<sup>13</sup>

LET Refer	EVOCABLE STANDBY  FER OF CREDIT  rence Number:  saction Date:
	EFICIARY:
San I	Diego Gas & Electric Company
Ladie	es and Gentlemen:
Calif	(the "Bank") hereby establishes this Irrevocable alby Letter of Credit ("Letter of Credit") in favor of San Diego Gas & Electric Company, a fornia corporation (the "Beneficiary"), for the account of
prece For the	Letter of Credit shall be of no further force or effect upon the close of business on  or, if such day is not a Business Day (as hereinafter defined), on the next ding Business Day, unless extended in accordance with the terms of this Letter of Credit. he purposes hereof, "Business Day" shall mean any day on which commercial banks are not orized or required to close in San Diego, California.
Bene	ect to the terms and conditions herein, funds under this Letter of Credit are available to the ficiary by presentation in compliance on or prior to 5:00 p.m. California time, on or prior to xpiration Date, of the following:
1.	The original of this Letter of Credit and all amendments (or photocopy of the original for partial drawings); and
2.	The Drawing Certificate issued in the form of Attachment A attached hereto and which forms an integral part hereof, duly completed and purportedly bearing the signature of an authorized representative of the Beneficiary.
requi	withstanding the foregoing, any drawing hereunder may be requested by transmitting the site documents as described above to the Bank by facsimile at or such number as specified from time to time by the Bank. The facsimile transmittal shall be
13	Note to Draft: Under Buyer review.

deemed delivered when received. It is understood that drawings made by facsimile transmittal are deemed to be the operative instrument without the need of originally signed documents.

Partial drawing of funds shall be permitted under this Letter of Credit, and this Letter of Credit shall remain in full force and effect with respect to any continuing balance; *provided that*, the Available Amount shall be reduced by the amount of each such drawing.

This Letter of Credit is transferable in whole or in part.

Banking charges shall be the sole responsibility of the Applicant.

It is a condition of this Letter of Credit that it shall be deemed automatically extended without an amendment for a one year period beginning on the present expiry date hereof and upon each anniversary of such date, unless at least ninety (90) days prior to any such expiry date we have sent you written notice by regular and registered mail or courier service that we elect not to permit this Letter of Credit to be so extended beyond, and will expire on its then current expiry date. No presentation made under this Letter of Credit after such expiry date will be honored except as described in the succeeding paragraph.

We agree that if this Letter of Credit would otherwise expire during, or within 30 days after, an interruption of our business caused by an act of god, riot, civil commotion, insurrection, act of terrorism, war or any other cause beyond our control or by any strike or lockout, then this Letter of Credit shall expire on the 30th day following the day on which we resume our business after the cause of such interruption has been removed or eliminated and any drawing on this Letter of Credit which could properly have been made but for such interruption shall be permitted during such extended period.

This Letter of Credit sets forth in full our obligations and such obligations shall not in any way be modified, amended, amplified or limited by reference to any documents, instruments or agreements referred to herein, except only the attachment referred to herein; and any such reference shall not be deemed to incorporate by reference any document, instrument or agreement except for such attachment.

The Bank engages with the Beneficiary that Beneficiary's drafts drawn under and in compliance with the terms of this Letter of Credit will be duly honored if presented to the Bank on or before the Expiration Date.

Except so far as otherwise stated, this Letter of Credit is subject to the International Standby Practices ISP98 (also known as ICC Publication No. 590), or revision currently in effect (the "ISP"). As to matters not covered by the ISP, the laws of the State of California, without regard to the principles of conflicts of laws thereunder, shall govern all matters with respect to this Letter of Credit.

AUTHORIZED SIGNATURE for Bank
By:
Title:

# ATTACHMENT A TO APPENDIX 11.3 DRAWING CERTIFICATE TO [ISSUING BANK NAME]

#### IRREVOCABLE STANDBY LETTER OF CREDIT

Reference Number.\_\_\_\_\_(Sample Text)

DRAWING CERTIFICATE Bank Bank Address Subject: Irrevocable Standby Letter of Credit Reference Number: The undersigned \_\_\_\_\_\_\_, an authorized representative of San Diego Gas & Electric Company (the "Beneficiary"), hereby certifies to [Issuing Bank Name] (the "Bank"), and \_\_\_\_\_ (the "Applicant"), with reference to Irrevocable Standby Letter of Credit No. \_\_\_\_\_\_, dated \_\_\_\_\_\_, (the "Letter of Credit"), issued by the Bank in favor of the Beneficiary, as follows as of the date hereof: 1. The Beneficiary is entitled to draw under the Letter of Credit an amount equal to \$\_\_\_\_\_\_, for the following reason(s) [check applicable provision]: An Event of Default, as defined in the Energy Storage Power Purchase Agreement between Beneficiary and Applicant (the "Agreement"), with respect to the Applicant has occurred and is continuing. B. The Letter of Credit will expire in fewer than sixty (60) days from the date hereof, and Applicant has not provided to Beneficiary alternate Performance Assurance (as defined in the Agreement) acceptable to Beneficiary. [ ]C. Applicant has forfeited all or part of its Pre-Construction Security as set forth and defined in the Agreement. [ ]C. Applicant has incurred Daily Delay Damages as set forth and defined in the Agreement. 2. Based upon the foregoing, the Beneficiary hereby makes demand under the Letter of Credit for payment of U.S. DOLLARS AND /100ths (U.S.\$\_\_\_\_\_\_ which amount does not exceed (i) the amount set forth in paragraph 1 above, and (ii) the Available Amount under the Letter of Credit as of the date hereof. Funds paid pursuant to the provisions of the Letter of Credit shall be wire-transferred to 3. the Beneficiary in accordance with the following instructions:

	ed herein, capitalized terms which are used and not defined ven each such term in the Letter of Credit.
	OF, this Certificate has been duly executed and delivered on authorized representative as of this day of
Beneficiary:	SAN DIEGO GAS & ELECTRIC COMPANY
	By: Name: Title:

#### APPENDIX 11.3.3

#### FORM OF GUARANTY AGREEMENT

#### **GUARANTY**

In consideration of San Diego Gas & Electric Company ("<u>Company</u>") entering into a contract with [Name of Seller], a [Legal Status of Seller] (hereinafter referred to as "<u>Applicant</u>"), [insert Guarantor name], a [Legal Status of Guarantor], (hereinafter referred to as "<u>Guarantor</u>"), agrees with Company as follows:

- 1. The term "Obligations" is used herein in its broadest and most comprehensive sense and shall mean, without limiting the generality of the foregoing, all obligations, liabilities and indebtedness of any kind whatsoever now or hereafter owing by Applicant to the Company in respect of or pursuant to that certain Renewable Energy and Energy Storage Power Purchase Agreement, by and between Company and Applicant, dated as of [Date], and any amendments, modifications or extensions thereof.
- 2. Guarantor unconditionally and irrevocably guarantees to Company the full, prompt and faithful payment and performance when due of each and all of the Obligations.
- This is a continuing guaranty relating to the Obligations. Guarantor acknowledges 3. that there is a continuing consideration to Guarantor for this Guaranty and therefore Guarantor waives and relinquishes the right to revoke or terminate this Guaranty as provided in California Civil Code Section 2815 except for the right to terminate this Guaranty in accordance with this No termination of this Guaranty by Guarantor shall affect any Obligations outstanding or contracted or committed for as of the effective date of the termination, the payment of which Obligations shall continue to be guaranteed by Guarantor pursuant to this Guaranty notwithstanding such termination, and this Guaranty shall remain in full force and effect with respect to such Obligations until finally and irrevocably paid in full. Guarantor may terminate this Guaranty with respect to future Obligations only by delivering personally, by certified mail, postage prepaid and return receipt requested, or by confirmed facsimile transmission (fax), written notice thereof to Company, provided that such notice shall specify the effective date thereof, which effective date shall be no sooner than ninety (90) days after Company's actual receipt of such notice, at the address set forth below (or to such new address or fax number as Company may designate hereafter in a notice to Guarantor):

San Diego Gas and Electric Company 555 W. Fifth Street Attn: Major Markets 18A3, Credit Manager Los Angeles, CA 90013

Fax No.: (213) 244-8316

4. Any of the Obligations may be amended, modified, waived, or increased (whether or not beyond any dollar limitation hereunder), further agreements may be entered into between Company and Applicant, Company may provide additional goods or services or credit to Applicant or increase or decrease the dollar value of such goods, services or credit, and further obligations

(including, without limitation, the provision or pledging of security to Company for any obligation), indebtedness and liabilities may be entered into or incurred from time to time by Applicant and without further authorization from or notice to Guarantor and no such action shall terminate, release, impair, reduce, discharge, diminish or in any way affect any of the obligations of Guarantor hereunder or any security furnished by Guarantor or give Guarantor any recourse or defense against Company. Company need not inquire into the power of Applicant or the authority of its officers, directors, partners or agents acting or purporting to act in its behalf.

- 5. With respect to all Obligations, this is a guaranty of payment and performance and not of collection, and Guarantor waives and agrees not to assert or take advantage of:
  - (a) any right to require Company to proceed against Applicant or any other person or to resort to, proceed against or exhaust any security held by it at any time or to pursue any other remedy in its power before proceeding against any Guarantor;
  - (b) demand, presentment, protest and notice of any kind including, without limiting the generality of the foregoing, notice of nonperformance, protest, dishonor and acceptance of this Guaranty, notice under Section 9611 of the California Commercial Code, and notice of the existence, creation or incurring of any new or additional indebtedness or obligation or of any action or non-action on the part of Applicant, Company, a guarantor under this or any other instrument, or creditor of Applicant or any other person whomsoever, in connection with any of the Obligations or any collateral for any of the Obligations or in connection with any of the Obligations; and
  - (c) any suretyship defenses and suretyship rights of every nature otherwise available under California law and the laws of any other state or jurisdiction, including, without limitation, all defenses and rights arising under Sections 2787 through 2855 of the California Civil Code (the "Suretyship Provisions") and any successor provisions to those Sections. Without limiting the generality of the foregoing, Guarantor acknowledges his, her or its understanding that the Suretyship Provisions provide various partial or complete defenses to the recovery by Company from Guarantor and/or grant Guarantor rights the enforcement of which could reduce or eliminate entirely Guarantor's liability hereunder to Company. Among the defenses and rights contained in the Suretyship Provisions are the following: (1) Section 2809 of the Civil Code, which provides, in part, that the obligation of a surety must not be either larger in amount or in other respects more burdensome than that of the principal; (2) Section 2810 of the Civil Code, which provides, in part, that a surety is not liable if for any reason other than the mere personal disability of the principal there is no liability upon the part of the principal at the time of execution of the contract, or the liability of the principal thereafter ceases; (3) Section 2819 of the Civil Code, which provides, in part, that a surety is exonerated if the creditor alters the original obligation of the principal without the consent of the surety; (4) Section 2845 of the Civil Code, which provides, in part, that a surety is

exonerated to the extent that the creditor fails to proceed against the principal, or to pursue any other remedy in the creditor's power which the surety cannot pursue and which would lighten the surety's burden; (5) Section 2846 of the Civil Code, which provides that a surety may compel his principal to perform the obligation when due; (6) Section 2847 of the Civil Code, which provides, in part, that if a surety satisfies the principal obligation, or any part thereof, the principal is obligated to reimburse the surety for the amounts paid by the surety; (7) Section 2848 of the Civil Code, which provides, in part, that a surety, upon satisfaction of the obligation of the principal is entitled to enforce remedies which the creditor then has against the principal; (8) Section 2849 of the Civil Code, which provides, in part, that a surety is entitled to the benefit of security held by the creditor for the performance of the principal obligation held by the creditor; (9) Section 2850 of the Civil Code, which provides, in part, that whenever the property of a surety is hypothecated with property of the principal, the surety is entitled to have the property of the principal first applied to the discharge of the obligation; and (10) Section 2822 of the Civil Code, which provides, in part, for a right to have the principal designate the portion of any obligation to be satisfied by the surety in the event that the principal provides partial satisfaction of such obligation.

- 6. All existing and future indebtedness of Applicant to Guarantor ("Intercompany Obligations") is subordinated to all Obligations hereby guaranteed. All of Guarantor's right, title and interest in and to the Intercompany Obligations and rights to receive any payments of the Intercompany Obligations are hereby granted and assigned to Company as continuing security for the Obligations hereby guaranteed, and, in the event of any default in the payment of any of the Obligations when due and until the Obligations guaranteed hereby have been paid in full (a) at the Company's request, Applicant shall forthwith pay to the Company all or any part of such Intercompany Obligations and any capital which Guarantor is entitled to withdraw until all of the Obligations guaranteed hereby have been paid in full, and (b) Guarantor shall pay to Company immediately any payments of such Intercompany Obligations received by Guarantor.
- 7. Guarantor agrees to pay all attorneys' fees (including without limitation, reasonably allocated fees of in-house counsel) and all other costs and expenses which may be incurred by Company in the enforcement of this Guaranty against Guarantor.
- 8. This Guaranty is not assignable by Guarantor without Company's consent. This Guaranty shall inure to the benefit of Company and its successors and assigns, including the assignees of any Obligations, and bind the heirs, executors, administrators, successors and permitted (if any) assigns of Guarantor. This Guaranty is assignable by Company with respect to all or any portion of the Obligations, and when so assigned Guarantor shall be liable to the assignees under this Guaranty without in any manner affecting the liability of Guarantor hereunder with respect to any Obligations retained by Company.
- 9. This Guaranty shall be governed by and construed in accordance with the laws of the State of California, without reference to its choice of law provisions. Guarantor hereby irrevocably and unconditionally agrees that any legal action or proceeding against Guarantor or

any of Guarantor's property with respect to this Guaranty may be brought in the courts of the State of California in the County of San Diego or the courts of the United States in the County of San Diego, as Company may elect, and by executing and delivering this Guaranty Guarantor hereby submits to and accepts with regard to any such action or proceeding for himself, herself or itself and in respect of his, her or its property, generally, irrevocably and unconditionally, the jurisdiction of the above mentioned courts. Guarantor hereby irrevocably appoints the Secretary of State of the State of California as his, her or its agent for service of process in any suit or proceeding if the Guarantor is located outside the State of California at the time of service or cannot reasonably be located by Company. The foregoing, however, shall not limit the right of Company as it may elect to bring any legal action or proceeding or to obtain execution of judgment in any other appropriate jurisdiction including but not limited to any other jurisdiction in which Guarantor or his, her or its property is located.

- 10. Except as provided in any other written agreement now or at any time hereafter in force between Company and Guarantor, this Guaranty shall constitute the entire agreement of Guarantor with Company with respect to the subject matter hereof and no representation, understanding, promise or condition concerning the subject matter hereof shall be binding upon Company unless expressed herein.
- 11. All notices, demands, requests and other communications required or permitted hereunder shall be in writing and, except for notice of termination of this Guaranty pursuant to paragraph 3 which shall be effective as provided therein, shall be given personally, by certified or registered mail, postage prepaid, return receipt requested, or by reliable overnight courier to the address of the Company set forth in paragraph 3 herein (or to such new address as Company may designate hereafter in a notice to Guarantor) in the case of a communication to the Company and to the address appearing next to Guarantor's signature on this Guaranty (or to such new address as Guarantor may designate hereafter in a notice to Company) in the case of a communication to Guarantor. Any notice served personally shall be deemed delivered upon receipt, and any notice served by certified or registered mail or by reliable overnight courier shall be deemed delivered on the date of receipt as shown on the addressee's registry or certification of receipt or on the date receipt is refused as shown on the records or manifest of the U.S. Postal Service or such courier.
- 12. Until all of the Obligations guaranteed hereby have been satisfied in full, Guarantor shall have no right of subrogation or reimbursement from the Applicant which Guarantor may have as a result of any payment by Guarantor under this Guaranty, and waives any right to enforce any remedy which Company now has or may hereafter have against the Applicant as a result of such payment by Guarantor under this Guaranty and waives any right under section 2849 of the California Civil Code and any other benefit of or right to participate in any security now or hereafter held by Company.
- 13. All amounts payable by Guarantor hereunder shall be paid without set-off or counterclaim and without any deduction or withholding whatsoever unless and to the extent that Guarantor shall be prohibited by law from doing so, in which case Guarantor shall pay to Company such additional amount as shall be necessary to ensure that Company receives the full amount it would have received if no such deduction or withholding had been made.

14. If any portion of this Guaranty is held to be unenforceable by a court of competent jurisdiction, the remainder of this Guaranty shall remain in full force and effect.

[Remainder of page intentionally left blank.]

on	IN WITNESS WE		igned Guarantor has	executed this Guaranty
	ГОR: [			
Signature		-		
Title		-		
Printed Nan	me of Person Signing	for Guarantor		
Guarantor's	s Address			
City, State,	Zip			
Guarantor's	s Phone No.			

#### APPENDIX 12.1

#### FORM OF CONSENT TO COLLATERAL ASSIGNMENT

This Consent to Collateral Assignment Agreement (this "Consent") is entered into among (i) San Diego Gas & Electric Company, a California corporation ("Buyer"), (ii) [Name of Seller], a [Legal Status of Seller] (the "Project Company"), and (iii) [Name of Collateral Agent], a [Legal Status of Collateral Agent], as Collateral Agent for the secured parties under the Financing Documents referred to below (such secured parties together with their successors permitted under this Consent in such capacity, the "Secured Parties", and, such agent, together with its successors in such capacity, the "Collateral Agent"). Buyer, Project Company and Collateral Agent are hereinafter sometimes referred to individually as a "Party" and jointly as the "Parties". Capitalized terms used but not otherwise defined in this Consent shall have the meanings ascribed to them in the Agreement (as defined below).

#### RECITALS

The Parties enter into this Consent with reference to the following facts:

- A. Project Company and Buyer have entered into that certain Renewable Energy and Energy Storage Power Purchase Agreement, dated as of [Date] [List all amendments as contemplated by Section 3.4] ("Agreement"), pursuant to which Project Company will develop, construct, commission, test and operate the Project, as defined in the Agreement (the "Project") and sell the Product to Buyer, and Buyer will purchase the Product from Project Company;
- B. As collateral for Project Company's obligations under the Agreement, Project Company has agreed to provide to Buyer certain collateral, which may include Performance Assurance and other collateral described in the Agreement (collectively, the "Agreement Collateral");
- C. Project Company has entered into that certain [Insert description of financing arrangements with Lender], dated as of [Date], among Project Company, the Lenders party thereto and the Collateral Agent (the "Financing Agreement"), pursuant to which, among other things, the Lenders have extended commitments to make loans to Project Company;
- D. As collateral security for Project Company's obligations under the Financing Agreement and related agreements (collectively, the "<u>Financing Documents</u>"), Project Company has, among other things, assigned all of its right, title and interest in, to and under the Agreement and Project's Company's owners have pledged their ownership interest in Project Company (collectively, the "<u>Assigned Interest</u>") to the Collateral Agent pursuant to the Financing Documents; and
- E. It is a requirement under the Financing Agreement and the Agreement that Buyer and the other Parties hereto shall have executed and delivered this Consent.

#### **AGREEMENT**

In consideration of the foregoing, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, and intending to be legally bound, the Parties hereto hereby agree as follows:

## SECTION 1. CONSENT TO ASSIGNMENT, ETC.

#### 1.1 <u>Consent and Agreement.</u>

Buyer hereby acknowledges:

- (a) notice of and consents to the assignment as collateral security to Collateral Agent, for the benefit of the Secured Parties, of the Assigned Interest; and
- (b) the right (but not the obligation) of Collateral Agent in the exercise of its rights and remedies under the Financing Documents, to make all demands, give all notices, take all actions and exercise all rights of Project Company permitted under the Agreement (subject to Buyer's rights and defenses under the Agreement and the terms of this Consent) and accepts any such exercise; provided, however, that, insofar as the Collateral Agent exercises any such rights under Agreement or makes any claims with respect to payments or other obligations under the Agreement, the terms and conditions of the Agreement applicable to such exercise of rights or claims shall apply to Collateral Agent to the same extent as to Project Company.

#### 1.2 <u>Project Company's Acknowledgement.</u>

Each of Project Company and Collateral Agent hereby acknowledges and agrees that Buyer is authorized to act in accordance with Collateral Agent's instructions, and that Buyer shall bear no liability to Project Company or Collateral Agent in connection therewith, including any liability for failing to act in accordance with Project Company's instructions.

#### 1.3 Right to Cure.

If Project Company defaults in the performance of any of its obligations under the Agreement, or upon the occurrence or non-occurrence of any event or condition under the Agreement which would immediately or with the passage of any applicable grace period or the giving of notice, or both, enable Buyer to terminate or suspend its performance under the Agreement (an "Agreement Default"), Buyer will not terminate or suspend its performance under the Agreement until it first gives written notice of such Agreement Default to Collateral Agent and affords Collateral Agent the right to cure such Agreement Default within the applicable cure period under the Agreement, which cure period shall run concurrently with that afforded Project Company under the Agreement. In addition, if Collateral Agent gives Buyer written notice prior to the expiration of the applicable cure period under the Agreement of Collateral Agent's intention to cure such Agreement Default (which notice shall include a reasonable description of the time during which it anticipates to cure such Agreement Default) and is diligently proceeding to cure such Agreement Default, notwithstanding the applicable cure period under the Agreement, Collateral Agent shall have a period of sixty (60) days (or, if such Agreement Default is for failure by the Project Company to pay an amount to Buyer which is due and payable under the Agreement other than to provide Agreement Collateral, thirty (30) days, or, if such Agreement Default is for failure by Project Company to provide Agreement

Collateral, [\_\_(\_\_)] Business Days) from the Collateral Agent's receipt of the notice of such Agreement Default from Buyer to cure such Agreement Default; provided, however, that (a) if possession of the Project is necessary to cure any such non-monetary Agreement Default and Collateral Agent has commenced foreclosure proceedings within sixty (60) days after notice of the Agreement Default and is diligently pursuing such foreclosure proceedings, Collateral Agent will be allowed a reasonable time, not to exceed one hundred eighty (180) days after the notice of the Agreement Default, to complete such proceedings and cure such Agreement Default, and (b) if Collateral Agent is prohibited from curing any such Agreement Default by any process, stay or injunction issued by any Governmental Authority or pursuant to any bankruptcy or insolvency proceeding or other similar proceeding involving Project Company, then the time periods specified herein for curing an Agreement Default shall be extended for the period of such prohibition, so long as Collateral Agent has diligently pursued removal of such process, stay or injunction. Collateral Agent shall provide Buyer with reports concerning the status of efforts to cure an Agreement Default upon Buyer's reasonable request.

#### 1.4 Substitute Owner.

If Collateral Agent, directly or indirectly, takes possession of, or title to the Project (including possession by a receiver or title by foreclosure or deed in lieu of foreclosure), Collateral Agent (or its designee) (the "Substitute Owner") must assume all of Seller's obligations arising under the Agreement; provided, that Collateral Agent shall not have any personal liability to Buyer under the Agreement and the sole recourse of Buyer in seeking enforcement of such obligations against Collateral Agent shall be to the aggregate interest of the Secured Parties in the Project; provided, however, that such limited recourse shall not limit Buyer's right to seek equitable or injunctive relief against Collateral Agent, or Buyer's rights with respect to any offset rights expressly allowed under the Agreement or the Agreement Collateral. Without limiting the foregoing, and subject to Section 1.7, the Parties agree that if Collateral Agent notifies (such notice, a "Financing Document Default Notice") Buyer that an event of default has occurred and is continuing under the Financing Documents (a "Financing Document Event of Default") then, upon a judicial foreclosure sale, non-judicial foreclosure sale, deed in lieu of foreclosure or other transfer following a Financing Document Event of Default, the Substitute Owner shall be substituted for Project Company under the Agreement, and, subject to Sections 1.7(b) and 1.7(c) below, Buyer and Substitute Owner will recognize each other as counterparties under the Agreement and will continue to perform their respective obligations (including those obligations accruing to Buyer and the Project Company prior to the existence of the Substitute Owner) under the Agreement in favor of each other in accordance with the terms thereof; provided, however, that before Buyer is required to recognize the Substitute Owner, the Substitute Owner must have demonstrated to Buyer's reasonable satisfaction that the Substitute Owner has financial qualifications and operating experience [TBD] (a "Permitted Transferee"). For purposes of the foregoing, Buyer shall be entitled to assume that any such purported exercise of rights by Collateral Agent that results in substitution of a Substitute Owner under the

Agreement is in accordance with the Financing Documents without independent investigation thereof but shall have the right to require that the Collateral Agent and its designee (if applicable) provide reasonable evidence demonstrating the same.

#### 1.5 Replacement Agreements.

Subject to Section 1.7, if the Agreement is terminated, rejected or otherwise invalidated as a result of any bankruptcy, insolvency, reorganization or similar proceeding affecting Project Company, its owner(s) or guarantor(s), and if Collateral Agent or its designee directly or indirectly takes possession of, or title to, the Project (including possession by a receiver or title by foreclosure or deed in lieu of foreclosure) ("Replacement Owner"), Buyer shall, and Collateral Agent shall cause Replacement Owner to, enter into a new agreement with one another for the balance of the obligations under the Agreement remaining to be performed having terms substantially the same as the terms of the Agreement with respect to the remaining Term ("Replacement Agreement"); provided, that before Buyer is required to enter into a Replacement Agreement, the Replacement Owner must have demonstrated to Buyer's reasonable satisfaction that the Replacement Owner satisfies the requirements of a Permitted Transferee. For purposes of the foregoing, Buyer is entitled to assume that any such purported exercise of rights by Collateral Agent that results in a Replacement Owner is in accordance with the Financing Documents without independent investigation thereof but shall have the right to require that the Collateral Agent and its designee (if applicable) provide reasonable evidence demonstrating the same. Notwithstanding the execution and delivery of a Replacement Agreement, to the extent Buyer is, or was otherwise prior to its termination as described in this Section 1.5, entitled under the Agreement, Buyer may suspend performance of its obligations under such Replacement Agreement, unless and until all Agreement Defaults of Project Company under the Agreement or Replacement Agreement have been cured.

#### 1.6 Transfer.

Subject to Section 1.7, a Substitute Owner or a Replacement Owner may assign all of its interest in the Project and the Agreement and a Replacement Agreement to a natural person, corporation, trust, business trust, joint venture, joint stock company, association, company, limited liability company, partnership, Governmental Authority or other entity (a "Person") to which the Project is transferred; provided, however, that the proposed transferee shall have demonstrated to Buyer's reasonable satisfaction that such proposed transferee satisfies the requirements of a Permitted Transferee.

#### 1.7 <u>Assumption of Obligations.</u>

(a) <u>Transferee</u>. Any transferee under Section 1.6 shall expressly assume in a writing reasonably satisfactory to Buyer all of the obligations of Project Company, Substitute Owner or Replacement Owner under the Agreement or Replacement Agreement, as applicable,

including posting and collateral assignment of the Agreement Collateral. Upon such assignment and the cure of any outstanding Agreement Default, and payment of all other amounts due and payable to Buyer in respect of the Agreement or such Replacement Agreement, the transferor shall be released from any further liability under the Agreement or Replacement Agreement, as applicable.

- (b) <u>Substitute Owner</u>. Subject to Section 1.7(c), any Substitute Owner pursuant to Section 1.4 shall be required to perform Project Company's obligations under the Agreement, including posting and collateral assignment of the Agreement Collateral; provided, however, that the obligations of such Substitute Owner shall be no more than those of Project Company under the Agreement.
- (c) No Liability. Buyer acknowledges and agrees that neither Collateral Agent nor any Secured Party shall have any liability or obligation under the Agreement as a result of this Consent (except to the extent Collateral Agent or a Secured Party is a Substitute Owner or Replacement Owner or otherwise takes possession of, or title to, the Project) nor shall Collateral Agent or any other Secured Party be obligated or required to (i) perform any of Project Company's obligations under the Agreement, except as provided in Sections 1.7(a) and 1.7(b) and to the extent Collateral Agent or a Secured Party is a Substitute Owner or Replacement Owner, or (ii) take any action to collect or enforce any claim for payment assigned under the Financing Documents. If Collateral Agent becomes a Substitute Owner pursuant to Section 1.4 or enters into a Replacement Agreement, Collateral Agent shall not have any personal liability to Buyer under the Agreement or Replacement Agreement and the sole recourse of Buyer in seeking enforcement of such obligations against Collateral Agent shall be to the aggregate interest of the Secured Parties in the Project; provided, however, that such limited recourse shall not limit Buyer's right to seek equitable or injunctive relief against Collateral Agent, or Buyer's rights with respect to any offset rights expressly allowed under the Agreement, a Replacement Agreement or the Agreement Collateral.

#### 1.8 Delivery of Notices.

Collateral Agent shall deliver to Buyer, concurrently with delivery thereof to Project Company, a copy of each notice, request or demand given by Collateral Agent to Project Company pursuant to the Financing Documents relating to a default by Project Company under the Financing Documents.

#### 1.9 Confirmations.

Buyer will, as and when reasonably requested by Collateral Agent from time to time, confirm in writing matters relating to the Agreement (including the performance of same by Project Company); provided, however, that such confirmation may be limited to matters of which Buyer is aware as of the time the confirmation is given and such confirmations shall be without prejudice to any rights of Buyer under the Agreement as between Buyer and Project Company.

#### 1.10 Exclusivity of Dealings.

Except as provided in Sections 1.3, 1.4, 1.8, 1.9 and 2.1, unless and until Buyer receives a Financing Document Default Notice, Buyer shall deal exclusively with Project Company in connection with the performance of Buyer's obligations under the Agreement. From and after such time as Buyer receives a Financing Document Default Notice and until a Substitute Owner is substituted for Project Company pursuant to Section 1.4, a Replacement Agreement is entered into or the Agreement is transferred to a Person to whom the Project is transferred pursuant to Section 1.6, Buyer shall, until Collateral Agent confirms to Buyer in writing that all obligations under the Financing Documents are no longer outstanding, deal exclusively with Collateral Agent in connection with the performance of Buyer's obligations under the Agreement, and Buyer may irrevocably rely on instructions provided by Collateral Agent in accordance therewith to the exclusion of those provided by any other Person.

#### SECTION 2. PAYMENTS UNDER THE AGREEMENT

#### 2.1 Payments.

Unless and until Buyer receives written notice to the contrary from Collateral Agent, Buyer will make all payments to be made by it to Project Company under or by reason of the Agreement directly to Project Company. Buyer, Project Company, and Collateral Agent acknowledge that Buyer will be deemed to be in compliance with the payment terms of the Agreement to the extent that Buyer makes payments in accordance with Collateral Agent's instructions.

#### 2.2 No Offset, Etc.

All payments required to be made by Buyer under the Agreement shall be made without any offset, recoupment, abatement, withholding, reduction or defense whatsoever, other than that expressly allowed by the terms of the Agreement.

#### SECTION 3. REPRESENTATIONS AND WARRANTIES OF BUYER

Buyer makes the following representations and warranties as of the date hereof in favor of Collateral Agent:

#### 3.1 <u>Organization</u>.

Buyer is a corporation duly organized and validly existing under the laws of the state of its incorporation, and is duly qualified, authorized to do business and in good standing in every jurisdiction in which it owns or leases real property or in which the nature of its business requires it to be so qualified, except where the failure to so qualify would not have a material adverse effect on its financial condition, its ability to own its properties or its ability to transact its

business. Buyer has all requisite power and authority, corporate and otherwise, to enter into and to perform its obligations hereunder and under the Agreement, and to carry out the terms hereof and thereof and the transactions contemplated hereby and thereby.

#### 3.2 Authorization.

The execution, delivery and performance by Buyer of this Consent and the Agreement have been duly authorized by all necessary corporate or other action on the part of Buyer and do not require any approval or consent of any holder (or any trustee for any holder) of any indebtedness or other obligation of Buyer which, if not obtained, will prevent Buyer from performing its obligations hereunder or under the Agreement except approvals or consents which have previously been obtained and which are in full force and effect.

#### 3.3 <u>Execution and Delivery; Binding Agreements.</u>

Each of this Consent and the Agreement is in full force and effect, have been duly executed and delivered on behalf of Buyer by the appropriate officers of Buyer, and constitute the legal, valid and binding obligation of Buyer, enforceable against Buyer in accordance with its terms, except as the enforceability thereof may be limited by (a) bankruptcy, insolvency, reorganization, moratorium or other similar laws of general application affecting the enforcement of creditors' rights generally and (b) general equitable principles (whether considered in a proceeding in equity or at law).

## 3.4 <u>No Default or Amendment.</u>

Except as set forth in Schedule A attached hereto: (a) Neither Buyer nor, to Buyer's actual knowledge, Project Company, is in default of any of its obligations under the Agreement; (b) Buyer and, to Buyer's actual knowledge, Project Company, has complied with all conditions precedent to the effectiveness of its obligations under the Agreement; (c) to Buyer's actual knowledge, no event or condition exists which would either immediately or with the passage of any applicable grace period or giving of notice, or both, enable either Buyer or Project Company to terminate or suspend its obligations under the Agreement; and (d) the Agreement has not been amended, modified or supplemented in any manner except as set forth herein and in the recitals hereto.

#### 3.5 No Previous Assignments.

Buyer has no notice of, and has not consented to, any previous assignment by Project Company of all or any part of its rights under the Agreement, except as previously disclosed in writing and consented to by Buyer.

#### SECTION 4. REPRESENTATIONS AND WARRANTIES OF PROJECT COMPANY

Project Company makes the following representations and warranties as of the date hereof in favor of the Collateral Agent and Buyer:

#### 4.1 <u>Organization</u>.

Project Company is a [Legal Status of Seller] duly organized and validly existing under the laws of the state of its organization, and is duly qualified, authorized to do business and in good standing in every jurisdiction in which it owns or leases real property or in which the nature of its business requires it to be so qualified, except where the failure to so qualify would not have a material adverse effect on its financial condition, its ability to own its properties or its ability to transact its business. Project Company has all requisite power and authority, corporate and otherwise, to enter into and to perform its obligations hereunder and under the Agreement, and to carry out the terms hereof and thereof and the transactions contemplated hereby and thereby.

#### 4.2 Authorization.

The execution, delivery and performance of this Consent by Project Company, and Project Company's assignment of its right, title and interest in, to and under the Agreement to the Collateral Agent pursuant to the Financing Documents, have been duly authorized by all necessary corporate or other action on the part of Project Company.

#### 4.3 Execution and Delivery; Binding Agreement.

This Consent is in full force and effect, has been duly executed and delivered on behalf of Project Company by the appropriate officers of Project Company, and constitutes the legal, valid and binding obligation of Project Company, enforceable against Project Company in accordance with its terms, except as the enforceability thereof may be limited by (a) bankruptcy, insolvency, reorganization, moratorium or other similar laws of general application affecting the enforcement of creditors' rights generally and (b) general equitable principles (whether considered in a proceeding in equity or at law).

#### 4.4 No Default or Amendment.

Except as set forth in Schedule B attached hereto: (a) neither Project Company nor, to Project Company's actual knowledge, Buyer, is in default of any of its obligations thereunder; (b) Project Company and, to Project Company's actual knowledge, Buyer, has complied with all conditions precedent to the effectiveness of its obligations under the Agreement; (c) to Project Company's actual knowledge, no event or condition exists which would either immediately or with the passage of any applicable grace period or giving of notice, or both, enable either Buyer or Project Company to terminate or suspend its obligations under the Agreement; and (d) the Agreement has not been amended, modified or supplemented in any manner except as set forth herein and in the recitals hereto.

#### 4.5 No Previous Assignments.

Project Company has not previously assigned all or any part of its rights under the Agreement.

# SECTION 5. REPRESENTATIONS AND WARRANTIES OF COLLATERAL AGENT

Collateral Agent makes the following representations and warranties as of the date hereof in favor of Buyer and Project Company:

#### 5.1 Authorization.

The execution, delivery and performance of this Consent by Collateral Agent have been duly authorized by all necessary corporate or other action on the part of Collateral Agent and Secured Parties.

# 5.2 Execution and Delivery; Binding Agreement.

This Consent is in full force and effect, has been duly executed and delivered on behalf of Collateral Agent by the appropriate officers of Collateral Agent, and constitutes the legal, valid and binding obligation of Collateral Agent as Collateral Agent for the Secured Parties, enforceable against Collateral Agent (and the Secured Parties to the extent applicable) in accordance with its terms, except as the enforceability thereof may be limited by (a) bankruptcy, insolvency, reorganization, moratorium or other similar laws of general application affecting the enforcement of creditors' rights generally and (b) general equitable principles (whether considered in a proceeding in equity or at law).

#### SECTION 6. MISCELLANEOUS

#### 6.1 Notices.

Unless otherwise provided in this Consent, any Notice shall be in writing to the address provided below and delivered by hand delivery, United States mail, overnight courier service, facsimile, or electronic messaging (e-mail). Notice by facsimile, electronic messaging (e-mail), or hand delivery shall be effective at the close of business on the day received, if the entire document was received during business hours on a Business Day, and otherwise shall be effective at the close of business on the next Business Day after it was sent for "next-day delivery" or its equivalent by a nationally-recognized overnight courier or personally delivered. Notice by overnight courier service shall be effective on the next Business Day after it was sent. Notice by United States mail shall be effective on the day it was received. A Party may change its address by providing Notice of same to the other Party in accordance with this Section 6.1.

#### To Buyer:

San Diego Gas & Electric Company 8315 Century Park Court, CP21D San Diego, California 92123

Attention: Director of Procurement and Portfolio Design

Telephone: 858-650-6156 Facsimile: 858-650-6191

To Seller:

Attention:
Telephone:
Facsimile:
To Collateral Agent:
Attention:
Telephone:
Facsimile:

#### 6.2 Governing Law; Submission to Jurisdiction.

(a) This Consent shall be construed under the laws of the State of California without giving effect to choice of law provisions that might apply the laws of a different jurisdiction. The Parties hereby consent to conduct all dispute resolution, judicial actions or proceedings arising directly, indirectly or otherwise in conjunction with, out of, related to or arising from this Consent in the City of San Diego, California.

(b) All disputes, claims or controversies arising out of, relating to, concerning or pertaining to the terms of this Consent shall be governed by the dispute resolution provisions of the Agreement.

#### 6.3 Headings Descriptive.

The headings used herein are for convenience and reference purposes only.

#### 6.4 Severability.

If any term, section, provision or other part of this Consent, or the application of any term, section, provision or other part of this Consent, is held to be invalid, illegal or void by a court or regulatory agency of proper jurisdiction, all other terms, sections, provisions or other parts of this Consent shall not be affected thereby but shall remain in force and effect unless a court or regulatory agency holds that the provisions are not separable from all other provisions of this Consent. In the event any such provision of this Consent is so held invalid, illegal or void, the Parties shall promptly renegotiate in good faith new provisions to restore this Consent as near as possible to its original intent and effect.

#### 6.5 Amendment.

This Consent can only be amended by a writing signed by both Parties. None of the provisions of this Consent shall be considered waived by either Party unless the Party against

whom such waiver is claimed gives the waiver in writing. The failure of either Party to insist in any one instance upon strict performance of any the provisions of this Consent or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishments of such rights for the future, but the same shall continue and remain in full force and effect. Waiver by either Party of any default of the other Party shall not be deemed a waiver of any other default.

#### 6.6 Termination.

Each Party's obligations hereunder are absolute and unconditional, and no Party has any right, and shall have no right, to terminate this Consent or to be released, relieved or discharged from any obligation or liability hereunder until Buyer has been notified by Collateral Agent that all of the obligations under the Financing Documents shall have been satisfied in full (other than contingent indemnification obligations) or, with respect to the Agreement or any Replacement Agreement, its obligations under such Agreement or Replacement Agreement have been fully performed.

## 6.7 <u>Successors and Assigns</u>.

This Consent shall be binding on each Party's successors and permitted assigns.

#### 6.8 Further Assurances.

If either Party determines in its reasonable discretion that any further instruments, assurances or other things are necessary or desirable to carry out the terms of this Consent, the other Party shall execute and deliver all such instruments and assurances and do all things reasonably necessary or desirable to carry out the terms of this Consent.

#### 6.9 Waiver of Trial by Jury.

THE PARTIES WAIVE ANY RIGHT TO TRIAL BY JURY IN ANY LITIGATION ARISING UNDER THIS CONSENT TO THE EXTENT SUCH WAIVER IS CONSISTENT WITH APPLICABLE LAW.

#### 6.10 Entire Agreement.

This Consent, when fully executed, constitutes the entire agreement by and between the Parties as to the subject matter hereof, and supersedes all prior understandings, agreements or representations by or between the Parties, written or oral to the extent they have related in any way to the subject matter hereof. Each Party represents that, in entering into this Consent, it has not relied upon any promise, inducement, representation, warranty, agreement or other statement that is not set forth in this Consent.

#### 6.11 Counterparts; Electronic Signatures.

This Consent may be executed in multiple counterparts, each of which shall be deemed an original. Any signature page of this Consent may be detached from any counterpart of this Consent without impairing the legal effect of any of the signatures thereon and may be attached

to another counterpart of this Consent identical in form hereto by having attached to it one or more signature pages.

[Remainder of Page Left Intentionally Blank.]

IN WITNESS WHEREOF, the Parties hereto have caused this Consent to be duly executed and delivered by their duly authorized officers on the dates indicated below their respective signatures.

[NAME OF PROJECT COMPANY],	SAN DIEGO GAS & ELECTRIC
[Legal Status of Project Company].	COMPANY,
	a California corporation.
By:	By:
[Name] [Title]	[Name] [Title]
[NAME OF COLLATERAL AGENT],	
[Legal Status of Collateral Agent].	
By:	
[Name]	
[Title]	

# **APPENDIX 15.4.1**

# **AVAILABILITY NOTICE**<sup>14</sup>

# **Availability Notice**

Trading Day:	<u> </u>
Station:	Issued By:
Unit:	Issued At:
Unit 100% Available No Restrictions:	

Hour Ending	Available Charging Capacity	Available Discharging Capacity	Minimum Output	Comments
	(MW)	(MW)	(MW)	
1:00				
2:00				
3:00				
4:00				
5:00				
6:00				
7:00				
8:00				
9:00				
10:00				
11:00				
12:00				
13:00				
14:00				
15:00				
16:00				
17:00				
18:00				
19:00				

Note to Draft: Under Buyer review.

20:00		
21:00		
22:00		
23:00		
0:00		

Comments:			

# 

# **Dispatch Notice**

Trading Day:	<u> </u>
Station:	Issued By:
Unit:	Issued At:

		T	T	1	
Hour Ending	Scheduled Energy for Charging	Scheduled Energy for Dischargi ng	Spinning Reserve	Non- Spinning Reserve	Comments
	(MW)	(MW)	(MW)	(MW)	
1:00					
2:00					
3:00					
4:00					
5:00					
6:00					
7:00					
8:00					
9:00					
10:00					
11:00					
12:00					
13:00					
14:00					
15:00					
16:00					
17:00					
18:00					
19:00					
20:00					

Note to Draft: Under Buyer review.

21:00			
22:00			
23:00			
0:00			

Comments:	
<u>Updat</u>	ed Dispatch Notice
Trading Day:	<u> </u>
Station:	Issued By:
Unit:	Issued At:
Changes from Scheduled Delivery are h	ighlighted.
Comments:	

Hour Ending	Scheduled Energy for Charging	Scheduled Energy for Dischargi ng	Spinning Reserve	Non- Spinning Reserves	Comment
	(MW)	(MW)	(MW)	(MW)	
1:00					
2:00					
3:00					
4:00					
5:00					
6:00					
7:00					
8:00					
9:00					

10:00			
11:00			
12:00			
13:00			
14:00			
15:00			
16:00			
17:00			
18:00			
19:00			
20:00			
21:00			
22:00			
23:00			
0:00			

# APPENDIX 15.8 DAILY OPERATING REPORT<sup>16</sup>

Buyer shall create a template for use as a Daily Operating Report which contains all the information required by Buyer regarding the Project's daily operations (including the Project's hourly Availability, Capacity, Charging Energy, Delivered Energy, Stored Energy, Maximum Energy Capacity and State of Energy), with Seller's approval (which approval shall not be unreasonably withheld). Until such template is created and approved by the Parties as provided above, Seller shall not be required to provide such Daily Operating Report as set forth in Section 15.8 of the Agreement.

Note to Draft: Under Buyer review.

#### APPENDIX 15.10 COMMUNICATIONS PROTOCOLS<sup>17</sup>

#### **Communication Protocols**

#### 1. Contacts and Authorized Representatives

The "Contact Information" tables sets forth those contact functions, phone/fax numbers and e-mail information by which each Party elects to be contacted by the other. References in these Communication Protocols to notices by telephone, fax, or e-mail shall be deemed to refer to the applicable number set forth in the Contact Information Table.

#### 2. Communication Protocols - General

2.1 Intra-day Communication: All communications and notices between the Parties that occur intra-day for the applicable trading day including those regarding emergencies, Dispatch Notices, Updated Dispatch Notices, Availability Notices, and notices to avoid imbalance penalties, uninstructed deviation charges/credits or any other CAISO charge types specified in the Agreement, shall be provided telephonically to the applicable Party.

If to Seller, such notices and communications shall be provided to the following contact, in order of priority, (1) Dispatch Desk, (2) Plant Manager. If to Buyer, such notices and communications shall be provided to the following contact, in order of priority, Real Time. Each Party shall confirm all Intra-day Communication either electronically or via fax as soon as practicable.

- <u>2.2</u> Communication Failure: In the event of a failure of the primary communication link between Seller and Buyer, both Parties will try all available means to communicate, including cell phones or additional communication devices as installed.
- <u>2.3</u> System Emergency: Buyer and Seller shall communicate as soon as possible all changes to the schedule requested by the CAISO as a result of a System Emergency.

During System Emergencies, Seller's operations staff shall communicate with Buyer's Grid Operations Department via established communications devices. Buyer's Grid Operations

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Dated as of

Note to Draft: Under Buyer review.

Department will periodically test the communications devices to be utilized during System Emergencies.

- <u>2.4 Verbal Communication</u>: Each Party shall provide confirmation (either electronically or via facsimile) of any telephonic operating notice or communication provided to the other Party as soon as practicable. All telephonic communication shall be subject to recording.
- 2.5 Confidentiality: Confidential communications between the Parties in discharging their rights and obligations under the Agreements and these Communication Protocols will be subject to the applicable restrictions set forth in the Agreement.
- <u>2.6</u> <u>Staffing:</u> Parties will have available 24 hours a day, seven days a week, personnel available to communicate regarding the implementation of these Communication Protocols.

#### **Contact Information Table**

# **Contacts and Authorized Representatives for Buyer**

Outlined below is the contact and communication information for the relevant contact groups. This list may be amended by Buyer with timely Notice to Seller.

Contact	Primary Phone	Secondary Phone	Fax	Email
Real Time	858-650- 6160	619-517- 5661	858-650- 6191	tsched@semprautilities.
Day-Ahead Scheduling	858-650- 6178	858-650- 6160	858-650- 6191	presched@semprautilitie s.com
Day-Ahead Trading	858-650- 6137	858-650- 6160	858-650- 6191	rmiller3@semprautilities .com jpasquito@semprautiliti es.com
Settlements – Power	TBD before IDD	TBD before IDD	TBD before IDD	TBD before IDD
Contract Administration	TBD before IDD	TBD before IDD	TBD before IDD	TBD before IDD
Outage Scheduling	TBD before IDD	TBD before IDD	TBD before IDD	TBD before IDD
Transmission System Emergencies	TBD before IDD	TBD before IDD	TBD before IDD	TBD before IDD

# **Contacts and Authorized Representatives for Seller**

Outlined below is the contact and communication information for the relevant Seller employees. This list may be amended by Seller with timely Notice to Buyer.

Contact:	Primary Phone	Secondary Phone	Fax	Email
Dispatch				
Desk				
(Day Ahead)				
Dispatch				
Desk				
(Real Time)				
Outage Desk				
Plant				
Manager				

Contract Administrati		
on		
Settlements		
Operations Manager		
Operations		
Supervisor		

### **APPENDIX 8**

# **RPS Renewable Energy Credit Agreement**

#### EEI AGREEMENT REC CONFIRMATION BETWEEN

# AND SAN DIEGO GAS & ELECTRIC COMPANY

This Confirmation ("Confirmation") confirms the renewable energy credit ("REC") transaction ("Transaction") between [ ] ("Seller") and San Diego Gas & Electric Company ("Buyer"), each individually a "Party" and together the "Parties", effective as of [ ], 20\_\_ (the "Confirmation Effective Date"). This Transaction is governed by the EEI Master Power Purchase & Sale Agreement effective as of 4/25/00 (attached hereto as Exhibit A with [TO BE NEGOTIATED: all elections, including credit, confidentiality, and government entity language.](the "EEI Agreement"). The EEI Agreement and this Confirmation shall be collectively referred to herein as the "Agreement." Capitalized terms used but not otherwise defined in this Confirmation have the meanings ascribed to them in the EEI Agreement or in the RPS (as defined below).

# ARTICLE 1 COMMERCIAL TERMS

Seller:		Buyer: San Diego Gas & Electric Company	
Contact Information:	Name: (" <u>Seller</u> ")	Name: San Diego Gas & Electric Company ("Buyer")	
	Attn: Contract Administration Phone: Facsimile: Duns: Federal Tax ID Number:	All Notices: San Diego Gas & Electric Company Street: 8315 Century Park Court City: San Diego, CA Zip: 92123 Attn: Electric & Fuel Procurement Contract Administration Phone: (858) 650-6176 Facsimile: (858) 650-6190 Duns: 006911457 Federal Tax ID Number: 95-1184800 Invoices:	
	Attn: Phone: Facsimile:	San Diego Gas & Electric Company 8315 Century Park Ct. San Diego, California 92123-1593 Attn: Energy Accounting Manager Phone: (858) 650-6177 Facsimile: (858) 650-6190	
	Scheduling:  Attn: Phone: Facsimile:	Scheduling: San Diego Gas & Electric Company 8315 Century Park Ct. San Diego, California 92123-1593 Attn: Transaction Scheduling Manager Phone: (858) 650-6160 Facsimile: (858) 650-6191	

	Wire Tran BNK: _ ABA: _ ACCT: Confirm	ile:sfer:				PO B Santa Attn: I Phone Facsi Wire Tra BNK: for: S ABA: ACCI Confil	Diego Gas & Electric Company ox 25110 I Ana, CA 92799-5110 Mail Payments e: (619) 696-4521 mile: (619) 696-4899
	Attn: Phone: Facsim					San E Marke 555 V Los A Attn.: Collec Fax N	nd Collections: Diego Gas & Electric Company, Major ets V. Fifth Street, ML 10E3 Ingeles, CA 90013-1011 Major Markets, Credit and etions Manager Io.: (213) 244-8316 E: (213) 244-4343
	Defaults: With addit Default or  Attn: Phone: Facsim	Potential				or Poten San E 8330 San E Attn: O	bitional Notices of an Event of Default tial Event of Default to: Diego Gas & Electric Company Century Park Ct. Diego, California 92123 General Counsel e: (858) 650-6141 mile: (858) 650-6106
Product:	All California RPS-eligible RECs associated with the Contract Quantity and Green Attributes from the Project for the applicable Product Vintage. The obligation of Seller to deliver the Product exclusively to Buyer, for each of the applicable Product Vintage years, is as follows:  Obligation: (Check One):  Resource Contingent Firm						
Contract	[[ ] MWh REC per month for all months of the Vintage specified herein.] [All RECs associated with [the entire output of the Project / [%] of the output from the project] for all months of the Vintage specified herein.]						
Quantity:	# RECs	mm/yy	mm/yy	mm/yy	mm/y	y Total	
Contract Price:	[\$[ ]/MWh	REC]					

Product Vintage:					
	Name of Facility: Location: EIA Number: CEC ID: WREGIS ID: Certification Date: On-line Date: [For Pooled Facilities (for use from one or more of the [type]		Product sold hereunder shall be d below:		
		Name of Facility: [ ]	Name of Facility: [ ]		
	Location:				
	EIA Number:				
	CEC ID:				
Project:	WREGIS ID:				
	Certification Date:				
	On-line Date:				
	(collectively, the "Pooled Facilities")				
	The Parties acknowledge and agree that the Project consists of the Pooled Facilities and Seller is permitted to utilize the Pooled Facilities in order to satisfy its obligations hereunder.				
		olely be limited to the actual to satisfy the Contract Quan luced by the Pooled Facilitie	Product generated and delivered tity, and that Buyer is not entitled		
	Each of the Pooled Facilities s resource and Seller shall have Facilities.]				
Renewable Energy Source:					
Term:	The Term of this Transaction shall commence upon the Confirmation Effective Date and shall continue until the later of (i) the expiration of the Delivery Period and (ii) the satisfaction of all obligations of the Parties under this Agreement.				
Delivery Period:	The Delivery Period of this Transaction shall commence on [ ], 20[ ] and shall continue until [delivery by Seller to Buyer of the Product has been completed/[ ], 20[ ]].				
Delivery Point:	Buyer's WREGIS account: SE	OG&E Account ID: 39			

The commencement of the Delivery Period shall be contingent upon satisfaction of the condition (the "Condition") that the Buyer obtain CPUC Approval of this Confirmation and the requested relief contained in the related advice letter filing.

Both Parties shall take all reasonable action to satisfy this Condition.

#### Conditions:

Either Party has the right to terminate this Agreement on notice, which will be effective five (5) Business Days after such notice is given, if the Condition has not been satisfied or waived by Buyer in its sole discretion within [ ] days after Buyer files its request for CPUC Approval and a notice of termination is given on or before the [ ] day after Buyer files the request for CPUC Approval.

In the event of a termination under this section, neither Party shall be liable for any Termination Payment and Article 5 of the EEI Agreement shall not apply.

# ARTICLE 2 DEFINITIONS

"Accepted Electrical Practices" means (a) those practices, methods, applicable codes, and acts engaged in or approved by a significant portion of the electric power industry during the relevant time period, or (b) in the absence of such practices, methods, applicable codes, and acts, any of the practices, methods, and acts which, in exercise of reasonable judgment in light of the facts known at the time a decision is made, could have been expected to accomplish a desired result at reasonable cost consistent with good business practices, reliability, safety, and expedition. Acceptable Electrical Practices are not intended to be limited to the optimum practices, methods, or acts to the exclusion of other, but rather refers to a spectrum of practices, methods, and acts generally accepted, or approved by a significant portion of the electric power industry in the relevant region, during the relevant time period, as described in the immediately preceding sentence.

"CPUC" means the California Public Utilities Commission or its regulatory successor.

"CPUC Approval" means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to the Parties, or either of them, which contains the following terms:

- (a) Approves this Agreement in its entirety, including payments to be made by the Buyer, subject to CPUC review of the Buyer's administration of the Agreement; and
  - (b) Finds that any procurement pursuant to this Agreement is procurement of Renewable Energy Credits that conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in California Public Utilities Commission Decision 08-08-028, and as may be modified by subsequent decision of the California Public Utilities Commission or by subsequent legislation, for purposes of determining Buyer's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 et seq.), Decision 03-06-071, or other applicable law.

CPUC Approval will be deemed to have occurred on the date that a CPUC decision containing such findings becomes final and non-appealable.

"Delivered" or "Delivery" or "Deliver" means the transfer from Seller to Buyer of the Contract Quantity of the Product in accordance with the California RPS Program, including its regulations and procedures, necessary for recognition by WREGIS of the transfer to Buyer, or Seller's delivery to Buyer of a WREGIS Certificate.

"Delivery Date" means the date or dates on which the Product is Delivered pursuant to this Confirmation. "Delivery Term" means "Delivery Period".

"Firm" means Seller has agreed to sell and Deliver, and Buyer has agreed to buy and receive the Contract Quantity of the Product during the Delivery Period consistent with the terms of this Confirmation without excuse for non-Delivery by Seller except for Force Majeure, and as such, if Seller fails to Deliver the Product for any reason other than for Force Majeure, then Seller shall be the non-performing Party as set forth in Section 4.1 of the EEI Agreement and Buyer shall be the performing Party and shall be entitled to receive from Seller an amount determined pursuant to Section 4.1 of the EEI Agreement.

"Green Attributes" means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Project, and its avoided emission of pollutants. Green Attributes include but are not limited to Renewable Energy Credits, as well as:

- (1) Any avoided emission of pollutants to the air, soil or water such as sulfur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO) and other pollutants;
- (2) Any avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by law, to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere;<sup>1</sup>
- (3) The reporting rights to these avoided emissions, such as Green Tag Reporting Rights.

Green Tag Reporting Rights are the right of a Green Tag Buyer to report the ownership of accumulated Green Tags in compliance with federal or state law, if applicable, and to a federal or state agency or any other party at the Green Tag Buyer's discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local law, regulation or bill, and international or foreign emissions trading program. Green Tags are accumulated on a MWh basis and one Green Tag represents the Green Attributes associated with one (1) MWh of energy. Green Attributes do not include:

- (i) Any energy, capacity, reliability or other power attributes from the Project,
- (ii) Production tax credits associated with the construction or operation of the Project and other financial incentives in the form of credits, reductions, or allowances associated with the Project that are applicable to a state or federal income taxation obligation,
- (iii) Fuel-related subsidies or "tipping fees" that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or
- (iv) Emission reduction credits encumbered or used by the Project for compliance with local, state, or federal operating and/or air quality permits.

If the Project is a biomass or biogas facility and Seller receives any tradable Green Attributes based on the greenhouse gas reduction benefits or other emission offsets attributed to its fuel usage, it shall provide Buyer with sufficient Green Attributes to ensure that there are zero net emissions associated with the production of electricity from the Project.

"LORS Certification" means certification by the CEC of an electric generation facility not located within the state of California that such facility meets California's environmental quality laws, ordinances, regulations, and standards as set forth in the CEC's RPS Eligibility Guidebook.

"Renewable Energy Credit" or "REC" has the meaning set forth in California Public Utilities Code Section 399.12(f) and CPUC Decision 10-03-021, as modified by CPUC Decision 11-01-025 and as may be

<sup>&</sup>lt;sup>1</sup> Avoided emissions may or may not have any value for GHG compliance purposes. Although avoided emissions are included in the list of Green Attributes, this inclusion does not create any right to use those avoided emissions to comply with any GHG regulatory program.

amended from time to time or as further defined or supplemented by law.

"Renewable Energy Facility" means an electric generation unit or other facility or installation that produces electric energy using a Renewable Energy Source.

"Renewable Energy Source" means an energy source that is not fossil carbon-based, non-renewable or radioactive, and may include solar, wind, biomass, geothermal, landfill gas or wave, tidal and thermal ocean technologies.

"Reporting Year" means a twelve-month compliance period specified under WREGIS.

"Resource Contingent" means that Seller is obligated to Deliver the Product to the extent that the applicable Renewable Energy Source supports energy production by the applicable Renewable Energy Facility, subject to Force Majeure, curtailment ordered directly or indirectly from the CAISO, and the planned or forced outage of the Renewable Energy Facility (which is not the result of Seller's negligence or willful misconduct), [Insert the following provision if SDG&E is not purchasing 100% of the output: and further subject to Seller's obligation to allocate the production among all of its purchasers of Product from the Renewable Energy Facility during the Vintage [as follows: [insert].] If Seller otherwise fails to Deliver the Product, then Seller shall be the non-performing Party as set forth in Section 4,1 of the EEI Agreement and Buyer shall be the performing Party and shall be entitled to receive from Seller an amount determined pursuant to Section 4.1 of the EEI Agreement.

"RPS" means the California Renewables Portfolio Standard Program as codified at California Public Utilities Code Section 399.11 *et seq.*, and any decisions by the CPUC related thereto.

"Vintage" means the calendar year, Reporting Year or other period specified by the Parties or WREGIS in which the Product is created or first valid for use under the RPS.

"WREGIS" means the Western Renewable Energy Generation Information System or its successor organization recognized under applicable laws for the registration or recordation of Delivery, ownership or transfer of RECs.

"WREGIS Certificate" means "Certificate" as defined by WREGIS in the WREGIS Operating Rules.

"WREGIS Operating Rules" means the operating rules and requirements adopted by WREGIS.

# ARTICLE 3 CONVEYANCE OF RENEWABLE ATTRIBUTES

#### 3.1 Seller's Conveyance of Contract Quantity of the Product and Green Attributes

- (a) Seller hereby provides and conveys all Green Attributes associated with all electricity generation from the Project to Buyer as part of the Product being delivered. Seller represents and warrants that Seller holds the rights to all Green Attributes from the Project, and Seller agrees to convey and hereby conveys all such Green Attributes to Buyer as included in the delivery of the Product from the Project.
- (b) For each month of the Delivery Period, Seller shall deliver and convey the Contract Quantity of the Product and the Green Attributes pursuant to this Article 3 within five (5) Business Days after the end of the month in which the WREGIS Certificates for such Contract Quantity of the Product and the Green Attributes are created by properly transferring such WREGIS Certificates, in accordance with WREGIS Operating Rules, equivalent to Contract Quantity of the Product and the quantity of such Green Attributes, to Buyer into Buyer's WREGIS account such that all right, title and interest in and to such WREGIS Certificates shall transfer from Seller to Buyer.

#### 3.2 WREGIS Registration

During the Term, Seller, at its own cost and expense, shall maintain its registration of the Project with WREGIS and shall use commercially reasonable efforts to ensure that the Contract Quantity of the Product and all Green Attributes transferred to Buyer under this Confirmation count towards Buyer's RPS requirements. The Project shall be certified by the CEC as an RPS-eligible resource and the Contract

Quantity of the Product and all Green Attributes transferred by Seller hereunder shall be designated California RPS-compliant with WREGIS. Seller shall, at its sole expense, use WREGIS as required pursuant to the WREGIS Operating Rules to effectuate the transfer of the Contract Quantity of the Product and the Green Attributes to Buyer in accordance with WREGIS reporting protocols and WREGIS Operating Rules.

#### 3.3 Cooperation on Delivery; Review of Records; and Audit Rights

- (a) Upon either Party's receipt of notice from WREGIS that the transfer of any portion of the Product pursuant to this Confirmation will not be recognized, that Party will immediately so notify the other Party, providing a copy of such notice, and both Parties will cooperate in taking such actions as are necessary and commercially reasonable to cause such transfer to be recognized and the Delivery Obligation to be met. Each Party agrees to provide copies of its records to the extent reasonably necessary for WREGIS to perform the functions necessary pursuant to this Confirmation and to verify the accuracy of any fact, statement, charge or computation made pursuant hereto if requested by the other Party. If any fact, statement, charge or computation contained any inaccuracy, the necessary adjustments and any resulting payments will be made within 30 calendar days after the notification date, and the payments will bear interest at the Interest Rate from the date the overpayment or underpayment was made until paid.
- (b) If Seller is not the owner or operator of the Project, Seller will cooperate with Buyer in any efforts to review the records of the original seller of such Product.

The obligations set forth in this Section shall terminate with respect to this Transaction on the later of 30 days following the last banking date under WREGIS for the Vintage of the Product Delivered, or the third anniversary of the Delivery Date.

- (c) In addition to any audit rights that Buyer may have under the EEI Agreement, Seller shall, along with the initial invoice sent to Buyer by Seller under this Confirmation for any calendar year during the Term and at other times as may be requested by Buyer, provide documentation, including, but not limited to, meter data as recorded by a meter approved by the CAISO, sufficient to demonstrate that the Product has been conveyed and delivered, subject to the terms of this Confirmation, to Buyer. [NOTE: CAISO meters may not be required for certain projects.]
- (d) Seller shall, at its own cost and expense, instruct WREGIS to provide Buyer with a WREGIS produced report of the generation activity from the Project following each month that the Project generates energy that is being used to Deliver the Product. Such information shall be limited to the amount of electric energy generated by the Project during the Term, and shall not include any information or reference to the transfer of WREGIS Certificates from Seller's account to any other entity.

# ARTICLE 4 CPUC FILING AND APPROVAL

Buyer shall file with the CPUC the appropriate request for CPUC Approval of this Confirmation. Buyer shall expeditiously seek CPUC Approval, including promptly responding to any requests for information related to the request for CPUC Approval. Seller shall use commercially reasonable efforts to support Buyer in obtaining CPUC Approval. Buyer has no obligation to seek rehearing or to appeal a CPUC decision which fails to approve this Confirmation or which contains findings required for CPUC Approval with conditions or modifications unacceptable to either Party.

# ARTICLE 5 CREDIT AND COLLATERAL

#### 5.1 General Provisions

[The Parties agree that Sections 8.1(b) and 8.2(b) of the EEI Agreement shall not apply to this Confirmation. All implied rights relating to financial assurances arising from Section 2-609 of the Uniform Commercial Code or case law applying similar doctrines, are hereby waived. ][Credit terms will follow the policy outlined in the Credit Section of the RFO.]

#### 5.2 Seller Collateral Requirements

#### [Credit terms will follow the policy outlined in the Credit Section of the RFO.]

# ARTICLE 6 REPRESENTATIONS, WARRANTIES AND COVENANTS

#### 6.1 <u>Seller's Representation, Warranties, and Covenants</u>

- (a) Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement the Renewable Energy Credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in California Public Utilities Commission Decision 08-08-028, and as may be modified by subsequent decision of the California Public Utilities Commission or by subsequent legislation. To the extent a change in law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in law.
- (b) Seller warrants that all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in the Western Renewable Energy Generation Information System will be taken prior to the first delivery under the contract. To the extent that the WREGIS Operating Rules require such step(s) to be taken after the first delivery date under the contract and, in those cases, Seller warrants that it will take all such steps within the timelines set forth in the WREGIS Operating Rules

For the avoidance of doubt, the term "contract" as used in the immediately preceding paragraph means this Agreement.

- (c) In addition to the foregoing, Seller warrants, represents and covenants, as of the Confirmation Effective Date and throughout the Term that:
  - (i) Seller has the contractual rights to sell all right, title, and interest in the Product agreed to be delivered hereunder;
  - (ii) Seller has not sold the Product to be delivered under this Confirmation to any other person or entity:
  - (iii) at the time of Delivery, all rights, title, and interest in the Product to be delivered under this Confirmation are free and clear of all liens, taxes, claims, security interests, or other encumbrances of any kind whatsoever; and
  - (iv) Seller warrants that all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in the Western Renewable Energy Generation Information System will be taken prior to the first delivery under the contract.

#### 6.2 Seller's Representation, Warranties, and Covenants Related to the Project

Seller warrants, represents and covenants that:

- (a) Seller will inspect, maintain, repair and operate the Project in accordance with applicable industry standards (including those related to safety), the Project's permit requirements, and Accepted Electrical Practices; and
- (b) Seller will abide by all applicable laws in operating the Project.

# ARTICLE 7 PAYMENT

For purposes of Article 6 of the EEI Agreement, Seller shall invoice Buyer for the payment amount calculated as: (a) the Contract Price multiplied by (b) the Contract Quantity of the applicable Product specified herein. Buyer shall remit payment for the full amount on the thirtieth day of the calendar month following the month in which Buyer has verified the transfer and Delivery of the Product.

## ARTICLE 8 AMENDMENTS TO EEI AGREEMENT

#### 8.1 Force Majeure

Notwithstanding Section 3.3 of the EEI Agreement to the contrary, Buyer and Seller agree that any failure by Seller to deliver the Product pursuant to this Confirmation due to any Force Majeure shall be deemed to be a failure by Seller to perform such delivery obligation if such failure continues for a period of [ninety (90) days] or more after the time such delivery was due to be made. Otherwise, the terms of Section 3.3 of the EEI Agreement shall apply to this Confirmation. Force Majeure may include the failure or disruption in Deliveries by WREGIS that is not the fault of the Party asserting the Force Majeure."

#### 8.2 Governing Law/Waiver of Jury Trial/Venue

For purposes of this Confirmation, Section 10.6, Governing Law, of the EEI Agreement is amended by replacing the Section in its entirety with the following:

"GOVERNING LAW/WAIVER OF JURY TRIAL/VENUE. THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. TO THE EXTENT ENFORCEABLE AT SUCH TIME, EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY LITIGATION ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT. IN THE EVENT OF ANY LITIGATION TO ENFORCE OR INTERPRET ANY TERMS OF THIS AGREEMENT. THE PARTIES AGREE THAT SUCH ACTION WILL BE BROUGHT IN THE SUPERIOR COURT OF THE COUNTY OF SAN DIEGO, CALIFORNIA (OR, IF THE FEDERAL COURTS HAVE EXCLUSIVE JURISDICTION OVER THE SUBJECT MATTER OF THE DISPUTE, IN THE U.S. DISTRICT COURT FOR THE SOUTHERN DISTRICT OF CALIFORNIA), AND THE PARTIES HEREBY SUBMIT TO THE EXCLUSIVE JURISDICTION OF SUCH COURTS."

**8.3** Confidentiality. Section 10.11, Confidentiality, of the EEI Agreement is amended by deleting Section 10.11 in its entirety and inserting the following:

"10.11(a) Neither Party shall disclose the non-public terms or conditions of this Agreement or any transaction hereunder to a third party, other than (i) the Party's Affiliates and its and their officers, directors, employees, lenders, counsel, accountants or advisors who have a

need to know such information and have agreed to keep such terms confidential, (ii) for disclosure to the Buyer's Procurement Review Group, as defined in CPUC Decision (D) 02-08-071, subject to a confidentiality agreement, (iii) to the CPUC under seal for purposes of review, (iv) disclosure of terms specified in and pursuant to Section 10.11(b) of this Agreement: (v) in order to comply with any applicable Law, regulation, or any exchange. control area or CAISO rule, or order issued by a court or entity with competent jurisdiction over the disclosing Party ("Disclosing Party"), other than to those entities set forth in subsection (vi); or (vi) in order to comply with any applicable regulation, rule, or order of the CPUC, CEC, or the Federal Energy Regulatory Commission. In connection with requests made pursuant to clause (v) of this Section 10.11(a) ("Disclosure Order") each Party shall, to the extent practicable, use reasonable efforts to prevent or limit such disclosure. After using such reasonable efforts, the Disclosing Party shall not be: (i) prohibited from complying with a Disclosure Order or (ii) liable to the other Party for monetary or other damages incurred in connection with the disclosure of the confidential information. Except as provided in the preceding sentence, the Parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with, this confidentiality obligation.

10.11(b) RPS Confidentiality. Notwithstanding Section 10.11(a) of this Agreement, at any time on or after the date on which the Buyer makes its filing seeking CPUC Approval of this Agreement, either Party shall be permitted to disclose the following terms with respect to this Agreement: Party names, resource type, Delivery Period, Project location, Contract Quantity, and Delivery Point.

10.11(c) Publicity. Except as otherwise agreed to in Section 10.11(b) above, no announcement, publicity, advertising, press release, promotional or marketing materials regarding the arrangement contemplated under this Agreement, including the existence hereof, shall be made by either Party without the prior written approval of the other Party which approval shall not be unreasonably withheld or delayed." Notwithstanding the foregoing, the Parties understand acknowledge and agree that Buyer is a California Public Agency and that certain actions and documents of Buyer are subject to public notice and/or disclosure under applicable laws and regulations, including, but not limited to, the California Public Records Act and/or the California Ralph M. Brown Act, and that Buyer is not obligated to seek prior approval of Seller when Buyer is complying, in its sole and absolute discretion, with such laws and regulations."

# ARTICLE 9 GENERAL PROVISIONS

#### 9.1 Prevailing Wage

To the extent applicable, Seller shall comply with the prevailing wage requirements of Public Utilities Code Section 339.14, subdivision (h).

#### 9.2 Facility Identification [If Project consists of Pooled Facilities]

Within five (5) Business Days after the end of each month during the Delivery Period, Seller shall (a) identify the facility(s) from the Pooled Facility that the Product was delivered from for that month; (b) provide estimates of the quantity of Product that will be provided in the next month and the facility(s) from which it will be provided.

#### 9.3 **Assignment**

Section 10.5 of the Master Agreement shall be deleted in its entirety and replaced with the following:

Neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent shall not be unreasonably withheld; provided that either Party may assign this Agreement to an Affiliate without the other Party's consent (and thereby relieving itself from further liability hereunder) so long as (a) the assignee is as creditworthy as the assigning party, or better, (b) the assigning Party notifies the other Party no later than five (5) Business Days before the effective date of the assignment and the assignee assumes in writing all of the assigning Party's obligations and liabilities hereunder. For purposes hereof, the transfer of more than fifty percent (50%) of the equity ownership or voting interest of Seller (or any parent entity holding directly or indirectly at least fifty percent (50%) of the equity ownership or voting interest of Seller if such interest constitutes more than twenty percent (20%) of the fair market value of the assets of such parent entity) to a person that is not an Affiliate of Seller shall also constitute an assignment of this Agreement requiring Buyer's prior written consent. Notwithstanding the foregoing, Buyer may, without the consent of the Seller (and thereby relieving itself from further liability hereunder), assign this Agreement to any legal entity that is established by statute or by the CPUC to serve load as a central procurement entity. Buyer may also assign this Agreement (and thereby relieve itself from further liability hereunder), to a Qualified Assignee, so long as Buyer notifies Seller no later than thirty (30) days before the effective date of the assignment and the assignee assumes in writing all of Buyer's obligations and liabilities hereunder. "Qualified Assignee" shall mean: any community choice aggregation entity formed in the State of California with a Credit Rating of BBB- or better or that provides cash or a Letter of Credit in the amount of the Delivery Period Security Notwithstanding the foregoing, either Party may, without the consent of the other Party (and without relieving itself from liability hereunder), transfer, sell, pledge, encumber, or assign this Agreement or the accounts, revenues or proceeds hereof to its financing providers. In connection with any financing or refinancing of the Project by Seller, Buyer shall in good faith negotiate and agree upon a consent to collateral assignment of this Agreement in a form that is commercially reasonable and customary in the industry.

# ARTICLE 10 TERMINATION

Notwithstanding anything to the contrary in the EEI Agreement, including Section 7.1, the Parties shall determine the Termination Payment for this Transaction in accordance with Section 5 of the EEI Agreement. Furthermore, with respect to this Transaction only, the following language is to be added at the end of Section 5.2:

"If Buyer is the Non-Defaulting party and Buyer reasonably expects to incur penalties or fines from the CPUC, the California ISO or any other governmental entity for failure to meet RPS requirements due to Seller's Event of Default, then Buyer may, in good faith, estimate the amount of those penalties or fines and include this estimate in its determination of the Termination Payment, subject to accounting to Seller when those penalties or fines are finally ascertained. The rights and obligations with respect to determining and paying any Termination Payment and

any dispute resolution with respect thereto, shall survive termination of this Transaction and shall continue until after those penalties or fines are finally ascertained."

# ARTICLE 11 ADDITIONAL EVENTS OF DEFAULT

It shall constitute an Event of Default as to Seller under Section 5.1 of the EEI Agreement if:

- (a) Seller sells, assigns, or otherwise transfers, or commits to sell, assign, or otherwise transfer, the Product, or any portion thereof, or any benefits derived therefrom, to any party other than the Buyer; or
- (b) Seller or the Project owner fails to maintain CEC Certification or LORS Certification, as applicable, for the Project from the CEC.

#### ACKNOWLEDGED AND AGREED TO AS OF THE CONFIRMATION EFFECTIVE DATE:

Ву:	By:
Name:	Name:
Title:	Title:

#### Exhibit A

[attach EEI]

# APPENDIX 9 Least Cost Best Fit

#### SDG&E's 2024 RPS RFO Evaluation Methodology - Least-Cost Best-Fit

Below is the assessment methodology and process to be taken by SDG&E and the Independent Evaluator ("IE") to ensure that the bid selection process is transparent and does not favor any technology or counterparty, and is aligned with SDG&E's compliance requirements. Although SDG&E has worked diligently with its IE to develop this methodology, this document may require adjustment related to the specific product(s) being procured before issuing of the RFO in order to account for potential market, regulatory, and/or business context changes.

#### 1. Receive Bids by the Deadline

- a. Bids will be uploaded to the PowerAdvocate® website for any RPS RFO event, to which the IE will have access.
- b. SDG&E will accept bids that were submitted by of the designated offer submittal deadline.

#### 2. Organize Bid Data

- a. The day after offer submittal deadline, the IE and SDG&E will compare the offer inventory to ensure the bid population of the IE is identical to the bid population to be analyzed by the SDG&E RFO team. To the extent the folders do not match, a reconciliation effort begins until folders match.
- b. The relevant data of all bids is exported into a data table for analysis.

#### 3. Perform Initial Bid Assessment & Conformance Check

a. A snapshot of the key statistics of the bids is produced for presentation to the PRG. These statistics will not include prices. At this stage of the process, bids are being checked for conformance vis-à-vis the RFO requirements. Bids are reviewed for completeness relative to the RFO's eligibility requirements.

#### 4. Quantitative Evaluation

**Net Market Value Calculation:** Quantitative evaluation of bundled product offers will utilize Net Market Value (NMV) principles, calculated as follows:

- For bundled products NMV = [(Energy Benefit + REC Benefit + Ancillary Services Benefit + Capacity Benefit)] - [(Levelized Contract Cost + Transmission Cost + Congestion Cost+ Integration Cost Adder)]
- For unbundled RECs: the unbundled REC price measured in \$/MWh

#### A. Calculation of Offer Benefits

- **a. Energy Benefit:** The Energy Benefit is calculated based on applicable forecasted electricity prices for each contract year.
- **b. REC Benefit:** The REC Benefit is calculated based on the Market Price Benchmarks ("MPB") used in Power Charge Indifference Adjustment ("PCIA") for each contract vear.
- c. Ancillary Services Benefit (if any): The Ancillary Services ("A/S") Benefit is calculated based on a 5-year average of historical A/S prices. This ratio is applied to the forecasted electricity price for each A/S type: Spin, Non-Spin, Regulation Up and Regulation Down, for each month to determine the forecasted A/S prices. The forecasted A/S prices are multiplied by the product of the available A/S capacity for each of the A/S types and the expected commitment percentage to determine the A/S Benefit. The expected commitment percentage is a value cited by the CAISO in its most recent Annual Report on Market Issues Performance.
- d. Capacity Benefit (if any): To measure the resource's contribution to the system's reliability, Capacity Benefit will be calculated as a percentage of Capacity Value as described below. Capacity Value is based on the estimated Net Qualifying Capacity ("NQC") for each technology multiplied by SDG&E's forecasted capacity price. NQC will be calculated using the effective load carrying capacity methodology ("ELCC"). The most recently published ELCC values from the Integrated Resource Planning ("IRP") proceeding will be used. According to the proposed decision adopting the 2023 Preferred System Plan released by the Commission on January 10, 2023, ELCC values will be updated and published periodically by Commission staff. Any procurement associated with D. 21-06-035 or D. 23-02-040 will use the ELCC values specified in those decisions for the respective resource type.
  - For projects located in SDG&E's service territory connecting to transmission or distribution facilities at a point that is electrically west of the ECO or Suncrest substations ("Local Area Projects") bidding as fully deliverable:<sup>1</sup>

Capacity Benefit = 100 % of Capacity Value

• For projects that are in the greater Imperial Valley ("IV") area as defined by the CAISO,<sup>2</sup> meaning those projects connecting to transmission or distribution facilities at a point that is at, or electrically east of, the ECO or Suncrest

<sup>&</sup>lt;sup>1</sup> Projects connecting at the ECO or Boulevard Substation are considered to be IV Area Projects for these purposes.

<sup>&</sup>lt;sup>2</sup> Refer to the CAISO's 2014 Local Capacity Technical Analysis, Final Report and Study Results, April 30, 2013.

substations bidding as fully deliverable<sup>3</sup> and for projects other than Local Area Projects or IV Area Projects that still qualify for Resource Adequacy pursuant to the CAISO Tariff ("System Area Projects") bidding as fully deliverable:

Capacity Benefit = Capacity Value x 33.59%

 For all energy-only projects, or projects interconnected to non-California Balancing Authorities unable to provide resource adequacy benefits to SDG&E

Capacity Benefit = 0

that are specific to the project being bid to SDG&E:

#### B. Calculation of Offer Costs

- **a.** Congestion Cost: SDG&E will conduct a marginal analysis to determine the difference in locational pricing between the project's point of delivery and SDG&E's default load aggregation point ("DLAP"). SDG&E and the IE will add the relevant Congestion Charges to the Bids once derived or obtained from SDG&E Transmission.
  - i. In the event that a congestion study is required, SDG&E and the IE will jointly prepare the relevant data needed for the SDG&E Transmission Planning team to calculate Congestion Costs. This process will group together, on a noname basis, the relevant data of bids (mainly anticipated generation and energy delivery profile) by interconnection points. The SDG&E evaluation team or IE will then forward this information to SDG&E's Transmission Planning team.
  - ii. Transmission Planning will run studies to determine hourly congestion costs associated with each of the proposed offer groups and provide results to SDG&E's evaluation team and the IE.
- b. Transmission Cost: For offers for new projects or projects proposing to increase the size of existing facilities, SDG&E performs an initial analysis of costs for transmission network upgrades or additions that are to be directly reimbursed to the bidder using the relevant transmission network upgrade cost, if any, from the bidders' offer forms and verified in project interconnection studies submitted with the bids.
  SDG&E has a preference for project offers with transmission upgrade cost studies or equivalent process.
  - i. The total reimbursable transmission upgrade cost specified in the project's transmission studies will be divided by the number of years in which the

<sup>&</sup>lt;sup>3</sup> Projects connected to the Imperial Valley, Drew, Ocotillo, ECO or Boulevard Substations are considered to be IV Area Projects for these purposes.

- utility will reimburse the network transmission costs to the bidder to produce an annual transmission upgrade cost.
- ii. The present value of the annual transmission upgrade costs will be divided by the present value of the estimated energy deliveries during the contract period to produce the Transmission Cost Charge.
- iii. SDG&E and the IE will add the relevant Transmission Cost Charges to the Bids once they are determined from the transmission cost studies submitted with the Bids and confirmed by both SDG&E and the IE after mutual agreement.
- **c. Levelized Contract Cost:** The contract cost is calculated based on the present value of the total cost of the contract over the term of the contract, converted to equal annual payments.
- **d.** Renewable Integration Cost Adder:<sup>4</sup> If applicable, the integration cost adder will be calculated using the adopted interim valuation methodology. This methodology calculates two components for the cost of integration:
  - 1. Variable integration cost
  - 2. Fixed integration cost the cost to SDG&E of procuring additional flexible and non-flexible RA over the contract period. This is a product of (a) and (b) below:
    - a. The monthly increase (or decrease) in flexible capacity requirement due to the increment of wind or solar being considered for the solicitation. Calculated based on the overall system flexible capacity requirement and then applies the percentage contribution from wind and solar.
    - b. The forecasted monthly flexible RA price.

#### 5. Qualitative Evaluation

SDG&E will be conducting a qualitative evaluation in conjunction with the quantitative evaluation. Initially, offers undergo a conformance screen for completeness to the protocol requirements. To the extent offers are not conforming, SDG&E may discard the bid. Next,

<sup>&</sup>lt;sup>4</sup> SDG&E's valuation process does not lead to double-counting of the Integration Cost adder. The creation of SDG&E's price forecasts does not use the Integration Cost adder as an input. The Integration Cost adder is applied in the LCBF process during the NMV calculation, as a separate component that differentiates variable renewable energy resources from each other and other resource types. The calculated energy benefit attributed to renewable resources in the NMV calculation is the same with or without an Integration Cost adder, which is added later in the valuation process.

offer evaluation review qualitative factors including, but not limited to, the following (in no particular order of preference):5

- Project Viability<sup>6</sup>
- Deliverability and reliability
- Benefits to Disadvantaged Communities: Disadvantaged Communities (DAC) are those identified as Environmental Justice (EJ) communities through California's Environmental Protection Agency's CalEnviroScreen 4.0. Offer documents must include any environmental or economic benefits that the proposed project would provide to EJ communities with high poverty or unemployment rates, and/or high emission levels of toxic air contaminants.
- Resource diversity
- Supplier diversity, including as defined in G.O. 156
- Environmental stewardship
- Rate Impacts
- Portfolio Needs
- Emissions targets
- Compliance with procurement requirements outside RPS
- Workforce Development Assessment: Offer documents must include projected California employment growth during construction and operation, including: number of hires; duration of hire; and indication of whether the bidder has entered into Project Labor Agreements or Maintenance Labor Agreements in California for the proposed project.

#### 6. Develop Shortlist:

SDG&E determines its Renewable Net Short ("RNS") by compliance period as described in its RPS Plan and ranks all the Bids by NMV price until SDG&E has met its need. The shortlist ranking enables SDG&E to determine which offers are most attractive based on an NMV price.

<sup>&</sup>lt;sup>5</sup> As discussed above, procurement protocols may need to be adjusted to account for potential market, regulatory, and/or business context changes, which may include: evaluation criteria for existing or re-powered facilities; interconnection status, particularly as related to changes necessary to account for CAISO's Interconnection Process Enhancements; supply chain and permitting issues and other potential impacts to project schedules; developer experience and standing with SDG&E.

<sup>&</sup>lt;sup>6</sup> SDG&E considers project viability as a qualitative factor and relies on the Energy Division's Project Viability Calculator. For projects that SDG&E rejects due to low viability scores, SDG&E rescores the projects to affirm the bidder did not unfairly score itself too low. For projects that SDG&E shortlists, SDG&E rescores the project to affirm that the bidder did not unfairly score itself too high. Projects below a certain viability threshold will not be considered for the shortlist.

Offers with deliveries outside the acceptable RPS delivery windows will be considered non-conforming, unless SDG&E's need assessment has changed materially between the time of issuance of this RPS Plan and the determination of the shortlist.

#### 7. Final Shortlists:

- a. Offers will be ranked on a levelized Net Market Value, \$/MWh basis from highest to lowest value. SDG&E and the IE will then develop the preliminary final shortlist based on the highest-ranking NMV of bids, while taking into account qualitative factors in Section 5 in determining the least-cost, best fit for procurement goals.
- b. The preliminary final shortlist is prepared and shared with the PRG during the next available meeting.
- c. After discussion with the PRG and the Energy Division, SDG&E will determine the final shortlist.

# APPENDIX 10 RPS Procurement Protocol





ENERGY PROCUREMENT

8315 CENTURY PARK COURT, CP21D

SAN DIEGO, CA 92123

# SDG&E'S 20XX REQUEST FOR OFFERS (RFO) SEEKING ELIGIBLE RENEWABLE RESOURCES

ISSUED
[INSERT]

OFFERS DUE [INSERT]

RFO WEBSITE [INSERT]

**EMAIL QUESTIONS/COMMENTS TO**RFO@sdge.com

INDEPENDENT EVALUATOR (IE)
[INSERT]

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#### 1.0 SCOPE OF REQUEST

As authorized by Decision (D.) [INSERT] and Advice Letter-XXXX approving San Diego Gas & Electric Company's ("SDG&E's") Renewable Program Standard ("RPS") Procurement Plan and solicitation protocols, SDG&E is issuing this Request for Offers ("RFO" or "solicitation") to solicit offers from eligible renewable energy generators. An entity responding to this RFO ("Respondent") agrees to be bound by the terms and conditions set forth in this document ("Solicitation Protocol"). SDG&E is seeking to procure [INSERT] MWh per year or [INSERT] MW to achieve the volumetric cap and capacity cap established in its Commission approved RPS Procurement Plan, as part of its Senate Bill ("SB") 100 RPS Compliance efforts. Resources offered must meet the California RPS eligibility criteria set forth by the California Energy Commission ("CEC"). (See Section 5.0 RPS Program Parameters for additional information.)

#### A. Procurement Needs

SDG&E is required by SB100 to serve its customers 60% of electricity retail sales with renewable resources by the end of Compliance Period ("CP") 6, ending December 31, 2030.

SDG&E must meet these goals by procuring renewable resources that meet the requirements of the products outlined in Public Utilities Code 399.16(b), summarized below:

Category 1 Bundled Products (Public Utilities Code 399.16(b)(1)(A-B)). Resources delivering Category 1 Product must:

- have first point of interconnection ("POI") with a California Balancing Authority ("CBA"); or
- have first POI with distribution facilities used to serve end users within a CBA; or
- be scheduled from the eligible renewable resource ("ERR") into a CBA without substituting electricity from another source<sup>2</sup>; **or**.
- have an agreement to dynamically transfer electricity to a CBA.

#### Category 2 Firmed and Shaped Products (Public Utilities Code 399.16(b)(2):

For Category 2 product, to be Firmed and Shaped the ERR delivering such product must substitute electricity attribute deliveries by providing incremental electricity scheduled into a CBA within the same calendar year as the generation from the ERR for which it is substituting.

Category 3 Unbundled Renewable Energy Credits ("RECs"), (Public Utilities Code 399.16(b)(3):

<sup>&</sup>lt;sup>1</sup> SDG&E's 20XX RPS Procurement Plan

<sup>&</sup>lt;sup>2</sup> If using another source to provide real-time ancillary services required to maintain an hourly or sub-hourly import schedule into a CBA is permitted, but only the fraction generated by the ERR will count as Category 1.

• ERR products, or any fraction of the electricity generated, **including unbundled RECs**, that do not qualify under 399.16(b)(1-2)

The table below provides a high-level overview of SDG&E's procurement needs for this RFO. SDG&E's need is defined in terms of the time frame within which deliveries are needed and the product categories with which SDG&E intends to meet such needs. A more detailed discussion of RFO eligibility requirements is provided at Section 7.0.

[select as applicable]	Description of Procurement Need	Project Size [in MW and/or MWh]
Category 1	[select as applicable: "Long-term energy, short-term energy"] products (term of [INSERT] years or less, projects with CODs as early as 20XX will be accepted, but the initial PPA delivery date will be January 20XX at the earliest, projects with CODs as late as 20XX will also be considered)	
Category 2	[select as applicable: "Long-term energy, short-term energy"] products (term of [INSERT] years or less, projects with CODs as early as 20XX will be accepted, but the initial PPA delivery date will be January 20XX at the earliest, projects with CODs as late as 20XX will also be considered)	
Category 3	Unbundled RECs that will be generated in January of 20XX at the earliest with a preference for those generated in [Year(s) TBD]	

*[select as applicable]:* Proposed products may be for Peaking, Baseload, Dispatchable (unit firm), As-available or unbundled RECs. Proposed resources may include capacity (fully-deliverable), energy, or unbundled RECs from:

- 1) Re-powering of existing facilities;
- 2) Incremental capacity upgrades of existing facilities;
- 3) New facilities;
- 4) New facilities that are scheduled to come online during the years specified in this RFO that have excess or uncontracted quantities of power for a short time frame;
- 5) Existing facilities with expiring contracts; or
- 6) Eligible resources currently under contract with SDG&E. SDG&E will consider bids from facilities with which it has existing agreements that propose a price reduction and a term extension.

#### B. Transmission and Deliverability

The generating facility and transmission interconnection must be designed and constructed in conformance with the CAISO's various reliability agreements, procedures, protocols, tariffs and standards. [MAY BE REVISED, based on the outcome of CAISO's Interconnection Process Enhancement (IPE): SDG&E has a preference for Projects that, at a minimum, have completed CAISO Generator Interconnection Procedures ("GIP") Phase II or equivalent process or exemption, and an existing interconnection agreement for the duration of the Power Purchase Agreements ("PPA") for existing facilities]. See RFO Section 4.0 – "RFO Response Instructions" for additional information.

#### C. Power Purchase Agreements ("PPA")

Respondents offering *[select as applicable:* "bundled energy ("Category 1"), or firmed and shaped energy ("Category 2")"] product shall propose modifications to the power purchase agreement for energy only and/or energy plus capacity attributes, as applicable if the project(s) delivering such product is fully deliverable. PPA pricing may be subject to reduction if the total cost of network upgrades required to make the project deliverable exceed a dollar cap determined by SDG&E. Respondents offering Category 1 or 2 products must be poised to sign an agreement in substantially the form of the *[select as applicable:* "Long-Term Model, Short-Term Model or RPS Plus Storage"] Power Purchase Agreements ("PPA") (See Section 4.0 RFO Response Instructions). Agreement(s) must be executed as outlined in the RPS solicitation schedule and is (are) subject to CPUC approval. Additional resource criteria are described in Section 7.0 Resource Criteria.

#### **D.** Deliverability

Respondents may provide bids for projects that will achieve Full Capacity Deliverability Status (FCDS), as defined by the CAISO Tariff and determined by the CAISO or, for projects that will not achieve FCDS, provide bids for Energy Only. Respondents may also choose to provide both FCDS and Energy Only bids for the same project. SDG&E intends that FCDS projects will count towards SDG&E's Resource Adequacy (RA) obligations when possible. In order to achieve FCDS, a project must apply for a deliverability study to be conducted by the CAISO. Respondents with winning bids for FCDS projects must demonstrate that: [TO BE UPDATED BASED ON THE CAISO'S IPE: (1) the project has been assessed for deliverability; or (2) the Respondent will request a deliverability assessment through the next available CAISO cluster window.] This condition must be met for winning bids that will interconnect at either the distribution or transmission level. For winning FCDS project bids that result in an executed and approved PPA, during the project development process, the project is at a minimum required to obtain final interconnection studies (i.e. for transmission level projects, a final Phase II interconnection study report, or for distribution level projects, a final interconnection facilities study report (or Phase II study equivalent)). Note, however, projects located in the Imperial Valley and dynamically transferred via pseudo-tie into SDG&E's service territory by the CAISO must submit Energy Only bids and may offer in projects

that may count as RA if the project can demonstrate Maximum Import Capability (MIC) allocations.

#### E. [Select if applicable: "Unbundled REC Agreements

Respondents offering unbundled RECs (Category 3) products shall offer unbundled RECs from an eligible renewable resource that can meet the criteria described herein and is registered in WREGIS. Seller of Category 3 products shall enter into an Edison Electric Institute ("EEI") Master Agreement with SDG&E if it has not done so already. The Model REC Agreement will be appropriate for Respondents offering Category 3 products (See Section 4.0 RFO Response Instructions). Agreement(s) must be executed as outlined in the RPS solicitation schedule and is (are) subject to CPUC approval. Additional resource criteria are described in Section 7.0 Resource Criteria."

#### F. Participation from Diverse Business Enterprises

SDG&E strongly encourages Diverse Business Enterprises ("DBEs"), Women-Owned, Minority-Owned, Disabled Veteran-Owned, Lesbian-Owned, Gay-Owned, Bisexual-Owned and/or Transgender-Owned Business Enterprises ("WMDVLGBTBEs") as defined in G.O. 156,<sup>3</sup> to participate in the RPS program and in this RFO. Furthermore, SDG&E encourages developers to utilize DBEs during various stages of project development and construction. As a part of G.O. 156, SDG&E will require developers to identify and verify their DBE contractors/subcontractor spending if any. Additional information on SDG&E's DBE program and utilizing DBEs can be found at:

https://www.sdge.com/more-information/doing-business-with-us/supplier-diversity?keywords=supplier%20diversity and http://www.cpuc.ca.gov/puc/supplierdiversity/

Like other qualitative factors, in the event of a tie between two Offers, SDG&E will consider a Respondents status as a DBE and or a Respondent's plan to utilize the services of DBEs during project development. DBEs can request additional information by contacting SDG&E at vendorrelations@semprautilities.com.

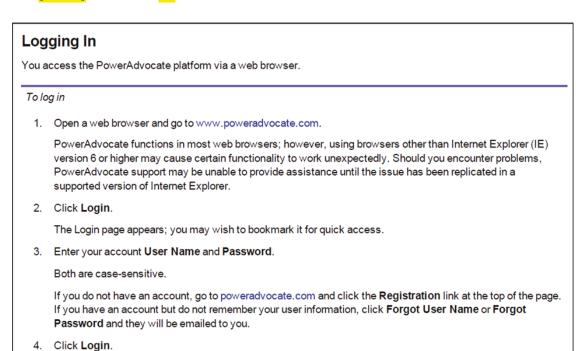
#### G. Standards of Care

Seller must comply with all applicable standards including safety and reliability standards requirements as set forth in Long-Term and Short-Term Model PPAs.

<sup>&</sup>lt;sup>3</sup> See http://www.thesupplierclearinghouse.com/eligibility/default.asp for the definition of a DBE.

#### 2.0 REO WEBSITE AND COMMUNICATIONS

The RFO and all subsequent revisions and documents are available for download from the RFO Website [insert] and the 20XX SDG&E RPS RFO event on the PowerAdvocate® website.



Potential Respondents are responsible for monitoring the RFO Website and PowerAdvocate® for subsequent updates, notices and postings. The 20XX SDG&E RPS RFO event on the PowerAdvocate® website contains the following: required RFO forms, documents, ands schedule. Respondents intending to bid and do not have an existing account with PowerAdvocate® must first register to create a username/password in order to receive access to the event. See below for instructions to log in/register:

First-time users must register as a Supplier using the instructions above and the Referral information below to access the RFO event:

Referral Information	
Are you registering for a specific Event: *	<ul><li>Yes</li><li>No, I would simply like to register.</li></ul>
Who referred you to this Event: *	renewablerfo@semprautilities.com
Name of that individual's company: *	San Diego Gas & Electric
Name or description of the Event: *	39272: 2013 SDGE RPS RFO

Users with an existing PowerAdvocate® account may request for access to the event using the link below:

#### [Link TBD]

The RFO website contains RFO forms and documents, RFO Schedule, and a Question and Answer forum. All questions or other communications regarding this RFO must be submitted via email to <a href="RFO@sdge.com">RFO@sdge.com</a> by the DEADLINE TO SUBMIT QUESTIONS as specified in Section 3.0 RFO Schedule. SDG&E will not accept questions or comments in any other form.

#### 3.0 RFO SCHEDULE

The following schedule and deadlines apply to this RFO. SDG&E reserves the right to revise this schedule at any time and in SDG&E's sole discretion. SDG&E will be utilizing a platform designed and maintained by PowerAdvocate® for launching and managing Offers received in response to this RFO. To access the RFO event, Respondent must register to create a username and password for PowerAdvocate®. A link and instructions on how to register is provided in Section 2.0, RFO Website and Communications. Respondents are responsible for accessing the RFO Website and PowerAdvocate® for updated schedules and possible amendments to the RFO or the solicitation process. Respondents shall register on PowerAdvocate® for the RFO no later than [DATE TBD], and submit Offers no later than [DATE TBD] at 12:00 PM PST.

NO.	ITEM	DATE
1.	RFO Issued	TBD
2.	Pre-Bid Conference / Bidder Outreach Event	TBD
	DEADLINE TO SUBMIT QUESTIONS	
3.	Question submittal cut-off date.	TBD
	Answers to questions will be posted on the website no later than January 31, 2020.	
4.	DEADLINE TO REGISTER for PowerAdvocate® access / to download RFO	TBD
''	forms and documents	122
	CLOSING DATE:	
5.	Offers must be uploaded to and received on PowerAdvocate® no later than 12:00	TBD
	PM Pacific Prevailing Time on TBD.	
6.	SDG&E Begins Bid Evaluation Process	TBD
7.	Shortlist determination	TBD
8.	SHORTLIST NOTIFICATION	TBD
8.	SDG&E notifies Shortlisted Bidders	11017

NO.	ITEM	DATE
	SHORTLISTED BIDDERS ACCEPTANCE/WITHDRAWAL	
9.	Letter due from Shortlisted Bidders indicating:	+10 Days
	a. Withdrawal from SDG&E's solicitation; OR	after Shortlist Notification
	b. Acceptance of shortlisted standing and including Shortlist Acceptance Fee	
10.	SDG&E commences with PPA negotiations	+11 Days after Shortlist
10.	SDG&E Commences with FFA negotiations	Notification
		+2 week
11.	SDG&E issues appreciation notices to unsuccessful Respondents	after Shortlisted Bidders
		accept/withdraw
12.	Target date to complete PPA negotiations	TBD
13.	SDG&E Submits Application with PPAs to CPUC for approval	TBD

#### [SELECT IF NECESSARY: "PRE-BID CONFERENCE

SDG&E will host one pre-bid conference webinar. Though encouraged, participation in the pre-bid conference webinar is NOT mandatory in order to submit an offer. Please monitor the RFO Website periodically. The information and time will be posted as soon as arrangements are finalized.

Any party interested in attending this pre-bid conference should register on the PowerAdvocate® site and must email the following information to renewablerfo@semprautilities.com. Please limit your participation to two representatives per organization.

- Company name
- Attendees' names and titles
- Contact information (E-mail address and telephone number)"]

#### 4.0 RFO RESPONSE INSTRUCTIONS

Respondents are required to submit the forms submitted below. Forms are available on the RFO Website and PowerAdvocate®. The failure to provide the listed information may result in the proposal being deemed non-conforming and may disqualify the proposal from further consideration.

#### **Limit on Number of Bids**

A MAXIMUM OF [NUMBER (X)] OFFERS PER RESPONDENT WILL BE ACCEPTED.

Fill out separate offer forms for each offer. Only one Project Description Form is required per Respondent to the extent that all bids can be adequately summarized in the space provided.

If the respondent has questions or concerns regarding bid limits, please contact SDG&E at: RFO@sdge.com

#### A. Required Forms for Category 1 or Category 2 Offers:

If the respondent is submitting offers for more than one project, each project must be submitted in a separate compressed ZIP archive with its required forms. Forms and compressed ZIP archives must be clearly labeled to identify the project name and the submitted forms. All forms are located on the PowerAdvocate® site's "1. Download Documents" Tab and must be submitted by uploading to the "2. Upload Documents" Tab.

- 1) **RPS Offer Form** Respondents may submit up to six (6) offers per project.
- 2) **Project Description Form** Submit one per project.<sup>4</sup>
- 3) Credit Application
- 4) Long-Term Model PPA for terms 10 years or longer, Short-Term Model PPA for term less than 10 years or RPS Plus Storage PPA. These are the PPAs required for offers that include energy deliveries. Respondents shall download, populate, and redline the Model PPA.
- 5) Interconnection Documents<sup>5</sup> Respondents must provide an electronic copy of the proposed project's completed CAISO/WDAT Phase II Interconnection Study or

<sup>&</sup>lt;sup>4</sup> Please note this form MUST describe the substation at which the project interconnects

<sup>&</sup>lt;sup>5</sup> Note that interconnection documents should be in the name of the entity that will sign the PPA. If not, Respondent must assign such documents to the entity that will sign the PPA by the time that Respondent accepts its position on the shortlist.

equivalent process or exemption.<sup>6</sup> If the facility is existing, Respondent must provide the facility's interconnection agreement.<sup>7</sup>

- 6) Site Control Information
- 7) **Permitting Status** In the project description form, provide a description of permitting requirements and progress in meeting such requirements.
- 8) **Resource Report** Respondents must submit a verifiable fuel resource plan ("solar resource" or "wind resource" etc.) for the duration of the PPA based on historical actuals taken at the site with equipment maintenance and cleaning records, correlated to long term satellite data, with probabilities of different weather and productions scenarios for the site, range of equipment outputs, range of plant downtime and curtailments, historical and/or estimated project curtailments reports due to transmission or system constraints. For wind bids, you must submit the full AWS/GLGH or similar wind resource report.
- 9) **PVSyst Files** For Solar bids, the full PVSyst file must be submitted by exporting the entire project that contains the prj, met, inv, pan, et.c files and submitting that file through PowerAdvocate. The contract DC must match the pvsyst file and the output of the file must match the 8760 in the Offer Form. All future discussions about plant production will refer to this prj file, where this future prj file will govern. No changes to plant design that changes the PVSyst model will be allowed unless written approval is given by SDG&E. Please set uptime percentage to 100% in PVSyst and enter that information in the Offer form. The model should include all losses to the interconnection point except for LGIA limitations losses, which will be computed in the Offer Form.
- 10) Diverse Business Enterprise Subcontracting Commitment and Reporting Requirements (DBE) Form (optional) Provide a copy of certification documents received from the California Public Utilities Commission. An application can be made before submission of the offer and referenced in the offer.
- 11) Applicable to Category 2 Offers Only: Firming and Shaping/Substitute Energy Agreement Respondent must provide evidence of the proposed project's firming and shaping agreement (either draft or executed version if completed).

#### B. [Select if applicable: "Required Forms for Category 3 Offers:

If the respondent is submitting offers for more than one project, each project must be submitted in a separate ZIP archive with its required forms. Forms and ZIP archives must be clearly labeled to identify the project name and the submitted forms. All forms are located on the PowerAdvocate® site's "1. Download Documents" Tab and must be submitted by uploading to the "2. Upload Documents" Tab.

<sup>&</sup>lt;sup>6</sup> D.13-11-024 required that the IOUs make this clarification to address potentially different requirements for existing or repowered facilities.

<sup>&</sup>lt;sup>7</sup> Note that interconnection documents should be in the name of the entity that will sign the PPA. If not, Respondent must assign such documents to the entity that will sign the PPA by the time that Respondent accepts its position on the shortlist.

- 1) **RPS Offer Form** Respondents may submit up to six (6) offers per project to this solicitation.
- 2) **Project Description Form** Submit one per project.<sup>8</sup>
- 3) Credit Application
- 4) **Model REC Agreement** Required for offers for unbundled RECs only. Respondents shall populate and redline the Model REC Agreement."

The Project Description Form, Credit Application, and redlines to the applicable agreement(s) must be in Word or Word-compatible format (not in PDF). The Offer Form and Project Viability Calculator must be in Excel or Excel-compatible format (not in PDF).

Submissions containing unsolicited materials or submissions of individual bid documents in file formats other than the formats of the original bid forms will be rejected. This RFO is an electronic only Solicitation; Respondents need not submit paper documents or e-binders.

Any party interested in submitting an Offer must register to receive access to the SDG&E RPS RFO event on PowerAdvocate® in order to submit an Offer. To register, Respondents must follow the instructions outlined in Section 2, RFO Website and Communications. All Offers must be uploaded to the PowerAdvocate® no later than [12:00 P.M.], Pacific Prevailing Time, on the CLOSING DATE (see RFO Schedule). If Respondents encounter technical difficulties with the uploading process, they should provide evidence of such difficulties (e.g. a screen shot of the error message) and email the bid to:

The RFO mailbox: mailto: RFO@sdge.com

Must CC IE: [insert]

Emails shall be received by 12:00 P.M., Pacific Prevailing Time, on the Closing Date.

All offer materials submitted in accordance with the above Response Instructions shall be subject to the confidentiality provisions of Section 11 Confidentiality of this RFO.

SDG&E will review and may utilize all information, if any, submitted by a Respondent that is not specifically requested as a part of any forms. During all stages of the RFO process, SDG&E reserves the right to request additional information from individual Respondents or to request any Respondent to submit supplemental materials in fulfillment of the content requirements of this RFO or to meet additional information needs. SDG&E also reserves the unilateral right to waive any technical or format requirements contained in the RFO.

<sup>8</sup> Please note this form MUST describe the substation at which the project interconnects

#### 5.0 RESOURCE CRITERIA

#### A. Compliance Period X Procurement Needs

In order to meet its RPS goals for Compliance Period X, SDG&E intends to solicit long term Category 1, 2, and 3 projects. SDG&E will accept bids from Category 1 and 2 facilities with CODs as early as 20XX, but the initial PPA delivery date will be January 20XX at the earliest, and projects with CODs as late as 20XX will also be considered. SDG&E will accept bids from Category 3 facilities that will be generated in January of 20XX at the earliest with a preference for those generated in 20XX and 20XX. SDG&E will accept offers for Unit Contingent Structures only (from a single facility). Requirements for such products are defined below.

#### I. Category 1 and Category 2 Products

- a. Term: [INSERT] years or less;
- b. Pricing: fixed price for the bundled product, expressed in \$/MWh;
- c. Eligible Renewable Resources: All proposed resources must be CEC-certifiable as an eligible renewable resource ("ERR"), and cannot be subject to any moratorium or injunction against procurement by the California Energy Commission, California Public Utility Commission, or other legal authority with jurisdiction over utility procurement;
- d. Minimum Size: [for capacity targets: Net Contract Capacity must be ≥ [INSERT]
   MW (rated in alternating current, or "AC") or, for energy targets: Net Contract
   Quantity in an amount not less than [X] MWh];
- e. Maximum Size: [for capacity targets: Net Contract Capacity must be ≤ [INSERT] MWs AC, and SDG&E encourages Respondents to limit deliveries to [INSERT] GWh per year<sup>9</sup> Net Contract Quantity in an amount not to exceed [X] MWh];
- f. Deliverability: Offers may provide energy only products or fully deliverable products. SDG&E will incorporate any deliverability value in its evaluation of these offers<sup>10</sup>;
- g. Green Attributes: All green attributes associated with the project must be tendered to SDG&E;

<sup>&</sup>lt;sup>9</sup> SDG&E's approved volumetric and capacity caps requested in 20XX RPS Procurement Plan

<sup>&</sup>lt;sup>10</sup> Resource Adequacy (RA) is a capacity attribute of a CAISO Participating Generator. An RA resource can provide either Local and/or System RA attributes based on its location as determined by the CAISO. Annually the CPUC and the CAISO assign a Net Qualifying Capacity (NQC) to each RA resource. In order to receive an NQC the resource's capacity output must be deliverable to load as described in the CAISO Tariff. The methodology for determining a resource's NQC can be found in the CPUC's Qualifying Capacity Methodology
Manual located at: http://www.cpuc.ca.gov/NR/rdonlyres/2526B26C-BEEA-46FE-904F-A99D2F042FD8/0/AdoptedQCmethodologymanualfromD1006036APPENDIXB.doc.

- h. Dynamic Transfers: Proposed resources using dynamic transfer for delivery to a CBA must provide documentation certifying the existence of the dynamic transfer arrangements. Such documentation must have a sufficient level of detail for SDG&E to determine conformance with Category 1 specifications, and to ensure that the dynamic transfer arrangement conforms with all other California state laws and decisions issued by the California Public Utilities Commission, the California Energy Commission, and any other regulatory authorities with jurisdiction over utility procurement in California;
- i. Project Stewardship: The Respondent will own and operate<sup>11</sup> the facility(ies) associated with the offer and be responsible for development, land acquisition, fuel supply source and transportation, permitting, financing and construction for the facility(ies).

#### II. [select as applicable: "Category 3 Products

- a. Pricing: the implied price for the Green Attributes, expressed in \$/MWh;
- b. Eligible Renewable Resource: All proposed resources must be CEC-certifiable as an eligible renewable resource ("ERR"), and cannot be subject to any moratorium or injunction against procurement by the California Energy Commission, California Public Utility Commission, or other legal authority with jurisdiction over utility procurement;
- c. REC Shelf Life: SDG&E will accept offers for RECs that have been generated no earlier than January 20XX, with a preference for RECs generated in 20XX and 20XX [to accommodate 36-month shelf life for unbundled RECs];
- d. Respondents must take all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in the Western Renewable Energy Generation Information System prior to the first delivery under the contract."]

#### Additional Requirements for Shortlisted Category 1 and 2 Offers:

Additional requirements for Respondents successfully entering into an agreement for Category 1 or 2 products with SDG&E, for deliveries in Compliance Period [TBD], may include, but are not limited to:

a. Firmed and Shaped Products only: The transaction must conform to the Commission's definition of a firmed and shaped product. The energy and associated RECs from the facility must be sold simultaneously to SDG&E; the energy must not be sold back to the generator and must not be already committed to another party; and the initial contract for substitute energy may be acquired no earlier than the time the energy is purchased by SDG&E and no later than prior to

<sup>&</sup>lt;sup>11</sup> A direct contractual relationship with the operator of the facility is sufficient to meet this criteria.

- the initial date of generation of the energy under the terms of the contract between SDG&E and the facility;
- b. Respondents shall be financially and operationally responsible for the transmission gen-tie up to the point of interconnection with the local transmission/distribution network in accordance with applicable laws. Gen-tie costs must be included in the offer price for energy and/or capacity;
- c. Respondents must have a verifiable fuel resource plan for the duration of the PPA;
- d. Respondents will provide personnel required to operate the Facility;
- e. Resource operations will be scheduled in accordance with the CAISO Tariff, as from time to time modified. CAISO compliant real-time metering of the generation will be required for Energy Management System (EMS) data;
- f. Respondents must execute Participating Generator Agreements and Meter Service Agreements as required by the CAISO. If the project is outside of CAISO's jurisdiction, Respondents must make all interconnection and wheeling arrangements required;
- g. To facilitate monthly settlement processes, Respondents shall authorize Buyer to view the Facility's CAISO on-line meter data by identifying SDG&E as an authorized user with "read only" privileges on Schedule 3 of Respondent's Meter Service Agreement with the CAISO. For resources outside of CAISO's area, Respondent will provide similar access to SDG&E, if such an interface exists, with the system operator having jurisdiction over the project; and
- h. Respondents must take all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in the Western Renewable Energy Generation Information System prior to the first delivery under the contract."]

#### 6.0 RPS PROGRAM PARAMETERS

#### **CALIFORNIA RPS PROGRAM**

California's RPS program was established in 2002 by Senate Bill (SB) 1078 (Sher, 2002) with the initial requirement that 20% of electricity retail sales must be served by renewable resources by 2017. The program was accelerated in 2015 with SB 350 (de León, 2015) which mandated a 50% RPS by 2030. SB 350 includes interim annual RPS targets with three-year compliance periods and requires 65% of RPS procurement to be derived from long-term contracts of 10 or more years. In 2018, SB 100 (de León, 2018) was signed into law, which again increases the RPS to 60% by 2030 and requires all the state's electricity to come from carbon-free resources by 2045.

The CPUC implements and administers RPS compliance rules for California's retail sellers of electricity or load serving entities (LSEs), which include large and small investor-owned utilities (IOUs), electric service providers (ESPs) and community choice aggregators (CCAs). The California Energy Commission (CEC) is responsible for the certification of electrical generation facilities as

eligible renewable energy resources and adopting regulations for the enforcement of RPS procurement requirements of public owned utilities (POUs).

The California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) jointly implement the RPS program. The CPUC's responsibilities include:

- 1. Determining annual procurement targets and enforcing compliance.
- 2. Reviewing and approving each IOU's renewable energy procurement plan.
- 3. Reviewing IOU contracts for RPS-eligible energy.
- 4. Establishing the standard terms and conditions used by IOUs in their contracts for eligible renewable energy.

Current law requires all Load Serving Entities (LSEs) are required by the CPUC to procure renewable energy in the amount of 60% of retail sales by 2030<sup>12</sup>. The 60% target sets increasing targets for three or four multi-year Compliance Periods ("CPs"). The targets are set at 33% by the end of CP3 (2017-2020), 44% by the end of CP5 (2025-2027) and 60% by the end of CP6 (2028-2030). The CPUC issued its first decision implementing the RPS Program, D.03-06-071 on June 19, 2003. This decision established certain basic RPS Program parameters. The CPUC has subsequently issued several additional RPS-related decisions in rulemaking proceeding R.04-04-026, and successor proceedings R.06-02-012, R.06-05-027, R.08-08-009, R.11-05-005, R-15-02-020 and the most current RPS proceeding, R-18-07-003. SDG&E will comply with all CPUC decisions governing RPS procurement. These decisions are publicly available on the CPUC's website at <a href="https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-power-procurement/rps/rps-program-overview/rps-decisions-and-proceedings">https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-power-procurement/rps/rps-program-overview/rps-decisions-and-proceedings</a>.

This RFO is being conducted in compliance with relevant statutory and regulatory directives. Requirements set forth within the law and all directives shall be incorporated herein by reference. A full text of the law and the above-mentioned CPUC decisions can be downloaded from the CPUC website. Respondents are encouraged to review all RPS-related, CPUC issued directives available on the same Internet websites and are responsible for understanding and abiding by all RPS provisions.

#### **RPS ELIGIBILITY CRITERIA**

Respondents successfully signing agreements with SDG&E must warrant that the resources being offered in response to this solicitation are certifiable as an "eligible renewable resource" by the California Energy Commission (CEC). Eligibility criteria are set forth by the CEC in its <u>Renewable Portfolio Standard Eligibility Guidebook</u>. The most recent revision to the CEC guidebook was adopted in January 2017. It can be downloaded from the CEC's website at <a href="https://efiling.energy.ca.gov/getdocument.aspx?tn=217317">https://efiling.energy.ca.gov/getdocument.aspx?tn=217317</a>. Respondents are encouraged to review all RPS-related, CEC issued directives available on the same Internet website and are

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<sup>&</sup>lt;sup>12</sup> See, Senate Bill (SB) 100 (DeLeon, Stats. 2018, ch. 312)

responsible for understanding and abiding by all RPS provisions. All requirements set forth within the CEC's guidebooks and all RPS-related documents shall be incorporated herein by reference. SDG&E has no preferred "eligible renewable resource" or resource stack and will judge the merits of each bid based on the provisions of Section 9.0.

Respondents are encouraged, although not required, to apply for pre-certification from the CEC in advance of submitting an offer. Pre-certification forms are available from the above-entitled guidebook.

#### PROCUREMENT REVIEW GROUP

The Procurement Review Group (PRG), a CPUC-endorsed entity, is composed of non-market participants such as ratepayers' advocacy groups, state energy and water commissions, power authorities, utility-related labor unions and other non-commercial, energy-related special interest groups. CPUC Decision D.03-06-071 established the role of the PRG in the RPS Program. The PRG is charged with overseeing the IOU's procurement process, reviewing procedural fairness, examining overall procurement prudence and providing feedback during all stages. From RFO language development to offer evaluation to contract negotiation, IOU's brief the PRG on a periodic basis during the entire process.

Respondents are hereby notified that revealing confidential offer information to the PRG is required during PRG briefings in accordance with Section 11 ("Confidentiality"). Each Respondent must clearly identify, as part of its offer, what type of information it considers to be confidential.

#### INDEPENDENT EVALUATOR

The CPUC requires each IOU to use an Independent Evaluator to separately evaluate and report on the IOU's entire solicitation, evaluation, and selection process for this solicitation. This will serve as an independent review of SDG&E's implementation of the RFO process and final selections. The Independent Evaluator shall make periodic presentations regarding its findings to the IOU, and the IOU's PRG including the CPUC Energy Division staff. The intent is to preserve the independence of the Independent Evaluator by ensuring free and unfettered communication between the Independent Evaluator and the CPUC as well as an open, fair, and transparent process that the Independent Evaluator can affirm.

SDG&E is committed to ensuring an open and transparent solicitation, and to providing a fair, reasonable and competitive process.

#### 7.0 SDG&E BACKGROUND

SDG&E is a regulated public utility that provides clean, safe and reliable energy service to 3.6 million consumers through 1.4 million electric meters and 873,000 natural gas meters in San Diego and southern Orange counties. The utility's area spans 4,100 square miles. SDG&E is committed to creating ways to help customers save energy and money every day. SDG&E is a subsidiary of Sempra Energy (NYSE: SRE), a Fortune 500 energy services holding company based in San Diego. Connect with SDG&E's Customer Contact Center at 800-411-7343, on Twitter (@SDGE) and Facebook.



For a map California IOU service territories please visit:

http://www.energy.ca.gov/maps/serviceareas/electric service areas.html

#### 8.0 ASC 810 (FIN46) REQUIREMENTS

Generally Accepted Accounting Principles and SEC rules require SDG&E to evaluate whether or not SDG&E must consolidate a Seller's financial information. SDG&E will require access to financial records and personnel to determine if consolidated financial reporting is required. If SDG&E determines at any time that consolidation is required, SDG&E shall require the following during every calendar quarter for the term of any resultant agreement:

1.

- a) Unaudited financial statements with footnotes, within 15 calendar days of the end of each quarter;
- b) Audited financial statements with footnotes within 90 calendar days of the end of the year,
- c) Financial schedules underlying the financial statements, within 15 calendar days of the end of each quarter;
- d) Access to records and personnel, so that SDG&E's internal or independent auditor can conduct financial audits (in accordance with generally accepted auditing standards) and internal control audits (in accordance with Section 404 of the Sarbanes-Oxley Act of 2002)) and SDG&E can meet its SEC filing requirements. The rights and obligations under the agreement shall survive the termination of this agreement for a period of two years;
- e) Certifications by duly authorized representatives as may be reasonably requested by SDG&E; and
- f) Such other information as reasonably requested by SDG&E.
- g) If consolidation is required and considered material by the buyer to buyer's financial statements or its parent company's financial statements and buyer reasonably determines seller's internal controls over financial reporting are considered to be significantly deficient or a material weakness, then seller is to remediate within 30 calendar days;
- h) Seller to provide to buyer any SEC Form 8K disclosures, two calendar days after the occurrence of the SEC Form 8K event; and
- Seller to notify buyer at any time during the term of the agreement of any consulting (nonindependent) services proposed to be provided to seller by the buyer's independent auditor.

Any information provided to SDG&E shall be treated as confidential, except that it may be disclosed for financial statement purposes. Full details of SDG&E's requirements in connection with consolidation are set forth in the Model PPA or REC Agreement.

#### 9.0 EVALUATION CRITERIA AND SHORTLISTING

All incoming offers will be assessed for conformance based on the requirements outlined in Eligibility Requirements section. Respondents' offers shall conform with minimum participation criteria and eligibility requirements in order to be considered.

SDG&E will utilize the Offer Response Forms and narratives to evaluate all offers. Respondents are responsible for the accuracy of all figures and calculations. Errors discovered during negotiations may impact Respondents standing on the short-list. SDG&E has provided instructions and requirements for this solicitation. Initially, all offers will go through a conformance check to ensure that the project meets the requirements outlined in the RFO document. Conforming offers will then go through a Least-Cost / Best-Fit (LCBF).

SDG&E will periodically brief the members of the PRG during the various stages of evaluation. Upon completion of SDG&E's evaluation process, SDG&E will brief the PRG members regarding SDG&E's recommendations for its short-list. Based upon the comments and recommendations received from the PRG, SDG&E may modify the preliminary short-list as necessary.

SDG&E will consider any proposal by shortlisted counterparties to reduce the price for shortlisted projects provided that no other material changes are made to the terms of the offer.

#### **EVALUATING OFFERS**

In order to be considered a conforming long-term offer, bids for renewable projects must, at a minimum, declare:

- a. A single specific geographical location (e.g. a set of contiguous parcels not bisected by a right-of-way) where the project will be located, with an address, coordinates, or a legal description of the project that conforms with the standards of the township/range/section methods of the Public Land Survey System;
- b. A single Guaranteed Commercial Operation Date when the project will provide the product described in the Bid Pricing Form, or a single Initial Commercial Operation Date for the beginning of deliveries from a project's initial phase together with a single Guaranteed Commercial Operation Date when the project will provide the maximum capacity described in the Bid Pricing Form;
- c. A single contract term, in years, between the Guaranteed Commercial Operation Date and the ending date of the contract;
- d. A single set of net output capacities, estimated contract deliveries, and energy prices for the duration of the contract term for quantities and prices as delivered to SDG&E, using alternating current (AC) and in the appropriate units of measure

- as specified on the Bid Pricing Form and inclusive of all losses due to expected curtailment, transmission losses, distribution losses, and transmission costs up to the point of delivery;
- e. Expected hourly capacity factors in the Typical Profile of the Bid Pricing Form, which shall be the ratio of estimated contract deliveries in megawatts (AC) delivered to SDG&E in a typical hour to the net output capacity at the point of delivery to SDG&E in megawatts (AC) during that same hour, in Pacific Time (including Pacific Standard Time and Pacific Daylight Time for appropriate time periods).

Absence of any of the above may result in a bid being rejected due to nonconformance. SDG&E may require clarifying information for certain projects in addition to those specified above; failure to provide such clarifying information in a timely fashion, or the provision of information which conflicts with original bid documents, may also result in a bid being rejected due to nonconformance.

Pursuant to D.XXXXXXX<sup>13</sup>, SDG&E will evaluate all offers using the Least-Cost Best-Fit ("LCBF") Methodology. Passing each step below is required in order to advance to the next level, with the eventual Short-Listed offers having to pass all levels. The following provides a general description of each evaluation level.

- Step I: Check for Conformance. Check to ensure that all offers meet minimum RFO criteria. All offers meeting minimum requirements will pass Step I, will be deemed "conforming" and will move on to Step II.
- Step II: Preliminary Ranking and Short Listing. This assessment will be based on a project's Net Market Value, which consists of benefits including energy, REC value, and, if any, other benefits including ancillary services and capacity; less, offer costs including levelized contract costs, transmission network upgrade costs as determined by the costs of network upgrades as presented in the project's transmission cost studies, and other costs, such as congestion costs and renewable integration cost adders.
- Step III: Offers will be ranked on a levelized Net Market Value, on a \$/MWh basis, from highest to lowest value, and shortlist determined by least-cost, best fit principles as relates to procurement targets. After the preliminary short list has been approved by the PRG, the Offers may be modeled to determine impacts to SDG&E's portfolio. If modeling occurs, the shortlist may be updated based on modeling results which identify offers that best meet SDG&E's bundled customer needs.

<sup>&</sup>lt;sup>13</sup> Decision on 20XX RPS Procurement Plans approving SDG&E's LCBF Methodology

SDG&E is evaluating offers in accordance with CPUC direction and criteria established for the RPS Program. SDG&E will be conducting a qualitative evaluation in conjunction with the quantitative evaluation (Step II) by reviewing qualitative factors including, but not limited to, the following: (in no particular order of preference)

- a) Project viability
- b) Deliverability and reliability
- c) Benefits to low income or minority communities
- d) Resource diversity
- e) Environmental stewardship
- f) Supplier Diversity, as defined in G.O. 156
- g) Rate Impacts
- h) Portfolio needs
- i) Emissions targets
- j) Compliance with procurement requirements outside of RPS
- k) Workforce Development Assessment

These factors will be used to differentiate long-term offers with similar costs for those resources under consideration near the annual procurement target. SDG&E requests that Respondents elaborate in their offer on the benefits of their project with regard to these factors. SDG&E notes that a project scoring low on the Project Viability Calculator may not be shortlisted even if it ranks high on the LCBF quantitative evaluation.

Consistent with CPUC Decision D.04-07-029 issued on July 8, 2004, SDG&E will treat dispatchability, curtailability and repowering as quantitative attributes and will evaluate these factors using quantitative methods. SDG&E requests that Respondents elaborate in their offer on the benefits of their project with regard to these factors.

ALL OFFERS SHALL BE VALID AND BINDING UPON THE RESPONDENT AFTER BEING SELECTED FOR THE SHORT LIST UNTIL CONTRACT EXECUTION.

Respondents as part of responding to the shortlist letter will have an opportunity to improve the pricing – keeping unchanged all other terms – of their offer as well as any time thereafter.

SDG&E WILL NOT REIMBURSE RESPONDENTS FOR THEIR EXPENSES UNDER ANY CIRCUMSTANCES, REGARDLESS OF WHETHER THE RFO PROCESS PROCEEDS TO A SUCCESSFUL CONCLUSION OR IS ABANDONED BY SDG&E IN ITS SOLE DISCRETION.

#### 10.0 REJECTION OF OFFERS

SDG&E SHALL TREAT ALL RESPONDENTS FAIRLY AND EQUALLY AND SHALL EVALUATE ALL OFFERS IN GOOD FAITH. WHILE SDG&E IS MINDFUL OF THE BENEFITS OF RENEWABLE ENERGY AND IS VIGOROUSLY PURSUING THE GOALS OF THE RPS, IT MAKES NO GUARANTEE THAT A CONTRACT AWARD SHALL RESULT FROM THIS RFO EVEN AFTER AN OFFER HAS BEEN SHORTLISTED. IN ADDITION, SDG&E NOTES THAT SHORTLISTING AN OFFER DOES NOT CONSTITUTE SDG&E ACCEPTANCE OF ALL REDLINED CHANGES TO THE PROFORMA CONTRACT. SDG&E RESERVES THE RIGHT AT ANY TIME, AT ITS SOLE DISCRETION, TO ABANDON THIS RFO PROCESS, TO CHANGE THE BASIS FOR EVALUATION OF OFFERS, TO TERMINATE FURTHER PARTICIPATION IN THIS PROCESS BY ANY PARTY, TO ACCEPT ANY OFFER OR TO ENTER INTO ANY DEFINITIVE AGREEMENT, TO EVALUATE THE QUALIFICATIONS OF ANY RESPONDENT OR THE TERMS AND CONDITIONS OF ANY OFFER, OR TO REJECT ANY OR ALL OFFERS, ALL WITHOUT NOTICE AND WITHOUT ASSIGNING ANY REASONS AND WITHOUT LIABILITY OF SEMPRA ENERGY, SDG&E, OR ANY OF THEIR SUBSIDIARIES, AFFILIATES, OR REPRESENTATIVES TO ANY RESPONDENT. SDG&E SHALL HAVE NO OBLIGATION TO CONSIDER ANY OFFER.

#### 11.0 CONFIDENTIALITY

EXCEPT WITH THE PRIOR WRITTEN CONSENT OF SDG&E, RESPONDENTS MAY NOT DISCLOSE (OTHER THAN BY ATTENDANCE ALONE AT ANY MEETING TO WHICH MORE THAN ONE RESPONDENT IS INVITED BY SDG&E) TO ANY OTHER RESPONDENT OR POTENTIAL RESPONDENT THEIR PARTICIPATION IN THIS RFO, AND RESPONDENTS MAY NOT DISCLOSE, COLLABORATE ON, OR DISCUSS WITH ANY OTHER RESPONDENT, OFFER STRATEGIES OR THE SUBSTANCE OF OFFERS, INCLUDING WITHOUT LIMITATION THE PRICE OR ANY OTHER TERMS OR CONDITIONS OF ANY INDICATIVE OR FINAL OFFER.

SDG&E WILL USE THE HIGHER OF THE SAME STANDARD OF CARE IT USES WITH RESPECT TO ITS OWN PROPRIETARY OR CONFIDENTIAL INFORMATION OR A REASONABLE STANDARD OF CARE TO PREVENT DISCLOSURE OR UNAUTHORIZED USE OF RESPONDENT'S CONFIDENTIAL AND PROPRIETARY INFORMATION THAT IS LABELED AS "PROPRIETARY AND CONFIDENTIAL" ON THE OFFER PAGE ON WHICH THE PROPRIETARY INFORMATION APPEARS ("CONFIDENTIAL INFORMATION"). RESPONDENT SHALL SUMMARIZE ELEMENTS OF THE OFFER(S) IT DEEMS CONFIDENTIAL. THE SUMMARY MUST CLEARLY IDENTIFY WHETHER OR NOT PRICE, PROJECT NAME, LOCATION, SIZE, TERM OF DELIVERY AND TECHNOLOGY TYPE (EITHER COLLECTIVELY OR INDIVIDUALLY) ARE TO BE CONSIDERED CONFIDENTIAL INFORMATION. CONFIDENTIAL INFORMATION MAY BE MADE AVAILABLE ON A "NEED TO KNOW" BASIS TO SDG&E'S DIRECTORS, OFFICERS, EMPLOYEES, CONTRACTORS, CONSULTANTS, THE INDEPENDENT EVALUATOR, AGENTS AND ADVISORS ("REPRESENTATIVES"), BUT SUCH REPRESENTATIVES SHALL BE REQUIRED TO OBSERVE THE SAME CARE WITH RESPECT TO DISCLOSURE AS SDG&E.

NOTWITHSTANDING THE FOREGOING, SDG&E MAY DISCLOSE ANY OF THE CONFIDENTIAL INFORMATION TO COMPLY WITH ANY LAW, RULE, OR REGULATION OR ANY ORDER, DECREE, SUBPOENA OR RULING OR OTHER SIMILAR PROCESS OF ANY COURT, SECURITIES EXCHANGE, CONTROL AREA OPERATOR, GOVERNMENTAL AGENCY OR GOVERNMENTAL OR REGULATORY AUTHORITY AT ANY TIME EVEN IN THE ABSENCE OF A PROTECTIVE ORDER, CONFIDENTIALITY AGREEMENT OR NON-DISCLOSURE AGREEMENT, AS THE CASE MAY BE, WITHOUT NOTIFICATION TO THE RESPONDENT AND WITHOUT LIABILITY OR ANY RESPONSIBILITY OF SDG&E TO THE RESPONDENT.

IT IS EXPRESSLY CONTEMPLATED THAT MATERIALS SUBMITTED BY A RESPONDENT IN CONNECTION WITH THIS RFO WILL BE PROVIDED TO THE CPUC, ITS STAFF, THE CEC, ITS STAFF, SDG&E'S INDEPENDENT EVALUATOR, SDG&E'S PRG, AND THE COST ALLOCATION METHODOLOGY ("CAM") GROUP. ADDITIONALLY, SDG&E MAY PROVIDE LIMITED INFORMATION SUCH AS (BUT NOT LIMITED TO) ON-LINE DATE, INTERCONNECTION POINT, TECHNOLOGY AND OTHER OPERATIONAL CHARACTERISTICS TO THE CAISO FOR MODELING PURPOSES. SDG&E WILL SEEK CONFIDENTIAL TREATMENT PURSUANT TO PUBLIC UTILITIES CODE SECTION 583 AND GENERAL ORDER 66-D OF THE CPUC, WITH RESPECT TO ANY RESPONDENT CONFIDENTIAL INFORMATION SUBMITTED BY SDG&E TO THE CPUC. SDG&E WILL ALSO SEEK CONFIDENTIALITY PROTECTION FROM THE CALIFORNIA ENERGY COMMISSION ("CEC") FOR RESPONDENT'S CONFIDENTIAL INFORMATION AND WILL SEEK CONFIDENTIALITY AND/OR NON-DISCLOSURE AGREEMENTS WITH THE PROCUREMENT REVIEW GROUP ("PRG"). SDG&E CANNOT, HOWEVER, ENSURE THAT THE CPUC OR CEC WILL AFFORD CONFIDENTIAL TREATMENT TO A RESPONDENT'S CONFIDENTIAL INFORMATION OR THAT CONFIDENTIAL TREATMENT TO A RESPONDENT'S CONFIDENTIAL INFORMATION OR THAT CONFIDENTIALITY AGREEMENTS OR ORDERS WILL BE OBTAINED FROM AND/OR HONORED BY THE PRG, CEC, OR CPUC.

SDG&E, ITS REPRESENTATIVES, SEMPRA ENERGY, AND ANY OF THEIR SUBSIDIARIES DISCLAIM ANY AND ALL LIABILITY TO A RESPONDENT FOR DAMAGES OF ANY KIND RESULTING FROM DISCLOSURE OF ANY OF RESPONDENT'S INFORMATION.

#### 12.0 CREDIT TERMS AND CONDITIONS

SDG&E has the unilateral right to evaluate and determine the credit-worthiness of the Respondent relative to this RFO. The Respondent is required to complete, execute and submit the RFO credit application as part of its offer. The application requests financial and other relevant information needed to demonstrate creditworthiness. Respondents may download the application from the RFO Website. Winning bidders will be required to comply with the credit and collateral requirements set forth in the pro forma agreement. The amount of such requirements will be determined by SDG&E at the time of shortlisting and will be based on product, deliveries, price, and term, among other variables. For clarity, bidders should **not** include credit costs within their bid price (note: respondents are required to provide information regarding the added cost of collateral per \$100,000 increment to satisfy the initial collateral requirement if SDG&E decides not to extend unsecured credit - this information will be gathered via the credit application form. These costs will be considered as discussed in the quantitative evaluation section within this document).

#### A. SHORTLISTACCEPTANCE FEE.

The Shortlist Acceptance Fee is the greater of \$[TBD] or \$[TBD] per kW of project nameplate / aggregate program capacity and shall be required to be paid to SDG&E within ten (10) business days of notification by SDG&E that the offer has been shortlisted. The Shortlist Acceptance Fee shall be refunded (with interest for cash deposits) to Respondent if Respondent and SDG&E fail to reach an agreement and such failure is not due to Respondent's withdrawal of its offer or a material misrepresentation of pricing or non-pricing information provided by Respondent.

#### 13.0 CPUC APPROVAL

SDG&E shall submit all signed contracts to the CPUC for approval. CPUC approval will be required as a condition precedent to the effectiveness of any contract resulting from this RFO, however, SDG&E, in its sole discretion, may choose to take deliveries prior to such approval.

### **APPENDIX 11**

**RPS Sales RFP** 

# 2024 REQUEST FOR PROPOSAL FOR THE SALE OF RENEWABLE ENERGY PRODUCTS

ISSUED

[]

**OFFERS DUE** 

[]

**RFP WEBSITE** 

[ ]

**EMAIL QUESTIONS/COMMENTS TO**RECsaleRFP@sdge.com

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#### 1.0 SCOPE OF REQUEST

As authorized by D.XX-XX-XXX, San Diego Gas & Electric Company ("SDG&E") is issuing this Request for Proposal ("RFP") seeking proposals from third parties ("Respondents") who are interested in purchasing products from eligible renewable resources under contract with SDG&E ("Resources"). By responding, Respondents are bound by the terms and conditions of this RFP. Products are derived from Resources that meet the California Renewables Portfolio Standard ("RPS") eligibility criteria set forth by the California Energy Commission ("CEC") (See Section 5.0 for additional information on RPS Program Parameters). This RFP solicits bids from financial institutions, energy service providers, utilities, municipal utilities, industrial end users, wholesale power marketers, and any other entity that would have a need to purchase bundled energy and Renewable Energy Credits ("RECs"), unbundled RECs, and/or RPS Contracts.

#### Acceptable Product Types<sup>1</sup>

Table 1 – Unit Contingent and Firm Products

	Bundled Firm	<b>Bundled Unit Contingent</b>	Unbundled
Product Types:	Bundled Energy and	Bundled Energy and RECs	Unbundled RECs
	RECs from pool of RPS-	from specific project(s)	
	eligible projects	only	
Minimum	1 Month	1 Month	One-time transfer of
Term:			firm quantities
Maximum	1 Year (12 months)	10 Years (120 months)	Recurring transfers of
Term:			unit contingent
			quantities during Term
			up to 10 years
Delivery	Start no earlier than	Start no earlier than	Start no earlier than
Window:	CPUC Approval ("X"),	CPUC Approval ("X"), End	CPUC Approval
	End no later than X+12	no later than X+120	
	months <sup>2</sup>	months <sup>3</sup>	
Point of	Point of	Point of Interconnection	n/a
Delivery:	Interconnection of the	of the Project to the	
	Project to the CAISO	CAISO Grid	
	Grid		
Min Volume:	No Min	No Min	No Min

<sup>&</sup>lt;sup>1</sup> RPS Contract Assignment/Novation may be offered in a solicitation.

<sup>&</sup>lt;sup>3</sup> Respondent to propose dates for purchase (See "Delivery Period" in RFP WSPP Agreement).

<sup>&</sup>lt;sup>3</sup> Respondent to propose dates for purchase (See "Delivery Period" in RFP WSPP Agreement).

Table 2 – Portion of PCIA-eligible Volumes Not Allocated in VAMO

·	Bundled Firm	Unbundled
Product Types:	Bundled Energy and RECs from available pool of PCIA-eligible projects	Unbundled RECs from the available pool of out-of-state PCIA-eligible projects
Term:	<ul> <li>Short-term transactions, for the remainder of the Compliance Period ending in 2027, or</li> <li>Long-term transactions, for the remaining terms of the PPAs s in the available pool of PCIA-eligible projects</li> </ul>	<ul> <li>Short-term transactions, for the remainder of the Compliance Period ending in 2027, or</li> <li>Long-term transactions, for the remaining terms of the PPAs s in the available pool of PCIA-eligible projects</li> </ul>
Point of Delivery:	Point of Interconnection of the Project to the CAISO Grid	n/a
Volume:	One percent increments of the "slice" or portion of the Bundled PCIA-eligible portfolio available after the VAMO process.	One percent increments of the "slice" or portion of the out-of- state PCIA-eligible portfolio available after the VAMO process.

#### A. Definition of Products

Load-serving entities ("LSEs") in California are required to serve its customers with 44% of retail sales by December 31, 2024, with reasonable progress made in 2021-2023 (CP4); (b) 52% of retail sales by December 31, 2027, with reasonable progress made in 2025-2026 (CP5); (c) 60% of retail sales by December 31, 2030, with reasonable progress made in 2028-2029 (CP6); and (d) 60% of retail sales for all subsequent CPs.

LSEs must meet these goals by procuring renewable resources that meet the requirements of the products outlined in Public Utilities Code 399.16(b). A summary of two eligible product types is provided below:

#### (Public Utilities Code 399.16(b)(1)(A-B)): Bundled Energy Products

- Must have first point of interconnection ("POI") with a California Balancing Authority ("CBA"); or
- Must have first POI with distribution facilities used to serve end users within a CBA;
   or
- Must be scheduled from the eligible renewable resource ("ERR") into a CBA without substituting electricity from another source<sup>4</sup>; or
- Have an agreement to dynamically transfer electricity to a CBA.

#### (Public Utilities Code 399.16(b)(3): Unbundled Renewable Energy Credits ("RECs")

• ERR products, or any fraction of the electricity generated, **including unbundled RECs**, that do not qualify under 399.16(b)(1-2).

Projects from SDG&E's allocation portion of its Power Charge Indifference Adjustment (PCIA)-eligible RPS portfolio, projects from the PCIA-eligible resources prior to the distribution of Voluntary Allocation and Market Offer ("VAMO"), or portion of PCIA-eligible resources that are not allocated and sold in the VAMO process are offered to eligible Participants are RPS-eligible resources that are interconnected to the CAISO grid, or located in Imperial Valley (or outside California) and dynamically transferred via pseudo-tie into CAISO.

SDG&E is not selling Resource Adequacy ("RA") with any of these transactions. The final portfolio sale will be shaped as specified by the seller in the bid form. Offered resources may be:

- 1) Re-powered or existing facilities;
- 2) New facilities;
- 3) New facilities that are scheduled to come online during the years specified in this RFP; and/or
- 4) Other facilities.

#### B. Transaction Documents

a) Bundled Energy Products (Bundled Firm and Bundled Unit Contingent)

<sup>&</sup>lt;sup>4</sup> If using another source to provide real-time ancillary services required to maintain an hourly or sub-hourly import schedule into a CBA is permitted, but only the fraction generated by the ERR will count as a bundled energy product.

Respondents bidding on bundled energy products must mark up SDG&E's Long-form Confirmation to the Western Systems Power Pool ("WSPP") Agreement. Any resulting agreement shall be subject to CPUC approval. Additional respondent criteria are described in Section [] "Products & Eligibility Requirements."

#### b) Unbundled REC Agreements (Unbundled Firm and Unbundled Unit Contingent)

Respondents bidding on unbundled RECs products must mark up SDG&E's Long-form Confirmation to the WSPP or EEI Agreement. Any resulting agreement shall be subject to CPUC approval. Additional eligibility requirements are described in Section [] "Products & Eligibility Requirements".

#### 2.0 RFP WEBSITE AND COMMUNICATIONS

The RFP and all subsequent revisions and documents are available for download from the RFP Website [ ]. Potential Respondents are responsible for monitoring the RFP Website for subsequent updates, notices and postings.

Offers for the 2020 RPS REC Sale RFP must be submitted through the PowerAdvocate® website. Offerors intending to submit an Offer but who do not yet have an existing account with PowerAdvocate® must first register to create a username/password to receive access to the event. See below for instructions to log in/register:

First-time users must register as a <u>Supplier</u> using the instructions above and the Referral information below to access the RFP event:

#### Logging In

You access the PowerAdvocate platform via a web browser.

#### To log in

1. Open a web browser and go to www.poweradvocate.com.

PowerAdvocate functions in most web browsers; however, using browsers other than Internet Explorer (IE) version 6 or higher may cause certain functionality to work unexpectedly. Should you encounter problems, PowerAdvocate support may be unable to provide assistance until the issue has been replicated in a supported version of Internet Explorer.

2. Click Login.

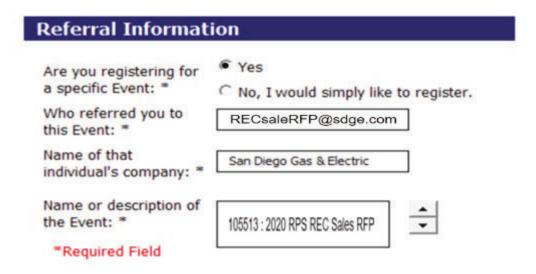
The Login page appears; you may wish to bookmark it for quick access.

3. Enter your account User Name and Password.

Both are case-sensitive.

If you do not have an account, go to poweradvocate.com and click the **Registration** link at the top of the page. If you have an account but do not remember your user information, click **Forgot User Name** or **Forgot Password** and they will be emailed to you.

4. Click Login.



Users with an existing PowerAdvocate® account may request access to the event by searing open RFPS or by using the link below:

Public Registration Link: [ ]

All questions or other communications regarding this RFP must be submitted via email to SDG&E's RFP inbox <u>RECsaleRFP@sdge.com</u> and <u>MUST</u> cc the Independent Evaluator (IE) [ ]. SDG&E will not accept questions or comments in any other form, except at the Bidder's Conference. Questions submitted after the deadline as specified in the RFP Schedule will only be answered at the sole discretion of SDG&E or the IE. All questions and their answers will be posted publicly on this website anonymously soon after receipt. We cannot respond directly to or confidentially to any questions.

#### 3.0 RFP SCHEDULE

The following schedule and deadlines apply to this RFP. SDG&E reserves the right to revise this schedule at any time and in SDG&E's sole discretion. Respondents are responsible for accessing the RFP Website for updated schedules and possible amendments to the RFP or the solicitation process.

NO.	ITEM	APPROX. DATE
1.	RFP Issued	
2.	Pre-Bid Conference (Webinar)	
	DEADLINE TO SUBMIT QUESTIONS	
3.	Question submittal cut-off date. Answers to all questions will be posted on the website no later than 3 business days following question submittal cutoff date	
4.	CLOSING DATE: Offers must be submitted to PowerAdvocate® website no later than NOON (Pacific Standard Time).	
6.	SDG&E notifies shortlisted Bidder(s).	
8.	SDG&E submits FINAL list of shortlisted Bidders to Commission and PRG.	
9.	SDG&E issues appreciation notices to unsuccessful Bidders.	
10.	SDG&E commences with Transaction Document negotiations.	
11.	SDG&E submits Tier 1 or Tier 3 Advice Letter(s) with agreements for Commission approval.	

#### **PRE-BID CONFERENCES**

SDG&E will host one pre-bid webinar conference on [ ]. While encouraged, participation in the pre-bid conference is NOT mandatory to submit an offer. Please monitor the RFP Website periodically. The venue and time of the pre-bid conference will be posted as soon as arrangements are finalized.

Any party interested in attending this pre-bid conference and/or webinar should email the following information to <a href="mailto:RECsaleRFP@sdge.com">RECsaleRFP@sdge.com</a>. Please limit your participation to two representatives per organization.

- Company name
- Attendees' names, titles and contact information

#### 4.0 RFP RESPONSE INSTRUCTIONS

Forms are available on the RFP Website. The failure to provide the listed information may result in the bids being deemed non-conforming and may disqualify the proposal from further consideration.

#### **Required Forms for Bundled Energy Product Offers:**

- 1) Participation Summary and Bid Form
- 2) Credit Application
- 3) Transaction Document Respondents shall populate and redline the Transaction Agreement.

#### **Required Forms for Unbundled REC Offers:**

- 1) Participation Summary and REC Bid Form
- 2) Credit Application
- 3) Model REC Agreement To be provided by SDG&E at time of shortlisting.

Submissions containing unsolicited materials or submissions of individual Offer documents in file formats other than the formats of the original Offer forms, will be rejected. This RFP is an electronic only Solicitation; Respondents need not submit paper documents nor e-binders.

All offer materials submitted in accordance with the above Response Instructions shall be subject to the confidentiality provisions of Section 10 "Confidentiality" of this RFP.

SDG&E will review and may utilize all information, if any, submitted by a Respondent that is not specifically requested as a part of any forms. During all stages of the RFP process, SDG&E reserves the right to request additional information from individual Respondents or to request any Respondent to submit supplemental materials in fulfillment of the content requirements of this RFP or to meet additional information needs. SDG&E also reserves the unilateral right to waive any technical or format requirements contained in the RFP.

ALL BIDS SHOULD BE VALID AND BINDING FOR THE DURATION OF THE RFP.

SDG&E WILL NOT REIMBURSE RESPONDENTS FOR THEIR EXPENSES UNDER ANY CIRCUMSTANCES, REGARDLESS OF WHETHER THE RFP PROCESS PROCEEDS TO A SUCCESSFUL CONCLUSION OR IS ABANDONED BY SDG&E IN ITS SOLE DISCRETION.

#### **CALIFORNIA RPS PROGRAM**

California's Renewable Portfolio Standard ("RPS") Program was adopted in 2002 and is codified at Public Utility Code sec 399.11, et seq.<sup>5</sup> In adopting the RPS legislation, the Legislature specifically found and declared that increasing California's reliance on renewable energy resources promotes the purpose of and may accomplish each of the following:

- Increase the diversity, reliability, public health and environmental benefits of the energy mix
- Promote stable electricity prices
- Protect public health and improve environmental quality
- Stimulate sustainable economic development and create new employment opportunities
- Reduce reliance on imported fuels
- Ameliorate air quality problems
- Improve public health by reducing the burning of fossil fuels

Current law requires retail sellers to procure renewable energy in the amount of 60% of retail sales by 2030.<sup>6</sup> Unlike the prior annual RPS program, the 60% regime sets increasing targets for multi-year Compliance Periods ("CPs"). The CPUC issued its first decision implementing the RPS Program, D.03-06-071 on June 19, 2003. This decision established certain basic RPS Program parameters. The CPUC has subsequently issued several additional RPS-related decisions in rulemaking proceeding R.04-04-026, and successor proceedings R.06-02-012, R.06-05-027, R.08-08-009, R.11-05-005, R.15-02-020, and R.18-07-003. SDG&E will comply with all CPUC decisions governing RPS procurement. These decisions are publicly available on the CPUC's website at: <a href="https://www.cpuc.ca.gov/RPS">https://www.cpuc.ca.gov/RPS</a> Overview/

#### **RPS ELIGIBILITY CRITERIA**

Resources being offered in this solicitation are certifiable as an "eligible renewable resource" by the CEC. Eligibility criteria are set forth by the CEC in its Renewable Portfolio Standard Eligibility Guidebook, which can be downloaded from the CEC's website at <a href="http://www.energy.ca.gov/renewables/documents/index.html">http://www.energy.ca.gov/renewables/documents/index.html</a>. Respondents are encouraged to review all RPS-related, CEC issued directives available on the same Internet website and are responsible for understanding and abiding by all RPS provisions. All requirements set forth within the CEC's guidebooks and all RPS-related documents shall be incorporated herein by reference.

<sup>&</sup>lt;sup>5</sup> See, Senate Bill (SB) 1078 (Stats. 2002 Ch. 516), as amended by SB 107, (Stats. 2006, Ch. 464).

<sup>&</sup>lt;sup>6</sup> See, Senate Bill (SB) 100.

#### PROCUREMENT REVIEW GROUP

The Procurement Review Group ("PRG"), a CPUC-endorsed entity, is composed of non-market participants such as ratepayers' advocacy groups, state energy commissions, power authorities, utility-related labor unions and other non-commercial, energy-related special interest groups. CPUC Decision D.03-06-071 established the role of the PRG. The PRG is charged with overseeing the IOU's procurement process, reviewing procedural fairness, examining overall procurement prudence and providing feedback during all stages. From RFP language development to offer evaluation to contract negotiation, IOUs brief the PRG on a periodic basis during the entire process.

Respondents are hereby notified that revealing confidential offer information to the PRG is required during PRG briefings in accordance with Section 11 ("Confidentiality"). Each Respondent must clearly identify, as part of its offer, what type of information it considers to be confidential.

#### INDEPENDENT EVALUATOR

The CPUC requires each IOU to use an Independent Evaluator to separately evaluate and report on the IOU's entire solicitation, evaluation, and selection process for this solicitation. This will serve as an independent review of SDG&E's implementation of the RFP process and final selections. The Independent Evaluator shall make periodic presentations regarding its findings to the IOU, and the IOU's PRG including the CPUC Energy Division staff. The intent is to preserve the independence of the Independent Evaluator by ensuring free and unfettered communication between the Independent Evaluator and the CPUC as well as an open, fair, and transparent process that the Independent Evaluator can affirm.

SDG&E is committed to ensuring an open and transparent solicitation, and to providing a fair, reasonable and competitive process.

#### 6.0 SDG&E BACKGROUND

<u>SDG&E</u> is a regulated public utility that provides clean, safe and reliable energy service to 3.7 million consumers through 1.5 million electric meters and 900,000 natural gas meters in San Diego and southern Orange counties. The utility's area spans 4,100 square miles. SDG&E is committed to creating ways to help customers save energy and money every day. SDG&E is a subsidiary of <u>Sempra Energy</u> (NYSE: SRE), a Fortune 500 energy services holding company based in San Diego. Connect with SDG&E's Customer Contact Center at 800-411-7343, on Twitter (@SDGE) and Facebook.



For a map California IOU service territories please visit:

http://www.energy.ca.gov/maps/serviceareas/electric service areas.html

#### 7.0 PRODUCTS & ELIGIBILITY REQUIREMENTS

#### A. Compliance Periods.

In this RFP, SDG&E intends to offer bundled and unbundled RECs for the periods defined in Table 2 of this document. Such products are defined below.

#### I. Bundled Energy Products (Bundled Firm and Bundled Unit Contingent)

a. Term: 10 years or less

b. Pricing: Index Price plus Green Attributes Price \$/MWh

c. Volume: To be bid in

#### II. Unbundled REC Products (Unbundled Firm and Unbundled Unit Contingent)

a. Term: One-time transfer or recurring unit contingent transfers during specified term up to 10 years to designated WREGIS Account

b. Pricing: Bid REC price expressed in \$/MWh

c. Volume: To be bid in

#### **Eligibility Requirements**

1. WREGIS Account; and

2. Credit Capability (See Section 12.0 "Credit Terms and Conditions").

#### 8.0 EVALUATION CRITERIA AND SHORTLISTING

All incoming Bids will be assessed for conformance to the RFP requirements. Respondents shall conform to the minimum eligibility criteria in order to be considered, please see RFP Response Instructions.

SDG&E will utilize all the information provided in the required forms and narratives to evaluate all Bids. Respondents are responsible for the accuracy of all information provided in response to this RFP.

SDG&E will periodically brief the members of the PRG during the various stages of evaluation. Upon completion of SDG&E's evaluation process, SDG&E will brief the PRG members regarding SDG&E's recommendations for its shortlist. Based upon the comments and recommendations received from the PRG, SDG&E may modify the preliminary list of shortlisted bids.

#### QUANTITATIVE EVALUATION

SDG&E evaluates and ranks bids based on the pricing, volume and term information provided by the Bidders. SDG&E's analysis evaluates both quantitative and qualitative aspects of each bid to estimate its value to SDG&E's customers and its relative value in comparison to other Offers. SDG&E considers the value of selling Renewable Energy as compared to the potential value of using such Renewable Energy to defer future RPS purchases to meet RPS compliance targets through REC banking. The quantitative valuation of an Offer takes into account SDG&E's RPS position and any opportunity costs associated with each transaction. A bid that minimizes overall cost to SDG&E's customers and satisfies all volumetric and timing constraints will be selected. The Offer will be shortlisted if it fulfills the quantitative and qualitative criteria and SDG&E decides to move forward to close a transaction.

#### **QUALITATIVE EVALUATION**

Qualitative factors and benefits may be used to determine advancement onto the shortlist or evaluate tie-breakers, if any. In addition, SDG&E analyzes the qualitative aspects of each conforming offer to establish how well the offer satisfies priorities set out by the CPUC, including supplier diversity. SDG&E strongly encourages Diverse Business Enterprises ("DBEs"), Women-Owned, Minority-Owned, Disabled Veteran-Owned, Lesbian-Owned, Gay-Owned, Bisexual-Owned and/or Transgender-Owned Business Enterprises ("WMDVLGBTBEs") as defined in G.O. 156, to participate in this RFO. Furthermore, SDG&E strongly encourages developers to utilize DBEs during various stages of project development and construction. As a part of G.O. 156, SDG&E will require developers to identify, verify and report their DBE contractors/subcontractor spending if any. Additional information on SDG&E's DBE program can be found at: <a href="https://www.sdge.com/more-information/doing-business-with-us/supplier-diversity">https://www.sdge.com/more-information/doing-business-with-us/supplier-diversity</a>.

#### ADHERENCE TO TERMS AND CONDITIONS

Respondents may not make material modification(s) to the supplied Transaction Documents. SDG&E will review modifications of any terms and conditions proposed in the Offer and consider the materiality of these changes. Material changes will result in disqualification.

#### **BID CONFORMANCE EVALUATION**

In addition to the elements described above, SDG&E may also reject a Bid if:

- 1. SDG&E uncovers evidence of market manipulation in the bid preparation and Offer process:
- 2. The Respondent does not provide adequate evidence it meets minimum participation criteria;
- 3. If there is a question as to whether the bids meet minimum eligibility criteria;
- 4. If the Respondent cannot fulfill the terms and conditions of the supplied Transaction Documents;
- 5. If the Respondent is unable to comply with RFP timing and other solicitation requirements; and/or
- 6. Respondent in SDG&E's sole judgment may not be able to provide or maintain the level of security of the transaction.

#### 9.0 REJECTION OF OFFERS

WHILE SDG&E IS MINDFUL OF THE BENEFITS OF THIS RFP, IT MAKES NO GUARANTEE THAT A CONTRACT AWARD SHALL RESULT FROM THIS RFP EVEN AFTER A BID HAS BEEN SHORTLISTED. IN ADDITION, SDG&E NOTES THAT SHORTLISTING A BID DOES NOT CONSTITUTE SDG&E ACCEPTANCE OF ALL REDLINED CHANGES TO THE REQUIRED TRANSACTION AGREEMENT. SDG&E RESERVES THE RIGHT AT ANY TIME, AT ITS SOLE DISCRETION, TO ABANDON THIS RFP PROCESS, TO CHANGE THE BASIS FOR EVALUATION OF BIDS, TO TERMINATE FURTHER PARTICIPATION IN THIS PROCESS BY ANY PARTY, TO ACCEPT ANY BID OR TO ENTER INTO ANY DEFINITIVE AGREEMENT, TO EVALUATE THE QUALIFICATIONS OF ANY RESPONDENT OR THE TERMS AND CONDITIONS OF ANY BID, OR TO REJECT ANY OR ALL BIDS, ALL WITHOUT NOTICE AND WITHOUT ASSIGNING ANY REASONS AND WITHOUT LIABILITY OF SEMPRA ENERGY, SDG&E, OR ANY OF THEIR SUBSIDIARIES, AFFILIATES, OR REPRESENTATIVES TO ANY RESPONDENT. SDG&E SHALL HAVE NO OBLIGATION TO CONSIDER ANY BID.

#### 10.0 CONFIDENTIALITY

EXCEPT AS STATED BELOW OR WITH THE PRIOR WRITTEN CONSENT OF SDG&E, RESPONDENTS MAY NOT DISCLOSE (OTHER THAN BY ATTENDANCE ALONE AT ANY MEETING TO WHICH MORE THAN ONE RESPONDENT IS INVITED BY SDG&E) TO ANY OTHER RESPONDENT OR POTENTIAL RESPONDENT THEIR PARTICIPATION IN THIS RFP, AND RESPONDENTS MAY NOT DISCLOSE, COLLABORATE ON, OR DISCUSS WITH ANY OTHER RESPONDENT, OFFER STRATEGIES OR THE SUBSTANCE OF OFFERS, INCLUDING WITHOUT LIMITATION THE PRICE OR ANY OTHER TERMS OR CONDITIONS OF ANY INDICATIVE OR FINAL OFFER. RESPONDENT MAY DISCLOSE THEIR PARTICIPATION IN THIS RFP, THEIR OFFER INFORMATION, AND THE NEGOTIATION PROCESS, TO THE CPUC, ITS STAFF, THE PRG AND THE IE UNDER APPROPRIATE CONFIDENTIALITY PROTECTIONS.

SDG&E WILL USE THE HIGHER OF THE SAME STANDARD OF CARE IT USES WITH RESPECT TO ITS OWN PROPRIETARY OR CONFIDENTIAL INFORMATION OR A REASONABLE STANDARD OF CARE TO PREVENT DISCLOSURE OR UNAUTHORIZED USE OF RESPONDENT'S CONFIDENTIAL AND PROPRIETARY INFORMATION THAT IS LABELED AS "PROPRIETARY AND CONFIDENTIAL" ON THE OFFER PAGE ON WHICH THE PROPRIETARY INFORMATION APPEARS ("CONFIDENTIAL INFORMATION"). RESPONDENT SHALL SUMMARIZE ELEMENTS OF THE OFFER(S) IT DEEMS CONFIDENTIAL. THE SUMMARY MUST CLEARLY IDENTIFY WHETHER PRICE, PROJECT NAME, LOCATION, SIZE, TERM OF DELIVERY AND TECHNOLOGY TYPE (EITHER COLLECTIVELY OR INDIVIDUALLY) ARE TO BE CONSIDERED CONFIDENTIAL INFORMATION. CONFIDENTIAL INFORMATION MAY BE MADE AVAILABLE ON A "NEED TO KNOW" BASIS TO SDG&E'S DIRECTORS, OFFICERS, EMPLOYEES, CONTRACTORS, CONSULTANTS, THE INDEPENDENT EVALUATOR, AGENTS AND ADVISORS ("REPRESENTATIVES") FOR THE PURPOSE OF EVALUATING RESPONDENT'S OFFER, BUT SUCH REPRESENTATIVES SHALL BE REQUIRED TO OBSERVE THE SAME CARE WITH RESPECT TO DISCLOSURE AS SDG&E.

NOTWITHSTANDING THE FOREGOING, SDG&E MAY DISCLOSE ANY OF THE CONFIDENTIAL INFORMATION TO COMPLY WITH ANY LAW, RULE, OR REGULATION OR ANY ORDER, DECREE, SUBPOENA OR RULING OR OTHER SIMILAR PROCESS OF ANY COURT, SECURITIES EXCHANGE, CONTROL AREA OPERATOR, GOVERNMENTAL AGENCY OR GOVERNMENTAL OR REGULATORY AUTHORITY AT ANY TIME EVEN IN THE ABSENCE OF A PROTECTIVE ORDER, CONFIDENTIALITY AGREEMENT OR NON-DISCLOSURE AGREEMENT, AS THE CASE MAY BE, WITHOUT NOTIFICATION TO THE RESPONDENT AND WITHOUT LIABILITY OR ANY RESPONSIBILITY OF SDG&E TO THE RESPONDENT.

IT IS EXPRESSLY CONTEMPLATED THAT MATERIALS SUBMITTED BY A RESPONDENT IN CONNECTION WITH THIS RFP WILL BE PROVIDED TO THE CPUC, ITS STAFF, THE CEC, ITS STAFF, AND THE PRG. SDG&E WILL SEEK CONFIDENTIAL TREATMENT PURSUANT TO CPUC DECISION NUMBER 06-06-066 AND ITS SUCCESSIVE DECISIONS, PUBLIC UTILITIES CODE SECTION 583 AND

GENERAL ORDER 66-D OF THE CPUC, WITH RESPECT TO ANY RESPONDENT CONFIDENTIAL INFORMATION SUBMITTED BY SDG&E TO THE CPUC FOR THE PURPOSES OF OBTAINING REGULATORY APPROVAL. SDG&E WILL ALSO SEEK CONFIDENTIALITY PROTECTION FROM THE CEC FOR RESPONDENT'S CONFIDENTIAL INFORMATION AND WILL SEEK CONFIDENTIALITY AND/OR NON-DISCLOSURE AGREEMENTS WITH THE PRG. SDG&E CANNOT, HOWEVER, ENSURE THAT THE CPUC OR CEC WILL AFFORD CONFIDENTIAL TREATMENT TO A RESPONDENT'S CONFIDENTIAL INFORMATION OR THAT CONFIDENTIALITY AGREEMENTS OR ORDERS WILL BE OBTAINED FROM AND/OR HONORED BY THE PRG, CEC, OR CPUC.

SDG&E, ITS REPRESENTATIVES, SEMPRA ENERGY, AND ANY OF THEIR SUBSIDIARIES DISCLAIM ANY AND ALL LIABILITY TO A RESPONDENT FOR DAMAGES OF ANY KIND RESULTING FROM DISCLOSURE OF ANY OF RESPONDENT'S INFORMATION.

#### 11.0 CREDIT TERMS AND CONDITIONS

SDG&E has the unilateral right to evaluate and determine the credit-worthiness of the Respondent relative to this RFP. The Respondent is required to complete, execute and submit the RFP credit application as part of its offer. The application requests financial and other relevant information needed to demonstrate creditworthiness. Respondents may download the application from the RFP Website.

All credit support arrangements (e.g., parent guaranty letter of credit, or cash) must be negotiated prior to an offer being accepted as a winning offer. The form of the security (e.g. parent guaranty, letter of credit, or cash) will be at SDG&E's sole discretion and will depend on various factors including Respondent's credit-worthiness, product type, the volume and the term of the agreement. A guaranty template and a letter of credit template may be downloaded from the RFP Website as separate attachment to the Transaction Document.

#### 12.0 CPUC APPROVAL

SDG&E may, in its sole discretion, submit all signed agreements to the CPUC for approval. CPUC approval that is final and non-appealable will be required as a condition precedent to the effective date of any contract resulting from this RFP. Deliveries under any contract will not start prior to CPUC approval.

# Appendix 12 RPS Sales Model PPA (Bundled Product)



# WSPP AGREEMENT CONFIRMATION BETWEEN SAN DIEGO GAS & ELECTRIC COMPANY AND [INSERT NAME]

This confirmation letter ("Confirmation") confirms the transaction ("Transactio	n") between <b>San Diego</b>
Gas & Electric Company ("Seller" or "SDG&E" "Party B") and	("Buyer" or "Party A"),
each individually a "Party" and together the "Parties", effective as of	, 2018 (the
"Confirmation Effective Date"). This Transaction is governed by the WSPP Agr	reement effective as of
June 21, 2018 (the "Master Agreement"), along with any amendments a	and annexes executed
between the Parties thereto (the "Master Agreement"). The Master Agreemen	t and this Confirmation
shall be collectively referred to herein as the "Agreement." Capitalized terms of	used but not otherwise
defined in this Confirmation have the meanings ascribed to them in the Maste	er Agreement, Tariff or
RPS (as defined below). If any term in this Confirmation conflicts with the N	Master Agreement, the
definitions set forth in this Confirmation shall supersede.	

#### **CONTACT INFORMATION**

Contact	Name: [INSERT] (" <u>Buyer</u> ")	Name: San Diego Gas & Electric Company
Information:		(" <u>Seller</u> ")
	All Notices:	All Notices:
		San Diego Gas & Electric Company
	Attn:	8315 Century Park Court
	Phone:	San Diego, CA Zip: 92123
	Facsimile:	Attn: Electric & Fuel Procurement
	Duns:	Contract Administration
	Federal Tax ID Number:	Phone: (858) 650-5536
		Facsimile: (858) 650-6190
		Duns: 006911457
		Federal Tax ID Number: 95-1184800
	Invoices:	Invoices:
		San Diego Gas & Electric Company
		8315 Century Park Ct.
		San Diego, California 92123-1593
		Attn: Energy Accounting Manager
		Phone: (858) 650-6177
		Facsimile: (858) 650-6190
	Wire Transfer:	Wire Transfer:
		BNK: Union Bank of California
		for: San Diego Gas & Electric Company
		ABA: Routing # 122000496
		ACCT: #4430000352
		Confirmation: SDG&E, Major Markets
		FAX:(213) 244-8316

Draft: for discussion purposes only.

Credit and Collections:	Credit and Collections:
	San Diego Gas & Electric Company, Major
	Markets
	555 W. Fifth Street, ML 10E3
	Los Angeles, CA 90013-1011
	Attn.: Major Markets, Credit and
	Collections Manager
	Fax No.: (213) 244-8316
	Phone: (213) 244-4343
Defaults:	Defaults:
With additional Notices of an Event	With additional Notices of an Event of
of Default or Potential Event of	Default or Potential Event of Default to:
Default to:	San Diego Gas & Electric Company
	8330 Century Park Ct.
	San Diego, California 92123
	Attn: General Counsel
	Phone: (858) 650-6141
	Facsimile: (858) 650-6106
	<b>Defaults:</b> With additional Notices of an Event of Default or Potential Event of

#### **ARTICLE 1. COMMERCIAL TERMS**

The Parties hereby agree that the General Terms and Conditions are incorporated herein, and to the following provisions as provided for in the General Terms and Conditions:

Product:	The "Product" is <i>[for Firm deliveries:</i> Firm Delivery; <i>for As-available deliveries:</i> As-Available Delivery <i>]</i> Obligation electric energy and associated Green Attributes in the Contract Quantity.  During the Delivery Period, Seller shall deliver and sell, and Buyer shall purchase and receive, this Product, subject to the terms and conditions of this Confirmation. Seller shall not substitute or purchase any Green Attributes from any generating resource other than the Project for delivery hereunder.
Project:	All Product sold hereunder shall be from one or more of the facilities, each meeting the requirement of 6.1(a) and as listed in Exhibit A, as may be updated from time to time by written notice from Seller to Buyer (collectively, the "Project"). The Project from which Product is sold by Seller to Buyer shall: (a) have a first point of interconnection with a California balancing authority, (b) have a first point of interconnection with distribution facilities used to serve end users within a California balancing authority area, or (c) be scheduled from the eligible renewable energy resource into a California balancing authority without substituting electricity from another source.  [for Firm deliveries: The Parties acknowledge and agree that the Project consists of a pool of facilities and that Seller is permitted to utilize one or more of those
	of a pool of facilities and that Seller is permitted to utilize one or more of these pooled facilities in order to satisfy its obligations hereunder.  The Parties further acknowledge and agree that, with respect to Section 3 of this Confirmation, Product shall solely be limited to the actual Product generated and delivered by the pooled facilities used to satisfy the Contract Quantity, and that Buyer is not entitled to any additional Product produced by the pooled facilities in the Project above and beyond the Contract Quantity.
Contract Capacity	In any hour throughout the Delivery Term, the "Contract Capacity" shall be, in MW, as determined by Seller in accordance with the Contract Quantity section of this Confirmation.
Contract Quantity:	[for Firm deliveries: "Contract Quantity" shall be equal to [] MWhs per calendar [select: month / year] for a total of [] MWhs during the Delivery Period. In the event Seller does not deliver any of the above specified quantities in a particular calendar month for any reason, except as excused by Uncontrollable Force, the Parties shall agree upon the make-up schedules for any undelivered quantities. If the Parties are unable to come to agreement on such make-up schedule, Buyer shall deliver the quantities to Seller in a reasonable manner and within a reasonable time.]
	[for As-available deliveries: "Contract Quantity" shall be [all output from the Project [up to INSERT] [for RPS sales of portions or "slices" of portfolio: multiplied by [X]%], unless excused pursuant to the definition of As-Available Delivery Obligation below. Seller in its sole discretion shall determine the hourly Contract

	Quantity during the Delivery Period.]
Contract Price:	Index Price plus Green Attributes Price
Index Price:	"Index Price" means the CAISO Integrated Forward Market Day-Ahead price (as such term is defined in the Tariff) for [SP15/NP-15] for each applicable hour as published by the CAISO on the CAISO website; or any successor thereto, unless a substitute publication and/or index is mutually agreed to by the Parties.
Green Attributes Price:	\$[ <b>xx.xx</b> ] / MWh
Term:	The "Term" of this Transaction shall commence upon the Confirmation Effective Date and shall continue until delivery by Seller to Buyer of the Contract Quantity of the Product has been completed and all other obligations of the Parties under this Agreement have been satisfied, unless terminated earlier due to failure to satisfy the Condition Precedent or as otherwise provided in the Agreement.
Delivery Period:	The "Delivery Period" of this Transaction shall commence on [MM/DD/YYYY] (the "Start Date"), and continue until midnight on [MM/DD/YYYY]; provided that if CPUC Approval is not received by the Start Date above, then the Start Date shall be the first day of the calendar month following the calendar month in which the Condition Precedent Satisfaction Date occurs [If applicable: and shall continue until midnight on the last day of the month in which the [#] anniversary of the Start Date, unless extended for make-up deliveries as specified in the Contract Quantity Section or terminated in accordance with the terms herein]].
Delivery Point:	The "Delivery Point" is <i>[insert EZ Gen Hub]</i> .
[Firm; As-	[for Firm deliveries: "Firm Delivery Obligation" shall mean the obligation to provide the Contract Quantity is a firm obligation in that Seller shall deliver the quantity of the Product from the Project, instantaneously with its receipt of such Product, consistent with the terms of this Confirmation without excuse other than Uncontrollable Force. If a failure by Seller to deliver the quantity from the Project is not excused by Uncontrollable Force, Seller shall make up such failure in accordance with the "Contract Quantity" Section.]
Available] Delivery Obligation:	[for As-available deliveries: "As-Available Delivery Obligation" shall mean the obligation to provide the Contract Quantity is an as-available obligation in that Seller shall deliver the quantity of the Product from the Project, instantaneously with its receipt of such Product, consistent with the terms of this Confirmation. Seller's failure to deliver shall be excused, and Seller shall have no obligation to make up or replace any failure of the Facility to generate and deliver the quantity from the Project: if (i) the Project is unavailable as a result of a Scheduled or Forced Outage, (ii) by an event or circumstance that affects the Project so as to prevent Seller from performing its obligations, which event or circumstance was not anticipated as of the date the Transaction was agreed to, and which is not within

the reasonable control of, or the result of the negligence of, the Seller, (iii) by Buyer's failure to perform, or (iv) by [SELECT APPLICABLE FUEL: [the unavailability of landfill gas which was not anticipated as of the Execution Date, which is not within the reasonable control of, or the result of negligence of, Seller or the party supplying such landfill gas to the Project, and which by the exercise of reasonable due diligence, Seller is unable to overcome or avoid or causes to be avoided.] OR [insufficient wind power for the Project to generate energy as determined by the best wind speed and direction standards utilized by other wind producers or purchasers in the vicinity of the Project or if wind speeds exceed the Project's technical specifications.] OR [the unavailability of water or the unavailability of sufficient pressure required for operation of the hydroelectric turbine-generator as reasonably determined by Seller within its operating procedures, neither of which was anticipated as of the Execution Date, which is not within the reasonable control of, or the result of negligence of, Seller or the party supplying such water to the Project, and which by the exercise of due diligence, such Seller or the party supplying the water is unable to overcome or avoid or causes to be avoided.] OR [insufficient solar power for the Project to generate energy as determined by the best solar standards utilized by other solar producers or purchasers in the vicinity of the Project] OR [a reduction or insufficiency of biomass that causes a reduction or cessation of generation of electric energy by the Project].]

## Scheduling Obligations:

Seller, or a qualified third party designated by Seller, shall act as Scheduling Coordinator. Buyer hereby authorizes Seller, or its third-party Scheduling Coordinator designee, to deliver the Product, or cause the Product to be delivered, to the CAISO at the Delivery Point.

### Condition Precedent:

The commencement of the Delivery Period in accordance with Section 3 below shall be contingent upon the Seller obtaining or waiving CPUC Approval of this Confirmation. Either Party has the right to terminate this Confirmation upon notice in accordance with Section 12 of the WSPP Agreement, which will be effective five (5) Business Days after such notice is given, if: (i) the CPUC does not issue a final and non-appealable order approving this Agreement or the requested relief contained in the related advice letter filing, both in their entirety, (ii) the CPUC issues a final and non-appealable order which contains conditions or modifications unacceptable to either Party, or (iii) the final and non-appealable CPUC Approval has not been obtained by Seller, on or before *[INSERT DEADLINE DATE]*.

The date on which CPUC Approval of this Confirmation has been obtained or waived, by Seller, in its sole discretion, shall hereinafter be the "Condition Precedent Satisfaction Date."

Any termination made by a Party under this section shall be without liability or obligation to the other Party.

Notwithstanding any other provision in this Confirmation, Seller will have no obligation to transfer Green Attributes to Purchaser unless the Condition Precedent Satisfaction Date has occurred.

#### **ARTICLE 2. DEFINITIONS**

"Renewables Portfolio Standard" or "RPS" means the renewable energy program and policies established by California State Senate Bills 1078, X1 - 2 and 350, codified in California Public Utilities Code Sections 399.11 through 399.32 and California Public Resources Code Sections 25740 through 25751, as such provisions are amended or supplemented from time to time.

"Condition Precedent Satisfaction Date" means the date on which CPUC Approval, as fully described in the "Condition Precedent" provision, has been obtained or waived, by Seller, in its sole discretion.

"CPUC" means the California Public Utilities Commission or its regulatory successor.

"CPUC Approval" means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to the Parties, or either of them, which approves this Agreement in its entirety, subject to CPUC review of the Seller's administration of the Agreement.

CPUC Approval will be deemed to have occurred on the date that a CPUC decision containing such findings becomes final and non-appealable.

Notwithstanding the foregoing, if a Tier 2 or Tier 3 advice letter process is used to obtain CPUC Approval of this Agreement, CPUC Approval will also be deemed to have occurred on the date that a CPUC Energy Division disposition which contains such findings or deems approved an advice letter requesting such findings becomes final and non-appealable.

"Day-Ahead" has the meaning set forth in the Tariff.

**[for As-available deliveries:** "Forced Outage" means any unplanned reduction or suspension of production of Product from the Project or unavailability of the Project or transmission facilities in whole or in part that is not a Planned Outage or a willful withholding of Product when the Project is otherwise capable of delivering Product under Good Industry Practices.**]** 

"Delivery Period" means "Delivery Term".

"Designated Contract Capacity" means the amount determined by Seller in accordance with the Scheduling Obligations section of this Confirmation.

"Governmental Authority" means any federal, state, local or municipal government, governmental department, commission, board, bureau, agency, or instrumentality, or any judicial, regulatory or administrative body, having jurisdiction as to the matter in question.

"Green Attributes" means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Project, and its avoided emission of pollutants. Green Attributes include but are not limited to Renewable Energy Credits, as well as:

- (i) any avoided emission of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants;
- (ii) any avoided emissions of carbon dioxide (CO2), methane (CH4), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental

<sup>&</sup>quot;Buyer" means "Purchaser".

<sup>&</sup>quot;CAISO" means the California Independent System Operator.

<sup>&</sup>quot;CAISO Energy" means "Energy" as defined in the Tariff.

- Panel on Climate Change, or otherwise by law, to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere;<sup>1</sup>
- (iii) the reporting rights to these avoided emissions, such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of a Green Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state law, if applicable, and to a federal or state agency or any other party at the Green Tag Purchaser's discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local law, regulation or bill, and international or foreign emissions trading program. Green Tags are accumulated on a MWh basis and one Green Tag represents the Green Attributes associated with one (1) MWh of Energy.

#### Green Attributes do not include;

- (i) any energy, capacity, reliability or other power attributes from the Project,
- (ii) production tax credits associated with the construction or operation of the Project and other financial incentives in the form of credits, reductions, or allowances associated with the Project that are applicable to a state or federal income taxation obligation,
- (iii) fuel-related subsidies or "tipping fees" that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or
- (iv) emission reduction credits encumbered or used by the Project for compliance with local, state, or federal operating and/or air quality permits.

If the Project is a biomass or biogas facility and Seller receives any tradable Green Attributes based on the greenhouse gas reduction benefits or other emission offsets attributed to its fuel usage, it shall provide Buyer with sufficient Green Attributes to ensure that there are zero net emissions associated with the production of electricity from the Project.

"Integrated Forward Market" has the meaning set forth in the Tariff.

**[for As-available deliveries:** "Planned Outage" means any planned reduction or suspension of the electrical output from the Project or unavailability of the Project or the transmission facilities, in whole or in part as a result of the inspection, maintenance, or repair of equipment.]

"Tariff" means the tariff and protocol provisions, including any current CAISO-published "Operating Procedures" and "Business Practice Manuals," as amended or supplemented from time to time, of the CAISO.

"Vintage" means the calendar year and month during the Delivery Period in which the WREGIS Certificate is created through the generation of the Product.

"WREGIS" means the Western Renewable Energy Generation Information System or other process recognized under applicable laws for the registration, transfer or ownership of Green Attributes.

"WREGIS Certificate" means "Certificate" as defined by WREGIS in the WREGIS Operating Rules.

Avoided emissions may or may not have any value for GHG compliance purposes. Although avoided emissions are included in the list of Green Attributes, this inclusion does not create any right to use those avoided emissions to comply with any GHG regulatory program.

"WREGIS Operating Rules" means the operating rules and requirements adopted by WREGIS.



#### **ARTICLE 3.** CONVEYANCE OF RENEWABLE ENERGY

#### 3.1. Seller's Conveyance Of Electric Energy

Except as stated in this Section 3.1 and beginning on the first day of the Delivery Period and throughout all applicable months of the Delivery Period, Seller shall deliver and sell, and Buyer shall purchase and receive, the Product, subject to the terms and conditions of this Confirmation. Seller will not be obligated to sell or replace any Product that is not or cannot be delivered as a result of Uncontrollable Force.

Should any electric energy provided by Seller under this Confirmation be determined to have originated from a resource other than the Project, Seller shall remedy such failure in a manner reasonably acceptable to Buyer within a reasonable period of time after written notice of such failure is given to the Seller by the Buyer.

#### 3.2. Seller's Conveyance Of Green Attributes

(a) <u>Green Attributes.</u> Seller hereby provides and conveys all Green Attributes associated with all electricity generation from the Project to Buyer as part of the Product being delivered. Seller represents and warrants that Seller holds the rights to all Green Attributes from the Project, and Seller agrees to convey and hereby conveys all such Green Attributes to Buyer as included in the delivery of the Product from the Project. The Green Attributes are delivered and conveyed upon completion of all actions described in Section 3.2(b) below.

#### (b) Green Attributes Initially Credited to Seller's WREGIS Account

- (i) During the Delivery Period, Seller, at its own cost and expense, shall maintain its registration with WREGIS. All Green Attributes transferred by Seller hereunder shall be designated California RPS-compliant with WREGIS. Seller shall, at its sole expense, use WREGIS as required pursuant to the WREGIS Operating Rules to effectuate the transfer of Green Attributes to Buyer in accordance with WREGIS reporting protocols and WREGIS Operating Rules.
- (ii) For each applicable month of the Delivery Period, Seller shall deliver and convey the Green Attributes associated with the electric energy delivered in Section 3.1 within five (5) Business Days after the end of the month in which the WREGIS Certificates for the Green Attributes are created by properly transferring such WREGIS Certificates, in accordance with the rules and regulations of WREGIS, equivalent to the quantity of Green Attributes to Purchaser into Purchaser's WREGIS account such that all right, title and interest in and to the WREGIS Certificates shall transfer from Seller to Purchaser.
- (iii) In addition to its other obligations under this Section 3.2, Seller shall convey to Buyer WREGIS Certificates from the Project that are of the same Vintage as the Product that was provided under Section 3.1 of this Confirmation.

#### **ARTICLE 4. PERFORMANCE ASSURANCE; CPUC FILING AND APPROVAL**

#### 4.1. Performance Assurance

- (a) To secure its obligations under this Agreement, Buyer agrees to deliver to Seller and maintain in full force and effect Performance Assurance in the amount of **\$[INSERT AMOUNT]** in the form of cash or a Letter of Credit from the Execution Date and for the Delivery Term of this Agreement.
- Buyer hereby grants to Seller a present and continuing first priority security interest in, and lien on (and right of setoff against), and assignment of, all cash collateral and cash equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, Seller, and each Party agrees to take such action as the other Party reasonably requires in order to perfect the Seller's first-priority security interest in, and lien on (and right of setoff against), such collateral and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence and during the continuation of an Event of Default by Seller or an Early Termination Date as a result thereof, Seller may do any one or more of the following: (i) exercise any of the rights and remedies of a secured party with respect to all Performance Assurance, including any such rights and remedies under Law then in effect; (ii) exercise its rights of setoff against such collateral and any and all proceeds resulting therefrom or from the liquidation thereof; (iii) draw on any outstanding Letter of Credit issued for its benefit; and (iv) liquidate all or any portion of any Performance Assurance then held by or for the benefit of Seller free from any claim or right of any nature whatsoever of Buyer, including any equity or right of purchase or redemption by Buyer. Seller shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce the Buyer's obligations under the Agreement (Buyer remaining liable for any amounts owing to Seller after such application), subject to Seller's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.
- (c) Upon an Event of Default of Buyer prior to CPUC Approval, Seller may terminate this Agreement in which case Buyer shall owe Seller liquidated damages in the amount of the Performance Assurance and Seller may retain such Performance Assurances to pay such liquidated damages. Each Party agrees and acknowledges that (a) the actual damages that Buyer would incur due to an Event of Default of Buyer prior to CPUC Approval would be difficult or impossible to predict with certainty, (b) the liquidated damages set forth in this section are a reasonable and appropriate approximation of such damages, and (c) the liquidated damages set forth in this section are the exclusive remedy for an Event of Default of Seller prior to CPUC Approval.
  - (d) [NOTE ADDITIONAL CREDIT TERMS TO BE INSERTED DEPENDING ON LENGTH OF TERM, ETC.]

#### 4.2. CPUC Filing and Approval

Within *[INSERT]* days after the Confirmation Effective Date, Seller shall file with the CPUC the appropriate request for CPUC Approval of this Agreement and possibly other agreements. Seller shall seek CPUC Approval of the filing, including promptly responding to any requests for information related to the request for CPUC Approval. Buyer shall use commercially reasonable efforts to support Seller in obtaining CPUC Approval. Seller and Buyer have no obligation to seek rehearing or to appeal a CPUC decision which fails to approve this Agreement, or which fails to meet the requirements contained in the Condition Precedent section. Notwithstanding anything to the contrary in the Confirmation, Seller shall not have any obligation or liability to Buyer or any third party for any action or inaction of the CPUC or other Governmental Authority affecting the approval or status of this Confirmation as a transaction eligible for portfolio content category, as defined in California Public Utilities Code Section 399.16(b)(1).



#### **ARTICLE 5. COMPENSATION**

#### 5.1. Calculation Period

The "Calculation Period" shall be each calendar month, or portion thereof, during the Delivery Period.

#### 5.2. Monthly Cash Settlement Amount

Purchaser shall pay Seller the Monthly Cash Settlement Amount, in arrears, for each Calculation Period in the amount equal to the sum (a) plus (b) minus (c), where:

- (a) equals the sum, over all hours of the Calculation Period, of the applicable Index Price for each hour, multiplied by the quantity of CAISO Energy scheduled, delivered and received by Purchaser pursuant to Section 3.1 during that hour; and
- (b) equals the product of the Green Attributes Price multiplied by the quantity of Green Attributes (in MWhs) delivered or credited to Purchaser's WREGIS account pursuant to Section 3.2 during the applicable Calculation Period; and
- (c) equals the sum, over all hours of the Calculation Period, of the applicable Index Price for each hour, multiplied by the quantity of CAISO Energy scheduled, delivered and received by Purchaser pursuant to Section 3.1 during that hour.

#### 5.3. Payment Date

Notwithstanding any provision to the contrary in Section 9.2 of the Master Agreement, payments of each Monthly Cash Settlement Amount by Purchaser to Seller under this Confirmation shall be due and payable on or before the later of the twentieth (20<sup>th</sup>) day of the month in which the Purchaser receives from Seller an invoice for the Calculation Period to which the Monthly Cash Settlement Amount pertains, or within ten (10) Business Days, or, if such day is not a Business Day, then on the next Business Day, following receipt of an invoice issued by Seller for the applicable Calculation Period. The invoice shall include a statement detailing the portion of Product transferred to Purchaser during the applicable Calculation Period.

Invoices to Buyer will be sent by Excel/PDF format via email to Buyer's Invoice Contact set forth above in Contact Information, and for purposes of this Confirmation, Buyer shall be deemed to have received an invoice upon the receipt of the Excel/PDF format of the invoice. Payment to Seller shall be made by electronic funds transfer pursuant to the Wire Transfer instructions set forth above in Contract Information.

#### **ARTICLE 6.** SELLER'S REPRESENTATIONS, WARRANTIES AND COVENANTS

- (a) Seller, and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement that:
  - (i) the Project qualifies and is certified by the CEC as an Eligible Renewable Energy Resource ("ERR") as such term is defined in Public Utilities Code Section 399.12 or Section 399.16; and
  - (ii) the Project's output delivered to Buyer qualifies under the requirements of the California Renewables Portfolio Standard. To the extent a change in law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in law.
  - (iii) Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement the Renewable Energy Credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in California Public Utilities Commission Decision 08-08-028, and as may be modified by subsequent decision of the California Public Utilities Commission or by subsequent legislation.

To the extent a change in law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in law.

The term "commercially reasonable efforts" as set forth in Sections 6.1 (a) and (b) above shall not require Seller to incur out-of-pocket expenses in excess of **\$[INSERT]** in the aggregate in any one calendar year between the Confirmation Effective Date and the last day of the Term.

(c) Seller warrants that all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in the Western Renewable Energy Generation Information System will be taken prior to the first delivery under the contract.

For the avoidance of doubt, the term "contract" as used in the immediately preceding paragraph means this Agreement.

- (d) In addition to the foregoing, Seller warrants, represents and covenants, as of the Confirmation Effective Date and throughout the Delivery Period, that:
  - (i) Seller has the contractual rights to sell all right, title, and interest in the Product agreed to be delivered hereunder;
  - (ii) Seller has not sold the Product to be delivered under this Confirmation to any other person or entity; and
  - (iii) at the time of delivery, all rights, title, and interest in the Product to be delivered under this Confirmation are free and clear of all liens, taxes, claims, security interests, or other encumbrances of any kind whatsoever.
  - (iv) The original upstream third party contract(s), under which Buyer is re-selling,

- meets the criteria of California Public Utilities Code Section 399.16(b)(1)(A);
- (v) This Agreement transfers only Energy and Green Attributes that have not yet been generated prior to the commencement of the Delivery Period; and
- (vi) The Energy transferred hereunder is transferred to Buyer in real time.



#### **ARTICLE 7. GENERAL PROVISIONS**

#### 7.1. Facility Identification

Upon Buyer's reasonable request, within ten (10) Business Days after the end of each month during the Delivery Period, Seller shall provide indicative identification, based on preliminary meter data, of the **[for Firm deliveries:** pooled] facility(ies) that the Product was delivered from for that month.

#### 7.2. Governing Law/Venue

THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. TO THE EXTENT ENFORCEABLE AT SUCH TIME, EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY LITIGATION ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT. The Parties hereby irrevocably and unconditionally agrees that any legal action or proceeding with respect to this Agreement shall be brought in the courts of the State of California in the County of San Diego or the courts of the United States in the County of San Diego, and by executing and delivering this Agreement, both Parties hereby submit to and accept irrevocably and unconditionally, the jurisdiction of the above mentioned courts. The foregoing, however, shall not limit the right of either Party as it may elect to bring any legal action or proceeding or to obtain execution of judgment in any other appropriate jurisdiction. [SDG&E will consider binding arbitration for longer term deals.]

#### 7.3. SOVEREIGN IMMUNITY

[NOTE TO BIDDERS: insert only if applicable to governmental agencies, etc.] For purposes of this Confirmation only, the WSPP Agreement is amended by adding the following new provision: "Purchaser hereby waives sovereign immunity with regard to disputes relating to this Confirmation."]

#### 7.4. Confidentiality Amendment to WSPP Agreement.

Changes to the WSPP shall apply to this Confirmation only. For purposes of this Confirmation, Section 30 (Confidentiality) of the WSPP Agreement is deleted in its entirety and replaced with the following:

"30.1(a) Neither Party shall disclose the non-public terms or conditions of this Agreement or any transaction hereunder to a third party, other than (i) the Party's Affiliates and its and their officers, directors, employees, lenders, counsel, accountants or advisors who have a need to know such information and have agreed to keep such terms confidential, (ii) for disclosure to the Buyer's Procurement Review Group, as defined in CPUC Decision (D) 02-08-071, subject to a confidentiality agreement, (iii) to the CPUC under seal for purposes of review, (iv) disclosure of terms specified in and pursuant to Section 30.1(b) of this Agreement; (v) in order to comply with any applicable law, regulation, including, but not limited to, the California Public Records Act and/or the California Ralph M Brown Act, or any exchange, control area or CAISO rule, or order issued by a court or entity with competent jurisdiction over the disclosing Party ("Disclosing Party"), other than to those entities set forth in subsection (vi); or (vi) in order to comply with any applicable regulation, rule, or order of the CPUC, CEC, or the Federal Energy Regulatory Commission. In connection with requests made pursuant to clause (v) of this Section 30.1(a) ("Disclosure Order") each Party shall, to the extent practicable, use reasonable efforts within its sole and absolute discretion to pursue rights under such applicable laws, regulations, rules or orders which allow for the prevention or limitation of

such disclosure. The Disclosure Party's determination of what efforts might be reasonable shall not be subject to challenge by the other Party. After using such reasonable efforts, the Disclosing Party shall not be: (i) prohibited from complying with a Disclosure Order or (ii) liable to the other Party for monetary or other damages incurred in connection with the disclosure of the confidential information. Except as provided in the preceding sentence, the Parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with, this confidentiality obligation.

- (b) RPS Confidentiality. Notwithstanding Section 30.1(a) of this Agreement, at any time on or after the date on which the Seller makes its filing seeking CPUC Approval for this Agreement, either Party shall be permitted to disclose the following terms with respect to this Agreement: Party names, resource type, Delivery Term, project location, Contract Capacity, Contract Quantity, and Delivery Point.
- (c) Publicity. Except as otherwise agreed to in this Section 30.1 above, no announcement, publicity, advertising, press release, promotional or marketing materials regarding the arrangement contemplated under this Agreement, including the existence hereof, shall be made by either Party without the prior written approval of the other Party which approval shall not be unreasonably withheld or delayed." Notwithstanding the foregoing, the Parties understand acknowledge and agree that Buyer is a California Public Agency and that certain actions and documents of Buyer are subject to public notice and/or disclosure under applicable laws and regulations, including, but not limited to, the California Public Records Act and/or the California Ralph M. Brown Act, and that Buyer is not obligated to seek prior approval of Seller when Buyer is complying, in its sole and absolute discretion, with such laws and regulations.

ACKNOWLEDGED AND AGREED TO AS OF THE CONFIRMATION EFFECTIVE DATE:

#### SAN DIEGO GAS & ELECTRIC COMPANY [INSERT NAME OF PURCHASER]

BY:		BY:
NAME:		NAME:
TITLE:	Vice President – Energy Supply	TITLE:
	APPROVED AS TO LEGAL FORM	

#### **EXHIBIT A**

TO THE CONFIRMATION BETWEEN	AND SAN DIEGO GAS & ELECTRIC COMPANY
DATED:	

#### PROJECT FACILITY(IES)

Name of Facility	Resource	Capacity	CEC RPS ID	WREGIS GU	Host
		(MW)		ID	Balancing
					Authority

#### **EXHIBIT B**

#### **FORM OF LETTER OF CREDIT**

[DATE]	
То:	San Diego Gas & Electric Company 555 W. Fifth Street Mail Code: ML 18A3 Los Angeles, CA 90013
Re:	Our Irrevocable Standby Letter of Credit No In the Amount of US
Ladies a	and Gentlemen:
Benefic of Appli	eby open our irrevocable standby Letter of Credit Number in favor of [name of iary] ("Beneficiary"), by order and for account of [name of Applicant] ("Applicant"), [address icant], available at sight upon demand at our counters, at [location] for an amount of US\$ [amount spelled out and xx/100 U.S. Dollars] against presentation one of the ng documents:
Confirm transac or by oc other a	Statement signed by a person purported to be an authorized representative of Beneficiary that: "[name of Applicant] ("Applicant") is in default under the WSPP Agreement and nation between Beneficiary and Applicant dated or under any tion contemplated thereby (whether by failure to perform or pay any obligation thereunder courrence of a "default", "event of default" or similar term as defined in such agreement, any greement between Beneficiary and Applicant, or otherwise). The amount due to Beneficiary is"
expirati electior	Statement signed by a person purported to be an authorized representative of Beneficiary that: "as of the close of business on [insert date, which is less than 60 days prior to the ion date of the Letter of Credit] you have provided written notice to us indicating your not to permit extension of this Letter of Credit beyond its current expiry date. The amount Beneficiary, whether or not a default has occurred, is U.S. \$"
Special	Conditions:
- Applica	All costs and banking charges pertaining to this Letter of Credit are for the account of nt.
-	Partial and multiple drawings are permitted.
	Fax of Document 1 or 2 above is acceptable. Notwithstanding anything to the contrary any drawing hereunder may be requested by transmitting the requisite documents as ed above to us by facsimile at or such other number as specified from time

to time by us. The facsimile transmittal shall be deemed delivered when received. It is understood that drawings made by facsimile transmittal are deemed to be the operative instrument without the need of originally signed documents.
This Letter of Credit expires on at our counters.
We hereby engage with Beneficiary that upon presentation of a document as specified under and in compliance with the terms of this Letter of Credit, this Letter of Credit will be duly honored in the amount stated in Document 1, or 2 above. If a document is so presented by 1:00 pm on any New York banking day, we will honor the same in full in immediately available New York funds on that day and, if so presented after 1:00 pm on a New York banking day, we will honor the same in full in immediately available New York funds by noon on the following New York banking day.
It is a condition of this Letter of Credit that it shall be deemed automatically extended without an amendment for a one-year period beginning on the present expiry date hereof and upon each anniversary of such date, unless at least ninety (90) days prior to any such expiry date we have sent you written notice by regular and registered mail or courier service that we elect not to permit this Letter of Credit to be so extended beyond, and will expire on its then current expiry date. No presentation made under this Letter of Credit after such expiry date will be honored.
We agree that if this Letter of Credit would otherwise expire during, or within 30 days after, an interruption of our business caused by an act of god, riot, civil commotion, insurrection, act of terrorism, war or any other cause beyond our control or by any strike or lockout, then this Letter of Credit shall expire on the 30th day following the day on which we resume our business after the cause of such interruption has been removed or eliminated and any drawing on this Letter of Credit which could properly have been made but for such interruption shall be permitted during such extended period.
This Letter of Credit is subject to the Uniform Customs and Practice for Documentary Credits (2007 Revision) International Chamber of Commerce, Publication No. 600 ("UCP"), except to the extent that the terms hereof are inconsistent with the provisions of the UCP, including but not limited to Articles 14(b) and 36 of the UCP, in which case the terms of this Letter of Credit shall govern. Matters not covered by the UCP shall be governed and construed in accordance with the laws of the State of California.
[Name of Bank]

Authorized Signature(s)

#### **APPENDIX 13**

### **RPS Sales Model PPA (Unbundled Product)**

# WSPP AGREEMENT CONFIRMATION BETWEEN SAN DIEGO GAS & ELECTRIC COMPANY AND [INSERT NAME]

This confirmation letter ("Confirmation") confirms the transaction ("Transaction") between <b>San Diego Gas</b>
& Electric Company ("Seller" or "SDG&E" "Party B") and ("Buyer" or "Party A"), each
individually a "Party" and together the "Parties", effective as of, 2018 (the "Confirmation")
Effective Date"). This Transaction is governed by the WSPP Agreement effective as of June 21, 2018 along
with any amendments and annexes executed between the Parties thereto (the "Master Agreement"). The
Master Agreement and this Confirmation shall be collectively referred to herein as the "Agreement."
Capitalized terms used but not otherwise defined in this Confirmation have the meanings ascribed to them
in the Master Agreement, Tariff, or in the RPS (as defined below). If any term in this Confirmation conflicts
with the Master Agreement, the definitions set forth in this Confirmation shall supersede.

Contact Information:	Name: [INSERT] (" <u>Buyer</u> ")	Name: San Diego Gas & Electric Company ("Seller")
	All Notices:	All Notices:
		San Diego Gas & Electric Company
	Attn:	8315 Century Park Court
	Phone:	San Diego, CA Zip: 92123
	Facsimile:	Attn: Electric & Fuel Procurement Contract
	Duns:	Administration
	Federal Tax ID Number:	Phone: (858) 650-5536
		Facsimile: (858) 650-6190
		Duns: 006911457
		Federal Tax ID Number: 95-1184800
	Invoices:	Invoices:
		San Diego Gas & Electric Company
		8315 Century Park Ct.
		San Diego, California 92123-1593
		Attn: Energy Accounting Manager
		Phone: (858) 650-6177
		Phone: (858) 650-6177 Facsimile: (858) 650-6190
	Wire Transfer:	
	Wire Transfer:	Facsimile: (858) 650-6190
	Wire Transfer:	Facsimile: (858) 650-6190  Wire Transfer:
	Wire Transfer:	Facsimile: (858) 650-6190  Wire Transfer:  BNK: Union Bank of California
	Wire Transfer:	Facsimile: (858) 650-6190  Wire Transfer:  BNK: Union Bank of California for: San Diego Gas & Electric Company
	Wire Transfer:	Facsimile: (858) 650-6190  Wire Transfer:  BNK: Union Bank of California for: San Diego Gas & Electric Company ABA: Routing # 122000496

Credit and Collections:	Credit and Collections:
	San Diego Gas & Electric Company, Major Markets
	555 W. Fifth Street, ML 10E3
	Los Angeles, CA 90013-1011
	Attn.: Major Markets, Credit and Collections Manager
	Fax No.: (213) 244-8316
	Phone: (213) 244-4343
	` '
Defaults:	Defaults:
With additional Notices	With additional Notices of an Event of Default or Potential
of an Event of Default	Event of Default to:
or Potential Event of	
Default to:	San Diego Gas & Electric Company
	8330 Century Park Ct.
	San Diego, California 92123
	Attn: General Counsel
	Phone: (858) 650-6141
	Facsimile: (858) 650-6106

### ARTICLE 1 COMMERCIAL TERMS

The Parties hereby agree that the General Terms and Conditions are incorporated herein, and to the following provisions as provided for in the General Terms and Conditions:

Product:	The "Product" is <i>[for Firm deliveries:</i> Firm Delivery; <i>for As-Available deliveries:</i> As-Available Delivery <i>]</i> Obligation of Green Attributes in the Contract Quantity.  During the Delivery Term, Seller shall deliver and sell, and Buyer shall purchase and receive, this Product, subject to the terms and conditions of this Confirmation. Seller shall not substitute or purchase any Green Attributes from any generating resource other than the Project for delivery hereunder.
	All Product sold hereunder shall be from one or more of the facilities, each meeting the requirement of 6.1(a) and as listed in Exhibit A, as may be updated from time to time by written notice from Seller to Buyer (collectively, the "Project").
Project:	<b>[for Firm deliveries:</b> The Parties acknowledge and agree that the Project consists of a pool of facilities and that Seller is permitted to utilize one or more of these pooled facilities in order to satisfy its obligations hereunder.
	The Parties further acknowledge and agree that, with respect to Section 3.2(a) of this Confirmation, Product shall solely be limited to the actual Product generated and delivered by the pooled facilities used to satisfy the Contract Quantity, and that Buyer is not entitled to any additional Product produced by the pooled facilities in the Project above and beyond the Contract Quantity.
Contract Quantity:	[for Firm deliveries: "Contract Quantity" shall be equal a total of [] MWhs during the Delivery Term. In the event Seller does not deliver any of the above specified quantity(ies) for any reason, except as excused by Uncontrollable Force, the Parties shall agree upon the make-up schedules for any undelivered quantities. If the Parties are unable to come to agreement on such make-up schedule, Buyer shall deliver the quantities to Seller in a reasonable manner and within a reasonable time.]
	[for As-Available deliveries: "Contract Quantity" shall be [For fixed quantities: a quantity up to INSERT] [for RPS sales of portions or "slices" of portfolio: all output from the Project multiplied by [X]%], unless excused pursuant to the definition of As-Available Delivery Obligation below. Seller in its sole discretion shall determine the hourly Contract Quantity during the Delivery Period.]
Contract Price:	The Green Attributes Price.
Green Attributes Price:	\$[XXXX] per MWh of Green Attributes (RECs).

S	Drajt: for discussion purposes only. Drajt: for discussion purposes only. DG&E may insist on using the EEI master agreement depending on the credit evaluation.
	The "Term" of this Transaction shall commence upon the Confirmation Effective Date and shall continue until delivery by Seller to Buyer of the Contract Quantity of
Term:	the Product has been completed and all other obligations of the Parties under this Agreement have been satisfied, unless terminated earlier due to failure to satisfy

the Condition Precedent or as otherwise provided in the Agreement.

#### **Delivery Term:**

SDG&E shall deliver the Product to Buyer within five (5) Business days after CPUC Approval, or as otherwise set forth in the "Contract Quanity" Section. For purposes of this Confirmation, the "Delivery Term" shall be the duration upon which the Product is delivered.

#### **/**Delivery Period]

[For transactions of more than one-time transfers: The "Delivery Period" of this Transaction shall commence on [MM/DD/YYYY] (the "Start Date"), and continue until midnight on [MM/DD/YYYY]]; provided that if CPUC Approval is not received by the Start Date above, then the Start Date shall be the first day of the calendar month following the calendar month in which the Condition Precedent Satisfaction Date occurs [If applicable: and shall continue until midnight on the last day of the month in which the [#] anniversary of the Start Date, unless extended for make-up deliveries as specified in the Contract Quantity Section or terminated in accordance with the terms herein.]]

"Firm Delivery Obligation" means the obligation to provide the Contract Quantity is a firm obligation in that Seller shall deliver the quantity of the Product from the Project consistent with the terms of this Confirmation without excuse other than Uncontrollable Force. If a failure by Seller to deliver the quantity from the Project is not excused by Uncontrollable Force, Seller shall make up such failure in accordance with the "Contract Quantity" Section.

/Firm; As-Available] Delivery **Obligation:**  **[for As-available deliveries:** "As-Available Delivery Obligation" shall mean the obligation to provide the Contract Quantity is an as-available obligation in that Seller shall deliver the quantity of the Product from the Project, instantaneously with its receipt of such Product, consistent with the terms of this Confirmation. Seller's failure to deliver shall be excused, and Seller shall have no obligation to make up or replace any failure of the Facility to generate and deliver the quantity from the Project: if (i) the Project is unavailable as a result of a Scheduled or Forced Outage, (ii) by an event or circumstance that affects the Project so as to prevent Seller from performing its obligations, which event or circumstance was not anticipated as of the date the Transaction was agreed to, and which is not within the reasonable control of, or the result of the negligence of, the Seller, (iii) by Buyer's failure to perform, or (iv) by [SELECT APPLICABLE FUEL: [the unavailability of landfill gas which was not anticipated as of the Execution Date, which is not within the reasonable control of, or the result of negligence of, Seller or the party supplying such landfill gas to the Project, and which by the exercise of reasonable due diligence, Seller is unable to overcome or avoid or causes to be avoided.] OR [insufficient wind power for the Project to generate energy as determined by the best wind speed and direction standards utilized by other wind producers or purchasers in the vicinity of the Project or if wind speeds exceed the Project's technical specifications.] OR [the unavailability of water or the unavailability of sufficient pressure required for operation of the hydroelectric turbine-generator as reasonably determined by Seller within its operating procedures, neither of which

	was anticipated as of the Execution Date, which is not within the reasonable control of, or the result of negligence of, Seller or the party supplying such water to the Project, and which by the exercise of due diligence, such Seller or the party supplying the water is unable to overcome or avoid or causes to be avoided.] OR [insufficient solar power for the Project to generate energy as determined by the best solar standards utilized by other solar producers or purchasers in the vicinity of the Project] OR [a reduction or insufficiency of biomass that causes a reduction or cessation of generation of electric energy by the Project].]
Delivery	Buyer hereby authorizes Seller, or its third party designee, to deliver the Product, or cause the Product to be delivered into Buyer's WREGIS account in the quantity(ies) and timeline(s) set forth in the "Contract Quantity" Section.
Condition Precedent:	Seller's obligation to sell and deliver the Product shall be contingent upon the Seller obtaining or waiving CPUC Approval of this Confirmation. Either Party has the right to terminate this Confirmation upon notice in accordance with Section 12 of the WSPP Agreement, which will be effective five (5) Business Days after such notice is given, if: (i) the CPUC does not issue a final and non-appealable order approving this Agreement or the requested relief contained in the related advice letter filing, both in their entirety, (ii) the CPUC issues a final and non-appealable order which contains conditions or modifications unacceptable to either Party, or (iii) the final and non-appealable approval by the CPUC has not been obtained by Seller, on or before [INSERT DEADLINE DATE].
Precedent:	The date on which approval of the CPUC of this Confirmation has been obtained or waived, by Seller, in its sole discretion, shall hereinafter be the "Condition Precedent Satisfaction Date."
	Any termination made by a Party under this section shall be without liability or obligation to the other Party.
	Notwithstanding any other provision in this Confirmation, Seller will have no obligation to transfer Green Attributes to Purchaser unless the Condition Precedent Satisfaction Date has occurred.

### ARTICLE 2 DEFINITIONS

"Buyer" means "Purchaser".

"CAISO" means the California Independent System Operator.

"Condition Precedent Satisfaction Date" means the date on which CPUC Approval, as fully described in the "Condition Precedent" provision, has been obtained or waived, by Seller, in its sole discretion.

"CPUC" means the California Public Utilities Commission or its regulatory successor.

"CPUC Approval" means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to the Parties, or either of them, which approves this Agreement in its entirety, subject to CPUC review of the Seller's administration of the Agreement.

Notwithstanding the foregoing, if a Tier 2 or Tier 3 advice letter process is used to obtain CPUC Approval of this Agreement, CPUC Approval will also be deemed to have occurred on the date that a CPUC Energy Division disposition which contains such findings or deems approved an advice letter requesting such findings becomes final and non-appealable.

"Green Attributes" means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Project, and its avoided emission of pollutants. Green Attributes include but are not limited to Renewable Energy Credits, as well as:

- any avoided emission of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants;
- any avoided emissions of carbon dioxide (CO2), methane (CH4), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by law, to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere;<sup>1</sup>
- (3) the reporting rights to these avoided emissions, such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of a Green Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state law, if applicable, and to a federal or state agency or any other party at the Green Tag Purchaser's discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local law, regulation or bill, and international or foreign emissions trading program. Green Tags are accumulated on a MWh basis and one Green Tag represents the Green Attributes associated with one (1) MWh of Energy.

Green Attributes do not include;

- (i) any energy, capacity, reliability or other power attributes from the Project,
- (ii) production tax credits associated with the construction or operation of the Project and other financial incentives in the form of credits, reductions, or allowances associated with the Project that are applicable to a state or federal income taxation obligation,

Avoided emissions may or may not have any value for GHG compliance purposes. Although avoided emissions are included in the list of Green Attributes, this inclusion does not create any right to use those avoided emissions to comply with any GHG regulatory program.

SDG&E may insist on using the EEI master agreement depending on the credit evaluation.

- (iii) fuel-related subsidies or "tipping fees" that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or
- (iv) emission reduction credits encumbered or used by the Project for compliance with local, state, or federal operating and/or air quality permits.

If the Project is a biomass or biogas facility and Seller receives any tradable Green Attributes based on the greenhouse gas reduction benefits or other emission offsets attributed to its fuel usage, it shall provide Buyer with sufficient Green Attributes to ensure that there are zero net emissions associated with the production of electricity from the Project.

"Governmental Authority" means any federal, state, local or municipal government, governmental department, commission, board, bureau, agency, or instrumentality, or any judicial, regulatory or administrative body, having jurisdiction as to the matter in question.

"Tariff" means the tariff and protocol provisions, including any current CAISO-published "Operating Procedures" and "Business Practice Manuals," as amended or supplemented from time to time, of the CAISO.

"Vintage" means the calendar year and month in which the underlying energy for the Product isgenerated.

"WREGIS" means the Western Renewable Energy Generation Information System or other process recognized under applicable laws for the registration, transfer or ownership of Green Attributes.

"WREGIS Certificate" means "Certificate" as defined by WREGIS in the WREGIS Operating Rules.

"WREGIS Operating Rules" means the operating rules and requirements adopted by WREGIS.

### ARTICLE 3 CONVEYANCE OF RENEWABLE ENERGY

#### 3.1 Seller's Conveyance Of Green Attributes

Except as stated in this Section 3.1, Seller shall deliver and sell, and Buyer shall purchase and receive, the Product, subject to the terms and conditions of this Confirmation. Seller will not be obligated to sell or replace any Product that is not or cannot be delivered as a result of Uncontrollable Force.

Should any Green Attributes provided by Seller under this Confirmation be determined to have originated from a resource other than the Project, Seller shall remedy such failure in a manner reasonably acceptable to Buyer within a reasonable period of time after written notice of such failure is given to the Seller by the Buyer.

#### 3.2 Seller's Conveyance Of Green Attributes

- (a) The Green Attributes are delivered and conveyed upon completion of all actions described in Section 3.2(b) below.
  - (b) Green Attributes Initially Credited to Seller's WREGIS Account

During the Delivery Period, Seller, at its own cost and expense, shall maintain its registration with WREGIS. All Green Attributes transferred by Seller hereunder shall be designated California RPS-compliant with WREGIS. Seller shall, at its sole expense, use WREGIS as required pursuant to the WREGIS Operating Rules to effectuate the transfer of Green Attributes to Buyer in accordance with WREGIS reporting protocols and WREGIS Operating Rules.

### ARTICLE 4 PERFORMANCE ASSURANCE; CPUC FILING AND APPROVAL

#### 4.1 Performance Assurance

- (a) To secure its obligations under this Agreement, Buyer agrees to deliver to Seller and maintain in full force and effect Performance Assurance in the amount of **\$[INSERT AMOUNT]** in the form of cash or a Letter of Credit from the Execution Date and for the Delivery Term of this Agreement.
- Buyer hereby grants to Seller a present and continuing first priority security interest in, and lien on (and right of setoff against), and assignment of, all cash collateral and cash equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, Seller, and each Party agrees to take such action as the other Party reasonably requires in order to perfect the Seller's first-priority security interest in, and lien on (and right of setoff against), such collateral and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence and during the continuation of an Event of Default by Seller or an Early Termination Date as a result thereof, Seller may do any one or more of the following: (i) exercise any of the rights and remedies of a secured party with respect to all Performance Assurance, including any such rights and remedies under Law then in effect; (ii) exercise its rights of setoff against such collateral and any and all proceeds resulting therefrom or from the liquidation thereof; (iii) draw on any outstanding Letter of Credit issued for its benefit; and (iv) liquidate all or any portion of any Performance Assurance then held by or for the benefit of Seller free from any claim or right of any nature whatsoever of Buyer, including any equity or right of purchase or redemption by Buyer. Seller shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce the Buyer's obligations under the Agreement (Buyer remaining liable for any amounts owing to Seller after such application), subject to Seller's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.
  - (c) Upon an Event of Default of Buyer prior to CPUC Approval, Seller may terminate this Agreement in which case Buyer shall owe Seller liquidated damages in the amount of the Performance Assurance and Seller may retain such Performance Assurances to pay such liquidated damages. Each Party agrees and acknowledges that (a) the actual damages that Buyer would incur due to an Event of Default of Buyer prior to CPUC Approval would be difficult or impossible to predict with certainty, (b) the liquidated damages set forth in this section are a reasonable and appropriate approximation of such damages, and (c) the liquidated damages set forth in this section are the exclusive remedy for an Event of Default of Seller prior to CPUC Approval.

[INSERT additional credit terms depending on term, etc.]

#### 4.2 CPUC Filing and Approval

Within [INSERT] days after the Confirmation Effective Date, Seller shall file with the CPUC the appropriate request for CPUC Approval of this Agreement and possibly other agreements. Seller shall seek CPUC Approval of the filing, including promptly responding to any requests for information related to the request for CPUC Approval. Buyer shall use commercially reasonable efforts to support Seller in obtaining CPUC Approval. Seller and Buyer have no obligation to seek rehearing or to appeal a CPUC decision which fails to approve this Agreement, or which fails to meet the requirements contained in the Condition Precedent section. Notwithstanding anything to the contrary in the Cofirmation, Seller shall not have any obligation or liability to Buyer or any third party for any action or inaction of the CPUC or other Geovernmental Authority affecting the approval or status of this Confirmation as a transaction eligible for content category, as defined in California Public Utilities Code Section 399.16(b)(1).



### ARTICLE 5 COMPENSATION

#### 5.1 Monthly Cash Settlement Amount

Purchaser shall pay Seller in the amount equal to (the product of \$[INSERT PRICE] multiplied by the quantity of Green Attributes (in MWhs) delivered or credited to Purchaser's WREGIS account pursuant to Section 3.2 during the applicable Calculation Period.

#### 5.2 Payment Date

Seller shall issue an invoice to Buyer promptly after delivery of the Product into Buyer's WREGIS account, as set forth in the Contract Quantity Section and the Condition Precedent Section. Such invoice shall set forth in reasonable detail the quantity of Green Attributes transferred, the price, and the total payment owed to Buyer. Notwithstanding any provision to the contrary inSection 9.2 of the Master Agreement, payment shall be due and payable shall be made to Seller within ten (10) Business Days, or, if such day is not a Business Day, then on the next Business Day, following receipt of an invoice issued by Seller. The invoice shall include a statement detailing the quantity of Product transferred to Purchaser.

Invoices to Buyer will be sent by Excel/PDF format via email to: [TO BE INSERTED]

Attn: Email: Phone: Facsimile:

For purposes of this Confirmation, Buyer shall be deemed to have received an invoice upon the receipt of the Excel/PDF format of the invoice.

Payment to Seller shall be made by electronic funds transfer pursuant to the following:

BNK: Union Bank of California

For: San Diego Gas & Electric Company

ABA: Routing # 122000496

ACCT: #4430000352

Confirmation: SDG&E, Major Markets

FAX: (213) 244-8316

With a copy to:

San Diego Gas & Electric Company 8315 Century Park Ct. San Diego, California 92123-1593 Attn: Energy Accounting Manager

Phone: (858) 650-6177 Facsimile: (858) 650-6190

#### **ARTICLE 6**

#### SELLER'S REPRESENTATIONS, WARRANTIES AND COVENANTS RELATED TO GREEN ATTRIBUTES

#### 6.1 Seller's Representation, Warranties, and Covenants Related to Green Attributes

- (a) Seller, and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement that:
  - (i) the Project qualifies and is certified by the CEC as an Eligible Renewable Energy Resource ("ERR") as such term is defined in Public Utilities Code Section 399.12 or Section 399.16; and
  - (ii) To the extent the Product includes the Project's output, the Project's output delivered to Buyer qualifies under the requirements of the California Renewables Portfolio Standard. To the extent a change in law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in law.
- (b) Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement the Renewable Energy Credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in California Public Utilities Commission Decision 08-08-028, and as may be modified by subsequent decision of the California Public Utilities Commission or by subsequent legislation.

To the extent a change in law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in law.

The term "commercially reasonable efforts" as set forth in Sections 6.1 (a) and (b) above shall not require Seller to incur out-of-pocket expenses in excess of \$[INSERT] in the aggregate in any one calendar year between the Confirmation Effective Date and the last day of the Term.

(c) Seller warrants that all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in the Western Renewable Energy Generation Information System will be taken prior to the first delivery under the contract.

For the avoidance of doubt, the term "contract" as used in the immediately preceding paragraph means this Agreement.

- (d) In addition to the foregoing, Seller warrants, represents and covenants, as of the Confirmation Effective Date and throughout the Delivery Period, that:
  - (i) Seller has the contractual rights to sell all right, title, and interest in the Product agreed to be delivered hereunder;
  - (ii) Seller has not sold the Product to be delivered under this Confirmation to any other person or entity; and
  - (iii) at the time of delivery, all rights, title, and interest in the Product to be delivered under this Confirmation are free and clear of all liens, taxes, claims, security interests, or other encumbrances of any kind whatsoever.

### ARTICLE 7 GENERAL PROVISIONS

#### 7.1 [Reserved]

#### 7.2 **Governing Law/Venue**

THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. TO THE EXTENT ENFORCEABLE AT SUCH TIME, EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY LITIGATION ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT. The Parties hereby irrevocably and unconditionally agrees that any legal action or proceeding with respect to this Agreement shall be brought in the courts of the State of California in the County of San Diego or the courts of the United States in the County of San Diego, and by executing and delivering this Agreement, both Parties hereby submit to and accept irrevocably and unconditionally, the jurisdiction of the above mentioned courts. The foregoing, however, shall not limit the right of either Party as it may elect to bring any legal action or proceeding or to obtain execution of judgment in any other appropriate jurisdiction.

#### 7.3 <u>Sovereign Immunity</u>

[NOTE TO BIDDERS: insert only if applicable to governmental agencies, etc.] For purposes of this Confirmation only, the WSPP Agreement is amended by adding the following new provision: "Purchaser hereby waives sovereign immunity with regard to disputes relating to this Confirmation."

#### 7.4 Confidentiality Amendment to WSPP Agreement.

Changes to the WSPP shall apply to this Confirmation only. For purposes of this Confirmation, Section 30 (Confidentiality) of the WSPP Agreement is deleted in its entirety and replaced with the following:

"30.1(a) Neither Party shall disclose the non-public terms or conditions of this Agreement or any transaction hereunder to a third party, other than (i) the Party's Affiliates and its and their officers, directors, employees, lenders, counsel, accountants or advisors who have a need to know such information and have agreed to keep such terms confidential, (ii) for disclosure to the Buyer's Procurement Review Group, as defined in CPUC Decision (D) 02-08-071, subject to a confidentiality agreement, (iii) to the CPUC under seal for purposes of review, (iv) disclosure of terms specified in and pursuant to Section 30.1(b) of this Agreement; (v) in order to comply with any applicable law, regulation, including, but not limited to, the California Public Records Act and/or the California Ralph M Brown Act, or any exchange, control area or CAISO rule, or order issued by a court or entity with competent jurisdiction over the disclosing Party ("Disclosing Party"), other than to those entities set forth in subsection (vi); or (vi) in order to comply with any applicable regulation, rule, or order of the CPUC, CEC, or the Federal Energy Regulatory Commission. In connection with requests made pursuant to clause (v) of this Section 30.1(a) ("Disclosure Order") each Party shall, to the extent practicable, use reasonable efforts within its sole and absolute discretion to pursue rights under such applicable laws, regulations, rules or orders which allow for the prevention or limitation of such disclosure. The Disclosure Party's determination of what efforts might be reasonable shall not be subject to challenge by the other

Party. After using such reasonable efforts, the Disclosing Party shall not be: (i) prohibited from complying with a Disclosure Order or (ii) liable to the other Party for monetary or other damages incurred in connection with the disclosure of the confidential information. Except as provided in the preceding sentence, the Parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with, this confidentiality obligation.

- (b) RPS Confidentiality. Notwithstanding Section 30.1(a) of this Agreement, at any time on or after the date on which the Seller makes its filing seeking CPUC approval for this Agreement, either Party shall be permitted to disclose the following terms with respect to this Agreement: Party names, resource type, Delivery Term, project location, Contract Capacity, Contract Quantity, and Delivery Point.
- (c) Publicity. Except as otherwise agreed to in this Section 30.1 above, no announcement, publicity, advertising, press release, promotional or marketing materials regarding the arrangement contemplated under this Agreement, including the existence hereof, shall be made by either Party without the prior written approval of the other Party which approval shall not be unreasonably withheld or delayed." Notwithstanding the foregoing, the Parties understand acknowledge and agree that Buyer is a California Public Agency and that certain actions and documents of Buyer are subject to public notice and/or disclosure under applicable laws and regulations, including, but not limited to, the California Public Records Act and/or the California Ralph M. Brown Act, and that Buyer is not obligated to seek prior approval of Seller when Buyer is complying, in its sole and absolute discretion, with such laws and regulations.

#### ACKNOWLEDGED AND AGREED TO AS OF THE CONFIRMATION EFFECTIVE DATE:

SAN DIEGO GAS & ELECTRIC COMPANY [INSERT NAME OF PURCHASER]

ВҮ:		BY:
NAME:		NAME:
TITLE:	Vice President - Energy Supply	TITLE:
	APPROVED AS TO LEGAL FORM	

#### **EXHIBIT A**

TO THE CONFIRMATION BETWEEN	AND SAN DIEGO GAS & ELECTRIC COMPANY
DATED:	

#### PROJECT FACILITY(IES)

Name of Facility	Resource	Capacity	CEC RPS ID	WREGIS GU	Host
		(MW)		ID	Balancing
					Authority

#### **EXHIBIT B**

TO THE CONFIRMATION BETWEEN	AND SAN DIEGO GAS & ELECTRIC COMPANY
DATED:	

#### **CONTRACT QUANTITIES**

	YEAR					
MONTH	YR	YR	YR	YR	YR	YR
January						
February						
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						

#### **EXHIBIT C**

#### **FORM OF LETTER OF CREDIT**

[DAT	E]
To:	San Diego Gas & Electric Company 555 W. Fifth Street Mail Code: ML 18A3 Los Angeles, CA 90013
Re:	Our Irrevocable Standby Letter of Credit No In the Amount of US
Ladie	s and Gentlemen:
Benet Appli	ereby open our irrevocable standby Letter of Credit Number in favor of [name of ficiary] ("Beneficiary"), by order and for account of [name of Applicant] ("Applicant"), [address of cant], available at sight upon demand at our counters, at [location] for an amount of US\$ [amount spelled out and xx/100 U.S. Dollars] against presentation one of the following ments:
Confi conte of a "	Statement signed by a person purported to be an authorized representative of Beneficiary g that: "[name of Applicant] ("Applicant") is in default under the WSPP Agreement and rmation between Beneficiary and Applicant dated or under any transaction mplated thereby (whether by failure to perform or pay any obligation thereunder or by occurrence default", "event of default" or similar term as defined in such agreement, any other agreement een Beneficiary and Applicant, or otherwise). The amount due to Beneficiary is U.S. \$"
date ( perm	Statement signed by a person purported to be an authorized representative of Beneficiary g that: "as of the close of business on [insert date, which is less than 60 days prior to the expiration of the Letter of Credit] you have provided written notice to us indicating your election not to it extension of this Letter of Credit beyond its current expiry date. The amount due to Beneficiary, her or not a default has occurred, is U.S. \$"
Speci	al Conditions:
-	All costs and banking charges pertaining to this Letter of Credit are for the account of Applicant.
-	Partial and multiple drawings are permitted.
above The fa made	Fax of Document 1 or 2 or 3 above is acceptable. Notwithstanding anything to the contrary in, any drawing hereunder may be requested by transmitting the requisite documents as described to us by facsimile at or such other number as specified from time to time by us. acsimile transmittal shall be deemed delivered when received. It is understood that drawings by facsimile transmittal are deemed to be the operative instrument without the need of originally didocuments.
This L	etter of Credit expires on at our counters.

We hereby engage with Beneficiary that upon presentation of a document as specified under and in compliance with the terms of this Letter of Credit, this Letter of Credit will be duly honored in the amount stated in Document 1, 2, or 3 above. If a document is so presented by 1:00 pm on any New York banking day, we will honor the same in full in immediately available New York funds on that day and, if so presented after 1:00 pm on a New York banking day, we will honor the same in full in immediately available New York funds by noon on the following New York banking day.

It is a condition of this Letter of Credit that it shall be deemed automatically extended without an amendment for a one-year period beginning on the present expiry date hereof and upon each anniversary of such date, unless at least ninety (90) days prior to any such expiry date we have sent you written notice by regular and registered mail or courier service that we elect not to permit this Letter of Credit to be so extended beyond, and will expire on its then current expiry date. No presentation made under this Letter of Credit after such expiry date will be honored.

We agree that if this Letter of Credit would otherwise expire during, or within 30 days after, an interruption of our business caused by an act of god, riot, civil commotion, insurrection, act of terrorism, war or any other cause beyond our control or by any strike or lockout, then this Letter of Credit shall expire on the 30th day following the day on which we resume our business after the cause of such interruption has been removed or eliminated and any drawing on this Letter of Credit which could properly have been made but for such interruption shall be permitted during such extended period.

This Letter of Credit is subject to the Uniform Customs and Practice for Documentary Credits (2007 Revision) International Chamber of Commerce, Publication No. 600 ("UCP"), except to the extent that the terms hereof are inconsistent with the provisions of the UCP, including but not limited to Articles 14(b) and 36 of the UCP, in which case the terms of this Letter of Credit shall govern. Matters not covered by the UCP shall be governed and construed in accordance with the laws of the State of California.

[Name of Bank]	
Authorized Signature(s)	

# APPENDIX 14 RPS SALES OFFER FORM

#### Renewable Products Offer Form (2022 BioRAM RPS REC Sale RFP)



#### General Instructions

## Form Field Key: Free Form Field Pull Down Menu

#### Instructions:

- Follow instructions as they appear in each fields' comments or pop-up messages
- Complete ALL fields. Enter N/A if the question is not applicable. Don't put units in the cells, just the raw numbers. (i.e. 10, not 10 MWh)
- Fill out all fields in the units requested  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$
- Do not add, change, or move any cells, rows, columns or worksheets in the workbook
- Confidential Information should be entered in Red Font
- Limit and focus the discussion of the free form fields
- Submit One Offer Form per offer variation
- There is no limit on the number of Forms that can be submitted. Therefore, respondents are encouraged, but not required, to submit additional offers for our consideration, such as bids with different tenors and escalators

	Company Information	
Company Name Submitting Offer:		
Company Name on Potential Contract:		
Company Address:		
Company City		
Company State		
Company Zip		
Company Country		
ls the company Women/Minority/Disabled Veteran owned Business Enterprise as per CPUC General Order 156?		
How did the company hear of the RFO? (SDG&E website, SDG&E email, Colleague, Other (please elaborate)		
Does the Developer have the appropriate experience?		
	Company Representative	
Contact Name:	Primary Contact	Secondary Contact
Contact Name:		
Office Number:		
Cell Number:		
Centumber: Email:		
Is the Respondent an affiliate of SDG&E?		
Does the Respondent have one or more contracts with SDG&E?		
	Corporate Profile and Experience	
Describe your corporate background and organizational structure for the project. Please submit a complete		
organizational chart with all affiliates and parents.		
You must list all companies who participated in putting together this offer and who helped prepare documents.		

For Firm and Unit Contingent Products:

Product Information			
Product:			
Point of Delivery:			
Comments / Other Information			
Is there additional relevan	Is there additional relevant information necessary for SDG&E to evaluate the merits of the proposal?		

Note: Tables below are illustrative and start/stop months will vary based on the timing in which SDG&E launches a solicitation.

### Quantitative Description Provide Bid Quantity and Bid Price in the schedule below.

Annually				
Date	Bid Quantity (RECs or MWhs)	REC Price (\$/MWh)		
Month-Year				

Annually				
Date	Bid Quantity (RECs or MWhs)	REC Price (\$/MWh)		
<u>Year</u>				
Year				



# Renewable Products Offer Form Market Offer RFP

Product information			
	Product Type:	Point of Delivery:	

If submitting multiple offers, Respondent must duplicate this "Product & Bid Information" tab for each distinct offer to be considered and submit in one Offer Form workbook to SDGRE.

Comments / Other Information Is there additional relevant information necessary for SDG&E to evaluate the merits of the proposal?

Provide selected percentages in 1% increments and Bid Price in the schedule below.

(Please note that all bids will bid in as unit contingent product. See attachments for the estimated volumes.)

	PCIA-eligble Portfolio Available Afi	ter the VAIMO Process	
Date	Percentage of Long-Term Portfolio	REC Price (\$/MWh)	Long-term or Short-term**
Product to be Delivered			
. M. month of control	For Multiple Office Adultually Evolution 2 Voc/No*		

\*For bidders who submit multiple offer forms, please confirm if the offer form is mutually exclusive with other offer forms. "Yes" means SDG&E may select one or more of the offers within the offer forms, and "No" means that SDG&E must select all offers

togener.

\*\*Inogener means for so long as product is delivered to SDG&E for long-term PPAs in the CA+eligible RPS portfolio, and short-term means beginning with Commission approval of transaction(s) through the end of the 2027 calendar year.

### **APPENDIX 15**

### SDG&E's Framework for Assessing Potential RPS Sales

### SDG&E's 2023 Framework for Assessing Potential RPS Sales

SDG&E's 2024 RPS Plan addresses the potential sale of renewable generation, stating that SDG&E will address opportunities as they arise, and SDG&E will bank, if possible, or sell, based on whether such a sale is beneficial for bundled customers. <sup>1</sup>

### I. Products

SDG&E could sell bundled energy and Renewable Energy Credits (RECs) or unbundled RECs from its allocated portion of the PCIA-eligible RPS portfolio. SDG&E could sell bundled energy products generated from and after the effective date of the resale contract<sup>2</sup> and unbundled RECs from any contract within its portfolio.<sup>3</sup> As described in SDG&E's RPS Procurement Plan, Attachment A, SDG&E may also right size its portfolio, in part, through sales, by assigning or novating contracts, in which case SDG&E will file a Tier 3 advice letter for Commission review and approval.<sup>4</sup>

### II. Criteria

SDG&E will consider both quantitative and qualitative criteria when determining whether to bank or sell excess renewable generation from its allocation of the PCIA-eligible RPS portfolio including the portion of PCIA-eligible portfolio. As a threshold matter, if the results of this analysis indicate that a sales scenario would provide the greatest value to customers, then a sale may be pursued. If the banking vs. sales analysis indicates that banking provides the greatest customer value, then the excess generation will likely be banked.<sup>5</sup>

### • Quantitative Criteria

 Banking vs. Sales Analysis: As described in more detail under Section 4 in Attachment A, SDG&E will consider the time value of revenues from the potential sale, and the potential replacement cost when evaluating potential sales opportunities.

<sup>&</sup>lt;sup>1</sup> See Section 4 of Attachment A.

<sup>&</sup>lt;sup>2</sup> D.11-12-052, pp. 37, 52.

<sup>&</sup>lt;sup>3</sup> D.11-12-052, pp. 36, 56.

<sup>&</sup>lt;sup>4</sup> Consistent with D.21-05-030 (PCIA DECISION), SDG&E will issue an RFI for contract Assignment and contract modifications.

<sup>&</sup>lt;sup>5</sup> Future Commission decisions within the PCIA proceeding may impact SDG&E's sales criteria.

 Impact on Rates: Another consideration is the magnitude of the impact a potential sale will have on customer bills.

### Qualitative Criteria

- RPS Position: SDG&E regularly reviews its portfolio positions and considers actions based on future need, which include but are not limited to, procuring, selling and banking renewable generation.
- Procurement Mandates: Integrated Resources Plan ("IRP") Reliability procurement mandates that SDG&E solicit to procure a broad range of resources, including renewable generation, geothermal, and hybrid renewable energy plus storage, which provide additional renewable energy attributes towards SDG&E's RPS position.
- Load Departure: Future portfolio need and fit are regularly evaluated and encompass a review of load departure that will impact SDG&E's RPS portfolio positions.
- Market Liquidity: It is important to SDG&E that the market for renewable products remains liquid so that sales and purchases on behalf of customers can be made at competitive prices. Currently, SDG&E has one of the largest RPS portfolios in the State, and therefore it must consider possible impacts on the market of any potential sales volumes.
- Accounting Rules: SDG&E will consider the potential accounting impacts
  of selling renewable generation. Such impacts may include a scenario in
  which both the sales contract and the underlying contract(s) supplying
  the energy for the sales contract are marked to market value in each
  reporting period in accordance with generally accepted accounting
  principles. Due to market volatility, the mark to market adjustment
  associated with the sale may create volatility in SDG&E's financial
  statements.
- o Impact on GHG Reduction Goals and IRP Targets: With the passage of SB 350 and SB 100, the State is moving toward a more holistic planning process with the goal of reducing GHG emissions through a suite of tools, one of which is the RPS program.<sup>6</sup> As described under Section 2 of Attachment A, SDG&E has taken a strong leadership position with respect to the State's RPS targets, and in doing so has inherently advanced the goals of the IRP. The impact of any potential sale as it relates to SDG&E's

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<sup>&</sup>lt;sup>6</sup> See Section 4 of Attachment A.

progress towards IRP goals will be incorporated into SDG&E's analysis as appropriate.

O Uncertainty: SDG&E's analysis involves assumptions regarding future market pricing and structure, regulatory framework, and legislative goals many years into the future. Further, there is some uncertainty with respect to load departure and potential impacts of load returning. While SDG&E believes its assumptions to be reasonable, it acknowledges that markets change over time and the future is not predictable; therefore, this risk must be considered when evaluating any potential sale.

Additionally, SDG&E, along with all other public utilities, is required by law to seek and receive authorization from the Commission to sell assets valued above five million dollars that are useful in its services to the public. In other words, SDG&E's quantitative and qualitative evaluation must determine that the generation being sold through the potential resale contract is in fact not needed by customers.

### III. Buyers

Potential buyers could contract with SDG&E under various scenarios. One scenario would be by responding to a Sales RFP that SDG&E may issue. As mentioned above, SDG&E's 2024 Plan includes a Sales RFP that SDG&E may choose to issue, and if so, it would receive and evaluate purchase proposals from the market. Other scenarios would be through a bilateral transaction, a broker or exchange. In this scenario, a counterparty may approach SDG&E with an unsolicited proposal, or may be approached by SDG&E. Section 4 of Attachment A describes the potential benefits of bilateral, broker and exchange transactions, which is a valuable tool for both purchases and sales due to its flexibility in addressing situations that involve timing constraints and/or complex terms.

### IV. Pricing

The overarching goal of SDG&E's sales framework is to identify the best possible outcome for its customers. As with SDG&E's past Commission-approved sales transactions, and considering Section 5 below, the appropriate price thresholds of any potential sales opportunity will be dependent upon the results of SDG&E's quantitative and qualitative evaluation at the time of the transaction, and its reasonableness will be determined by the Commission as it acts on SDG&E's advice letter requesting approval of the transaction.

<sup>&</sup>lt;sup>7</sup> Section 851.

<sup>&</sup>lt;sup>8</sup> For example, see Commission Resolution E-4741.

### V. Maximum REC Sale Volume,

### **Maximum REC Sale Volume Methodology:**

The following formula represents SDG&E's methodology for calculating its maximum REC sales volume for any particular portfolio content category (PCC) RECs it elects to sell for any given year. This methodology is also consistent in considering assignment or novation.



<sup>&</sup>lt;sup>9</sup> For example, volumes from mandated programs such as BioRAM are deducted in SDG&E's methodology because the green attributes are mandated to be monetized pursuant to the Tree Mortality Non-Bypassable Charge decision; therefore, the associated RECs cannot be sold pursuant to this analysis.

<sup>&</sup>lt;sup>10</sup> Percent to be determined prior to solicitation, with Independent Evaluator and Procurement Review Group review and consultation.

### APPENDIX 16 TMNBC REC Sale Pro Forma

# WSPP AGREEMENT CONFIRMATION BETWEEN SAN DIEGO GAS & ELECTRIC COMPANY AND [INSERT NAME]

This confirmation letter ("Confirmation") confirms the transaction ("Transaction") between **San Diego Gas & Electric Company** ("Seller" or "SDG&E" or "Party B") and **[INSERT NAME]** ("Buyer" or "Party A"), each individually a "Party" and together the "Parties", effective as of [INSERT DATE] (the "Confirmation Effective Date"). This Transaction is governed by the WSPP Agreement effective as of July 28, 2020, along with any amendments and annexes executed between the Parties thereto (the "Master Agreement"). The Master Agreement and this Confirmation shall be collectively referred to herein as the "Agreement." Capitalized terms used but not otherwise defined in this Confirmation have the meanings ascribed to them in the Master Agreement, Tariff or RPS (as defined below). If any term in this Confirmation conflicts with the Master Agreement, the definitions set forth in this Confirmation shall supersede.

### **CONTACT INFORMATION**

Contact Information:	Name: [INSERT NAME] ("Buyer")	Name: San Diego Gas & Electric Company ("Seller")
	All Notices: Counterparty: Attn: Phone: Email: Duns: Federal Tax ID Number:	All Notices: San Diego Gas & Electric Company 8315 Century Park Court San Diego, CA Zip: 92123 Attn: Electric & Fuel Procurement Contract Administration Phone: (858) 650-5536 Facsimile: (858) 650-6190 Duns: 006911457 Federal Tax ID Number: 95-1184800
	Attn: Phone: Email:	Invoices: San Diego Gas & Electric Company 8315 Century Park Ct. San Diego, California 92123-1593 Attn: Energy Accounting Manager Phone: (858) 650-6177 Facsimile: (858) 650-6190
	Wire Transfer: Bank Name: Bank ABA: Account Number:	Wire Transfer: BNK: Union Bank of California for: San Diego Gas & Electric Company ABA: Routing # 122000496 ACCT: #4430000352 Confirmation: SDG&E, Major Markets FAX: (213) 244-8316

Credit and Collections:  Attn: Phone:	Credit and Collections: San Diego Gas & Electric Company, Major Markets 8326 Century Park Court, CP 21 San Diego, CA 92123
Email:	Attn.: Credit and Collections Manager Fax No.: (858) 650-6190 Phone: Email:
<b>Defaults:</b> With additional Notices of an Event of Default or Potential Event of Default to: Attn:	Defaults: With additional Notices of an Event of Default or Potential Event of Default to:
Phone: Email:	San Diego Gas & Electric Company 8330 Century Park Ct. San Diego, California 92123 Attn: General Counsel Phone: (858) 650-6141 Facsimile: (858) 650-6106

### **ARTICLE 1. COMMERCIAL TERMS**

The Parties hereby agree that the General Terms and Conditions are incorporated herein, and to the following provisions as provided for in the General Terms and Conditions:

	The "Product" is Unit Contingent Obligation electric energy and associated Green Attributes in the Contract Quantity.
Product:	During the Delivery Period, Seller shall deliver and sell, and Buyer shall purchase and receive, the Product, subject to the terms and conditions of this Confirmation. Seller shall not substitute or purchase any Green Attributes from any generating resource other than the Project for delivery hereunder.
Project:	All Product sold hereunder shall be from the facility listed in Exhibit A (the "Project" or the "Facility"). The Project from which Product is sold by Seller to Buyer shall: (a) have a first point of interconnection with a California balancing authority, (b) have a first point of interconnection with distribution facilities used to serve end users within a California balancing authority area, or (c) are scheduled from the eligible renewable energy resource into a California balancing authority without substituting electricity from another source.
Contract Capacity:	In any hour throughout the Delivery Term, the "Contract Capacity" shall be in MW, as determined by Seller in accordance with the Contract Quantity section of this Confirmation.
Contract Quantity:	"Contract Quantity" shall be, for the Delivery Term, all output from the Facility, unless excused pursuant to the definition of Unit Contingent Delivery Obligation below, up to [INSERT] MWh. Seller shall determine the hourly Contract Quantity during the Delivery Period.
Contract Price:	Index Price plus Green Attributes Price
Index Price:	"Index Price" means the CAISO Integrated Forward Market Day-Ahead price (as such term is defined in the Tariff) for NP15 for each applicable hour as published by the CAISO on the CAISO website; or any successor thereto, unless a substitute publication and/or index is mutually agreed to by the Parties.
Green Attributes Price:	\$[INSERT] / MWh
Term:	The "Term" of this Transaction shall commence upon the Confirmation Effective Date and shall continue until delivery by Seller to Buyer of the Contract Quantity of the Product has been completed and all other obligations of the Parties under this Agreement have been satisfied, unless terminated earlier due to failure to satisfy the Condition Precedent or as otherwise provided in the Agreement.
Delivery Period:	The "Delivery Period" of this Transaction shall commence on the later of (i) the first day of the calendar month following the calendar month in which CPUC approval occurs and (ii) January 1, 2022 (the "Start Date"), and continue until midnight on December 31, 2022; provided that if CPUC approval is not received by the Start Date above, then the Start Date shall be the first day of the month following the month in which CPUC approval is received and shall continue until midnight on the last day of the month in which the first anniversary of the Start Date, unless extended for make-up deliveries as specified in the Contract Quantity Section or terminated in accordance with the terms herein.

Delivery Point:	The "Delivery Point" is NP-15.
	"Unit Contingent Obligation" shall have the following meaning:
Unit Contingent Delivery Obligation:	The obligation to provide the Contract Quantity is a unit contingent obligation in that Seller shall deliver the quantity of the Product from the Project to Buyer, instantaneously upon Seller's receipt of such Product, consistent with the terms of this Confirmation on an as as-available basis. Seller's failure to deliver shall be excused, and Seller shall have no obligation to make up or replace any failure of the Facility to generate and deliver the quantity from the Project: if (i) the Project is unavailable as a result of a Scheduled Maintenance or Forced Outage, (ii) by an event or circumstance that affects the Project so as to prevent Seller from performing its obligations, which event or circumstance was not anticipated as of the date the Transaction was agreed to, and which is not within the reasonable control of, or the result of the negligence of, the Seller, (iii) by Buyer's failure to perform, or (iv) by a reduction or insufficiency of biomass that causes a reduction or cessation of generation of electric energy by the Project. Buyer shall have no obligation to pay for any Product that Seller is unable to deliver.
Scheduling Obligations:	Seller, or a qualified third party designated by Seller, shall act as Scheduling Coordinator. Buyer hereby authorizes Seller, or its third-party Scheduling Coordinator designee, to deliver the Product, or cause the Product to be delivered, to the CAISO at the Delivery Point.
Condition Precedent:	The commencement of the Delivery Period in accordance with Section 3 below shall be contingent upon the Seller obtaining or waiving CPUC approval as described in this Confirmation. Either Party has the right to terminate this Confirmation upon notice in accordance with Section 12 of the WSPP Agreement, which will be effective five (5) Business Days after such notice is given, if: (i) the CPUC does not issue a final and non-appealable order approving this Agreement or the requested relief contained in the related advice letter filing, both in their entirety, (ii) the CPUC issues a final and non-appealable order which contains conditions or modifications unacceptable to either Party, or (iii) the final and non-appealable CPUC approval has not been obtained by Seller, on or before December 31, 2021. The date on which CPUC approval of this Confirmation has been obtained or waived, by Seller, in its sole discretion, shall hereinafter be the "Condition Precedent Satisfaction Date." Any termination made by a Party under this section shall be without liability or obligation to the other Party.  Notwithstanding any other provision in this Confirmation, Seller will have no obligation to transfer Green Attributes to Purchaser unless the Condition Precedent Satisfaction Date has occurred.

### **ARTICLE 2. DEFINITIONS**

<sup>&</sup>quot;Buyer" means "Purchaser".

<sup>&</sup>quot;CAISO" means the California Independent System Operator.

<sup>&</sup>quot;CAISO Energy" means "Energy" as defined in the Tariff.

<sup>&</sup>quot;Renewables Portfolio Standard" or "RPS" means the renewable energy program and policies established by California State Senate Bills 1078, X1 - 2 and 350, codified in California Public Utilities Code Sections 399.11 through 399.32 and California Public Resources Code Sections 25740 through 25751, as such provisions are amended or supplemented from time to time.

<sup>&</sup>quot;Condition Precedent Satisfaction Date" means the date on which CPUC approval, as fully described in the "Condition Precedent" provision, has been obtained or waived, by Seller, in its sole discretion.

"CPUC" means the California Public Utilities Commission or its regulatory successor.

"CPUC Approval" means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to the Parties, or either of them, which contains the following terms:

- (a) Approves this Agreement in its entirety, including payments to be made by the Buyer, subject to CPUC review of the Buyer's administration of the Agreement; and
- (b) Finds that any procurement pursuant to this Agreement is procurement from an eligible renewable energy resource for purposes of determining Buyer's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 *et seq.*), Decision 03-06-071, or other applicable law.

CPUC Approval will be deemed to have occurred on the date that a CPUC decision containing such findings becomes final and non-appealable.

Notwithstanding the foregoing, if a Tier 2 or Tier 3 advice letter process is used to obtain CPUC Approval of this Agreement, CPUC Approval will also be deemed to have occurred on the date that a CPUC Energy Division disposition which contains such findings or deems approved an advice letter requesting such findings becomes final and non-appealable.

"Day-Ahead" has the meaning set forth in the Tariff.

"Delivery Period" means "Delivery Term".

"Forced Outage" means the removal from service availability of a generating unit, transmission line, or other facility for emergency reasons, or the condition in which the equipment is unavailable due to unanticipated failure.

"Governmental Authority" means any federal, state, local or municipal government, governmental department, commission, board, bureau, agency, or instrumentality, or any judicial, regulatory or administrative body, having jurisdiction as to the matter in question.

"Green Attributes" means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Project, and its avoided emission of pollutants. Green Attributes include but are not limited to Renewable Energy Credits, as well as:

- (i) any avoided emission of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants;
- (ii) any avoided emissions of carbon dioxide (CO2), methane (CH4), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by law, to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere;<sup>1</sup>
- (iii) the reporting rights to these avoided emissions, such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of a Green Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state law, if applicable, and to a federal or state agency or any other party at the Green Tag Purchaser's discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local law, regulation or bill, and international or foreign emissions trading program. Green Tags are accumulated on a MWh basis and one Green Tag represents the Green Attributes associated with one (1) MWh of Energy.

Green Attributes do not include;

(i) any energy, capacity, reliability or other power attributes from the Project,

Avoided emissions may or may not have any value for GHG compliance purposes. Although avoided emissions are included in the list of Green Attributes, this inclusion does not create any right to use those avoided emissions to comply with any GHG regulatory program.

- (ii) production tax credits associated with the construction or operation of the Project and other financial incentives in the form of credits, reductions, or allowances associated with the Project that are applicable to a state or federal income taxation obligation,
- (iii) fuel-related subsidies or "tipping fees" that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or
- (iv) emission reduction credits encumbered or used by the Project for compliance with local, state, or federal operating and/or air quality permits.

If the Project is a biomass or biogas facility and Seller receives any tradable Green Attributes based on the greenhouse gas reduction benefits or other emission offsets attributed to its fuel usage, it shall provide Buyer with sufficient Green Attributes to ensure that there are zero net emissions associated with the production of electricity from the Project. [STC 2, Green Attributes, Modifiable.]

"Integrated Forward Market" has the meaning set forth in the Tariff.

"Scheduled Maintenance" means an outage or partial outage scheduled to perform the necessary normal maintenance on a generating unit, transmission line, or other facility to preserve the reliability of the unit or overall system reliability, including scheduled outages for such maintenance.

"Tariff" means the tariff and protocol provisions, including any current CAISO-published "Operating Procedures" and "Business Practice Manuals," as amended or supplemented from time to time, of the CAISO.

"Vintage" means the calendar year and month during the Delivery Period in which the WREGIS Certificate is created through the generation of the Product.

"WREGIS" means the Western Renewable Energy Generation Information System or other process recognized under applicable laws for the registration, transfer or ownership of Green Attributes.

"WREGIS Certificate" means "Certificate" as defined by WREGIS in the WREGIS Operating Rules.

"WREGIS Operating Rules" means the operating rules and requirements adopted by WREGIS.

### ARTICLE 3. CONVEYANCE OF RENEWABLE ENERGY

### 3.1. Seller's Conveyance Of Electric Energy

Except as stated in this Section 3.1 and beginning on the first day of the Delivery Period and throughout all applicable months of the Delivery Period, Seller shall deliver and sell, and Buyer shall purchase and receive, the Product, subject to the terms and conditions of this Confirmation. Seller will not be obligated to sell or replace any Product that is not or cannot be delivered as a result of Uncontrollable Force.

Should any electric energy provided by Seller under this Confirmation be determined to have originated from a resource other than the Project, Seller shall remedy such failure in a manner reasonably acceptable to Buyer within a reasonable period of time after written notice of such failure is given to the Seller by the Buyer.

### 3.2. Seller's Conveyance Of Green Attributes

- (a) <u>Green Attributes.</u> Seller hereby provides and conveys all Green Attributes associated with all electricity generation from the Project to Buyer as part of the Product being delivered. Seller represents and warrants that Seller holds the rights to all Green Attributes from the Project, and Seller agrees to convey and hereby conveys all such Green Attributes to Buyer as included in the delivery of the Product from the Project. The Green Attributes are delivered and conveyed upon completion of all actions described in Section 3.2(b) below. [STC 2 Green Attributes, Modifiable.]
  - (b) Green Attributes Initially Credited to Seller's WREGIS Account
    - (i) During the Delivery Period, Seller, at its own cost and expense, shall maintain its

registration with WREGIS. All Green Attributes transferred by Seller hereunder shall be designated California RPS-compliant with WREGIS. Seller shall, at its sole expense, use WREGIS as required pursuant to the WREGIS Operating Rules to effectuate the transfer of Green Attributes to Buyer in accordance with WREGIS reporting protocols and WREGIS Operating Rules.

- (ii) For each applicable month of the Delivery Period, Seller shall deliver and convey the Green Attributes associated with the electric energy delivered in Section 3.1 within five (5) Business Days after the end of the month in which the WREGIS Certificates for the Green Attributes are created by properly transferring such WREGIS Certificates, in accordance with the rules and regulations of WREGIS, equivalent to the quantity of Green Attributes to Purchaser into Purchaser's WREGIS account such that all right, title and interest in and to the WREGIS Certificates shall transfer from Seller to Purchaser.
- (iii) In addition to its other obligations under this Section 3.2, Seller shall convey to Buyer WREGIS Certificates from the Project that are of the same Vintage as the Product that was provided under Section 3.1 of this Confirmation.

### ARTICLE 4. PERFORMANCE ASSURANCE; CPUC FILING AND APPROVAL

### 4.1. Performance Assurance

Notwithstanding any provision in the WSPP Agreement to the contrary, including Section 27, neither Party shall be required to post performance assurance, collateral or other security for this Transaction.

### 4.2. CPUC Filing and Approval

Within thirty (30) days after the Confirmation Effective Date, Seller shall file with the CPUC the appropriate request for CPUC approval of this Agreement and possibly other agreements. Seller shall seek CPUC approval of the filing, including promptly responding to any requests for information related to the request for CPUC approval. Buyer shall use commercially reasonable efforts to support Seller in obtaining CPUC approval. Seller and Buyer have no obligation to seek rehearing or to appeal a CPUC decision which fails to approve this Agreement, or which fails to meet the requirements contained in the Condition Precedent section. Notwithstanding anything to the contrary in the Confirmation, Seller shall not have any obligation or liability to Buyer or any third party for any action or inaction of the CPUC or other Governmental Authority affecting the approval or status of this Confirmation as a transaction eligible for portfolio content category, as defined in California Public Utilities Code Section 399.16(b)(1).

### **ARTICLE 5. COMPENSATION**

### 5.1. Calculation Period

The "Calculation Period" shall be each calendar month, or portion thereof, during the Delivery Period.

### 5.2. Monthly Cash Settlement Amount

Purchaser shall pay Seller the Monthly Cash Settlement Amount, in arrears, for each Calculation Period in the amount equal to the sum of (a) plus (b) minus (c), where:

- (a) equals the sum, over all hours of the Calculation Period, of the applicable Index Price for each hour, multiplied by the quantity of CAISO Energy scheduled, delivered and received by Purchaser pursuant to Section 3.1 during that hour; and
- (b) equals the product of the Green Attributes Price multiplied by the quantity of Green Attributes (in MWhs) delivered, or to be delivered, or credited to Purchaser's WREGIS account pursuant to Section 3.2 during the applicable Calculation Period; and
  - (c) equals the sum, over all hours of the Calculation Period, of the applicable Index Price for

each hour, multiplied by the quantity of CAISO Energy scheduled, delivered and received by Purchaser pursuant to Section 3.1 during that hour.

Such Monthly Cash Settlement Amount constitutes payment for the Product, including the Green Attributes, for such applicable Calculation Period. Buyer shall be obligated to make such payments with respect to each applicable Calculation Period notwithstanding the fact that the Green Attributes associated with a particular Calculation Period may be delivered or credited to Buyer's WREGIS account subsequent to the conclusion of the applicable Calculation Period in accordance with Section 3.2(b) of this Confirmation, provided that if Seller fails to comply with the provisions of Section 3.2(b), Buyer shall be entitled to exercise all rights and remedies available to Buyer under this Agreement for Seller's failure to deliver the Product.

### 5.3. Invoicing; Payment Date

- (a) Invoices for each Monthly Cash Settlement Amount shall be sent by Seller to Buyer within ten (10) Business Days after the last day of the Calculation Period, in Excel/PDF format via email to Buyer's Invoice Contact set forth above in Contact Information. For purposes of this Confirmation, Buyer shall be deemed to have received an invoice upon the receipt of the Excel/PDF format of the invoice. Payment to Seller shall be made by electronic funds transfer pursuant to the Wire Transfer instructions set forth above in Contract Information.
- (b) Notwithstanding any provision to the contrary in Section 9.2 of the Master Agreement, payments of each Monthly Cash Settlement Amount by Purchaser to Seller under this Confirmation shall be due and payable on or before the later of the twentieth (20<sup>th</sup>) day of the month in which the Purchaser receives from Seller an invoice for the Calculation Period to which the Monthly Cash Settlement Amount pertains, or within ten (10) Business Days, or, if such day is not a Business Day, then on the next Business Day, following receipt of an invoice issued by Seller for the applicable Calculation Period. The invoice shall include a statement detailing the portion of Product transferred to Purchaser during the applicable Calculation Period.

### ARTICLE 6. SELLER'S REPRESENTATIONS, WARRANTIES AND COVENANTS

- (a) Seller, and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement that:
  - (i) the Project qualifies and is certified by the CEC as an Eligible Renewable Energy Resource ("ERR") as such term is defined in Public Utilities Code Section 399.12 or Section 399.16; and
  - (ii) the Project's output delivered to Buyer qualifies under the requirements of the California Renewables Portfolio Standard. To the extent a change in law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in law. [STC 6, Non-Modifiable.]
  - (iii) Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement the Renewable Energy Credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in California Public Utilities Commission Decision 08-08-028, and as may be modified by subsequent decision of the California Public Utilities Commission or by subsequent legislation. To the extent a change in law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in law. [STC REC-1, Non-modifiable.]
  - (b) The term "commercially reasonable efforts" as set forth in Sections 6.1 (a) and (b) above

shall not require Seller to incur out-of-pocket expenses in excess of \$10,000 in the aggregate in any one calendar year between the Confirmation Effective Date and the last day of the Term.

(c) Seller warrants that all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in the Western Renewable Energy Generation Information System will be taken prior to the first delivery under the contract. [STC REC-2, Non-modifiable.]

For the avoidance of doubt, the term "contract" as used in the immediately preceding paragraph means this Agreement.

- (d) In addition to the foregoing, Seller warrants, represents and covenants, as of the Confirmation Effective Date and throughout the Delivery Period, that:
  - (i) Seller has the contractual rights to sell all right, title, and interest in the Product agreed to be delivered hereunder;
  - (ii) Seller has not sold the Product to be delivered under this Confirmation to any other person or entity; and
  - (iii) at the time of delivery, all rights, title, and interest in the Product to be delivered under this Confirmation are free and clear of all liens, taxes, claims, security interests, or other encumbrances of any kind whatsoever.
  - (iv) The original upstream third party contract(s), under which Buyer is re-selling, meets the criteria of California Public Utilities Code Section 399.16(b)(1)(A);
  - (v) This Agreement transfers only Energy and Green Attributes that have not yet been generated prior to the commencement of the Delivery Period; and
  - (vi) The Energy transferred hereunder is transferred to Buyer in real time.

### ARTICLE 7. GENERAL PROVISIONS

### 7.1. Facility Identification

Upon Buyer's reasonable request, within ten (10) Business Days after the end of each month during the Delivery Period, Seller shall provide indicative identification, based on preliminary meter data, of the Facility.

### 7.2. Governing Law/Venue

THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. TO THE EXTENT ENFORCEABLE AT SUCH TIME, EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY LITIGATION ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT. [STC 17, Applicable Law, Non-Modifiable.]

The Parties hereby irrevocably and unconditionally agrees that any legal action or proceeding with respect to this Agreement shall be brought in the courts of the State of California in the County of San Diego or the courts of the United States in the County of San Diego, and by executing and delivering this Agreement, both Parties hereby submit to and accept irrevocably and unconditionally, the jurisdiction of the above mentioned courts. The foregoing, however, shall not limit the right of either Party as it may elect to bring any legal action or proceeding or to obtain execution of judgment in any other appropriate jurisdiction.

### 7.3. SOVEREIGN IMMUNITY

Purchaser warrants and covenants that with respect to its contractual obligations hereunder and performance thereof, it will not claim immunity on the grounds of sovereignty or similar grounds from (a) suit, (b) jurisdiction of court (provided that such court is located within a venue permitted under the Agreement), or (c) execution or enforcement of any judgment; provided, however, that nothing in this Agreement shall waive the obligations and/or rights set forth in the California Government Claims Act

(Government Code Section 810 et seq.).

### 7.4. Confidentiality Amendment to WSPP Agreement

Changes to the WSPP shall apply to this Confirmation only. For purposes of this Confirmation, Section 30 (Confidentiality) of the WSPP Agreement is deleted in its entirety and replaced with the following:

"30.1(a) Each Party recognizes that this Confirmation is subject to the requirements of the California Public Records Act (Government Code Section 6250 et seq.). Neither Party shall disclose the non-public terms or conditions of this Agreement or any transaction hereunder to a third party, other than (i) the Party's Affiliates and its and their officers, directors, employees, lenders, counsel, accountants or advisors who have a need to know such information and have agreed to keep such terms confidential, (ii) for disclosure to the Buyer's Procurement Review Group, as defined in CPUC Decision (D) 02-08-071, subject to a confidentiality agreement, (iii) to the CPUC under seal for purposes of review, (iv) disclosure of terms specified in and pursuant to Section 30.1(b) of this Agreement; (v) in order to comply with any applicable law, regulation, including, but not limited to, the California Public Records Act and/or the California Ralph M Brown Act, or any exchange, control area or CAISO rule, or order issued by a court or entity with competent jurisdiction over the disclosing Party ("Disclosing Party"), other than to those entities set forth in subsection (vi); or (vi) in order to comply with any applicable regulation, rule, or order of the CPUC, CEC, or the Federal Energy Regulatory Commission. In connection with requests made pursuant to clause (v) of this Section 30.1(a) ("Disclosure Order") each Party shall, to the extent practicable, use reasonable efforts within its sole and absolute discretion to pursue rights under such applicable laws, regulations, rules or orders which allow for the prevention or limitation of such disclosure. The Disclosure Party's determination of what efforts might be reasonable shall not be subject to challenge by the other Party. After using such reasonable efforts, the Disclosing Party shall not be: (i) prohibited from complying with a Disclosure Order or (ii) liable to the other Party for monetary or other damages incurred in connection with the disclosure of the confidential information. Except as provided in the preceding sentence, the Parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with, this confidentiality obligation.

- (b) RPS Confidentiality. Notwithstanding Section 30.1(a) of this Agreement, at any time on or after the date on which the Seller makes its filing seeking CPUC approval for this Agreement, either Party shall be permitted to disclose the following terms with respect to this Agreement: Party names, resource type, Delivery Term, project location, Contract Capacity, Contract Quantity, and Delivery Point.
- (c) Publicity. Except as otherwise agreed to in this Section 30.1 above, no announcement, publicity, advertising, press release, promotional or marketing materials regarding the arrangement contemplated under this Agreement, including the existence hereof, shall be made by either Party without the prior written approval of the other Party which approval shall not be unreasonably withheld or delayed. Notwithstanding the foregoing, the Parties understand acknowledge and agree that Buyer is a California Public Agency and that certain actions and documents of Buyer are subject to public notice and/or disclosure under applicable laws and regulations, including, but not limited to, the California Public Records Act and/or the California Ralph M. Brown Act, and that Buyer is not obligated to seek prior approval of Seller when Buyer is complying, in its sole and absolute discretion, with such laws and regulations."

### 7.5 No Recourse to Members of Buyer

Buyer is organized as a Joint Powers Authority in accordance with the Joint Exercise of Powers Act of the State of California (Government Code Section 6500, et seq.) and is a public entity separate from its constituent members. Buyer will solely be responsible for all debts, obligations and liabilities accruing and arising out of this Confirmation. Seller will have no rights and shall not make any claims, take any actions or assert any remedies against any of Buyer's constituent members, or the officers, directors, advisors, contractors, consultants or employees of Buyer or Buyer's constituent members, in connection with this Confirmation.

### 7.6 Counterparts

This Confirmation may be signed in any number of counterparts with the same effect as if the signatures to the counterparts were upon a single instrument. The Parties may rely on electronic or scanned signatures as originals under this Confirmation. Delivery of an executed signature page of this Confirmation by electronic mail transmission (including PDF) shall be the same as delivery of a manually executed signature page.

### 7.7 Entire Agreement; No Oral Agreements or Modifications

This Confirmation sets forth the terms of the Transaction into which the Parties have entered and shall constitute the entire agreement between the Parties relating to the contemplated purchase and sale of the Product. Notwithstanding any other provision of the Agreement, this Transaction may be confirmed only through a Documentary Writing executed by both Parties, and no amendment or modification to this Transaction shall be enforceable except through a Documentary Writing executed by both Parties.

[Signatures appear on the following page.]

### ACKNOWLEDGED AND AGREED TO AS OF THE CONFIRMATION EFFECTIVE DATE:

SAN DIEGO GAS & ELECTRIC COMPANY	[INSERT COUNTERPARTY]
BY:	BY:
NAME:	NAME:
TITLE:	TITLE:
APPROVED AS TO LEGAL FORM	

### **EXHIBIT A**

### TO THE CONFIRMATION BETWEEN [INSERT NAME] AND SAN DIEGO GAS & ELECTRIC COMPANY

DATED: [INSERT]

### PROJECT FACILITY

Facility	Resource ID	Capacity (MW)	CEC RPS ID	WREGIS GU ID	Balancing Authority
HL Power Company, LP	LASSEN_6_UNITS	24	60077A	W604	CAISO

### **APPENDIX 17**

### SDG&E's Request for Information

### SDG&E's Request for Information – July 22, 2023:

The appendix herein provides the summary of SDG&E's Request for Information from its second RFI process. It includes a summary of responses received from the RFI solicitations issued in 2023 as required by Decision 21-05-030 on Request for Information, dated May 20, 2021. SDG&E issued an RFI to 35 supplier counterparties of existing RPS-eligible power purchase agreements and to 2,500 RPS market participants to determine interest in contract assignments and/or modifications to optimize SDG&E's portfolio. SDG&E is currently evaluating responses from both counterparties and third-party market participants. SDG&E has provided and will continue to provide updates to the PRG regarding SDG&E's RFI process. All resulting contracts, if there are any, from the RFI process, will be submitted to the Commission for approval via Tier 3 Advice Letter filing.

CONFIDENTIAL APPENDIX 16 - Table 1	2023 RFI Response from Supplier Counterparties  Projects Facility Size Est. Annual Generation Contract End Date Comments		2023 RFI Resposes from Market Participants  Third Party  Eacility Type  Duration  Capacity Size  Capacity Size  Capacity Size  Capacity Size  Anew information as of July 2024
		1 2 8 4	1 2 8 4 4

### **APPENDIX 18**

### Achievable, Upfront Standards & Criteria

### SDG&E's Achievable, Upfront Standards and Criteria

CATEGORY	STANDARDS & CRITERIA
Volume	SDG&E will consider volume limits in sales and/or purchases –(i.e., quantities within a volumetric cap (in MWh) and identified in, and approved by the Commission in the RPS Plan)
Delivery Years	Less than 5 years forward
Products	PCC 1 / 2 / 3
Transaction Type	Purchase/Sell
Price	Sales - Price Floor
	Purchases - Price Ceiling or Strong Showing (if price is above the ceiling)
Entities Type	Brokers, Counterparties, and Exchanges
Process/Method	IOU solicitations, 3rd party solicitations, bilateral, and broker/exchange transactions
PRG Consultation	PRG consultation for transactions greater than three months except for those transactions which (1) cannot wait for PRG consultation, (2) are in keeping with a strategy or plan already discussed with and reviewed by the PRG, and (3) involve transparent exchanges, brokers, or electronic solicitations
Administrative Review	The quarterly RPS Reporting will be submitted to CPUC auditing staff and the relevant Energy Division staff
Attachments to Quarterly Report	IE Report when applicable (ie., SDG&E held Solicitations), copy of executed agreement, summary of volumes transacted are within the volumetric caps, strong showing for bilaterals
Cost Recovery	<ul> <li>Purchases &lt; or equal 1 year: ERRA</li> <li>Purchases &gt; 1 year and &lt; 5: PABA subaccount</li> <li>Unit specific sales: PABA subaccount for sold resource</li> <li>Non-Unit Specific resource: PABA subaccount pro rata allocation</li> <li>IOU VA share: ERRA</li> <li>Brokers &amp; exchange fees: ERRA/subaccount of PABA based on whether the purchase/sales would record to ERRA or PABA</li> <li>Request an order in Commission Decision for Tier 1 AL to modify tariffs as needed</li> </ul>
Contract Method	Either via Commission-adopted pro forma, or transactions using other documentation that must include, at a minimum, the Commission-adopted RPS Standard Terms and Conditions, with the exception of the defined term "CPUC Approval"
List of Approved Brokers & Exchanges	List of Approved Brokers and Exchanges for REC Sales and Purchases (See SDG&E's list of brokers and exchanges below)

### SDG&E's List of Brokers and Exchanges<sup>1</sup>

Brokers
BGC Environmental Brokerage Services
BGC Financial, L.P.
Choice Natural Gas, LP and Choice Power, LP
Elk Mountain Energy, LLC
Energy Trade Management GP, LLC
Equus Energy Group, LLC
Evolution Markets Inc.
Intercontinental Exchange Inc.
IVG Energy, Ltd.
SCB Brokers LLC.
TFS Brokers
TFS Energy Futures, LLC
Tullet Prebon Americas Corp
Wells Fargo Advisors, LLC

Exchanges	
Intercontinental Exchange (ICE)	
New York Mercantile Exchange (NYMEX)	

Note: SDG&E will update its brokers and exchanges list in its Bundled Procurement Plan as needed.

<sup>&</sup>lt;sup>1</sup> SDG&E's 2014 Bundled Procurement Plan, on pages 48 and 49.

## APPENDIX 19 SDG&E's RPS Procurement Offer Form

### 1. Instructions

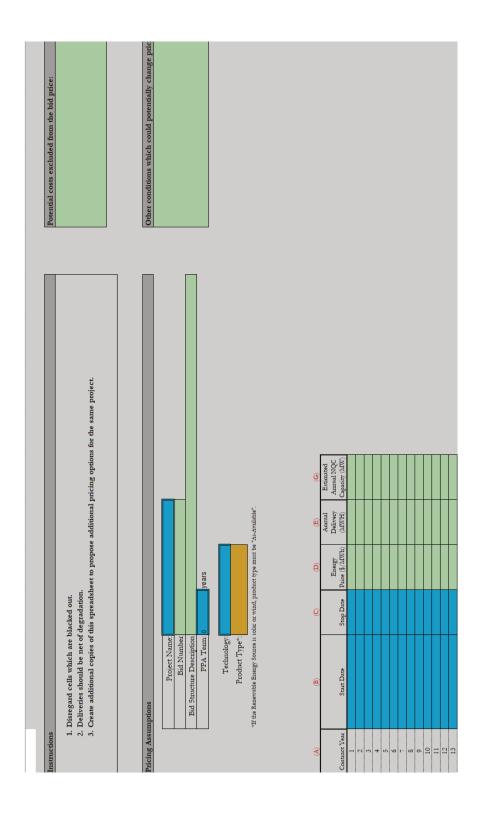
								Page 1	
Renewable F	Products Of	fer Fo	rm						
Renewable Portfolio St	andard RFO - Rene	wables							
San Diego Gas and Electi	ric Company ("SDG&E	") is issuin	this RFO	to meet the RPS c	omplian	ce requiren	nents.		
	1			7					
Form Field Key:									
Free Form Field									
Pull Down Menu									
Calculated Field									
Comment Field									
Instructions:									
- Follow instructions as t	hey appear in each fi	elds' comr	nents or po	p-up messages					
- Complete all applicable	e fields in the "Contac	ct Informa	tion", "Pro	ect Description",	"Pricing	g" <i>,</i> and "Ty	pical Profile	e" workshe	ets
- Fill out all fields in the	units requested								
- Do not add, change, or	move any cells, rows	, columns	or workshe	ets in the workbo	ok				

### 2. Contact Information

			Page 2	
Renewable Products Offer Form				
Renewable Portfolio Standard RFO - Renewables				
Contact Information				
Primary Contact Information:				
Name:				
Title:				
Company:				
E-Mail:				
Phone Number:				
Secondary Contact Information:				
Name:				
Title:				
Company:				
E-Mail:				
Phone Number:		1		
Bidder Information:				
Business Address 1				
Business Address 2				
City				
State				
Zip Code		i		
General Information				
Bidder or Contact listed above is an affiliate of SDG&E?				
Bidder or Contact listed above has one or more contracts with SDG&E?				
Bidder or Sponsor is certified as a Diverse Business Entity (DBE)?				

### 3. Project Description tab

### 4. a. Bundled RECs Pricing



4. b. Unbundled RECs Pricing

Renewable Products Offer Form

Other conditions which could potentially change pricing: Estimated Annual Delivery (MWH) Disregard cells which are blacked our.
 Deliveries should be net of degradation.
 Greate additional copies of this spreadsheet to propose additional pricing. Technology:
Product Type\*:
"If the Perewahe Energy Source is solar or wind product type must be "As-Avalable". REC Price (\$/MWh) Stop Date Renewable Portfolio Standard RFO - Renewables Contract Year

### 5. Delivery Profile

# Renewable Products Offer Form Renewable Portfolio Standard RFO - Renewables Instructions: File date Description Geographical Site Meteorology Data Simulation Project Simulation Run Date Solar Plant's Location relative to TOD Timezone (hours east of PPT) For example, PPT is -8 GMT, if the timezone is -7 GMT (AZ for example), then the value entered should be 1 Expected Plant Uptime % excluding external system curtailments Solar or Wind Smaller of LGIA or Contract Maximum - MW

Annual 8	760 Hourly profile			
	GlobHor( Solar only)	T Amb (Solar or Wind)	WindVel (Solar or Wind)	Energy (E_Grid) (Solar or Wind)
Hour of standard year (8760 hours)	W/m²	°C	m/s	MWh
1 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9			11113	WVVII
10				
11 12				
13 14				
15				
16 17				
18				

### **APPENDIX 20**

### SDG&E's Transmission and Interconnection Delay

### **PUBLIC**

### SB 1174 Reporting

\*\*IMPORTANT\* All fields, except "Notes", are mandatory. Returned data with blank fields will be considered incomplete. The Input Format described below must be followed for each field, i.e. date fields must have dates entered. Tab sections in black text refer to transmission projects, tab sections in red text refer to generation projects.

Pursuant to SB 1174 [Hertcherg, Stat, 2022, Ch. 229] and Pub. Util. Code § 399.13(a)(2)(B), electrical corporations that own transmission facilities are required to provide information within their RPS Procurement Plans detailing the impact that delays to transmission facilities and network system upgrades have had on renewable energy and energy storage resources with executed interconnection agreements. Electrical corporations should use this template to report the related data and include data on all projects currently in development, regardless of if it has been delayed or not.

Electrical corporations shall list each of their transmission facility and system network upgrades that are currently in development, in the "Transmission Project Name" column/field on the "1. Transmission Delay Reporting" tab. For each project listed in the "Transmission Project Name" column/field on the "1. Transmission Delay Reporting" tab. Fill in the corresponding data fields for the project. Fill in all construction and inservice dates for all projects regardless of if the project has been delayed or not. For each transmission facility and system network upgrade project, list every renewable energy and energy storage resource that depends on the project's completion in section 4: "GENERATION RESOURCE DEPENDENCIES".

Additionally, electrical corporations are to fill in the "2. Generation Reporting" tab and list every renewable energy and energy storage resource (with executed interconnection agreements) currently in the CAISO, WDAT, or other interconnection queues. For each resource make sure to list every transmission facility and system network upgrade project that it depends on in section 3: "CONNECTING TRANSMISSION PROJECTS".

			"1. Transmission D	elay Reporting" TAB
			Section 1: TRANSMIS	SION PROJECT DETAILS
Field #	Project Data Field	Input Format	Input Example	Input Description
1	Transmission Project Name	Text string.	Manzanita Substation	Project's name at the date of filing this report and this is currently in development. Identify all prior project names and alternative names currently used in different venues, including the name as approved and included in the CAISO's TPP.
2	Transmission Project Unique ID	Text string.	78493	Unique identification (ID) code(s) or number(s) for transmission project. List most specific (PG&E = Planning Order, SCE = SCE ID, SDG&E = Project ID).
3	Description	Text string.	Project will repair the transmission line connecting 4th and Townsend to the East Northfork station which failed as a consequence of the 2019 San Clemente Hedge Fire.	Brief project summary, including assets to be installed.
4	Status	Drop-down menu selection.	Construction (10%-25%)	See drop-down menu. Indicate the status of the project.
5	Action Taken	Drop-down menu selection.	Upgrade/Retrofit	See drop-down menu. If two or more options are required, select "Multiple Options" and provide remaining responses, pipe-delimited, in 'Notes' data field. If the purpose or purpose details relates to complying with a NERC, WECC, or CAISO requirement, list specific standard(s), requirement(s), and/or any contingencies that are being addressed.
6	Purpose	Drop-down menu selection.	Reliability	See drop-down menu. In the "Notes" data field, please explain a purpose identified as "Other" or provide additional details on the purpose identified.
7	Purpose Details	Drop-down menu selection.	Age/Condition - Anti Climb Guards	See drop-down menu. If the purpose details is to comply with a NERC, WECC, or CAISO requirement, list the standard, requirement, and/or any contingencies that are being addressed in the "Notes" data field.
			Section 2: TRANSMISSI	ON PROJECT VARIANCES
Field #	Project Data Field	Input Format	Input Example	Input Description
8	Original Construction Start Date	Date, formatted YYYY-MM-DD.	2025-07-30	The expected construction start date when the project was first approved.
9	Current Planned or Actual Construction Start Date	Date, formatted YYYY-MM-DD.	2024-12-15	At the time the data was extracted from the utility's database(s) as provided in Section 2.1.5 of the Transmission Project Review Process Description. If the project has not been delayed, the original and current construction dates should match.
10	Construction Start Date Change Initiator	Drop-down menu selection.	Utility	See drop-down menu. Select the party that initiated the change from the original construction start date. The initiator is the party closest to the source of the delay. Select N/A only if the project is NOT delayed.
11	Construction Start Date Change Reason	Drop-down menu selection.	Land Rights	See drop-down menu. Select the reason for the change from the original construction start date. Select N/A only if the project is NOT delayed.
12	Original In-service Date	Date, formatted YYYY-MM-DD.	2025-06-01	The expected in-service start date when the project was first approved.
13	Current Planned or Actual In-service Date	Date, formatted YYYY-MM-DD.	2021-01-01	At the time the data was extracted from the utility's database(s) as provided in Section 2.1.5 of the Transmission Project Review Process Description. If the project has not been delayed, the original and current in-service dates should match.
14	In-service Date Change Initiator	Drop-down menu selection.	Customer	See drop-down menu. Select the party that initiated the change from the original in-service date. The initiator is the party closest to the source of the delay. Select N/A only if the project is NOT delayed.
15	In-service Date Change Reason	Drop-down menu selection.	Financing	See drop-down menu. Select the reason for the change from the original in-service date. Select N/A only if the project is NOT delayed.
			Section 3: TRANSMIS	SION PROJECT NOTES
Field #	Project Data Field	Input Format	Input Example	Input Description
16	Notes	Text strings, inclusive of field identifiers in brackets, separated by	[4. Status] PPA negotiation failure.	For all fields in which an option including "[See Notes]" was selected, please enter a description or explanation here.
		line break.	[6. Purpose] Experimental breaker testing.	
				RESOURCE DEPENDENCIES
Field #		Input Format	Input Example	Input Description
	Dependent In-Queue Generation Resource (CAISO and WDAT)	Text string.	0002CONV	CAISO and WDAT queue numbers. Identify all generation resources (with executed interconnection agreements) that are operationally dependent on this project. List all queue position #s both CAISO and WDAT generation projects. Types of queue position labels include, but are not limited to:  -##, or, if two queues have combined then the queue number will reflect ##,##.
17+				-####CONV is a two-to-three party contract conversion or is a conversion project repowering with new generation####PRC, that is an existing two-party generating Faility that has yet to complete a contract conversion#### for generation resources that are dynamic or pseudo-ties (projects in a balancing authority area other than the CAISO but are treated as Participating Generators under the CAISO TRIFI.
				If the generation resource is connecting to a PTO's distribution system then Queue numbers can include "W", "WDT", "WD", "GFID", "RO' or "Rule 21".
				Submitter may add additional columns for additional generation projects as necessary.

			Z. Generation	Reporting" TAB
			Section 1: GENERATIO	N RESOURCES DETAILS
Field #	Project Data Field	Input Format	Input Example	Input Description
1	Generation Facility Name	Text string.	Sierra Solar Farm Project	Name of generating facility (with executed interconnection agreement) that is currently in development.
2	In-Queue Number (CAISO or WDAT)	Text string.	0002CONV	CAISO queue or WDAT (Wholesale Distribution Access Tariff) queue number of the generating facility. Types of queue position labels include:  -###, or, if two queues have combined then the queue number will reflect ##,###.  -#####CDAV is a two-to-three party contract conversion or is a conversion project repowering with new generation.  -#####EC, that is an existing two-party generating facility that has yet to complete a contract conversion.  -#####EC parts in a existing two-party generating facility that has yet to complete a contract conversion.  -#####EC parts of prevention resources that are dynamic or pseudo-ties (projects in a balancing authority area other than the CAISO but are treated as Participating Generators under the CAISO Tariff.)  If the generation resource is connecting to a Participating TO's distribution system then Queue numbers can include "W", "WDT", "WD",  "GFID", "RD" or "Rule 21".
3	Generator Resource ID	TEXT STRING IN CAPS, underscore(_), #(s), underscore (_), TEXT STRING IN CAPS. #(s).	HENRUA_6_ACDSR3	The resource ID for this generating facility. Resource ID is assigned during "model build" stage of the New Resource Implementation (NRI) Process.
4	Primary Developer	Text string.	SuperSun Renewables, LCC	Developer with the highest percentage interest in the project.
5	Developer Parent Company Name	Text string.	Orion Energy Corp.	Parent company name of primary developer. For wholesale aggregated contracts, use name of aggregator (e.g., Shell, Barclays etc.).
6	Nameplate Capacity	Number (decimal).	100.5	Total nameplate capacity of the whole project in MW. This should be the maximum MW it can deliver under the interconnection agreement.
7	Expected Annual RPS Eligible Generation (MWh)	Number (decimal).	29396.8	The anticipated total energy generated by this RPS eligible resource each year in MWh.
8	Planned Construction Start Date	Date, formatted YYYY-MM-DD.	2024-06-17	Identify planned construction start dates for in-queue resource or generation project.
9		Date, formatted YYYY-MM-DD.	2025-09-01	Identify planned in-service date for in-queue resource and generation project.
10	Interconnection Request Type	Drop-down menu selection.	Fully deliverable	See drop-down menu. Select deliverability status sought in interconnection agreement.
11	Technology Type		Biogas	See drop-down menu. Select resource technology type.
12	RPS Eligible	Drop-down menu selection.	Yes	Is this resource RPS-eligible? (Yes or No)
			Section 2: GENERATION	ON RESOURCES NOTES
Field #	Project Data Field	Input Format	Input Example	Input Description
13	Notes	Text strings, inclusive of field identifiers in brackets, separated by line break.	[11. Technology Type] Mixed technology, solar and battery storage.	For all fields in which an option including "[See Notes]" was selected, please enter a description or explanation here.
			Section 3: CONNECTING 1	TRANSMISSION PROJECTS
Field #		Input Format	Input Example	Input Description
14+	Transmission Project Unique ID	Text string.	78493	Corresponding "Transmission Project Unique ID" from transmission projects in "1. Transmission Delay Reporting" tab, field 2, that this generating facility is dependent on.  Submitter may add additional Columns for additional transmission projects as necessary.

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be followed for each field, i.e.	PROBLEMS and READ AND AND AND AND AND AND AND AND AND A	wen blankfields wit be considered .	incomplete, the input romar descitation projects, tab sections ing 6.	wat refer to generation	one cas must													
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## Acronym List

# ACCONVENT Definition AFUDC AIDWANCE for Funds Used During Construction CAISO Callionina Independent System Operator CPUC Callionina Public Utilities Commission FERC General Energy Regulatory Commission GO General Order In Information Technology IX INTERCANDENT Technology IX MWA Megavotic-ampere MREC North American Electric Reliability Corporation OAL Operative as installed PGGE Pacific Gas and Electric PTO Participating Transmission Owner RPS Renewables Porficiol Standard RTU Remote Terminal Unit SGE Southern California Edison SDGRE STARSMISSION Planning Process Transmission Planning Process Transmission Planning Process Transmission Planning Process TWA Western Electricity Coordinaling Council

# **Date Change Reasons Defined**

Reason	Definition
Bundling Dependencies	unding Dependencies Have other projects or work (outside of this project) been delayed that were necessary to complete before this project could move forward. This can be in any phase of the project (i.e. planning, engineering, construction, etc.)
Clearances	Non-permit related clearance delays from any governmental entity with authority or jurisdiction over any phase of this project.
Completed Early	Project completed before originally scheduled in-service date.
Customer Action	For this context; generators' (in most circumstances, interconnecting generators) actions that specifically impacted the timeline of this project.
Financing	Project delayed due to capital and financial availability constraints.
ISO Action	The CAISO de-prioritized or re-prioritized the project. De-prioritization would typically manifest with an on-hold project status.
Land Rights	The project required easements, exercise of eminent domain, etc. that the utility has not been able to effect.
Material	Issues with equipment or components themselves but are not related to vendor error (see "Vendor Quality/Delays")
Outage	Outages (planned or unplanned) that impacted the in-service date.
Permitting (Customer)	[Impacts on the permitting process (or an existing permit) that affects the in-service date. Instances where the customer is waiting for permitting.
Permitting (Utility)	Impacts on the permitting process (or an existing permit) that affects the in-service date. Instances where the utility is responsible for permitting.
Project Design	Any redesigns or additional design work needed outside of the initially approved first project design but not related "Workforce", "Bundling Dependencies" or "Clearances".
Supply Chain Delays	Requested project resourres have not been delivered as scheduled.
Vendor Quality/Delays	endor Quality/Delays   Issues with vendor/Suppliers that are not related to the failure of equipment, material, or components (see "Material").
Weather	An unforeseen weather event that causes a delay or set-back in construction work. Example: mudslides resulting from El Nino.
Workforce Availability	Workforce Availability   Staffing impacts at any phase of the project (i.e., planning, engineering, construction, etc.).
Other [See Notes]	A date change reason or reason for delay that is not listed. Please describe the other delay reason in the "Notes" field.

			1. TRANSMISSION DELAY REPORTING	g					2. GENERATION REPORTING	
4. STATUS	5. ACTION TAKEN	6. PURPOSE	7. PURPOSE DETAILS	10. CONSTRUCTION START DATE CHANGE INITIATOR	11. CONSTRUCTION START DATE 14. IN-SERVICE DATE CHANGE REASON CHANGE INITIATOR	14. IN-SERVICE DATE CHANGE INITIATOR	15. IN-SERVICE DATE CHANGE REASON	10. INTERCONNECTION REQUEST TYPE	11. TECHNOLOGY TYPE	12. RPS ELIGIBLE
Abandoned	New	Address Results of Power Flow Analysis	3rd Party Damage	Customer	Bundling Dependencies	Customer	Bundling Dependencies	Energy Only	Battery Storage	Yes
Canceled	Relocate	Address Results of Protection Studies	Age/Condition	Utility	Clearances	Utility	Clearances	Fully Deliverable	Biodiesel	No
Construction (10%-25%)	Removal	Age/End of Life	Age/Condition - 230/115/70/60 kV Relay Replacement	N/A	Completed Early	N/A	Completed Early	Partially Deliverable	Biogas	
Construction (25%-50%)	Replace	Asset Condition	Age/Condition - 500 kV Relay Replacement		Customer Action		Customer Action	Other [See Notes]	Biomass	
Construction (50%-75%)	Upgrade/Retrofit	CAISO Transmission Planning Standards [See Not Age/Condition - Anti Climb Guards	Age/Condition - Anti Climb Guards		Financing		Financing		Conduit Hydro	
Construction (over 75%)	N/A	Economic	Age/Condition - Insulator Replacement - Steel		ISO Action		ISO Action		Digester Gas	
Construction (under 10%)	Multiple Options [See Notes]	Emergency Event	Age/Condition - Insulator Replacement - Wood		Land Rights		Land Rights		Geothermal	
Engineering less than 50% complete	te	Field Test Results	Age/Condition - Raptor Protection - Steel		Material		Material		Hybrid	
Engineering more than 50% complete	lete	Generator Interconnection	Age/Condition - Replace 230/115/70/60 kV Breakers		Outage		Outage		Hybrid/Paired Solar and Battery	
On Hold		Load Growth	Age/Condition - Replace 230/115/70/60 kV Transformers		Permitting (Customer)		Permitting (Customer)		Landfill Gas	
Operational		Local Capacity Requirement	Age/Condition - Replace 500 kV Breakers		Permitting (Utility)		Permitting (Utility)		Muni Solid Waste	
Permitting		Location, Environmental Conditions	Age/Condition - Replace 500 kV Transformers		Project Design		Project Design		Ocean/Tidal	
Planning		Physical Security	Age/Condition - Replace Boardwalks		Supply Chain Delays		Supply Chain Delays		Pumped Storage	
Other [See Notes]		Policy	Age/Condition - Replace Breakers	_	Vendor Quality/Delays		Vendor Quality/Delays		Solar	
		Reliability	Age/Condition - Replace Civil Structures		Weather		Weather		Various	
		Safety	Age/Condition - Replace Conductor		Workforce Availability		Workforce Availability		Wind	
		Wildfire Mitigation	Age/Condition - Replace Insulators		Other [See Notes]		Other [See Notes]		Other [See Notes]	
		Work Requested by Others	Age/Condition - Replace Other Substation Equipment		N/A		N/A			
		Another Project Or Resource [See Notes]	Age/Condition - Replace Other T-Line Equipment							
		Other [See Notes]	Age/Condition - Replace Reactors, Age/Condition - Replace Relays	Relays						
			Age/Condition - Replace Relays							

*********	Age/Condition - Replace 500 KV Breakers Age/Condition - Replace 500 kV Transformers Age/Condition - Replace Boardwalks	Permitting (Utility) Project Design Supply Chain Delay
( * * * * * * * *	e/Condition - Replace Boardwalks	Supply Chain Delay
Age		
A A A A	Age/Condition - Replace Breakers	Vendor Quality/Del
Age Age	Age/Condition - Replace Civil Structures	Weather Modforce Availabi
Age	Age/Condition - Replace Lonductor	Other [See Notes]
	Age/Condition - Replace Other Substation Equipment	N/A
es] Age		
Age	Age/Condition - Replace Reactors, Age/Condition - Replace Relays Age/Condition - Replace Relays	
Age	Age/Condition - Replace SCADA/RTU	
Age		
Age	Age/Condition - Replace Switches, Age/Condition - Replace Transformers Age/Condition - Replace Undergraind System	
Age	Age/Condition - Replace Wood Poles	
Age	Age/Condition - Switch Replacement - Steel	
Age	e/Condition - Switch Replacement - Wood	
Age	Age/Condition - Largeted Reframe	
Ani	Animal Abatement	
Aut	Automation	
ena c	Bus Opgrave Compliance - Remove Idle Facilities	
8 8	Construct Roads/Gates/Culverts	
Em	Emergency Response - Fire Related	
E	Emergency Response - Storm Related	
Fac	Facility Relocation	
Fire	Fire Protection	
Ger	Generation Interconnection	
Inst	GO95 Mitigation - Steel Install SCADA/RTU	
Line	Line Reconductoring	
Tive	Line Termination	
Mo	Load Interconnection Modular Protection and Automation Control	
NE	NERC CIP Compliance	
NE	NERC Compliance - GO 95	
S S	New Substation New T-line	
Pric	Priority 1 Steel Structure Replacement	
Pric	Priority 1 Wood Structure Replacement	
Pro	Protection NERC Compliance	
Rep	neidy Opgraves Replace Breakers	
Rep	Replace Other Substation Equipment	
Rep	Replace Transformer	
SS	SCADA Emergency Replacement	
SS	SCADA Switch Installation	
Sec	Security Upgrades	
Spe	Secial Protection Scheme	
Sub	Substation Capacity	
Suc	Substation Relia bility Sustam Design Horada	
Sys	System Operations	
Tar	Targeted Line Reliability	
2 :	T-Line Capacity	
2 2	I-Line Emergency	
T00	Tools, Transformer Addition/ Replacement	
nn	derground Emergency	
lo No	Voltage Conversion	
ŧ	her [See Notes]	
]		

#### **APPENDIX A**

## REDLINE VERSION OF DRAFT 2024 RPS PLAN AS COMPARED TO DRAFT 2023 RPS PLAN



# SDG&E's 20232024 Draft Renewables Portfolio Standard Procurement Plan

January July 22, 2024

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#### I. SUMMARY OF MAJOR CHANGES TO SDG&E'S RPS PLAN

The table in this section describes majorsignificant changes between San Diego Gas & Electric Company's ("SDG&E") DraftFinal 2023 Renewables Portfolio Standard ("RPS") Plan¹ and its Final 2023 2024 Draft RPS Plan (hereafter, "Plan" or "FinalDraft Plan"). On December 21, 2023, the California Public Utilities Commission ("CPUC" or "Commission") issued Decision ("D.") 23 12 008, approving with modifications, SDG&E's Final 2023 RPSE modified this Plan-per the Assigned Commissioner and Administrative Law Judge's Ruling Identifying Issues and Schedule of Review for 2024 Renewables Portfolio Standard Procurement Plans ("ACR"). The summary of changes is provided below.

SDG&E's Draft RPS Plan includes SDG&E's <u>alternative</u> Renewable Net Short ("RNS") <u>calculation</u>scenario. The scenario, included as Appendix 1b, reflects SDG&E's internal forecast <u>of its bundled retail sales</u>, along with volumes from RPS-eligible resources that will count towards SDG&E's RPS percentage, procured through the Integrated Resource Plan ("IRP") Mid-Term Reliability Procurement Order, Decision ("D.") 21-06-035—(", as modified by D.23-02-040 ("MTR" or "MTR Procurement Order").

Additionally, SDG&E's Final Plan includes multiple updates to the previous plan as required, to comply with the Decision. The following table summarizes other key changes from SDG&E's Draft 2023 RPS Plan: SDG&E's Draft Plan also includes a proposal for an updated approval process of short-term transactions via counterparties, brokers and exchanges. Details are discussed further in Section XVII.

Plan Reference	Plan Section	Summary/Justification
Attachment A Draft RPS Plan	II. Executive Summary	- Updated to include <del>authorizations granted to</del> <u>critical</u> <u>issues within</u> SDG& <del>E in D.23-12-008 and time</del> <del>passage</del> E's 2024 Draft RPS Plan.
Attachment A Draft RPS Plan	III. Summary of  Recent Legislative and/or Regulatory Changes	- Minor corrections Updated IRP and PCIA discussions.
Attachment A Draft RPS Plan	IV. Assessment of RPS Portfolio Supply and Demand	<ul> <li>As directed by the ACR, the discussion of Voluntary         Allocation Market Offer ("VAMO") was removed.</li> <li>Provided status updates on SDG&amp;E's 2023 Request of Information ("RFI") process.</li> <li>Minor updates Moved the RFI discussion to the Portfolio Optimization subsection.</li> </ul>

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<sup>&</sup>lt;sup>1</sup> SDG&E's Final <del>2022</del>2023 RPS Plan was filed on January <del>18, 2023</del>22, 2024.

	T	
Attachment A Final Draft Plan	V. Projects Development Status Updates	<ul> <li>Updated discussions on Demand and Demand         Assessments Lessons Learned and Trends subsections.</li> <li>Updated discussion on Green Tariff Shared         Renewables Program ("GTSR") and Energy Storage         subsections.</li> <li>Updated status of SDG&amp;E VAMO requirements under         D.21-05-030.</li> <li>Added other sales considerations to the discussion in         the Portfolio Optimization subsection.</li> <li>Updated Table 4-1, SDG&amp;E's Procurement Summary.</li> <li>Pursuant to the Decision, SDG&amp;E-Updated the         discussion of the number of projects that are under         development as of January July 2024, consistent with         Appendix 1.</li> </ul>
Attachment A Draft RPS Plan	VI. Potential Compliance Delays	<ul> <li>Updated discussion on Transmission         Interconnection/Coordination with CAISO and Debt and Equivalence Accounting subsections.     </li> </ul>
Attachment A Final Draft RPS Plan	VIIVIII. Risk Assessment	- Pursuant to the Decision, SDG&E-Updated discussion of assignment of severity of risk in the Compliance Risk subsection. on the projects failure rate assignments.
Attachment A Draft RPS Plan	VIII. Renewable Net Short	- Updated RNS discussion; SDG&E provides two RNS scenarios in Appendix 1.
Attachment A Draft RPS Plan Attachment A Draft RPS Plan	X. Bid Solicitation Protocols XI. Safety Considerations	<ul> <li>Updated list of appendices related to RPS sales and procurement solicitations documents.</li> <li>Updated discussions on vegetation management and customer impacts due to Public Safety Power Shutoff ("PSPS").</li> </ul>
Attachment A Final Draft RPS Plan	IX. Minimum Margin of Over- Procurement ("MMOP")XIII. Economic Curtailment Frequency, Costs, and Forecasting	- Updated the discussion on this section to be consistent with Section VII and Appendix 1 Narrative: Updated discussions on quantitative analysis of the forecast of the number of hours per year of negative market pricing for the next ten years and costs incurred, to date, for incidences of overgeneration and associated negative market prices.
Attachment A Draft RPS Plan Attachment A Final Draft RPS Plan	XIV. Cost Quantification Section X. Bid Solicitation ProtocolsXV.	<ul> <li>Updated Cost Quantification discussion.</li> <li>Updated discussion on this section. As directed by the Decision, SDG&amp;E submitted Solicitation Protocols via a Tier 3 advice letter on January 16, 2023.</li> </ul>

	Coordination with the IRP Proceeding	<ul> <li>Added discussion regarding System Reliability         Consideration in the LCBF Criteria subsection Updated         MTR and Summer Reliability procurement status to comply with the ACR.     </li> <li>Added table requirements from Table 3 of the ACR.</li> </ul>
Attachment A Final Draft RPS Plan	Section XV. Conformance with IRP ProceedingXVI. Impact of Transmission and Interconnection Delays	- As directed by Updated the Decision, SDG&E updated the table in this narrative section of the Impact of Transmission and Interconnection Delays to align comply with the table structure as directed in the Table 4 of the ACR, and to provide updates.
Attachment A Draft RPS Plan	XVII. Other RPS Planning Considerations and Issues	<ul> <li>SDG&amp;E is utilizing this section to request for an updated short-term RPS transaction approval process.</li> </ul>
Appendix 1	RNS Table 2024 RNS and Project Development Status Update	<ul> <li>Updated <u>Narrative</u>, RNS, and Projects Under Development tables</li> </ul>
Appendix 2	2024 Quantitative Information	- Updated Cost Quantification tables.
Appendix 3	TOD Factor Workpapers	- Updated TOD Factors Workpapers.
Appendix <u>89</u>	2024 Least_Cost Best_Fit	- SDG&E updated its Updated and reorganized the subsections of the Least Cost Best Fit ("LCBF') methodology document to conformalign with the Decision.RPS procurement protocol.
Appendix 10	2024 RPS Procurement Protocol	<ul> <li>Updated evaluation steps to align with LCBF methodology.</li> </ul>
Appendix 11	2024 RPS Sales RFP	<ul> <li>Updated acceptable product types table to be consistent with SDG&amp;E's proposed sales strategy.</li> </ul>
Appendix <del>15</del> <u>14</u>	Voluntary Allocations and Warket2024 RPS Sales Offer Form	- Updated tablesthe offer form to be consistent with 2024 information SDG&E's proposed sales strategy.
Appendix 15	2024 Framework for Assessing Potential Sales	<ul> <li>Updated buyers section to align with SDG&amp;E's requested authorizations.</li> </ul>
Appendix <del>16</del> 17	Request for Information ("RFI")	- Updated 2023 RFI summary table.

Appendix 18	Achievable,	<ul> <li>Along with SDG&amp;E's request for an updated short-</li> </ul>
	<u>Upfront Standards</u>	term-approval process, SDG&E is proposing an
	and Criteria	achievable, upfront standard & criteria necessary for
		the updated contract approval process.
Appendix 19	2024 RPS	<ul> <li>Added SDG&amp;E's RPS procurement offer form as part</li> </ul>
	Procurement Offer	of its solicitation documents
	<u>Form</u>	
Appendix 20	2024 SB 1174 Data	<ul> <li>As required by the ACR, SDG&amp;E is providing the 2024</li> </ul>
	Reporting	SB1174 Data Reporting Template
	<u>Template</u>	

#### II. EXECUTIVE SUMMARY – KEY ISSUES

SDG&E's Final 2023 Draft 2024 RPS Plan describes, among other things, the processes used by SDG&E to determine any RPS procurement need or excess, as well as the methods SDG&E will use to manage its RPS portfolio to meet RPS program compliance targets in a cost-effective manner. For year 2023, which falls within Compliance Period ("CP") 4 (2021-2024), it is estimated that SDG&E procured 50 percent of its power from renewable resources, which is From 2017 to 2022, SDG&E procured well above the State's statutory and the California Public Utilities Commission's ("Commission" or "CPUC") RPS program requirements. Beginning in 2023, SDG&E's RPS portfolio is limited to its elected and vintaged load share of RPS volumes, as directed by the Portfolio Optimization Decision ("D.21-05-030"). This Plan offers SDG&E's projected needs through 2034. Key factors currently affecting SDG&E's RPS position include impacts from the completed Voluntary Allocation and Market Offer ("VAMO") process and impacts from the on-going mid-term reliability procurement process ("D.21-06-035").

While SDG&E forecasts a long position in CP4, SDG&E's RPS portfolio expects to be in a short position to its RPS compliance requirement in the near—term, as discussed below in this Plan and illustrated in SDG&E's Renewable Net Short ("RNS") table. More details are provided in Appendix 1, attached hereto. Key factors currently affecting SDG&E's RPS position include the impacts to SDG&E's retail sales forecast from departing load and impacts to SDG&E's RPS eligible procurement resulting from D.21-05-030 (the "Portfolio Optimization Decision") within the PCIA proceeding.

In D.21-06-035, SDG&E was directed to procure at least 103 MWs of zero-emitting resources and 41 MWs of clean firm, non-energy storage resources. 5 SDG&E procured 179 MWs RPS-

Information as of January 2024, SDG&E's RNS Table (Appendix 1)

<sup>&</sup>lt;sup>4</sup> The RPS requirement for 2023 is 41.3 percent.

<sup>5</sup> D.21-06-035 at 57, ordered SDG&E to procure a total capacity of 361 MWs. Approved Advice Letter 3967-E increased SDG&E's total requirement by 114.3 MWs.

eligible resources to meet the zero-emitting requirement and will hold future solicitations to procure the required clean firm, non-energy storage resource(s). SDG&E includes the volumes from these RPS-eligible procured resources in its RNS, which are expected to begin deliveries in 2025. SDG&E will continue to include RPS eligible procurement from the IRP in its planning, which affects SDG&E's RPS portfolio.<sup>6</sup>

Section IV.A.1 addresses voluntary allocation and market offer sales activity that began in January 2023. SDG&E's RNS calculation includes significant load departure to Community Choice Aggregators ("CCAs") and Energy Service Providers ("ESPs") and nearly equivalent reduction to SDG&E's PCIA eligible resources in the RPS portfolio from Voluntary Allocations and Market Offer sales (together, "VAMO"), as directed by the Portfolio Optimization Decision. In the allocation process, SDG&E elected to receive one hundred percent of its allocation portion. After the VAMO process, SDG&E's RPS portfolio is limited to its elected and vintaged load share of RPS volumes. Additionally, the Portfolio Optimization Decision requires SDG&E to hold a Request for Information ("RFI") in the 2021 and 2022 RPS Plan cycles. SDG&E's RFI efforts from the 2021 RPS Plan cycle did not result in any contracts. SDG&E held its second RFI in the 2022 RPS Plan cycle. SDG&E is currently evaluating the responses. The RFI is discussed further in Section IV-A1.

SDG&E's analysis includes two RNS scenarios that show SDG&E's RPS position through 2034. SDG&E provides a conforming and alternative scenario of its RNS in Appendix 1. The difference between the two scenarios is the bundled retail sales forecast. Appendix 1a, the conforming scenario, is based on the CEC's 2023 California Demand Forecast, and Appendix 1b, the alternative scenario, uses SDG&E's internal bundled retail sales forecast. As recently mentioned, both versions are limited to SDG&E's elected load-share allocation of RPS product from its PCIA-eligible portfolio, and both versions use the Commission-required RNS methodology. According to SDG&E's forecasts, SDG&E will be in a short position beginning in Compliance Period ("CP") 5. In Appendix 1's narrative section, SDG&E summarizes the REC volumes that were transacted short-term with eligible load-serving entities through the end of 2024 in the VAMO process and are now available for SDG&E to utilize for compliance.

In this Draft Plan, SDG&E seeks authorization for the following:

#### 1. Utilize the bank

Because of SDG&E's RPS short position commencing in CP 5, <u>as illustrated</u> in <u>this Planthe RNS</u> <u>table in Appendix 1b</u>, SDG&E seeks the authority to <u>use the bank and/orutilize the value of SDG&E's banked Renewable Energy Credits ("RECs") procured pre-2023 from the year SDG&E begins a short position through 2034 when needed to limit additional costs for RPS compliance</u>

Advice Letter 4189-E – Request for Approval of Tranche 2 Mid-Term Integrated Resource Planning Reliability Contracts Resulting from SDG&E's Request for Offers Under D.21-06-035 and D.23-02-040.

and potentially protect bundled customers from rate impacts. SDG&E may meet compliance through 2034 by utilizing the RECs in its bank.

#### 2. Option to procure RECs for compliance

As an alternative to utilizing its RECs in its RPS bank, SDG&E is seeking authority to conduct optional RPS procurement in the 2023 RPS Plan cycle. to buy RECs from new or existing resources, short-term or long-term, if it is more advantageous to the portfolio considering costs and needs in the 2024 RPS Plan cycle. SDG&E expects to meet its compliance requirements through 2033 2034 by either utilizing its bank and/or additional procurement in this RPS Plan cycle. Using the alternative RNS forecast scenario (Appendix 1b), SDG&E has established a volumetric cap and a capacity cap of the amount of new eligible renewable resources it may procure if it exercises its option to hold a solicitation. Supporting information on SDG&E's volumetric and capacity cap for the 20232024 RPS Plan cycle can be found in Section IV under Determination of Compliance Needs for Each Compliance Period and in Appendix 1 – RNS Narrative. SDG&E also requests authorization for the option to sell RPS volumes in CP4, in accordance with SDG&E's Renewable Energy Credits ("RECs") Sales Framework, to further optimize in the near-term SDG&E's portion of portfolio allocated in VAMO, to provide benefits to customers while maintaining RPS compliance. Appendix 1 – RNS Narrative.

As discussed in the previous section, the Commission issued D.22-12-008 approving SDG&E's 2023 RPS Plan with modifications. It was stated in the Decision that "the Commission finds SDG&E's procurement strategy reasonable. It demonstrates future compliance with CP4 and provides a plausible approach to meeting shortfalls." The authorizations granted by the Commission to SDG&E are summarized below:

- To hold a solicitation to procure renewable resources to meet its RPS compliance requirements.<sup>8</sup>
- To use the banked RECs to meet its compliance requirements.9
- To sell Compliance Period 4 RPS Volumes.<sup>10</sup>
- To use bilateral agreements and brokers to procure and/or sell RPS volumes.<sup>11</sup>

The Decision ordered SDG&E to submit a Tier 3 advice letter for Commission review and approval of its bid solicitation protocols. <sup>12</sup> On January 16, 2024, thirty days after the effective date of this Decision, SDG&E submitted its solicitation protocols via Advice Letter 4368-E in

<sup>8</sup> Id., Ordering Paragraph 14

<sup>&</sup>lt;sup>2</sup> D.23-12-008, at p. 35

<sup>&</sup>lt;sup>9</sup> Id., Ordering Paragraph 15

<sup>&</sup>lt;sup>10</sup> Id., Ordering Paragraph 17

<sup>&</sup>lt;sup>11</sup> Id., Ordering Paragraph 18

<sup>12</sup> Id., Ordering Paragraph 16

accordance to the ACR requirements and Commission Staff findings illustrated on Table 1 of the Decision.

#### 3. Authorization to sell RPS volumes

SDG&E requests authorization for the option to sell RPS volumes from (i) the PCIA-eligible RPS portfolio, (ii) SDG&E's PCIA-eligible portfolio allocation, and (iii) the available RECs that were not required to be offered and not allocated in the D.21-05-030 transactions, in accordance with SDG&E's RECs Sales Framework, to provide benefits to customers while maintaining RPS compliance. To further balance SDG&E's RPS portfolio, SDG&E will consider opportunities to sell REC volumes from the projects in the PCIA-eligible portfolio prior to the distribution of the VAMO transactions. As set forth in Advice letter 4345-E, SDG&E is not planning to hold a future VAMO process. SDG&E is providing a summary of RECs not allocated or sold in the VAMO process beginning in 2025, as illustrated in Appendix 1's narrative section. To benefit its customers, SDG&E will consider selling the RPS volumes not allocated in the VAMO process if it does not use these volumes towards its compliance. If allowed, the potential RPS sales revenue may promote affordability for both bundled and unbundled customers. Sales considerations are further discussed below in Section IV. A.1., Portfolio Optimization.

#### 4. Flexibility to buy and sell RECs in the same year and/or compliance period

SDG&E seeks flexibility to manage its RPS portfolio by buying and selling both long-term and short-term products in the same year and/or compliance period to meet compliance, counter increased competition, adapt to the fast-changing market, and find the most economical option for its bundled customers, for the reasons stated above. This authority will allow SDG&E to react quickly to the rapidly changing RPS market and manage its portfolio in the most cost-effective way.

#### 5. Authorization to utilize both brokers and exchanges

SDG&E requests that its authorization to transact with brokers be extended to exchanges. In the previous RPS Plan Decision (D.23-12-008), SDG&E was given authorization to transact with brokers. To ensure a level playing field for SDG&E, SDG&E requests authorization to procure or sell RECS through both brokers and exchanges.

#### 6. Updated approval process for short-term transactions

In order to exercise the authorization to transact with brokers given to SDG&E in D.23-12-008 and potentially the authorization to transact through exchanges as requested in this Plan, SDG&E proposes an updated approval process for short-term transactions (contract term of less than 5 years) with counterparties, brokers, and exchanges. The proposed streamlined approval process will enable SDG&E to preserve the value of PCC1 RECs by delivering the RPS products timely, improve competition by adding three large IOUs to the REC market run by

On May 9, 2024, the Commission approved Advice Letter 4345-E, granting SDG&E's Request not to hold future Voluntary Allocation and Market Offer Processes pursuant to D.21-05-030 Ordering Paragraph 4,.

brokers and exchanges, and allow SDG&E to compete in the REC market fairly. The proposed RPS transaction approval framework was coordinated with the other IOUs. More information on the proposed updated approval process for short-term transactions can be found in Section XVII, and SDG&E's Upfront, Achievable Standards and Criteria table can be found in Appendix 18

### III. SUMMARY OF RECENT LEGISLATIVE AND/OR REGULATORY CHANGES AFFECTING THIS PLAN

This Plan accounts for relatively recent RPS-related legislation, specifically California Senate Bill ("SB") 350 (2015),<sup>14</sup> SB 100 (2018),<sup>15</sup> and SB 901 (2018),<sup>16</sup> as well as associated Commission proceedings, such as the IRP and PCIAPower Charge Indifference Adjustment ("PCIA") Order Instituting Rulemakings ("OIRs").

#### **SB 350**

SB 350 led to Commission D.17-06-026, which adopted new RPS procurement requirements. Notably, beginning January 1, 2021, at least 65 percent of a retail seller's RPS procurement must be from long-term contracts. SDG&E elected early compliance with this requirement and was subject to the new requirements beginning in CP 3 (2017-2020). In addition, SB 350 initiated the Commission's new IRP proceeding and associated processes, which are intended to be a wide-scale planning process that SDG&E anticipates will optimize RPS planning and procurement within a larger framework. The IRP seeks to implement policies that will achieve the State's greenhouse gas ("GHG") emissions reduction goals while maintaining reliability and affordability. The IRP process will inherently impact RPS procurement planning because some resources planned for procurement in the IRP may also count towards RPS compliance requirements. For example, the MTR IRP ordered a total of 15,500 MWsMW of resource procurement, with required online dates between 2023 and 2028 and with certain portions of procurement being ordered from limited resources, such as from zero-emitting and firm zeroemitting generation resources. SDG&E has incorporated RPS resources procured through these IRP mandates in its RNS. This process is a marked shift away from the historically siloed approach to procurement, in which resource procurement mandates are imposed individually on a program-by-program basis, without regard to the consideration of other potential forms of supply and/or demand-side procurement. The holistic process built into the IRP processes will evaluate the costs and benefits of all available resources when developing portfolios that comply with renewable and clean energy standards.

#### **SB 100**

<sup>&</sup>lt;sup>14</sup> Signed by Governor Brown on October 7, 2015.

<sup>&</sup>lt;sup>15</sup> Signed by Governor Brown on September 10, 2018.

<sup>&</sup>lt;sup>16</sup> Signed by Governor Brown on September 21, 2018.

SB 100 increased the State's RPS procurement percentages to 44 percent by 2024, 52 percent by 2027, and 60 percent by 2030. SB 100 also calls for the State's RPS requirement to be 100 percent clean energy by 2045. D.19-06-023 implemented these new requirements for the RPS program. On March 15, 2021, the California Energy Commission ("CEC"), Commission, and California Air Resources Board ("CARB") (together, the "Joint Agencies"), issued a report on SB 100 which indicated that the report is directional only and intended to inform and complement ongoing analysis within the Joint Agencies. 18

#### **SB 901**

As further discussed below in Section IV, SDG&E has fulfilled its BioRAM obligation, including its SB 901 obligation. RECs from BioRAM facilities have no impact on SDG&E's RPS procurement planning as SDG&E is prohibited from using RECs from BioRAM facilities for compliance.<sup>19</sup>

#### **Integrated Resource Planning Proceeding**

Clean energy goals are considered and addressed in the IRP proceeding. The Commission issued D.19-11-016 which ordered load-serving entities ("LSEs") to procure 3,300 MWsMW of new capacity to alleviate a reliability need in the near term 2021-2023. In the IRP MTR Procurement Order, D.21-06-035, <sup>20</sup> the Commission ordered 11,500 MW of incremental capacity and in the Supplemental MTR Procurement Order, D.23-02-040, <sup>21</sup> the Commission ordered additional 4,000 MWsMW. These recent mandates will likely result in the procurement of additional RPS eligible resources. Additionally, the Commission recently issued its 2023 Preferred System Plan decision, which authorizes SDG&E to procure to meet the resource needs identified in its 2022 individual IRP. <sup>22</sup> The Commission is also in the process of collecting party feedback on AB 1373, which, among other things, authorizes the Commission to request that the Department of Water Resources ("DWR") act as a central procurement entity,

Note that SB 1020, signed by Governor Newsom on September 16, 2022, adds further detail to the SB 100 policy stating that "It is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035, 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040, 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045, and 100 percent of electricity procured to serve all state agencies by December 31, 2035."

See, the Joint Agencies, 2021 SB 100 Joint Agency Report, Achieving 100 Percent Clean Electricity in California: An Initial Assessment (March 15, 2021), available at <a href="https://efiling.energy.ca.gov/EFiling/GetFile.aspx?tn=237167&DocumentContentId=70349">https://efiling.energy.ca.gov/EFiling/GetFile.aspx?tn=237167&DocumentContentId=70349</a>.

<sup>&</sup>lt;sup>19</sup> D.18-12-003, Ordering Paragraph 3 at 25-26.

<sup>&</sup>lt;sup>20</sup> D.21-06-035 at 58.

<sup>&</sup>lt;sup>21</sup> D.23-02-040 at 32.

<sup>&</sup>lt;sup>22</sup> D.24-02-047, Ordering paragraph 9, at 138.

and requires the Commission to make an initial need determination regarding DWR centralized procurement by September 1, 2024.<sup>23</sup> These authorizations may result in the procurement of additional RPS-eligible resources. SDG&E includes volumes from RPS-eligible IRP procurement in its RNS. SDG&E remains focused on effective cost and risk management and utilizing thea holistic approach in evaluating how resource needs are met. SDG&E will continue to include impacts of the IRP, including other relevant proceedings, such as summer reliability, <sup>24</sup> in its RPS procurement planning processes.

#### **Power Charge Indifference Adjustment**

Carrying out the mandates of D.21-05-030 impacts SDG&E's portfolio. According to the Optimization Decision, SDG&E must allocate RPS resources to CCAs and ESPs serving Direct Access ("DA") customers in the Voluntary Allocation process, offer unallocated renewable energy to the market through sales solicitations in the Market Offer process, and attempt to further optimize IOU portfolios through an RFI process. The Joint IOUs submitted AL 3835-E on August 23, 2021, AL 3835-E which set forth the methodology to "slice" the IOUs' RPS portfolios, which was approved on October 25, 2021. SDG&E used this methodology to establish its eligible RPS generation based on its load share allocation. SDG&E has included in this Draft 2023 RPS Plan the RNS table to assess impacts to SDG&E's RPS portfolio. More information of SDG&E's VAMO process and related milestones can be found in Section IV A1. As described in the approved Advice Letter 4345-E, SDG&E has completed the Voluntary Allocation process, and does not anticipate any further impact. SDG&E's RNS tables incorporate the results of this process. If a newly formed LSE requests a voluntary allocation, SDG&E will include the results in its RNS calculations. <sup>25</sup>

#### **ReMAT**

In D.21-12-032, the Commission reopened SDG&E's Renewable Market Adjusting Tariff ("ReMAT") program and required that SDG&E procure an additional 20.9 <a href="MWsMW">MWsMW</a> of ReMAT-eligible resources. Any procurement that occurs in the ReMAT program, once it re-opened in late 2022, will count towards SDG&E's RPS compliance needs and can be banked. It is unknown whether and how soon new RPS\_eligible supply from ReMAT can be procured, so SDG&E has not included RPS from additional ReMAT facilities in its RNS calculation but may consider doing so if it sees market interest in the program.

23 See, ALJ's Ruling Seeking Comments on Need and Process for Centralized Procurement of Specified Long Lead-Time Resources (April 26, 2024), available at https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M530/K323/530323853.PDF.

D.23-06-029 adopted an effective planning reserve margin procurement target of 170-320 MW for SDG&E for 2024 and 2025 resource adequacy compliance years.

<sup>&</sup>lt;sup>25</sup> D.21-05-030, Ordering Paragraph 10 allows newly formed LSEs to request a voluntary allocation via Tier 1 advice letter

#### IV. ASSESSMENT OF RPS PORTFOLIO SUPPLY AND DEMAND

#### A. Overview of Portfolio Supply & Demand Assessments

SDG&E makes RPS procurement decisions based on how its risk-adjusted RPS position forecast (referred to herein as its "RPS Position") compares to its RPS program compliance requirements, the result of which is its probability-weighted procurement need or RNS. To calculate its RPS Position, SDG&E conducts a qualitative and quantitative assessment and assigns a probability of success to the expected deliveries for each project that is not yet online in its portfolio; and then it adds the risk-adjusted expected deliveries across all projects in its entire RPS portfolio. These risks include approval (e.g., Commission approval and the timing of such), development (e.g., permitting, financing, or transmission interconnection), delivery (e.g., generation fluctuations given the variant-intermittent nature of some renewable resources or operational challenges), and other factors (e.g., under-development of transmission infrastructure common to a group of projects). SDG&E then subtracts the quantity of RECs committed in forward sales agreements, if any, from the total expected generation to determine its RNS.

In general, if SDG&E's RPS Position is less than its RPS Procurement Quantity Requirement, SDG&E will need to use the RECs in RPS bank procured prior to 2023, or plan to procure additional RPS resources on a schedule that will allow for the procurement and development of resources in time to provide adequate deliveries, to meet anticipated shortfalls. SDG&E's assessment also includes current and expected load departure. If, on the other hand, its RPS Position is greater than its RPS requirements, SDG&E will consider opportunities to bank or sell bundled and/or unbundled RECs. In addition, to optimize the relative value of renewable energy across compliance periods, SDG&E further considers short-term contracts when, for example, it is short in the most immediate CP but long in the subsequent CP.<sup>26</sup> Overall, SDG&E will also consider procurement strategies that are in the best interest of its customers across compliance periods to secure greater value from approved RPS expenditures. For example, SDG&E strives to have a well-diversified RPS portfolio so that its RPS compliance, particularly in the most immediate compliance period, is not unduly exposed to any given risk (e.g., a particular technology, region, counterparty, etc.). SDG&E's RPS portfolio management strategy involves identifying needs and risks and managing them in a cost-effective manner in the best interest of its customers.

In the <u>Portfolio</u> Optimization Decision, the Commission directed SDG&E, among other things, to optimize its RPS portfolio, specifically utilizing (i) a Request for Information process for Contract Assignments and Contract Modifications to right-size its supply portfolio,<sup>27</sup> (ii) a Voluntary

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The term "short" is used herein to refer to an RPS Position that is lower than the relevant RPS program requirements. The term "long" is used to refer to an RPS Position that is higher than relevant RPS program requirements.

<sup>&</sup>lt;sup>27</sup> D.21-05-030, Ordering Paragraph 6 at 65-66.

Allocation in load share proportions to LSEs servicethat serve departed load,<sup>28</sup> and (iii) a Market Offer process to sell portions of LSE allocations that were rejected in the allocation process.<sup>29</sup> SDG&E's assessment of its RPS Position resulting from these D.21-05-030 mandates through 20332034 is incorporated in SDG&E's RNS table.

The following sections explain SDG&E's methodology for determining its RNS, which includes considerations related to RPS supply and customer demand. First, the process used to compute the RPS Position is explained. Then, procurement needs by compliance periods are inferred by comparing RPS requirements to RPS Positions.

#### **SUPPLY**

### Assessment of Probability of Success for Various Project Types as a Key Component of Calculating the Probability-Weighted RPS Position Forecast

SDG&E must assess the probability of success and/or expected generation of the following main types of projects: (a) delivering; (b) approved but not yet delivering; and (c) not yet approved. SDG&E frequently evaluates the probability of success for each project in its portfolio to calculate its RNS, which is the basis for its procurement need. To do this, SDG&E conducts reviews with an interdisciplinary team and uses the most up-to-date qualitative and quantitative information to assign a probability of success and/or determine the expected generation of each individual project. SDG&E applies the following methodology to analyze each project type:

Assessment of Performance of Delivering Projects: Projects that have already achieved commercial operation and have begun delivering energy provide the most stable source of RPS deliveries when forecasting RPS procurement need. These projects have overcome development hurdles and are supported by steady revenues under executed PPAs. However, it is crucial to consider the potential fluctuations in deliveries that these projects can experience and the impact that such fluctuations could have on SDG&E's need to procure additional resources to meet its RPS goals.<sup>30</sup> As discussed further in Section VII, as-available deliveries from these variable resource projects can be impacted by resource availability, regulatory changes, economic environment, evolving technologies, and third-party systems. To ensure RPS compliance, SDG&E must consider

<sup>&</sup>lt;sup>28</sup> *Id.*, Ordering Paragraph 2 at 63-64.

<sup>&</sup>lt;sup>29</sup> *Id.*, Ordering Paragraph 3 at 64.

For example, contracts with solar photovoltaic ("PV") developers incorporate a degradation factor that is used to forecast the project's performance over time as the panels age and become less efficient. SDG&E utilizes this factor in its Least-Cost Best-Fit ("LCBF") evaluation, and when calculating project deliveries for its RPS Position calculation on both a nominal (assumes deliveries from contracts will occur as expected) and probability-weighted basis. To the extent deliveries are different than the provided estimates, SDG&E will adjust its RPS Position calculation accordingly.

potential fluctuations in the amount delivered (while recognizing that swings in production could be more than expected). The monitoring of performance of delivering contracts and the assessment of probabilities focuses on: (i) understanding the historical generation profile of each project and how it has differed year-over-year and relative to forecasts; and (ii) the operational track record of any given project. SDG&E has found that a weighting of 100 percent is typically appropriate for delivering contracts. The forecast of future deliveries for deliveringon-line RPS contracts is based on historical deliveries (the average of the most recent three years, if available; if not available, the project's expected generation is used), which SDG&E will revise as appropriate. Adjusting forecasts when necessary is a crucial component of SDG&E's need assessment methodology.

Assessment of the Development Progress of Approved Projects that Have Not Yet Begun Delivering: Another important aspect of SDG&E's need assessment methodology is evaluating the development status of projects approved by the Commission but not yet delivering energy. These projects are typically riskier than projects that have begun delivering due to the challenges that can arise during the development process that might prevent a project from completing construction and achieving commercial operation. Permitting, interconnection, regulatory factors, and other development issues are discussed further in Section VI. SDG&E must account for development risks when determining its procurement need, and the monitoring of development status is a critical aspect of SDG&E's need assessment methodology. Because SDG&E has a substantial REC bank, there is very little risk that any particular project failure will impact SDG&E's ability to meet its RPS compliance obligations. SDG&E assigns a probability of success to each of its developing projects. This factor is then applied to the expected deliveries stated in the contracts.

Assessment of the Approval Queue for Projects that Have Been Submitted to the Commission But Are Not Yet Approved: SDG&E typically meets monthly with its Procurement Review Group ("PRG"), which includes Energy Division staff, to discuss, among other things, the likely approval timetable of projects that SDG&E has submitted to the Commission for approval. The discussion covers expected timing of Commission action and any potential constraints that might necessitate expedited Commission action or require additional information. SDG&E works collaboratively with the Commission to develop a work plan that results in timely approval. It is possible, however, that the shortage of Energy Division staff or other procedural challenges can result in approval delays that can impact a project's ability to achieve milestones. SDG&E must monitor this process closely to determine what impact, if any, delays may have on the timing of expected deliveries or sales.

#### **Project Viability Supply Considerations**

Renewable project developers continue to face a challenging environment. For example, studying and constructing generator interconnection upgrades continue to take years to complete and can significantly influence project costs. In addition, as more projects are proposed, especially in desert regions, permitting approval timelines may extend due to increased scrutiny of environmental issues and permitting agency coordination efforts. SDG&E closely monitors project viability factors, and any effects they may have on its portfolio.

Impact of Key Transmission Upgrades and/or Infrastructure: Transmission availability has long been recognized as a potential barrier to achieving RPS goals, and SDG&E continues to monitor the progress of transmission upgrades on which SDG&E's RPS projects depend in order to assess potential delays and possible impacts. A more detailed discussion of transmission is provided under Section VI.

**Impact of Permitting Delays:** Many projects have experienced local agency permitting delays. Delays can occur when projects require ministerial or discretionary permits, which in turn may trigger environmental review such as under the California Environmental Quality Act ("CEQA"),") or are challenged by individuals and community groups. These requirements and public controversy can result in project conditions, increased costs to the developer, and significant project delays that can jeopardize project viability and potentially lead to project cancellation. A more detailed discussion of permitting is provided under Section VI.

#### **Existing RPS Contracts Supply Considerations**

The contracts within SDG&E's portfolio may be renewed at existing price terms, renegotiated via "blend and extend," assigned or novated, or allowed to expire or terminated pursuant to the term therein; additionally, SDG&E may solicit to re-sell bundled or unbundled REC attributes from its portfolio. D.21-05-030, which requires required SDG&E to allocate a portion of its RPS portfolio to eligible LSEs serving departed customers, will have an impact on impacted SDG&E's RPS portfolio as reflected illustrated in SDG&E's conforming and alternative RNS tabletables.

**Impact of VAMO:** As required by the Portfolio Optimization Decision, SDG&E implemented Voluntary Allocations by allocating portions of its RPS portfolio to departed customers and offering any excess to the market in the Market Offer process. SDG&E's RNS table illustrates the impacts to the sportfolio

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Renegotiation via "blend and extend" refers to an agreement made by parties to extend a contract at either a blended price lower than the original contract pricing terms, commencing at the time the contract is renegotiated, or at a lower price commencing at the start of the amended delivery term of the contract.

when retail sales and its PCIA-eligible RPS portfolio are reduced based on SDG&E's load share allocation, and the effects on SDG&E's RPS position of the IRP MTR Procurement Order.

Impact of Contract Renewal or Renegotiation: SDG&E began signing RPS contracts in 2003, most of which had terms of 20 years. As part of its RPS Position calculation, and in accordance with Commission direction, 32 SDG&E does not assume in its RNS calculation that these contracts will be renewed with existing pricing terms. Owners of these projects may be asked to bid such projects into future Request for Offers ("RFO"), if there is an RPS need, and these bids will be required to conform with the need identified in the then-current RFO. The benefits of this process are twofold: competition will be enhanced, and these facilities will have the opportunity to bid to extend their contracts past the original termination dates into later years, if and when SDG&E has a need. SDG&E continues to reassess its position to determine if contract renewal could add value to SDG&E's portfolio. Additionally, SDG&E may re-negotiate outside of an RFO process to – for example – "blend and extend" a contract at a new competitive price over a new delivery term, which may result in reduced administrative costs for the RFO process as well as in some cases preserve the long-term classification of the original agreement.

Impact of Contract Termination: As part of its contract administration process, SDG&E actively monitors contractual requirements including conditions precedent and project development terms that must be met (or waived) in order for the contract to be viable. When a condition precedent or development milestone has not been met, SDG&E may consider terminating the contract, or the parties can mutually agree to a termination, if it is in the best interest of customers. Contract termination could also include instances where parties could agree to terminate a contract with a buyout option. Contracts may also expire or terminate in accordance with their terms (*i.e.*, events of default).

Impact of the Resale Market: SDG&E will closely monitor opportunities to optimize the value of its portfolio, including opportunities to sell excess procurement, if excess procurement exists, or to use such excess towards future compliance if SDG&E determines this to be the best option for its customers. If SDG&E believes that the current market is favorable and expects that it will be able to fulfill any future needs with more economic options, SDG&E will first consider offering to solicit the excess to determine if the market is interested. More detail is provided below and in Appendix 9, attached hereto.

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Rulemaking ("R.") 11-05-005; Administrative Law Judge's Ruling on Renewable Net Short (May 21, 2014).

#### **DEMAND**

RPS compliance is based on an energy target (as opposed to a capacity target) and is calculated using a percentage of retail sales. Various factors (*e.g.*, departing load) impact retail sales, and these factors are reflected in the forecast. SDG&E's most recent retail sales forecast is provided within the RNS table in Appendix 1.

Impact of CEC Forecast: In accordance with Commission guidance, SDG&E uses the latest CEC forecast consistent with the standardized planning assumptions authorized in D.12-01-033 as a component in SDG&E's RNS. To determine its retail sales, SDG&E is using the most recently approved Integrated Energy Policy Report ("IEPR") forecast update issued on January 25, 2023 February 14, 2024 that reflects load departure. SDG&E monitors its retail sales forecasts and actuals on a quarterly basis to identify potential fluctuations and their impact on its RPS requirements.

**Impact of Transportation Electrification:** The sales forecast that supports SDG&E's RPS filing is the CEC's 20222023 IEPR demand forecast, also known as California Energy Demand Update ("CEDU") 20222023, adopted by the CEC Commissioners at the CEC's January 25, 2023 February 14, 2024, business meeting. For RPS purposes, SDG&E used the CEC's 20222023 IEPR planning forecast, with mid-case Additional Achievable Energy Efficiency ("AAEE"), Additional Achievable Photovoltaics ("AAPV"), Additional Achievable Fuel Substitution ("AAFS") and Additional Achievable Transportation Electrification ("AATE") as the basis. SDG&E reformatted the forecast to partition it into sales to bundled customers and sales to DA and CCA customers. SDG&E also incorporated updated DA and CCA customer enrollment schedules that became available after the CEC adopted the 2023 IEPR. SDG&E's forecast accounts for electric vehicle ("EV") charging within the Mid-Demand base-line segment of the scenario. SDG&E's RPS forecast includes approximately 5,288 an incremental 4,861 GWhs of electric consumption due to accommodate light-duty EV charging activity for light-duty Evs in SDG&E's service territory by 2035. The impact of adding more EVs is that retail sales will increase to account for more EV charging, thus more RPS energy may be needed to meet the compliance requirement. A description of the modeling approach and input assumptions made regarding

<sup>&</sup>lt;sup>33</sup> CEC, Minutes Orders and Resolutions of the January 25, 2023 February 14, 2024 business meeting, available at

https://efiling.energy.ca.gov/GetDocument.aspx?tn=254491&DocumentContentId=89891.

forecasting EV charging can be found in three CEDU publications that document CEDU 20222023.34

Impact of Departing Load: Load departure continues to reduce has reduced SDG&E's retail sales significantly, thereby impacting its RPS Position in comparison to its RPS requirements. The Commission authorized SDG&E to have anE's option to hold a procurement solicitation to maintain a reasonable RPS forecast in light of these impacts. Currently, there are two CCAs in SDG&EE's service territory; San Diego Community Power and Clean Energy Alliance. These CCAs represent significant current and future load departure, and SDG&E is actively working to optimize its RPS portfolio as a result of load departure and Commission requirements.

D.21-05-030's VAMO implementation reduced the size of SDG&E's RPS portfolio proportionally as RPS volumes were voluntarily allocated to departed <u>load</u> customers, sold in the market offer, and <u>the RFI process ordered in D.21-05-030's RFI030</u>35 may further reduce SDG&E's portfolio if contracts are assigned, modified or terminated. Delivery of allocated RPS volumes <u>began in 2023</u> and delivery of Market Offer RPS volumes began in 2023. The Commission "expect[s] that IOUs should generally be able to procure replacement RPS contracts with lower costs, while acknowledging that replacing resources could still increase costs for bundled ratepayers."<sup>36</sup>

It is also possible that customers who departed SDG&E's bundled service may return at some point. If this occurs, SDG&E may need additional RPS to accommodate those returning customers. SDG&E will monitor this situation as well as it can and will work to help mitigate any disruptions or unexpected surprises.

#### **Determination of the Compliance Needs for Each Compliance Period**

SDG&E met its CP 3 RPS requirements by achieving 42 percent renewable energy. As SDG&E looks ahead to CP 4 and beyond, it will continue to manage its portfolio to ensure RPS compliance. At this time, all of SDG&E's online renewable contracts are long-term for RPS compliance purposes. SDG&E has fourthree developing projects that have low risk of were assigned a project failure. One of these developing projects is near completion rate. SDG&E's RNS is calculated by multiplying the expected contractual deliveries (including degradation) by

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CEC, 20222023 Integrated Energy Policy Report Update, available at <a href="https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2023-integrated-energy-policy-report--.">https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2023-integrated-energy-policy-report--.</a>

<sup>&</sup>lt;sup>35</sup> D.21-05-030, Ordering Paragraph 6 at 65-66.

<sup>&</sup>lt;sup>36</sup> *Id.* at 19.

each contract's probability weighting and then adding the resulting expected deliveries across the portfolio.

Load departure commencing in 2021 and the Portfolio Optimization Decision VAMO process commencing in 2023 <a href="mailto:created-led-to">created-led-to</a> significant changes <a href="mailto:to-led-to-le

SDG&E will continue to account for further procurement of renewable energy projects under Commission-mandated procurement programs, and other procurement authorizations. The MTR Procurement OrdersOrder requires zero-emitting, clean, firm, non-energy storage resources to be procured between 2026 and 2028. PS-eligible resources such as geothermal, solar or wind, combined with energy storage ("hybrid") are identified in the MTR Procurement Order as resources that fit these characteristics; thus, SDG&E will include assumptions on RECs from potential RPS resources by 2028 as soon as the resource has been procured. If the RPS-eligible hybrid resources included in SDG&E's planning are not sufficient to meet its RPS compliance goals, SDG&E seeks the option to hold a solicitation. Additionally, a solicitation may be necessary to mitigate non-compliance risks arising from the impacts of portfolio optimization and load departure such as a potential unexpected mass return of customers that werecustomer load as the provider of last resort, not included in the load forecast.

As illustrated in Appendix 1, SDG&E's RNS table, SDG&E will fall short in the near future. SDG&E has a significant amount of RECs in its bank. SDG&E may meet its compliance requirements through 20332034 by utilizing the bank and/or, after considering the benefits to customers, SDG&E may hold a solicitation or enter agreements bilaterally to procure long-term and/or short-term resources to meet its Procurement Quantity Requirements ("PQR"). Determining compliance needs by compliance period and establishing a volumetric cap for 20232024 RPS Plan cycle procurement is further discussed below. SDG&E may utilize its bank to meet RPS compliance requirements. In order to have flexibility in its planning to meet RPS obligations in a cost-effective manner, SDG&E requests authority to procure RPS resources through solicitation-and/or, bilateral agreements, and brokerages and/or exchanges in the 20232024 RPS Plan cycle.

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<sup>&</sup>lt;sup>37</sup> D.23-02-040.

SDG&E may seek short-term optimization opportunities in the near-term, which include the sale of RPS products via request for proposals ("RFP"), bilateral sales agreements and/or a request for proposals ("RFP"). brokerages and exchanges. These opportunities are driven by the impact of departing load on SDG&E's RPS Position and by the fast-changing market for RECs. To the extent SDG&E determines that an RFP is appropriate, it will seek to issue the RFP attached hereto as Appendix 9. SDG&E continuously monitors its portfolio to determine if purchase or sale RFO or RFP is needed.

#### **Current & Future Compliance Period Needs**

Based on SDG&E's current RPS generation forecast, SDG&E anticipates meeting its RPS requirements for each CP through 20332024 with its portion of the RPS portfolio after impacts of the Portfolio Optimization Decision are considered and by procuring new renewable resources through a competitive solicitation-or\_zbilaterally, brokers or exchanges, as needed, or by leveraging the bank. SDG&E has fourthree developing contracts that havewere assigned a low risk of project failure rate, and all of SDG&E's online renewable contracts are long-term, which includes approximately 179 MW of additional RPS-eligible resources from the MTR solicitation, with on-line dates by 2025 and summer of 2025 and later in the year of 2026; thus, SDG&E is not currently at risk of noncompliancenon-compliance with SB 350's 65 percent long-term contracting requirement. Additional short-term renewable resources may be procured. As an alternative to procuring new renewable resources, SDG&E may use its bank to remain compliant. SDG&E accumulated a significant number of RECs in the bank from procuring renewable resources above the RPS Compliance requirements in the previous years.

It is important to note that this outlook is based on current available data and incorporated Voluntary Allocation impact assumptions impacts regarding SDG&E's RPS portfolio. The volume of any new purchases required for current and future compliance periods will be a function of portfolio performance and will be subject to the level of RPS banking, if any. SDG&E intends to fill any remaining RPS need with viable low-cost opportunities from future solicitations, bilateral transactions, and potential investments, utilize the bank if needed and will continue to procure for mandated programs, to the extent required. SDG&E continues to advocate for no incremental mandated RPS program procurement; and if mandated procurement is needed, it should not apply only to IOUs but to all LSEs, based on need, through the IRP process.

SDG&E intends to manage any potential over-procurement that is created by departing load by banking it for future compliance needs, terminating contracts where conditions precedent or other contractual obligations are not met or where mutual agreement is reached, selling such excess procurement, or transferring the obligation to a new party as permitted by the contract. SDG&E may undertake additional procurement to ensure RPS compliance, with the understanding that any resulting excess can be either banked or sold bilaterally or through an RFP. Additional discussion regarding the analysis of selling versus banking can be found below in Section IV-A2.

#### **Utility Tax Equity Investment and Utility Ownership Opportunities**

SDG&E's participation as a tax equity investor or utility owner in renewable generation and/or associated transmission projects may enhance project viability (through securing of financing) and may decrease costs for customers (given SDG&E's cost of capital relative to the renewable financing market). SDG&E may consider additional investment opportunities where: (a) its involvement might enhance the viability or cost competitiveness of a project; and/or (b) where a project may have a positive socioeconomic impact, potentially involving a Diverse Business Enterprise ("DBE").

Additionally, SDG&E has undertaken the construction of renewable energy facilities, for example under the Solar Energy Project program. SDG&E completed this program with the commercial operation of the 4.32 MW Ramona Solar Project on April 21, 2017.<sup>38</sup>

#### 1. Voluntary Allocation Market Offer ("VAMO")

#### **Voluntary Allocation Market Offer**

Pursuant to D.21.05-030, SDG&E was directed to offer allocations from its PCIA-eligible RPS portfolio of resources to LSEs at the current year Market Price Benchmark ("MPB") and offer for sale all PCIA-eligible resources remaining after Voluntary Allocation for deliveries beginning in 2023. Ninety days after completing the initial VAMO process, SDG&E is required to report on effectiveness of its VAMO process and propose whether there should be a future VAMO process.

#### **Voluntary Allocation**

Consistent with Administrative Law Judge's Ruling Modifying the Renewable Portfolio Standard Program's Procedural Schedule to Accommodate Filing of Voluntary Allocation and Market Offer Information Adopted in D.21 05 030 (May 20, 2022), issued on August 15, 2022, SDG&E submitted a Motion to Update its Draft 2022 RPS Procurement Plan including a request for approval of eligible LSEs' Voluntary Allocations, which was approved in D.22 11 021.<sup>39</sup>

Six of the twelve eligible LSEs made their elections to receive their portions of the long term volumes and four of those six also elected to receive their short-term allocations. To date, SDG&E has executed confirms with the six counterparties that accepted their Voluntary Allocations and filed Advice Letter 4121-E requesting approval of modifications to five executed confirmations, which was approved by the Commission, and Advice Letter requesting approval

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Approved by D.10-09-016. SDG&E was authorized to build up to 26 MWs of distributed utility-owned solar PV at a cost cap of \$3.50/W(dc). SDG&E held an RFP in the Fall of 2011 and executed a contract for up to a total of 17 MW at eight sites owned by SDG&E. To stay under the cost cap, the number of projects were subsequently reduced due to permitting, site, and contractor issues. SDG&E held another RFP in the Spring of 2015, and no contracts were executed as a result of the RFP

<sup>&</sup>lt;sup>39</sup> D.22-11-021, Ordering Paragraph 1 at 49.

of one unbundled confirm will be filed in July 2023. SDG&E provides a summary of its Voluntary Allocation results in Appendix 15.

#### **Market Offer**

In compliance with D.22-11-021, SDG&E filed and the Commission approved the following Advice Letters:

- Tier 1 Advice Letter 4117-E with its revisions to the Market Offer documents for the short-term sales process, as directed by Ordering Paragraph ("OP") 12. SDG&E made changes to Joint IOU Track 1 Draft 2022 RPS Procurement Plan Market Offer Framework, SDG&E's Confidential Appendix A to the Market Offer Framework, SDG&E's Market Offer solicitation protocol, SDG&E's Code of Conduct, and SDG&E's Market Offer pro forma transaction confirmations. SDG&E submitted a partial supplemental filing to provide amended attachments as originally submitted in AL 4117-E, to provide additional clarity on certain portions of the Market Offer process.
- Tier 2 Advice Letter 4126-E with its revisions to the Market Offer documents for the long-term sales process, as directed by OP 13. SDG&E made changes to Joint IOU Track 1 Draft 2022 RPS Procurement Plan Market Offer Framework for Long term Sales, SDG&E's Confidential Appendix A to the Market Offer Framework, SDG&E's Market Offer solicitation protocol, and SDG&E's Market Offer for long term sales pro forma transaction confirmations.

According to D.22-11-021, after Voluntary Allocation elections, SDG&E is authorized to offer one hundred percent of its remaining PCIA eligible short term contracts in its Short Term Market Offer. SDG&E must offer thirty five percent of the remaining PCIA eligible long term resources as long term product and may offer sixty five percent of the remaining PCIA eligible long term resources as long term or short term products in its Long Term Market Offer.

Pursuant to Advice Letter 4117 E/A, approved January 6, 2023, and D.22 11 021, SDG&E launched its Short Term Market Offer solicitation on January 9, 2023, and offered one hundred percent of its remaining PCIA eligible short term resources in its Short Term Market Offer. SDG&E received 17 offers for the balance of 2023 deliveries and 17 offers for 2024 deliveries. SDG&E shortlisted bidders with the highest price offers which are above price floor, volume not to exceed 100% of its unallocated PCIA-eligible short-term resources. SDG&E notified the PRG of its intention to shortlist bidders prior to notifying selected bidders on February 16, 2023.

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<sup>&</sup>lt;sup>40</sup> D.22-11-021, Ordering Paragraph 2 at 49

SDG&E filed Tier 1 Advice Letter 4188-E request for approval of SDG&E's Short-Term Market Offer confirmations, which was approved by the Commission on May 4, 2023.

SDG&E launched its Long-Term Market Offer solicitation on March 7, 2023, and offered thirty five percent of the remaining PCIA-eligible resources from its long-term portfolio as long-term product and offered the other sixty five percent of the remaining PCIA-eligible long-term resources as long-term or short-term products in its Long-Term Market Offer, volume not to exceed 100% of its unallocated long-term PCIA eligible resources. A1—SDG&E received 6 long-term offers and 10 short-term offers from bidders. SDG&E shortlisted bidders with the highest value for ratepayers. Details of the evaluation method used by SDG&E is discussed in Appendix 15—Market Offer Narrative and summary of the Market Offer results is illustrated in Appendix 15—Table 2. SDG&E notified the PRG of its intention to shortlist bidders prior to notifying selected bidders on April 24, 2023. The Commission approved SDG&E's Tier 1 Advice Letter 4249-E and Tier 3 Advice Letter 4250-E requesting for approval of its Long-Term Market Offer short-term and long-term confirmations.

#### **Request for Information**

Per the Portfolio Optimization Decision, IOUs shall "propose a Request for Information for Contract Assignments and Contract Modifications in the Renewables Portfolio Standard proceeding in 2021 and 2022." As described below, SDG&E issued another RFI outreach in the 2022 RPS Plan cycle.

To reduce excess and/or uneconomic resources, as directed by D.21 05 030, SDG&E held a RFI process with its supplier counterparties and market participants to determine interest in contract assignments or other contractual structures to optimize SDG&E's RPS portfolio.

Merrimack Energy, the assigned Independent Evaluator, oversees the RFI solicitation process for SDG&E.

A list of eligible contracts was developed by reviewing PCIA-eligible RPS portfolio to determine modifications and contract assignments eligibility. PPAs procured for specific mandates, such as GTSR and BioRAM programs, were excluded. PPAs with non-modifiable requirements such as RAM, REMAT and BioMAT will include limitations as it relates to other mandated programs.

<sup>41</sup> D.22-11-021, Ordering Paragraph 3 at 49

<sup>42</sup> D.21-05-030, Ordering Paragraph 6 at 65.

On January 5, 2022, SDG&E issued an RFI outreach to supplier counterparties of existing RPS eligible power purchase agreements to determine interest in modifications to existing contracts to reshape SDG&E's portfolio and minimize costs to customers in the SDG&E service territory. The following structures or potential contract modifications were proposed to the counterparties:

- Contract Novation all obligations of SDG&E under the power purchase agreement would pass from SDG&E to a new off taker, and SDG&E would cease to be liable under the agreement
- Contract Assignment SDG&E as a counterparty would be replaced with a new counterparty
- Contract Termination with Buyout SDG&E would make a lump sum payment to the seller and the contract would end as of the date of the payment
- Contract Buydown SDG&E would make a lump sum payment to the seller to lower the contract price for the duration of the delivery term
- Other Modifications other proposals to modify RPS agreements to reduce the quantity of RPS energy sold to SDG&E and/or the total costs of the contract over the remaining term

On March 11, 2022, SDG&E issued an RFI solicitation to market participants (third parties) who are interested in exploring potential assignment or other arrangement of existing eligible renewable energy contracts from SDG&E's RPS portfolio. The outreach was sent out to financial institutions, energy service providers, utilities, municipal utilities, industrial end users, wholesale power marketers, and any other entity that would be interested in bundled and or unbundled renewable attributes.

SDG&E received responses from both January 2022 and March 2022 outreach efforts. The summary of the responses is provided in Appendix 16. The responses were evaluated by SDG&E. There were no resulting contracts from this RFI process because no interested party or counterparty offered to enter into a contract modification. SDG&E provided updates to the PRG regarding SDG&E's the RFI process.

On August 23, 2023, SDG&E issued its second RFI in as directed by D.21 05 030 and as authorized in its 2022 Final RPS Plan. SDG&E's 2023 RFI process was similar to its 2022 RFI process. SDG&E reached out to its eligible counterparties interested in contract modifications and third-party market participants interested in potential assignment or other arrangement. SDG&E received responses from both RPS counterparties and third-party RPS market participants and currently evaluating the responses. The summary of responses is provided in Appendix 16. SDG&E has provided and will continue to provide updates to the PRG regarding SDG&E's the RFI process. All resulting contracts, if there are any, from the RFI process, will be submitted to the Commission for approval via Tier 3 Advice Letter filing.

#### **2.1.** Portfolio Optimization

Separate from the specific VAMO and RFI optimization efforts described above, SDG&E continuously employs a general portfolio optimization strategy. The first step in SDG&E's ongoing portfolio optimization strategy is to determine its RPS need. As outlined above, the probability of success and/or the expected generation of each of the projects in SDG&E's portfolio is frequently reviewed and revised using the most current information. The result of this comprehensive review is a calculation of SDG&E's forecasted RPS Position, which is then compared with SDG&E's RPS compliance requirements to determine its RNS. SDG&E uses this its alternative scenario RNS to determine the appropriate level of procurement, including the necessary margin of over-procurement (if any), going forward. Generally, if SDG&E were to foresee a shortfall, it would then procure additional resources; if it were to foresee an excess, then it may pursue sales, or other right-sizing activities. Regulatory directives in the Portfolio Optimization Decision will impact SDG&E's portfolio, and incorporated and procurement directed by the Commission in the IRP that will likely be RPS eligible, and so that procurement will be also be reflected in SDG&E's RPS portfolio.

#### **Cost Optimization**

Cost optimization begins before a contract is executed, with contract analysis methodology development and adoption. Once this analysis methodology is utilized and a contract is executed, if an opportunity to optimize this contract becomes apparent, SDG&E will investigate it to determine the best course of action for its customers.

Least-Cost Best-Fit ("LCBF") Analysis: SDG&E carefully analyzes bids and bilateral proposals according to its LCBF methodology. This methodology is intended to optimize SDG&E's procurement decisions by minimizing cost and maximizing value. The LCBF process results in the quantification and subsequent ranking of the costs and benefits of each bid based on these metrics. It includes analysis of the PPA price, which inherently includes the counterparty's interest, carrying, and transaction costs. The analysis also takes into account the energy, green attributes, and capacity value provided by each of the projects, as well as congestion costs and transmission costs. The formula deducts the PPA Price ("Levelized Contract Cost"), transmission cost, Renewable Integration Cost Adder ("RICA"), and congestion cost from the sum of the energy, green attributes, and capacity benefits to determine a project's Net Market Value ("NMV"). These NMVs can then be compared and used to create a quantitative ranking. SDG&E then evaluates any identifiable qualitative aspects, such as project location (whether in a Disadvantaged Communities ("DAC")), project viability, developer experience, and portfolio fit to determine the shortlist. The projects that are placed on the shortlist will have the highest value to customers and best portfolio fit when compared with other bids from the particular solicitation. SDG&E revises its LCBF methodology as necessary to incorporate new information and will continue to do so in accordance with any future

Commission decision on LCBF. See Section X and Appendix 89 for additional details on LCBF.

Banking vs. Sales Analysis: Another optimization tool related to contract management is the analysis of the option to bank or sell excess procurement. When SDG&E forecasts excess RPS procurement in its portfolio, it will perform an analysis of both the short-term and long-term quantitative and qualitative costs and benefits associated with the RECs to determine next steps. In the past, analysis was performed to determine whether to bank or sell the excess; however, given the issuance of the Portfolio Optimization Decision, SDG&E's portfolio will be allocated by vintaged, forecasted annual load share, with the remainder that is not accepted in allocations offered for sale to the market. If there continues to be excess in its RPS portfolio, SDG&E may bank the excess for future use. The quantitative portion of the valuation includes consideration of SDG&E's RPS Position, the time value of revenues from the potential REC sale, and the potential replacement cost. The qualitative portion includes consideration of the impact on market liquidity and SDG&E's RPS Position. For more information regarding SDG&E's Sales Framework, please see Appendix <del>13</del>15.

<u>Other Sales Considerations:</u> To further balance its portfolio and potentially lower electric rates for both its unbundled and bundled customers, SDG&E may find optimization opportunities and is seeking authorization to sell RPS volumes from:

- i. Projects from the pool of its PCIA-eligible portfolio as fixed, firm quantities, percentages of the portfolio, or specified projects in unit contingent product transactions.
- ii. SDG&E's elected allocation portion of its PCIA-eligible portfolio as a firm, percentage or unit contingent product.
- <u>iii.</u> The portion of the PCIA-eligible portfolio that was transacted as <u>short-term allocations and Market Offer sales and is not required</u> <u>to be further allocated or transacted in the VAMO process.</u>

**Bank Utilization:** Implementation of portfolio optimization, as required by D.21-05-030, willhas significantly impactimpacted SDG&E's RPS position. SDG&E may choose to utilize the bank as an alternative to procuring more renewable energy for meeting its RPS Compliance requirement when its RPS supply position falls short. Based on SDG&E's conforming RNS table, SDG&E's banked RECs arewould be sufficient to meet the compliance requirement for the years SDG&E's RPS supply position falls short.

Retirement Analysis: There is a significant link between SDG&E's banking versus sales analysis and its retirement analysis where SDG&E evaluates its compliance position and strategy to ensure that RECs are handled in the most cost-effective way in both the short-term and the long-term for SDG&E's customers. SDG&E's retirement decisions include consideration of its RPS Position and the 36-month shelf-life of the RECs. RECs can be retired and used for compliance purposes within 36 months of the REC's issuance, and any RECs in excess of the CP's required targets can be banked and will not expire. Once a REC is banked, it can be used for compliance purposes at SDG&E's discretion. SDG&E also considers the time value of the impact of potential revenues or additional RPS procurement on rates for bundled customers when making the decision to buy, sell, bank, or retire RECs.

#### **Value Optimization**

In addition to its contract analysis and management strategies, SDG&E also seeks to add value to the RPS procurement process by participating in stakeholder processes related to current and proposed procurement programs, and by evaluating unique procurement opportunities.

**Program Design:** SDG&E actively participates in discussions regarding the initial design and future of renewable procurement programs via comments and workshops. SDG&E's goal is to provide recommendations that contain costs and protect customers. Examples of these efforts are SDG&E's contribution to the BioMAT and BioRAM program design process, as well as its recommendations regarding the future of the RAM program. As explained under Section XV, SDG&E anticipates the IRP process signifies a shift away from individual, separate programs and processes, towards a holistic planning and procurement process.

**Utility Involvement:** SDG&E evaluates utility ownership opportunities as procurement options and assesses the value of its involvement. SDG&E may participate in these types of projects if its participation would either augment the probability of project success or cost competitiveness of a project, and/or lead to a positive socioeconomic impact, for example involving a DBE.

Bilateral Transactions: SDG&E will enter into bilateral purchase or sales agreements, if necessary, to the extent that these transactions benefit customers. Not all products are well-suited for the RFO process due to, for example, deal timing and/or complexity. The ability to contract bilaterally is a potentially valuable tool in maximizing value to customers. For example, it could be useful in addressing an unforeseen need in an expedited manner, as compared to the additional timing required for a solicitation. It also allows an IOU to take advantage of opportunities that are too complex to solicit through an RFO, such as tax equity, utility ownership, or buy/sell transactions. In addition, the ability to engage in bilateral deals is necessary from a practical

perspective: bilateral deals assist market development by offering an additional sales option, making project development less dependent on RPS solicitation cycles. SDG&E will request approval of bilateral purchases and sales through a Tier 3 Advice Letter filing.

#### **Risk Optimization**

SDG&E optimizes risk through several long-term and short-term mitigation strategies. SDG&E also seeks to add value by actively participating in discussions regarding compliance and enforcement rules.

Minimum Margin of Procurement: A long-term procurement strategy utilized by SDG&E is the establishment of a Minimum Margin of Procurement ("MMoP") consistent with California Public Utilities ("Cal. Pub. Util.") Code § 399.13(a)(4)(D). The MMoP is designed to mitigate the risk that renewable projects planned or under contract are delayed or canceled. SDG&E currently has fourthree projects under development and has adjusted its RNS consistent with SDG&E's MMoP strategy. SDG&E's MMoP is intended to ensure, to the extent possible, that SDG&E is able to reach its RPS goals, as explained in more detail below under Section IX, which describes how SDG&E's MMoP is incorporated into the RNS formula. Generally, SDG&E applies a failure rate which is a probability weighted deviation below expected forecast generation, and it is based upon but not limited to probability assessments of project failure, project capacity reduction, operational failure after project success, project curtailment due to transmission constraints, etc.<sup>43</sup> Risk-adjusted RECs from RPS facilities in development will be added to the total RPS eligible procurement which is captured in SDG&E's RNS, Appendix 1. Total RPS eligible procurement will be compared to the gross RPS Procurement Quantity Requirement to determine if additional procurement is required. Project development can present challenges that must be accounted for when determining a need. In combination with the constant fluctuation of RPS targets (based on retail sales) and continual changes in RPS deliveries, it is essentially impossible to meet the RPS targets exactly. SDG&E undertakes conservative MMoP procurement as a prudent measure to guard against any unforeseen events that may impact its portfolio and jeopardize compliance. SDG&E provides a risk assignment table in Appendix 1 narrative section.

**Short-term Contracts:** Due to unforeseen circumstances, a situation may occur in which SDG&E needs to procure a small amount of renewable energy in the near-term. In this scenario, short-term contracting is a viable strategy, as it

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SDG&E does not include an additional adjustment to its forecasted REC deliveries through a Voluntary Margin of Procurement ("VMoP"), which is optional, and not required by statute as is the MMoP.

allows SDG&E to respond quickly to a sudden change in portfolio status and manage a short-term need without entering into an unnecessary long-term commitment.

**Category 3 Procurement:** SDG&E may consider Category 3 procurement to the extent that such products are shown to be cost-effective and a need for additional RPS procurement becomes evident. However, SDG&E plans to maintain enough room below its Category 3 procurement limits so that Category 3 procurement is a potential strategy in the short-term, should SDG&E need to fill any unforeseen immediate need.

#### **Request for Information**

Per the Portfolio Optimization Decision, IOUs shall "propose a Request for Information for Contract Assignments and Contract Modifications in the Renewables Portfolio Standard proceeding in 2021 and 2022."<sup>44</sup> As described below, SDG&E issued another RFI outreach in the 2022 RPS Plan cycle.

To reduce excess and/or uneconomic resources, as directed by D.21-05-030, SDG&E held a RFI process with its supplier counterparties and market participants to determine interest in contract assignments or other contractual structures to optimize SDG&E's RPS portfolio.

Merrimack Energy, the assigned Independent Evaluator, oversees the RFI solicitation process for SDG&E.

A list of eligible contracts was developed by reviewing SDG&E's PCIA-eligible RPS portfolio to determine whether any prohibitions to contractual modifications or contract assignments exist. For example, PPAs procured for specific mandates, such as GTSR and BioRAM programs, were excluded. PPAs with non-modifiable requirements such as RAM, REMAT and BioMAT will include limitations as it relates to other mandated programs.

On January 5, 2022, SDG&E issued an RFI outreach to supplier counterparties of existing RPS eligible power purchase agreements to determine interest in modifications to existing contracts to reshape SDG&E's portfolio and minimize costs to customers in the SDG&E service territory. The following structures or potential contract modifications were proposed to the counterparties:

- Contract Novation all obligations of SDG&E under the power purchase
   agreement would pass from SDG&E to a new off-taker, and SDG&E would cease
   to be liable under the agreement
- Contract Assignment SDG&E as a counterparty would be replaced with a new counterparty

-

<sup>&</sup>lt;sup>44</sup> D<u>.21-05-030, Ordering Paragraph 6 at 65.</u>

- Contract Termination with Buyout SDG&E would make a lump sum payment
   to the seller and the contract would end as of the date of the payment
- Contract Buydown SDG&E would make a lump sum payment to the seller to lower the contract price for the duration of the delivery term
- Other Modifications other proposals to modify RPS agreements to reduce the quantity of RPS energy sold to SDG&E and/or the total costs of the contract over the remaining term

On March 11, 2022, SDG&E issued an RFI solicitation to market participants (third parties) who are interested in exploring potential assignment or other arrangement of existing eligible renewable energy contracts from SDG&E's RPS portfolio. The outreach was sent out to financial institutions, energy service providers, utilities, municipal utilities, industrial end users, wholesale power marketers, and any other entity that would be interested in bundled and or unbundled renewable attributes.

SDG&E received responses from both January 2022 and March 2022 outreach efforts. The summary of the responses is provided in Appendix 17. The responses were evaluated by SDG&E. There were no resulting contracts from this RFI process because no interested party or counterparty offered to enter into a contract modification. SDG&E provided updates to the PRG regarding SDG&E's the RFI process.

On August 23, 2023, SDG&E issued its second RFI in as directed by D.21-05-030 and as authorized in its 2022 Final RPS Plan. SDG&E's 2023 RFI process was similar to its 2022 RFI process. SDG&E reached out to its eligible counterparties interested in contract modifications and third-party market participants interested in potential assignments or other arrangements. SDG&E received responses from both RPS counterparties and third-party RPS market participants and currently evaluating the responses. The summary of responses is provided in Appendix 17 SDG&E has provided and will continue to provide updates to the PRG regarding SDG&E's the RFI process. All resulting contracts, if there are any, from the RFI process, will be submitted to the Commission for approval via Tier 3 Advice Letter filing. Because SDG&E is still in the process of concluding its second RFI and there was minimal interest in entering a contract modification from both interested parties and counterparties, SDG&E does not propose another RFI in the 2024 RPS Plan cycle.

#### B. Responsiveness to LSE Policies & Goals, Statutes, & Commission Policies

In this section, SDG&E provides an overview of its compliance with Commission policies, orders, directives, such as RPS related mandated procurement programs, and energy storage reporting. This section also addresses SDG&E's compliance with the statutory long-term contracting requirement. SDG&E does not have unique regional attributes such as once-through cooling retirements, and thus that topic is not included in SDG&E's RPS Plan.

## **Responsiveness to Legislation and Programs**

Notably, regarding SB 100's decarbonization goals, RPS resources play an important role in reducing carbon emissions, and the resource planning undertaken in IRP will be instrumental in ensuring that California reaches its carbon reduction goals through increasing clean resources. Procurement undertaken through the IRP process is, and will continue to be, quantified in SDG&E's RPS procurement planning analysis. SDG&E's RNS table includes impacts from the IRP, which would increase SDG&E's RPS once the resource(s) come online. SDG&E supports the efforts occurring in the IRP and will continue to be an active stakeholder through comments, workshops, etc.

The banking rules adopted by SB 350 and formalized in D.17-06-026 make several changes, which are now applicable to SDG&E per its election to utilize them beginning in CP3: (i) short-term Category 1 products can be banked;<sup>45</sup> (ii) Category 2 products cannot be banked;<sup>46</sup> and (iii) Category 2 and 3 products of any duration cannot be deducted from the bank.<sup>47</sup> In accordance with Commission direction,<sup>48</sup> SDG&E has updated its RNS table under Appendix 1 to comport with the new SB 350 banking rules, assuming for RNS calculation purposes that eligible excess procurement<sup>49</sup> will be utilized in future compliance periods.<sup>50</sup>

## **Legislation and Mandated Procurement Programs**

## **Green Tariff Shared Renewables Program**

Over the past several years, the California Legislature has passed SB 43 Green Tariff Shared Renewables or ("GTSR"), and Disadvantaged Communities ("DAC")-Green Tariff programs. SB 43, which became effective on January 1, 2014, requires participating utilities to file an application for a GTSR program allowing customers to buy some or all of their energy from local renewable projects via a GT or Enhanced Community Renewables ("ECR") program.<sup>51</sup> Prior to the effective date of this law, SDG&E filed Application ("A.") 12-01-008 requesting approval of its GTSR program in January 2012. SDG&E launched GTSR solicitations for GT and ECR projects

<sup>&</sup>lt;sup>45</sup> Cal. Pub. Util. Code § 399.13(a)(5)(B)(i).

<sup>&</sup>lt;sup>46</sup> Cal. Pub. Util. Code § 399.13(a)(5)(B)(ii).

The banking rules, established by D.12-06-038 at 66, require that bankable excess procurement be calculated by deducting all short-term RECs of any category from the total volume of bankable excess procurement. SB 350 expressly changes this by allowing the banking of short-term Category 1 products (399.13(a)(5)(B)(i)), and prohibiting the deduction of any Category 2 and 3 products when determining bankable excess procurement (399.13(a)(5)(B)(ii)).

<sup>&</sup>lt;sup>48</sup> R.11-05-005; Administrative Law Judge's Ruling on Renewable Net Short (May 21, 2014).

<sup>&</sup>lt;sup>49</sup> Rules regarding excess procurement are set forth in D.12-06-038, and D.17-06-026.

Note that SDG&E may manage excess procurement by selling such products when doing so would benefit customers, or by utilizing a retired REC for RPS compliance in future compliance periods.

These programs are branded as EcoChoice ("GT") and EcoShare ("ECR"), and were formerly known as "connected....to the sun."

in July 2015, September 2016, March 2017, November 2017, June 2018, November 2018, August 2020, and August 2021. While successful in earlier years, the high penetration of CCAs in SDG&E's service territory caused a majority of participants to depart, as this commodity-based program is only offered to bundled customers. Because program costs were being recovered from a shrinking pool of customers, rates rose sharply, resulting in further attrition. To address this concern, SDG&E filed an application to suspend the GTSR program on May 31, 2022 and received permission to file an advice letter suspending GT later that year. After filing the AL, SDG&E successfully notified all remaining customers and unenrolled them from the offering. SDG&E awaits a proposed decision from the CPUC to permanently close GTSR and the other Green Access Programs, which is now expected in 2024. SDG&E's RPS will increase whenever SDG&E claims allocated portion of the excess GTSR-committed RECs for compliance.

Reporting: D.15-01-051 allowed IOUs to supply initial GT program demand from an interim pool of existing RPS resources under contract with that IOU.<sup>53</sup> This Decision also requires reporting regarding this pool, specifically that the IOUs' RPS Plans include "all information related to the transfer of megawatts from the existing RPS program to GTSR. This information includes the impact on residual net short and the need to bridge for any shortfall, accounting of RECs, list of contracts with price, and other relevant details."<sup>54</sup> SDG&E received Commission approval of its interim project pool and enrollment in SDG&E's GT program began in Q4 2016. SDG&E's reporting on the interim project pool as of April 2021 shows that 8 RECs in 2016, 4,437 RECs43RECs in 2017, 86,446 RECs in 2018,<sup>55</sup> 87,617 RECs in 2019,<sup>56</sup> and 91,024 RECs in 2020,<sup>57</sup> were transferred between the interim project pool and the GTSR program. Starting in 2021, the customer attrition on the program increased significantly due to customer opt-outs in response to high rates and customer load departure to CCAs. GTSR customer enrollment decreased such that the interim pool was no longer needed to provide energy to GTSR customers. SDG&E's reporting on the interim project as of June 2022 shows no RECs were transferred between the interim project pool and the GTSR programs. Because GTSR customers are being served with dedicated renewable resources, the generation used to serve the customers enrolled in SDG&E's GT program were excluded in SDG&E's RNS table in the previous years. However, beginning 2021, due to the decreased GTSR program enrollment, the remaining generation from the dedicated renewable resources not used by the GTSR program will be included in SDG&E's RPS eligible generation in the RNS table, as allowed by D.15-01-

52 SDG&E Advice Letter 4074-E, approved and effective September 9, 2022.

<sup>&</sup>lt;sup>53</sup> D.15-01-051 at 39.

<sup>&</sup>lt;sup>54</sup> D.15-01-051 at 41.

A total of 102,880 RECs were retired for the GTSR Program (EcoChoice) for 2018. 86,446 RECs were retired from the interim pool and 16,434 RECs were retired from the GTSR project.

A total of 128,280 RECs were retired for the GTSR Program (EcoChoice) for 2019. 87,617 RECs were retired from the interim pool and 40,663 RECs were retired from the GTSR project.

<sup>&</sup>lt;sup>57</sup> A total of 127,956 RECs were retired for the GTSR Program (EcoChoice) for 2020. 91,024 RECs were retired from the interim pool and 36,932 RECs were retired from the GTSR project.

051.<sup>58</sup> SDG&E's filed AL 4074-E to immediately suspend its EcoChoice, Green Tariff Program pursuant to the ALJ Ruling Granting Request for Green Tariff Suspension.<sup>59</sup> Per the approved ERRA Forecast,<sup>60</sup> the dedicated resources for the GTSR Program will be recovered in the PCIA cost mechanism. Beginning in August 2022, the generation from the dedicated GTSR resources will be included in the RPS eligible generation.

On May 30, 2024, the Commission issued a decision modifying green access program tariffs and adopting a community renewable energy program. In the decision, CSGT was terminated for all LSEs and SDG&E was permitted to terminate the modified DAC-GT to its bundled customers. The GTSR-ECR unprocured capacity is reassigned to the modified Green Tariff, which will allow SDG&E to terminate the ECR offering as well. SDG&E's remaining procurement obligations from the GAP program are: (i) procurement through solicitations of the remaining capacity of 19 MW for the modified Green Tariff and (ii) to adopt CREP by utilizing the existing tariffs that are compliant with the federal Public Utility Regulatory Policies Act including REMAT and Standard-Offer-Contract. SDG&E has to implement these modified GAP programs and will update its RPS Plan with the progress accordingly.

## **Energy Storage**

As of January July 2024, SDG&E has a portfolio of approximately 1,188400 MWs of energy storage which are operational, under-development or pending CPUC approval. This includes battery energy storage, hybrid PV/battery storage, microgrid energy storage and pumped hydro storage. 602480 MW of this capacity is set to come online between 2024 and 2026.

Benefits of Energy Storage: Commission decisions<sup>61</sup> on energy storage list a myriad of grid management issues that can be addressed via storage, for example, contribution to reliability needs or deferment of transmission and distribution upgrade investments.<sup>62</sup> Storage also has the ability to respond to periods of renewable curtailment by charging during the overgeneration periods, harnessing the excess energy and potentially mitigating the frequency of negative pricing. Many of SDG&E's online facilities participate in the CAISO market. SDG&E anticipates increasingincreased its battery storage project participation in the CAISO market over the next couple of last several years. As mentioned, energy storage resources have the ability to take advantage of surplus renewable energy when it occurs, as they have the capability to absorb excess energy during times of high renewable generation and discharge it at times when supply is limited. As energy storage capacity increases, the ability of this

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<sup>&</sup>lt;sup>58</sup> D.15-01-051, Conclusions of Law 11 at 174.

<sup>&</sup>lt;sup>59</sup> ALI's Ruling Granting Request for Green Tariff Suspension issued on August 25, 2022.

<sup>60</sup> D.22-12-042, Ordering Paragraph 7 at 45.

<sup>&</sup>lt;sup>61</sup> See, e.g., D.13-01-040; D.14-10-045; and D.16-01-032.

<sup>&</sup>lt;sup>62</sup> D.13-10-040 at 9.

resource to absorb excess energy may increase, which may decrease the need for economic curtailments.

Assembly Bill 2514: SDG&E is required to incorporate into its RPS Procurement Plan any energy storage targets and policies that are adopted by the Commission as a result of its implementation of Assembly Bill ("AB") 2514.63 The Commission issued D.13-10-04064 on October 17, 2013, requiring SDG&E to procure 165 MW of energy storage by 2020.65 On December 31, 2020, CPUC Executive Director Rachel Peterson granted SDG&E an extension to 2021 to support SDG&E meeting its AB 2514 procurement obligation. To date, SDG&E has completed the 2014, 2016 and 2018 energy storage procurement cycles. In March of 2020, SDG&E filed its Application for Approval of its 2020 Energy Storage Procurement Framework and Program (A.20-03-003), which described that developers terminated two of the thirdparty contracts leaving SDG&E approximately 6 MW short of its target. Additional third-party contract cancellations in the remainder of 2020 resulted in a deficiency of approximately 13 MWs. On April 21, 2022, the Commission issued D.22-04-044,66 allowing SDG&E and the other Investor-Owned Utilities to count energy storage procurement that has occurred in other processes at the Commissions towards their AB 2514 targets through Tier 1 Advice Letters.<sup>67</sup> The Commission approved SDG&E's Advice Letter 4112-E via disposition on November 23, 2022, to count energy storage procurement that has occurred in other Commission processes towards its AB 2514 target. By counting 12.5 MW of Valley Center Energy Storage II towards its AB 2514 target, SDG&E has met its obligation. The Lake Hodges Pumped Storage Facility ("Lake Hodges"), a facility that commenced operation in 2012, has notified SDG&E that a force majeure event, which had interrupted service, was expected to continue indefinitely. Lake Hodges has indicated publicly that the project delays originally were thought to continue while emergency repairs were performed over 5-6 months but now indicates that the dam may have to be replaced. SDG&E has counted Lake Hodges towards compliance with its AB 2514 target requirements in past reports. SDG&E is forecasting zero RPS generation from this facility and is in discussions with the counterparty on next steps due to this extended force majeure event.

#### MANDATED RPS PROCUREMENT PROGRAMS

The Commission has implemented several mandated procurement programs, such as RAM, ReMAT, BioMAT, and BioRAM. These programs, with the exception of BioRAM, have resulted and will result in additional RPS procurement that SDG&E must include in its RNS calculation, which will impact SDG&E's position and procurement decisions. RPS-eligible procurement may

<sup>63</sup> Cal. Pub. Util. Code § 2837.

This decision established the policies and mechanisms for procurement of electric energy storage pursuant to AB 2514.

<sup>&</sup>lt;sup>65</sup> D.13-10-040, Ordering Paragraph 3 at 77, and Appendix A at 7.

This decision adopted remaining direction regarding AB 2514 energy storage procurement targets and approving two energy storage programs pursuant to AB 2868.

<sup>&</sup>lt;sup>67</sup> D.22-04-044, Ordering Paragraph 1 at 42.

occur both within and outside the RPS program. If authorized to procure renewable resources as a part of these initiatives, SDG&E will count such resources towards its RPS goals.

With regard to these programs, the Commission, as well as SDG&E, have long been interested in "develop[ing] a comprehensive and practical plan to combine IRP and RPS filings...." SDG&E, along with Southern California Edison Company ("SCE") and Pacific Gas & Electric Company, ("PG&E"), have submitted comments to the Commission as proponents to bring about greater efficiencies, avoid duplication, and enhance customer benefits by further aligning the RPS proceeding with the processes in the Integrated Resource Planning P proceeding.

To this laudable end, and with the considerations of keeping the costs and benefits of California electric consumers forefront in mind, SDG&E would-respectfully request\_requests that the Commission now consider undertaking, with all affected parties, the work of having various long-standing RPS programs, such as ReMAT, BioMAT, BioRAM, etc., fully integrated into the robust resource-planning processes already well established in the Commission's IRP proceeding. To date, these programs have been exempt from IRP analysis. Some of these programs are now either antiquated or moribund, but at a minimum they are in need of a fresh look in light of IRP methodologies. Some of these programs may necessitate further legislative action to have them fully integrated into the IRP and considered on an apples-to-apples basis with other resources. But this review is long overdue, in SDG&E's opinion, given that these resources continue to be required to be purchased by SDG&E's customers, when they have not been evaluated regarding (a) the need for these particular resources, and (b) the above-market costs that SDG&E's customers must pay for these resources. This type of review is especially at this critical time in which so many SDG&E customers have difficulty paying for even modest electrical service, regardless of its provider.

SDG&E would like to invite the Commission to work with SDG&E and other interested parties to explore how we can, together, create greater consumer efficiencies by promoting wherever necessary the need for all supply resources to be subject to needs-based and least-cost analyses and utilizing the Commission's existing IRP processes to consider those resources within those existing processes.

## **Renewable Auction Mechanism**

The Commission implemented its own mandated renewable procurement program, the RAM program in 2010. While SDG&E expects it will meet its RPS compliance obligations with RPS under contract, SDG&E may use the RAM solicitation documentation on an as-needed basis to procure for its GTSR program, as authorized by D.15-01-051<sup>69</sup> and D.16-05-006.<sup>70</sup> SDG&E's most recently approved RAM documents can be found in SDG&E AL 3206-E, effective April 28,

<sup>69</sup> D.15-01-051, Ordering Paragraph 5 at 180.

<sup>68</sup> D.19-12-042 at 74.

<sup>&</sup>lt;sup>70</sup> D.16-05-006, Ordering Paragraph 1 at 41-42.

2018.<sup>71</sup> D.14-11-042 allows the IOUs to propose an approval process for contracts resulting from the RAM process. At this time, SDG&E proposes no changes to the current Tier 2 AL RAM procurement approval process, but may propose alternate methods in subsequent versions of its RPS Plan.

#### **ReMAT**

The ReMAT, established in 2012, is a feed-in tariff program for small renewable generators less than 3 MW in size. In accordance with the ReMAT program rules, SDG&E's Schedule Re-MAT Tariff closed, effective June 30, 2016. Per D.21-12-032, SDG&E reopened its ReMAT program in January 2023. SDG&E has not included RPS resulting from the ReMAT program in its RNS calculation as the incremental procurement volume and timing is unknown. SDG&E will incorporate any updated RPS quantities from ReMAT facilities once they have been procured.

## BioMAT<sup>72</sup>

SB 1122 was signed into law in September 2012, creating the BioMAT program. The program required IOUs to procure a total of 250 MWsMW of bioenergy projects that are 3 MWsMW or less. The categories of procurement are biogas from wastewater plants and green waste (110 MWsMW), dairy or other agriculture bioenergy (90 MWsMW), and forest waste biomass (50 MWsMW). The BioMAT program benefits all California customers, and as a result of D.20-08-043, all BioMAT costs are required to be spreadrecovered through a non-bypassable charge. Currently, SDG&E has no BioMAT contracts, and its total available BioMAT capacity is 24.5 MW.<sup>73</sup> AB 843 allows CCAs to participate in the BioMAT program if capacity allocations remain available. This may reduce SDG&E's available capacity. SDG&E will incorporate any updated RPS quantities from BioMAT facilities onceif and when they have been are procured.

## **BioRAM**

The BioRAM program was established in 2016 as a result of former Governor Brown's emergency proclamation. The program was created to aid in mitigating the threat of wildfires by utilizing high hazard zone biofuel from forests and other vegetated areas determined by CAL FIRE that pose a wildfire risk. The program requires IOUs to collectively procure 146 MWsMW, of which SDG&E's share of that total is 19 MWsMW. SDG&E has one 24 MW BioRAM contract which fulfilled its procurement obligation. Per Resolution E-4977, which implements SB 901, SDG&E was required to seek to extend its BioRAM contract for 5five years. Accordingly, effective July 19, 2019, the Commission approved AL 3356-E and 3356-E-A, extending SDG&E's BioRAM contract by 5 years. five years. On October 16, 2023, the Commission issued

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AL 3206-E, available at https://tariff.sdge.com/tm2/pdf/3206-E.pdf.

SDG&E, Bioenergy Market Adjusting Tariff, available at <a href="https://www.sdge.com/bioenergy-market-adjusting-tariff-bio-mat">https://www.sdge.com/bioenergy-market-adjusting-tariff-bio-mat</a>.

<sup>&</sup>lt;sup>73</sup> SDG&E previously contracted with a BioMAT facility which has since been terminated.

<sup>&</sup>lt;sup>74</sup> SDG&E met its BioRAM requirement in November 2016.

Resolution E-5288 to implement the key provisions of SB 1109, which requires, among other things, the IOUs and Community Choice Aggregators with BioRAM contracts to amend their existing contracts or execute new contracts to include an extension of five years, so long as the eligible biomass facilities are not located in federal severe or extreme nonattainment areas for particulate matter or ozone. The Commission approved SDG&E's request to amend its HL Power BioRAM PPA in AL 4428-E on May 19, 2024.

D.18-12-003 requires SDG&E to make available for sale all of the future RECs associated with SDG&E's BioRAM contract(s) as PCC 1 RECs. SDG&E has utilized, and will continue to utilize, the Sales RFP documents attached herein (see Appendices 9-13) and will file an AL with the Commission for approval of any resulting contracts. According to the Decision, SDG&E may not use RECs associated with BioRAM contracts for compliance purposes. Therefore, SDG&E's RNS excludes RECs associated with BioRAM resource.

## 1. Long-Term Procurement

Requirements set forth in D.17-06-026 require that 65 percent of each retail seller's procurement that can be counted towards the RPS requirement must be from contracts (or ownership or ownership agreements) with term lengths of 10 years or more in duration. SDG&E elected early compliance (beginning in CP 3) with the 65 percent long-term contracting requirement.

Of the RECs retired in CP 3 (2017-2020), one hundred percent were from long-term contracts. As

In 2024, SDG&E signed a short-term Public Utility Regulatory Policies Act of 2020, 1001978 ("PURPA") contract with a landfill project. 75 In CP4 (2021-2024) and CP5 (2025-2027), 1 to 2 percent of SDG&E's forecasted RPS generation is from the PURPA short-term contract and the remaining RPS contracts are generation is from long-term contracts. SDG&E's developing projects generation is also from long-term contracts, and SDG&E's developing contracts are long term and have low risk of project failure. Because SDG&E's RPS portfolio is made up almost exclusively of long-term RPS contracts, it is not at risk for noncompliance with the 65% long-term contracting requirement. Additionally, SDG&E frequently monitors its portfolio to ensure continued compliance with the RPS Program requirements, including the long-term contracting requirement. SDG&E is providing a summary of its long-term and short-term procurement as of July 20232024, in the table below:

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D.20-050-006, Decision Adopting a New Standard Offer Contract For Qualifying Facilities of 20
 Megawatts or Less Pursuant to the Public Utility Regulatory Policies ACT of 1978.

TABLE 4-1
SDG&E'S PROCUREMENT SUMMARY

Compliance Period	Short-Term	Long-Term
2021-2024	N/AConfidential (See	Confidential (See Appendix 1-
	Appendix 1-RNS Narrative)	RNS <del>Table</del> Narrative)
2025-2027	N/AConfidential (See	4,482 GWhConfidential (See
	Appendix 1-RNS Narrative)	Appendix 1-RNS Narrative)
2028-2030	N/A	4, <del>481</del> <u>568</u> GWh
2031- <del>2033</del> <u>2034</u>	N/A	<del>4,169</del> <u>5,195</u> GWh

## C. Portfolio Diversity and Reliability

A wide variety of procurement programs exist both within and in addition to the RPS program. This variety contributes to SDG&E's overall portfolio diversity. An overview of SDG&E's mandated RPS procurement programs and preferred resources solicitation is provided above under Section IV; Section XV addresses the IRP process which aims to achieve resource diversity and reliability; and Section IV includes information on SDG&E's flexible capacity and storage procurement efforts. Additionally, SDG&E provides detail regarding how transportation electrification is considered in Section IV, and SDG&E's strategy for optimizing cost, value, and risk, which are also important considerations for both diversity and reliability purposes. Taken together, these various sections address how SDG&E has increased and will continue to increase the diversity of its portfolio and contribute to grid reliability, thereby resulting in customer value.

Another factor that influences SDG&E's portfolio diversity as well as helpand helps to appropriately address integration and overgeneration is the LCBF calculation that SDG&E has used and will use to select shortlisted projects. The LCBF methodology appears in a document attached hereto as Appendix 89. The LCBF document also contains qualitative evaluation metrics, which play a part in selecting a diverse portfolio.

Additionally, SDG&E's Plan includes Section XIII, dedicated to economic curtailment, which outlines how SDG&E proposes to address the integration of renewables and the issue of overgeneration, both of which can contribute significantly to the incidence of economic curtailment. This section includes a discussion of SDG&E's analysis and activities, as well as information regarding contract modifications SDG&E has made over time to address curtailment. SDG&E notes that the ACR expressed an interest in how SDG&E is addressing the "under-utilization" of renewable energy. This term implies that renewable energy is not being used to the extent possible when generated, which is not the case. However, As explained

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<sup>&</sup>lt;sup>76</sup> ACR at 20.

further in Section XIII, below, renewable generation is not load-following, and as such can result in overgeneration. One way to address overgeneration is through the use of energy storage. Section IV includes an update on the status of SDG&E's energy storage portfolio, as well as more detail regarding the potential of this technology to address overgeneration.

The various procurement activities and continued refinement of both the project valuation methodology and contracts are undertaken on behalf of SDG&E's customers to ensure that they receive a reliable, diverse and cost-effective portfolio of generation.

## **Alignment with Load Curves**

SDG&E evaluates load curves regularly to ensure that its portfolio meets hourly system needs. SDG&E's renewable resource procurement process analyzes these curves in three phases: (i) need identification; (ii) solicitation; and (iii) resource operations. All steps within this process consider the load curves and their implications on overall portfolio performance and system requirements. The need identification phase outlines the required resource characteristics based on SDG&E's existing portfolio and forecasted load. During the solicitation phase, projects with the characteristics identified in the first phase are sought, and portfolio and system requirements are incorporated into the analysis in the form of capacity value, congestion costs, and transmission costs (see the LCBF discussion below). And finally, once projects are operational, their generation can be managed as deemed necessary via curtailment and/or energy storage (see Sections IV and XIII for further detail).

SDG&E optimizes its RPS portfolio to meet and maintain its RPS compliance while minimizing customer costs, maximizing portfolio value and managing risk. SDG&E approaches this task from a variety of angles, as described below. SDG&E seeks to ensure an optimal, cost-effective portfolio mix based on technology, location, and contract length. SDG&E continually assesses opportunities to increase the value of its existing portfolio of contracts and the investment in SDG&E's RPS bank to maintain RPS compliance and mitigate financial and cost-allocation risks.

## **Advanced Emerging Technologies**

Advanced emerging technologies naturally support resource diversity due to their inherent novelty and propensity to render certain operations more efficient, cost-effective, <u>and</u> cleaner, to name <u>but</u> a few benefits. The Commission should also continue to prioritize resource diversification by supporting the development of long-duration energy storage and other potential viable options such as hydrogen energy storage. Hydrogen energy storage can significantly reduce emissions and can play a critical role in complementing intermittent renewables for the state. Hybrid battery storage can also provide benefits to the grid, such as reliability, because storage can absorb excess solar during the day to be used at a time when renewable resources may be producing less. The IRP process will continue to help identify and allow advanced emerging technologies to become part of the State's portfolio of resources. Furthermore, the IRP can help to promote growth in and maturation of new technologies, including EVs, carbon capture, carbon sink options, etc., and allow them to be part of the solution for achieving the State's policy goals.

#### D. Lessons Learned & Trends

The following sections discuss lessons learned regarding RPS supply and demand assessments and identify trends and potential future trends.

## **Supply Lessons Learned and Trends**

**Reduced Generation:** SDG&E recently experienced an unforeseen reduction of volumes delivered from a renewable project that suspended operations for a period of time from 2021 to 2022. During this period, the project delivered energy volumes below the expected delivery volumes. If this creates a compliance need in the future, SDG&E will utilize its bank and/or procure more RPS resources to meet RPS requirements.

**REC Sales Considerations:** A firm REC <u>salesales</u> agreement requires SDG&E to deliver a guaranteed volume of RECs to a counterparty, typically from a "pool" of renewable facilities. The purpose of the "pool" is to ensure the counterparty receives its full contracted volume. For example, if SDG&E agreed to deliver 10,000 RECs in one year to a counterparty, and Pooled Facility #1 generated 8,000 MWhs, one or more facilities from the "pool" must deliver the remaining 2,000 MWhs needed to <u>fulfilfulfill</u> the obligation of the contract. This type of transaction is considered a "firm" transaction.

The alternative to a firm REC sale agreement involves a counterparty agreeing to an as-available volume of RECs from one specific renewable facility. If the facility delivers less than expected, SDG&E is not required to make up the difference with the "pool" because there is no "pool" from which to back-fill shortfall quantities in non-firm REC agreements. This type of transaction is considered a "non-firm" transaction.

SDG&E sees advantages with both firm and non-firm transaction types. SDG&E has learned that. Non-firm transactions reduce the risk that a certain technology or facility(ies) in the RPS portfolio underperforms because SDG&E would not be obligated to "make up" RECs from its portfolio that may have been needed for SDG&E's compliance.

**Overbuilding:** SDG&E has had experience with developers providing profiles in prior solicitations that did not match the profiles of the facilities that were ultimately built. In other words, developers "overbuilt" facilities (*i.e.*, installed capacity above the amount bid and/or shaped the production profile to take advantage of higher-priced Time of Delivery ("TOD") periods). The resulting overgeneration has increased costs to customers through increased contract costs, and increased generation overall which increases the incidence of and payments to CASIO for negative real-time energy pricing. SDG&E has modified its PPApro forma PPAs several times to discourage this practice going forward

and will continue to reevaluate its contract provisions in subsequent versions of the plan, as new information becomes available, to determine if and how its contracts should be updated.

Energy Storage and Curtailments: Battery storage is a solution that-can work in tandem with renewables which may help reduce economic curtailment events. Energy storage could help alleviate economic curtailments by taking the excess supply off the grid. In recent IRP decisions D.19-11-016 and D.21-06-035To address reliability concerns, the Commission ordered 3,300 MWs and 11,500 MW, respectively, of new-capacity procurement to address reliability concerns in D.19-11-016, and an additional 11,500 MWs in decision D.21.06-035 and 4,000 MW in D.23-02-04. The response, SDG&E conducted all-source solicitations, in which eligible renewable energy resources could bid in. SDG&E found that of the bids offered, the majority were not renewables given the commercial online date requirements, and instead were battery storage solutions, or hybrid storage and renewable solutions. Ultimately, the development of battery storage could reduce the renewable curtailments currently faced by the CAISO and LSEs.

Capacity Value: SDG&E's method for calculating energy and capacity values uses a benchmark where energy values are shaped hourly based on a forecast of SP15 energy prices and the results of production cost modeling that yields an hourly energy shape that covers the contract term. The capacity value is shaped hourly using a Loss-of-Load Probability ("LOLP") study for a representative year of the contract term. The process assigns higher capacity value to hours of greater capacity need, which more accurately reflects the impact of variable energy resources upon capacity needs. The calculation provides annual capacity values for both local and IV/System area projects. These annual values are then taken through a process which creates monthly capacity values using the LOLP mentioned above, then down to an hourly level using the monthly values.

These benchmark values are reasonable because, when evaluating a contract on a standalone basis, it should be measured against the avoided costs the utility might face had this contract not been part of the portfolio. For example, if SDG&E had a resource in its portfolio, and that resource was crucial to meeting local resource adequacy requirements, the marginal value of that resource is the amount that SDG&E must pay to replace that resource if it becomes unavailable, plus the cost to replace the energy that resource would have generated to serve hourly retail load. SDG&E will update its calculations as the assumption sources are updated.

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<sup>&</sup>lt;sup>77</sup> D.19-11-016 at 48-49.

**Delay of COD Declaration:** SDG&E is concerned that a facility could reach commercial operation prior to the contractual commercial operation date ("COD"), but delay declaring COD until the guaranteed COD date in the contract. As a result, the facility would be paid for this energy at the contract price, thereby extending the term of its contract, resulting in an additional cost to customers. To mitigate this issue, SDG&E's PPAs provide that energy delivered prior to COD will be paid for at a reduced contract price.

**Steady Project Success Rates:** As the market for renewable energy has matured, SDG&E has observed a positive trend in project success rates. As explained above, SDG&E reviews the status of all projects in its portfolio frequently to incorporate the most recent information into its forecast and will continue this practice.

#### **Demand Assessment Lessons Learned and Trends**

Proliferation of CCAs and the provider of last resort ("POLR"): IOUs are experiencing significant amounts of departed load as a result of the proliferation of CCAs in the territory which results in the reduction of SDG&E's bundled retail sales. In SDG&E's service territory, the City of Solana Beach formed the Solana Energy Alliance and began operations in 2018 as the first local CCA, and has since joined the cities of Carlsbad and Del Mar to form the larger Clean Energy Alliance, ("CEA"). San Diego Community Power ("SDCP") began serving load in 2021, with customers in the cities of San Diego, Chula Vista, Encinitas, La Mesa and Imperial Beach. Together these two CCAs currently represent over 1,039,500196,282 accounts and close to 6960 percent of SDG&E's total load. Both CCAs have filed updated implementation plans and added additional communities in 2023; the County of San Diego and the city of National City joined SDCP, and the cities of Escondido and San Marcos joined CEA. Orange County Power Authority ("OCPA") planned on launching in 2023, to serve SDG&E customers in the unincorporated area Orange County. In early 2023, the Unincorporated County of Orange withdrew from OCPA. In 2024, additional local cities have recently taken actionenrolled to join CCA service with CEA, who updated its implementation plan in 2022 to add the cities of Oceanside and Vista. With these additional proposed departures, SDG&E expects a lower load share from the region past 2024 as discussed in Appendix 1 – RNS Narrative. As load departs from bundled service, the traditional role played by the IOUs in commodity procurement will need to be re-evaluated.

**Peak Shifting:** Due to the success of the RPS program, a significant amount of renewable energy continues to be added to the grid. Substantial amounts of rooftop solar are also being added by customers behind the meter. As a result, the peak load net of variable energy resources has and will continue to shift as the California resource portfolio evolves. Renewable resources have low

variable costs, and thus when they are delivering at high penetration levels during any single time during the day, doing so may result in significant decreases in marginal energy prices and significant ramping events. SDG&E is monitoring the impacts of this issue in the IRP proceeding.

Meeting Demand for Higher Levels of Renewables: In addition to the State's goals (the most recent development of which was SB 100), many customers and communities within SDG&E's service territory are interested in electricity service with even higher levels of renewables than required by law. Related to SDG&E's RPS planning efforts, SDG&E will continue to consider ways in which SDG&E can potentially support offerings that are made available to customers throughout the SDG&E service territory to help meet these goals.

## V. PROJECT DEVELOPMENT STATUS UPDATE

The adopted Reference System Plan ("RSP") from the 2019-2020 IRP cycle, which was approved in D.20-03-028, showed a need for developing new resources. Due to system reliability concerns, the Commission initiated a procurement track and ordered an additional amount of 3,300 MWsMW. SDG&E has since entered into contracts with multiple counterparties for its allocated procurement. Additionally, in both D.21-06-035 and D.23-02-040, the Commission required the procurement of additional resources, some of which may be RPS eligible. RPS resources procured in SDG&E's IRP-related procurement activities will be included in the Project Development Status Update, and their RPS volumes will be considered after adjusting REC deliveries for potential project failure. More information on SDG&E's RPS procurement alignment with the IRP can be found in Section XV.

The SDG&E project development status update also includes projects procured through other mandates. SDG&E signed a PURPA contract with one hybrid solar plus battery energy storage project, pursuant to D.22-06-003. In future updates, SDG&E will include any projects procured in the ReMAT and BioMAT feed-in-tariff procurement initiatives.

SDG&E regularly evaluates each project's development status to assess each project's ability to begin deliveries pursuant to contract terms and conditions. SDG&E's portfolio of renewable energy resources currently under contract but not yet delivering (either pre-construction or in construction) are in various stages of development. Projects under development generally require numerous permitting approvals, generator interconnection, financing, and completion of construction before they can achieve commercial operation. Each of these issues adds significant risk to the development of a project and can directly impact the success or failure of a project.

<sup>&</sup>lt;sup>78</sup> D.20-03-028, Finding of Fact 21 at 97.

<sup>&</sup>lt;sup>79</sup> D.19-11-016 at 48-49.

Generally, projects in the pre-construction phase are most at risk of failure. However, projects under construction may also encounter issues that could affect their ability to achieve commercial operation, such as successful litigation against the project or exposure to events of Force Majeure. In general, projects that have achieved commercial operation have a high probability of meeting their contractual obligations; however, project failure or resource fluctuations (e.g., a bad wind year, pandemic, etc.) can create challenges. Although a developer's experience may improve the likelihood of a project achieving commercial operation, it does not ensure that a project will be successful. Sections IV, VI and VII of this Plan discuss the various delays and risks that could impact projects in various stages of development.

Regarding the impact of project development status on SDG&E's RNS, as a practical matter, until a project actually begins commercial operation, it bears significant development risk. In 2023, Bright Canyon, one of the SDG&E's four developing projects came online. SDG&E expects that the remaining three developing projects in its RPS portfolio will meet their commercial operation dates either on schedule or within the prescribed cure period. All three projects were assigned failure rates, as further discussed in Section VII. SDG&E files monthly and quarterly RPS Database reports with the Commission, which include updates and status for each RPS project. SDG&E bases its forecasting, and therefore its RNS calculation, on its individual project assessments, as is described in more detail in Section IV. It also relies on the lessons it has learned and trends it has observed as a result of the RPS procurement process, as discussed in more detail in Section IV. The above factors contribute to SDG&E's monthly project assessments of the likelihood of each project's success. The result of these cumulative assessments is reflected in the RNS, which SDG&E will use to inform its procurement activities.

Information regarding SDG&E's developing projects, including location, which SDG&E has made public pursuant to D.22-01-004, can be found in Appendix 1.

## VI. POTENTIAL COMPLIANCE DELAYS

## Potential Issues that Could Impact RPS Compliance

The market for renewable energy is dynamic, and multiple factors can impact project development and SDG&E's attainment of its RPS program goals. The following discussion addresses many of the major issues affecting both renewable project developers and SDG&E.

**Transmission Interconnection / Coordination with CAISO:** The timely approval, permitting, and completion of interconnection facilities is crucial to the successful implementation of SDG&E's renewable portfolio. Issues may arise due to transmission facility planning that could impact project development timelines. For instance, the CAISO's transmission studies are already showing that there is

limited available deliverability left in the SDG&E interconnection area. 80 An inadequate amount of transmission capacity can result in insufficient eligible resources that would be needed for resource adequacy. Solving this issue will require the CAISO to approve

The recent approval of major transmission upgrades, as was done in the 2022-2023 Transmission Plan, that by CAISO supports solving this issue, however, many projects require long lead times to permit and build. DG&E monitors these issues and actively participates in the CAISO's Transmission Planning Process ("TPP"), including by responding to competitive solicitations and proposing its own projects when appropriate. SDG&E is also an active participant in CAISO's Generation Interconnection Process and process enhancements initiatives. The CAISO also recently approved changes to the interconnection process in its Interconnection Process Enhancements ("IPE") initiative, where projects will only be studied in a CAISO cluster if there is sufficient capacity available at their point of interconnection within a transmission planning deliverability zone. Longer term direction regarding the projected cost savings associated with the reduced need for local generation may become more evident based on the results of the Commission's IRP process.

Jurisdictional Agency Permitting Delays: Project permits and environmental reviews under CEQA and National Environmental Policy Act ("NEPA") can pose significant risk for projects under development. Project cost, design, and schedule can be adversely affected by ministerial or discretionary permitting requirements and environmental reviews, which depend on a multitude of project-specific factors, including location, environmental impacts, agency staffing resources, and public participation or controversy. Project permitting can result in scheduling delays or project conditions, which in turn can affect site control, financing, other agency permitting, engineering and design, and procurement of equipment and materials. In addition, the costs to mitigate environmental impacts or to respond to public concerns can significantly impact project viability, finances, or schedule.

**Debt Equivalence and Accounting:** Two additional issues may challenge SDG&E's ability to achieve its RPS goals. The first involves debt equivalence. The cumulative debt equivalence of executed PPAs could affect SDG&E's credit profile and, consequently, its financial standing. Some rating agencies include long-term

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<sup>&</sup>lt;sup>80</sup> California ISO, 2020-2021 Transmission Plan (March 24, 2021) at 234 (available at <a href="http://www.caiso.com/Documents/BoardApproved2020-2021TransmissionPlan.pdf">http://www.caiso.com/Documents/BoardApproved2020-2021TransmissionPlan.pdf</a>).

<sup>81</sup> California ISO 2023-2024 Transmission Plan (https://www.caiso.com/documents/iso-board-approved-2023-2024-transmission-plan.pdf)

<sup>82</sup> CAISO Draft Final Proposal – Interconnection Process Enhancements 2023 Track 2 and addendums (https://stakeholdercenter.caiso.com/StakeholderInitiatives/Interconnection-processenhancements-2023).

fixed financial obligations, such as PPAs, in their credit risk analysis. These obligations could be treated as additional debt during their financial ratio assessment. Standard and Poors views two Core ratios, including Funds From Operations ("FFO") to Debt and Debt to Earnings Before Interest, Tax, Depreciation and Amortization, as well as other supplementary ratios, as critical components of a utility's credit profile. Debt equivalence could negatively impact allthese ratios. Unless this risk is mitigated, a PPA would negatively impact SDG&E's credit profile by degrading credit ratios.

The second issue relates to Accounting Standards Codification ("ASC") 810 Consolidation, which includes the subject of Consolidation of Variable Interest Entities ("VIEs"). Application of ASC 810 as it pertains to consolidation of VIEs could also impact SDG&E's ability to sign new contracts. As part of SDG&E's overall internal review and approval process for new PPAs, SDG&E conducts a review of whether each PPA will be subject to consolidation under ASC 810. Under ASC 810, no renewable PPA has been deemed subject to such consolidation, however, ASC 810 requires SDG&E to perform an evergreen assessment for those contracts which are considered VIEs. reconsider whether PPA counterparties are VIEs upon the occurrence of certain reconsideration events. For this reason, SDG&E believes that it is required to assess quarterly each contract or category of contracts to ensure continued compliance with ASC 810, to determine whether SDG&E must consolidate a seller'scounterparty's financial information with SDG&E's quarterly financial reports to the Securities and Exchange Commission. The accounting rules can change. Thus wind, solar, geothermal and bio-gas sellerscounterparties could be impacted.

Application of ASC 810 could hinder SDG&E's ability to achieve its RPS goals and add further costs and risk to execution of new renewable contracts. If SDG&E determines that consolidation is required, a sellercounterparty must open its books to SDG&E and submit financial information, on a quarterly and monthly basis, as specified in SDG&E's contract language for the duration of the relevant agreement.

All PPAs aremay be affected by either debt equivalence or ASC 810 requirements. The Commission is aware of the negative impact of debt equivalence on SDG&E's credit profile. AB 57 requires that the Commission adopt procurement plans that, among other objectives, enhance the creditworthiness of the utility. ASC 810 will affect SDG&E's reported financial data and may have a negative impact on SDG&E's balance sheet and/or credit profile. ASC 810 could impact SDG&E's capital structure on a consolidated basis and cause it to be misaligned with its authorized capital structure. To the extent SDG&E must seek to mitigate the impacts of debt equivalence and ASC 810, it will do so through a separate cost of capital filing.

Insufficient Supply of Renewable Resources / Reduced Generation: As described above under Section IV, SDG&E expects to meet its CP goals through 20332034 with its portion of the RPS portfolio after impacts of the Portfolio Optimization Decision are considered and, thereafter, by utilizing the bank or by procuring new renewable resources through competitive solicitations or bilaterally, as needed.

SDG&E experienced an unforeseen reduced generation wherein a project delivered below the expected deliveries in CP4, as discussed above under section IV. D., Lesson Learned and Trends. SDG&E expects the project to fully operate and expects no risks such as reduced generation in the future deliveries.

The majority of the facilities with which SDG&E has contracted are operating, as can be seen in the probability weighted tables in Appendix 1. It is unlikely that an event, or series of events, will undermine SDG&E's ability to procure energy from these resources. However, as discussed more fully in Sections IV and IX, SDG&E has established an MMoP which guards against unforeseen circumstances with projects that are in development and has the option to develop a VMoP.

**Unanticipated Curtailment:** As explained in more detail below under Section XII, the incidence of curtailment has increased and will continue to do so as more and more intermittent renewable generation is brought online. SDG&E's current strategy inherently addresses curtailment as it seeks to mitigate the need to curtail by procuring a diverse portfolio of resources that account for system needs as described above in Section IV, and by refining its RPS PPA to ensure that the projects that are ultimately built reflect the project as bid, also described under Section IV. Additionally, SDG&E has taken steps in its RPS PPA to provide for economic curtailment rights, and these past RPS PPA modifications are referenced in Section XIII below.

Unanticipated Increases in Retail Sales: SDG&E's retail sales forecast methodology, which is intended to capture both increases and decreases, is explained above under Section IV. SDG&E is the "provider of last resort" in its service territory, which means that in the event of an LSE failure, its customers would return to SDG&E. This event would increase SDG&E's retail sales and would necessarily increase SDG&E's RPS requirements, potentially in excess of its forecasted procurement needs. <sup>83</sup> Furthermore, if unforeseen event or series of events increase SDG&E's retail sales to a level that prevents RPS compliance, SDG&E will utilize its bank and/or procure additional resources to meet compliance.

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Issues associated with the "Provider of Last Resort" (POLR) service are being explored in R.21-03-011.

## **Impact of Potential Delays**

SDG&E bases its RPS generation forecasting, and therefore its RNS calculation, on its individual project assessments, as described in more detail in Section IV. For example, a project that has been experiencing permitting issues would receive a probability weighting reduction to account for this risk until the issue is resolved. SDG&E also considers lessons learned and trends it has observed as a result of the RPS procurement process. The factors discussed in this section contribute to SDG&E's continuous assessment of the likelihood of each project's success. The results of these cumulative assessments are reflected in the RNS, which SDG&E will use to inform its procurement activities. SDG&E does not anticipate any RPS compliance delays at this time.

#### VII. RISK ASSESSMENT

SDG&E's current overall assessment is that projects in its portfolio have a low risk of non-performance due to SDG&E's expectation that the risk factors mentioned below remain relatively stable. Other factors that could impact SDG&E RPS compliance, such as load departure and variable generation, are also low risk because SDG&E has a REC bank it could use to meet compliance, including the 65% long-term contracting requirement.

## **Compliance Risk**

SDG&E assesses project risk on an ongoing basis utilizing written assessments from developers and periodic status update meetings with developers, especially as it relates to building new resources, delayed construction, and determining whether there is a risk that power will not be delivered. In assessing SDG&E's risk, it is important to first note that SDG&E has fewer projects in development than in prior years and, in general, current project development has been more successful in reaching commercial operation. Given that information, SDG&E's risk assessment is mainly qualitative. For example, SDG&E's RNS includes a delivery failure rate which is the probability weighted deviation below expected forecast generation of projects under development. The probability rate is weighted and is determined qualitatively and supported by historical project failure rates and subject matter expert knowledge and judgment. Two of SDG&E's three projects under development are all in the pre-construction phase and were assigned a high-risk failure. The other one project's status was recently updated to construction phase and will be assigned a high-medium-risk factor failure rate. Risks factors are explained below.

As directed by D.23-12-008, SDG&E is assigning low, medium and high-risk factors to its developing projects and will be using project milestones (project development phases) to establish failure rates, in addition to qualitative measures. This approach inherently incorporates risks related to permitting, transmission development, supply chains and financing, because many of those items allow a project to reach a new milestone. First, the projects in the pre-construction phase, such as projects waiting for CPUC approval, permits and interconnection agreement, generally will be assigned a high-risk factor. Second, the projects that are in the construction phase may encounter issues including, but not limited to, financing,

supply chain, interconnection, project delayed construction/completion rate and transmission development, generally will be assigned a medium-risk factor. Finally, the projects that are in the post-construction phase generally will be assigned a low-risk factor. These are the projects that may encounter issues including underperformance of delivering projects/delivery failure rate. Additionally, if a project in the construction phase misses a scheduled PPA milestone, it will be assigned a high-risk factor. SDG&E's RPS eligible procurement in its RNS accounts for the Minimum Margin of Over-Procurement ("MMoP"). The MMoP accounts for project development risks. SDG&E's forecasted failure rate for projects under development is illustrated in Appendix 1's Risk Assignment table. As further discussed in Section IX, to calculate the risk-adjusted forecasted generation in the RNS calculation, failure rates are deducted from 100% and then multiplied by the expected generation.

SDG&E periodically evaluates the risk that delivering projects will underperform. In SDG&E's experience, developers are inherently motivated to achieve their COD for their facilities and maintain successful operations due to several factors: (i) the significant investment required to achieve COD; (ii) the timely payments made for energy delivered once COD is reached for its debt service; and (iii) the penalties incurred if the project does not meet commercial operation or its contractual requirements to supply the minimum amount of energy established in the contract.

As explained above under Section IV, SDG&E expects to meet its CP goals through 20332034 with RPS eligible procurement already under contract, by leveraging the bank, and/or by procuring new renewable resources, as needed. SDG&E's risk of noncompliance is low considering its bank of RECs.

## **Risk Modeling and Risk Factors**

As discussed above, SDG&E uses qualitative measures to determine project development risk. SDG&E acknowledges risk associated with other factors, such as lower than expected generation, load departure/growth, variable generation, and resource availability. At this time, SDG&E does not conduct traditional modeling to account for these risks, and instead utilizes a three-year average of prior project deliveries. This approach captures natural fluctuations in deliveries that are likely to continue into the future, including lower than expected generation and variable generation. SDG&E assesses minimal risk associated with resource availability for facilities that rely on biofuel or water for hydro. SDG&E has one bioenergy facility through the BioRAM program and is prohibited from using those RECs towards its compliance requirement. Impacts from resource availability for BioRAM facilities do not affect SDG&E's RPS. SDG&E projects minimal risk in customer opt-outs, which may increase SDG&E's load. Customer opt-outs are monitored and are accounted for in retail sales forecast. If SDG&E does not procure renewable energy in a timely manner due to a sudden increase in SDG&E's load, SDG&E's bank could sustain its SDG&E's RPS compliance through 20332034.

SDG&E's consideration of project development risk, generation fluctuation, and load departure are factors SDG&E considers when evaluating its RPS compliance requirements. Importantly, as stated above, SDG&E has a REC bank that may be utilized if an unforeseen circumstance were to occur.

## **Diversity & Reliability**

As explained under Section IV, a wide variety of procurement programs exist within and in addition to the RPS program. These programs contribute to SDG&E's overall portfolio diversity and support reliability. In addition to <a href="the">the</a> information in Section IV, it is important to note that the IRP process prioritizes system reliability. Section XV provides additional information on the IRP process.

#### **Lessons Learned**

SDG&E has observed some dynamic factors that may affect power production from delivering projects:

Resource Availability and Variable Generation: Renewable resources depend on natural sources of energy that are variable and can be impacted by various factors. For example, a year with lower-than-expected wind can greatly impact a wind facility's performance and cause lower than expected generation. Another factor that could also impact generation is the occurrence of unexpected mechanical failures, which could cause a facility to be partially or fully unavailable until the issue can be resolved.

**Regulatory Changes:** The expiration of subsidies, additional requirements or unanticipated consequences resulting from changes in regulations, could impact the revenue stream and increase costs for RPS developers, which in turn could lead to reduced production if the project has difficulty in supporting this lower revenue stream.

**Economic Environment:** The interest rates and flexibility of financing arrangements entered into by developers can impact a project's success. Long-term project financing arrangements with unfavorable terms can lead to project failure or reduced production if the project has difficulty in supporting the financing cost requirements. Additionally, economic factors such as increasing inflation, labor shortages, trade restrictions and tariffs that negatively impact a generator's supply chain could impact its ability to comply with contract terms.

**Evolving Technology:** Facilities with older generation technology that is no longer supported by the manufacturer can experience project failure or reduced production. This problem is arising now for older RPS projects and could occur in the future as the projects built in the past begin to age.

**Issues with Third Party Mandatory Systems:** CAISO and WREGIS systems have experienced technical issues in the past, and potential technical problems with these systems going forward could complicate the compliance process.

## VIII. RENEWABLE NET SHORT

The analysis attached hereto in Appendix 1 shows the Commission's prescribed RNS calculation with supporting probability weighting calculations by project and anticipated effects impacts of Voluntary Allocation and Market Offer. The RNS calculation illustrates the impact impacts of the IRP MTR Procurement Order and the allocation of SDG&E's PCIA-eligible RPS portfolio to LSEs, and includes long-term contracts only through 20332034. SDG&E is using the approved allocation methodology in AL-3835E to determine its eligible RPS generation based on load share. As mentioned above, SDG&E is including the impacts to includes two scenarios that illustrate SDG&E's RPS position from the IRP MTR Procurement Order. based on the recent CEC retail sales forecast (Appendix 1a – conforming scenario) and SDG&E's internal retail sales forecast (Appendix 1b – alternative scenario).

SDG&E intends to monitor the vintage and remaining life of its RECs to maximize their value to the portfolio by retiring them at the most opportune time. This point was discussed in more detail in Section IV, above.

## IX. MINIMUM MARGIN OF OVER-PROCUREMENT ("MMOP")

## A. Minimum Margin Methodology & Inputs

SDG&E has established an MMoP, which is incorporated into SDG&E's RPS eligible procurement volume as shown in its RNS. SDG&E's MMoP is intended to account for project failures or delays and will inform whether additional procurement is needed for SDG&E to achieve its RPS requirements despite project development risks. SDG&E's forecasted failure rate assignments for projects under development is provided in Appendix 1 and discussed in detail in the Risk Assessment section of this Plan. As a result, SDG&E anticipates an increase in procurement based on the failure rate to compensate for the potential failure. This additional procurement needed to account for this failure rate would vary year by year depending on load. SDG&E has the option to incorporate a Voluntary Margin of Procurement ("VMoP<sub>7</sub>"), which is another form of project development risk mitigation. The VMoP further adjusts REC deliveries beyond the MMoP risk adjustment which results in more RECs being needed to meet RPS requirements. SDG&E does not make further adjustments to REC deliveries by using the VMoP due to the limited number of contracts under development and availability of its REC bank. SDG&E's RPS

Risk Adjusted<sup>84</sup> RNS Calculation, as shown in Appendix 1, provides an MMoP and does not include a VMoP.<sup>85</sup>

SDG&E's RNS calculation and MMoP methodology for each year is based on the following formula:

**RPS Risk-adjusted Net Short** = (Bundled Retail Sales Forecast x RPS Procurement Quantity Requirement + Voluntary Minimum Margin of Procurement (if any)) – (Online Generation + Risk-adjusted Forecast Generation + Pre-approved Generic Generation).<sup>86</sup>

#### Where:

- Bundled Retail Sales Forecast = the forecast developed in accordance with Section IV.
- RPS Procurement Quantity Requirement = the target for the relevant CP or year.
- Voluntary Minimum Margin of Procurement = zero.
- Online Generation = the generation that SDG&E expects will be delivered by its portfolio of RPS projects that have achieved commercial operation, as discussed in Section IV.
- Risk-adjusted Forecast Generation = the generation that SDG&E expects will be delivered by its portfolio of RPS projects that have not yet achieved commercial operation, as discussed in Sections IV and VII. This volume includes SDG&E's MMoP which is based on compliance risk factors' assigned project failure rate. Risk-adjusted Forecast Generation = Expected Deliveries x (100% Risk Failure Rate)
- Pre-approved Generic Generation = unsubscribed volumes that SDG&E is required to procure under fully implemented CPUC-mandated procurement programs (RAM and ReMAT).

#### B. Minimum Margin Scenarios

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Probability weightings by assigning severity of risk and a corresponding failure rate to each developing project, are used to adjust estimated deliveries based on the likelihood that each developing project will reach COD, as well as the likelihood that each delivering projects will continue to deliver as estimated. The probability weighting process identifies the volume of generation under contract that SDG&E is likely to receive and be able to apply towards its RPS compliance. Based on this analysis, SDG&E can determine what additional procurement, if any, is necessary to reach its RPS targets while considering project development risk.

<sup>&</sup>lt;sup>85</sup> See Row D of the RNS Table in Appendix 1.

All generation data listed in any of SDG&E's RPS Plans, as well as any of its RPS Plan Appendices, are from contracts that have been approved or pre-approved by the Commission.

SDG&E's RPS portfolio consists of entirely long-term contracts with facilities that have already commenced commercial operations and three projects that are under development. As discussed previously in section VII, SDG&E's developing projects are generally assigned either a high or medium risk as they are in the pre-construction or construction phase. According to SDG&E's RNS table in Appendix 1, SDG&E has a substantial REC bank which could be used for compliance if needed. Given these facts, SDG&E's risk of noncompliance with the RPS program requirements is low, therefore its VMoP is currently zero. However, SDG&E continues to monitor its portfolio to determine if impacts from load departure will affect SDG&E's VMoP strategy.

#### X. BID SOLICITATION PROTOCOL

#### A. Solicitation Protocols for Renewables Sales

#### **Lessons Learned**

SDG&E requests authorization in its 20232024 RPS Plan cycle to enter into RPS solicitations, as necessary, to meet the applicable RPS requirements and to further optimize its RPS portfolio by pursuing transactions that benefit SDG&E's customers. Competitive bid solicitations, such as RFPs, bring together the largest possible number of market participants to make offers to buy RPS resources from SDG&E's load share allocation portion from its PCIA-eligible portfolioRPS resources that are available for sale, thus promoting market liquidity and competition-outside the VAMO process. SDG&E also considers entering bilateral, broker or exchange transactions if SDG&E finds this option to have more benefits. SDG&E may have to enter into agreements bilaterally, or via brokers and exchanges to find the best value for RECs and to ensure that REC deliveries commence in a timely manner. SDG&E regularly evaluates its portfolio needs to determine whether RFPs present advantages to the alternative of bilateral transactions. Through early iterations of the RPS REC sale RFP process, SDG&E identified the importance of adhering to a comprehensively developed schedule when conducting a solicitation. Deliberate planning and anticipating potential delays in the contract execution and approval processes promote meeting all objectives in a timely manner.

#### **Sales Solicitation Documents**

Attached hereto in Appendices 9-14 are SDG&E's proposed RPS Sales documents:

- Appendix 9 202311 2024 RPS Sales RFP
- Appendix <del>10 2023</del>12 2024 RPS Sales Model PPA (Bundled Product)
- Appendix <u>11 202313 2024</u> RPS Sales Model PPA (Unbundled Product)
- Appendix <u>12 2023</u> 14 2024 RPS Sales Offer Form
- Appendix <u>13 2023 15 2024</u> Framework for Assessing Potential RPS Sales CONFIDENTIAL<sup>87</sup>
- Appendix 14 202316 2024 BioRAM RPS Sales Model PPA (Bundled Product)

Public versions of SDG&E's RPS Plan will include documents with confidential terms redacted.

## **Request For Information for Assignment and Novation**

SDG&E's 2022 RFI was distributed to a large amount of market participants as described above, SDG&E has consulted with PRG and has been monitored closely by an IE to oversee the process. There were no executed contracts that resulted from this process. As contemplated in D.21-05-030, SDG&E held another RFI in 2023. SDG&E's RFI process and plans are further discussed in section IV. A.1. If necessary, SDG&E may enter into an agreement through RFI bilaterally and will request approval through a Tier 3 Advice Letter.

#### **B.** Bid Selection Protocols

In this 20232024 Draft RPS Plan, SDG&E is requesting the option to hold an RPS procurement solicitation to address its short portfolio position after 2024 in CP5, with consideration of the additional RPS-eligible supply may result from the procurement mandated to address the needs identified in the IRP. Listed below are appendices related to RPS procurement including an additional template to accommodate the hybrid resource technology that qualifies as an RPS resource SDG&E posts information on current and historical RFOs and RFPs on its website.<sup>88</sup>

- Appendix 5 20232024 RPS Long-Term Model PPA
- Appendix 6 20232024 RPS Short-Term Model PPA
- Appendix 7 2023 RPS REC Agreement
- Appendix 8 2023 LCBF
- Appendix 17 2023- 2024 Hybrid RPS Generation Plus Storage PPA
- Pursuant D.23-12-008, Appendix 8 2024 RPS REC Agreement
- Appendix 9 2024 Least-Cost-Best-Fit
- Appendix 10 2024 Procurement Protocols
- Appendix 19 2024 RPS Procurement Offer Form

<u>The Commission has approved</u> SDG&<u>E submitted</u>E's Tier 3 Advice Letter 4368-E <u>submitted</u> on January 16, 2023 <u>to requestrequesting</u> review and approval for its Bid Selection Protocols ("Solicitation Protocols").

#### C. LCBF Criteria

## **Workforce Development Assessment Proposal**

A Workforce Development Assessment is included as a qualitative factor, which addresses projected California employment growth during construction and operation, within SDG&E's LCBF. The information used in this Assessment will be gathered as part of the required bid information for any solicitations which include renewable resources. The Assessment results

SDG&E, RFPs and RFOs, available at <a href="https://www.sdge.com/more-information/doing-business-with-us/rfps-rfos">https://www.sdge.com/more-information/doing-business-with-us/rfps-rfos</a>.

will be qualitatively compared among all renewable resource bids within the solicitation which will inform the final bid ranking.

## **System Reliability Consideration**

System Reliability consideration is included in the quantitative calculation. SDG&E calculates its NMV as part of its bid evaluation and selection process. Resources with more Capacity Benefits may have a higher NMV and most likely be ranked higher. The details of LCBF and NMV calculation is further discussed in SDG&E's LCBF Methodology (Appendix 8).

## **Assessment of Benefits to Disadvantaged Communities**

In D.04-07-029, the Commission directed the use of "benefits to low income or minority communities" as a qualitative factor in the LCBF analysis. Consistent with this direction, SDG&E has applied this factor on a qualitative basis along with several other qualitative factors (see Appendix 89 for a full list). Benefits to the community are either described by the developer in the project description form or can be requested by SDG&E if not provided. The results of SDG&E's LCBF analysis (quantitative as well as any additional qualitative) are shared with the PRG and also described in the AL seeking approval for SDG&E's shortlist.

#### **State Policies**

SDG&E includes bid evaluation considerations that are policy-related and cannot be quantified in its qualitative bid review process, outlined in Appendix 89, attached hereto. These factors include equity (addressed by the Disadvantaged Communities component), the environment (addressed by environmental stewardship component), and economic development (addressed by the Workforce Development Assessment component). Additionally, to address the issue of safety, SDG&E has added a safety component to the qualitative portion of the LCBF process.

## **Information-Only TOD Factors**

Pursuant to D.19-02-007, SDG&E participated in a stakeholder process to develop informationonly TOD factors, and the Commission approved SDG&E, PG&E's and SCE's May 29, 2019 Joint IOU Information-Only TOD Factor proposal ("TOD Proposal").89 SDG&E's approved TOD Factors for 2020 and 2024 are within the Commission-approved May 29, 2019 TOD Proposal, and Appendix 3 includes workpapers to confirm there is a high correlation between the public information-only TOD factors and SDG&E's confidential forecasts, per OP 26 of D.19-12-042.90

D.19-12-042.

To confirm there is a high correlation between the public information-only TOD factors, SDG&E uses 2025 which is in line with May 2024 ERRA filing and 2028 using the forward gas prices at the time of the May 2024 filing.

#### XI. SAFETY CONSIDERATIONS

## **Development and Operation of RPS-Eligible Generation**

SDG&E is committed to providing safe, reliable and environmentally sound electric service for its customers. As discussed in Appendix 4, SDG&E's RPS Plan contemplates procurement of RPS-eligible generation through both PPAs and utility owned generation ("UOG"). SDG&E's emphasis on safety is reflected in: (i) the terms and conditions contained in the pro forma PPAs used in its various procurement programs; and (ii) the safety procedures that all contractors working on UOG facilities are required by SDG&E to follow.

## **RPS Procurement Activities Designed to Address Safety**

There are several components to RPS procurement activities designed to address safety, such as, vegetation management, climate change impacts, decommissioning facilities, and customer impacts due to Public Safety Power Shutoff ("PSPS") events which are discussed below. Additionally, SDG&E prioritizes safety and includes a safety component in SDG&E's LCBF criteria.

Vegetation Management: SDG&E is also a leader in wildfire safety, preparedness and mitigation. Through its comprehensive Vegetation Management Program, SDG&E manages an approximately 490,000 trees and 35,000 poles associated with the electrical infrastructure, thus reducing the risk of vegetation-infrastructure contact outages and ignitions. In 2022, SDG&E "continued its successes in tracking and maintaining its inventory tree database, completing routine and enhanced tree patrols, pruning and removing hazardous trees, replacing unsafe trees with species that are more compatible with power lines, and pole brushing." SDG&E managesE's website includes an interactive map which allows customers to seeidentify when annual vegetation management crewstree pruning and pole clearing are scheduled to work occur in their area. SDG&E has also recently begun to incorporate data science analytics and modeling into its vegetation management, developing operations, allowing a Vegetation Risk Index of the highestmore risk trees in its service territory based approach to inform decision making.

Regarding procurement activities that relate to safety, as noted above, SDG&E has fulfilled its procurement mandate for the BioRAM program, as discussed above in Section IV. SDG&E has a PPA with a 24 MW BioRAM facility in Wendel, California. SDG&E extended its BioRAM contract by 5 years in accordance with Resolution E-4977, which implements SB 901. BioRAM facilities aid in wildfire

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<sup>&</sup>lt;sup>91</sup> SDG&E <del>2025</del><u>2023</u>-2025 Wildfire Mitigation Plan Update (April, 2023) at 251 (*available at* 2023-2025 WILDFIRE MITIGATION PLAN (sdge.com).

<sup>&</sup>lt;sup>92</sup> SDG&E, Tree Safety, available at <a href="https://www.sdge.com/safety/tree-safety">https://www.sdge.com/safety/tree-safety</a>.

mitigation efforts removing dead and dying trees from high fire prone areas. This effort is also intended to support sustainable forestry.

**Climate Change Impacts:** The IRP is tasked with achieving the mandates set forth in SB 100 with respect to reducing greenhouse gas emissions. The efforts taking place in the IRP, which include procurement of renewable resources, will continue to help mitigate the adverse impacts of climate change.

Renewable resources paired with energy storage is one practical solution in some circumstances. Energy storage reduces GHG emissions and prevents climate change. For example, energy storage has the ability of storing solar that is produced during the day and deploying it during the evening peak. This attribute creates flexibility which enables reduced reliance on higher GHG emitting resources, thus reducing climate change impacts.

**Decommissioning Facilities:** SDG&E contracts with multiple renewable generators, many of which have a useful life after SDG&E's contract with the counterparty has ended. These facilities are highly regulated by the state and the federal government and must abide by regulations made by those governing bodies. SDG&E's pro forma agreements do not address decommissioning as this is a step that occurs, in many cases, after SDG&E's contract has ended. However, SDG&E expects these generators will appropriately decommission their facilities in a manner consistent with the applicable laws.

Customer Impacts During PSPS Events: SDG&E understands that, despite the safety benefits, de-energizations can cause inconveniences. Under certain conditions, SDG&E must prioritize safety by initiating a PSPS event.

SDG&E understands that, despite the safety benefits, PSPS de-energizations can have negative customer impacts and should be limited as much as feasible to the specific areas that are experiencing extreme risk. This is especially important for critical facilities providing firefighting resources and life-saving services for individuals with Access and Functional Needs (AFN) who may require medical devices to be powered 24 hours a day, seven days a week. SDG&E initiates PSPS de-energizations as a last resort mitigation during extreme weather conditions, utilizing other tools to mitigate PSPS risk. SDG&E has employed multiple strategies to mitigate impacts to customers and will continue to seek additional strategies in the future. 93

SDG&E continues to help mitigate customer impacts by creating programs for customers and exploring new opportunities, such as microgrid technology. For example, the Generator Grant Program (GGP) was initiated in 2019 with the goal of providing medical

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More information can be found in the SDG&E 2023-2025 Wildfire Mitigation Plan Update (available at https://www.sdge.com/2023-wildfire-mitigation-plan).

baseline customers with generators that could be used during a PSPS event. This program was so successful that it was expanded in 2020.

Through 2022, the generator grant program reduced the impact of PSPS events by providing portable backup battery units to approximately 4,700 customers. For 2023, the program plans for additional participation of approximately 1,000 customers.

Grid hardening programs are aimed at reducing wildfires caused by utility equipment and minimizing impacts to customers from mitigations such as PSPS. Details of these programs can be found in SDG&E's 2023-2025 Wildfire Mitigation Plan, section 8.1.2. Specifically, there are three grid hardening programs that have had the greatest impact on PSPS risk reduction and customer impact: PSPS sectionalizing enhancement program, strategic undergrounding, and backup resiliency programs.

Sectionalizing Enhancement Program: To mitigate PSPS risk, the PSPS Sectionalizing Enhancement Program installs switches in strategic locations, improving the ability to isolate high-risk areas for potential de energization. Switches are installed on circuits that have significant sections undergrounded, allowing customers with this lower-risk infrastructure to remain energized during weather events. SDG&E also combines weather stations with sectionalizing devices to de-energize only sections of circuits that are experiencing extreme wind events.

Historical PSPS data is used to identify and prioritize locations for switches. This typically means installing switches in the High Fire Threat District (HFTD), however, as recent weather patterns have become more extreme and widespread, switches are placed in both the HFTD and the wildland urban interface (WUI). SDG&E will continue the PSPS Sectionalizing Enhancement Program using data from any additional PSPS events with the goal of reducing PSPS impacts using the most relevant data.

Strategic Undergrounding: Strategic undergrounding converts overhead systems to underground, providing the dual benefits of nearly eliminating wildfire risk and the need for PSPS events in these areas. This program is deployed in the HFTD as well as in areas where substantial PSPS impact reductions can be gained through strategic installation of underground electric system. Circuit segments that are fully undergrounded back to the substation source are no longer considered to have a PSPS risk.

Data on historic PSPS events, wind conditions, risk modeling, and others are reviewed to determine where undergrounding will have the largest impact. Constraints such as environmental, permitting, and design are also taken into consideration. Cost effectiveness calculations developed in the WiNGS-Planning model are also utilized to prioritize undergrounding within the HFTD. Between 2023 and 2033, the scope of the Strategic Undergrounding Program is expected to increase as the understanding of costs and constraints improves.

Backup Resiliency Programs The category "Backup Resiliency Programs" consists of

three SDG&E programs: the Generator Grant Program (GGP), the Standby Power
Program (SPP), and the Generator Assistance Program (GAP). These three programs
ensure backup power is provided to customers most vulnerable to PSPS deenergizations in the form of portable battery units with solar charging capacity (GGP),
fixed installation backup generators, temporary critical facility generators, or solar panel
and backup battery system (SPP), or rebates for portable generators (GAP).

These three programs prioritize their outreach and education to customers in Tiers 2 and 3 of the HFTD. The GGP focuses on the needs of medical baseline (MBL), life support, and other select customers with AFN who have experienced a PSPS deenergization. As part of the GGP, SDG&E has a reserve of backup batteries established specifically for expedited delivery during active PSPS events. This program is called the Emergency Backup Battery Program. These units are pre-charged and delivered within 1 to 4 hours of eligible requests to customers who call into SDG&E's Customer Care Centers or 211 in need of emergency backup power that cannot be met through other AFN services such as hotel stays and accessible transportation. SDG&E promotes the availability of these backup battery units to vulnerable customers through partnerships with our Public Safety Partners and Indian Health Councils. The SPP targets customers and communities that will not directly benefit from other grid hardening programs due to their location and regions that are fed by circuits with higher historical PSPS impacts. The GAP focuses on resiliency for all customers who reside in the HFTD and have been impacted by PSPS de-energizations. Eligible customers are proactively contacted and educated about these programs.

Covered Conductor: Unlike bare conductor, covered conductor is manufactured with an internal semiconducting layer and external insulating ultraviolet-resistant layers to provide incidental contact protection. The Covered Conductor Program has the potential to raise the threshold for PSPS de-energizations to higher wind speeds compared to bare conductor hardening; however, as of the end of 2023 the threshold for PSPS de-energizations has not been raised on any circuits with covered conductor installed as there have not yet been any circuit segments fully hardened with covered conductor.

Community Resource Centers: During a PSPS event there may be a need to provide support to an impacted community. SDG&E has a network of 11 Community Resource Centers (CRC) and may open one on more CRCs near the affected area(s) if conditions prolong the estimated outage duration. At these facilities, community residents will have access to water, light snacks, Wi-Fi, and a way to charge small electronic devices charging, as well as receive the most up-to-date information on the shut-off.

<u>Education and Outreach: SDG&E customers and the general public are affected by wildfires, which are now a nearly year-long presence in California. Customers and the general public who are not educated about wildfire safety, emergency preparedness, and resiliency may be ill-prepared for a wildfire or a PSPS event.</u>

To mitigate this risk, SDG&E's comprehensive wildfire safety public education and outreach plan was developed with the intent of increasing community resiliency to wildfires and mitigating the impact of PSPS de-energizations. The plan captures three phases: prior to, during, and following a wildfire or PSPS de-energization.

Communication efforts before a wildfire related event focus on educating customers and the public about the measures and programs being implemented to reduce the threat of catastrophic wildfires, tactics they can employ to remain resilient and safe, and the community resources available. During a wildfire related event, real-time awareness and updates about the event are provided along with information on how to remain safe and vigilant and the community resources available through the end of the event. After a wildfire related event, SDG&E examines communications and solicits customer and stakeholder feedback with the intent of refining and improving communication efforts. SDG&E's wildfire and PSPS education and outreach efforts are focused in the HFTD but expand to the entire service territory.

More information on SDG&E's PSPS preparedness, education and outreach, and resources can be found in the SDG&E PSPS Pre-Season Report on the CPUC's website.

## XII. CONSIDERATION OF PRICE ADJUSTMENT MECHANISMS

SDG&E acknowledges that contracts with new facilities having initial online dates occurring more than 24 months after the contract execution date can pose additional risk to customers. SDG&E has incorporated price adjustment mechanisms into some of its current contracts that are intended to alleviate some of these risks, including the following:

Damages or Default for delay in Guaranteed Commercial Operation Date ("GCOD"): An effective remedy for missing the GCOD is to charge delay damages to the developer. Projects that are delayed in reaching their GCOD can avoid contract default by paying daily delay damages, which SDG&E has collected from some projects. Collections from these damages are passed on to SDG&E customers. If the GCOD is delayed beyond the maximum period for which daily delay damages are available, the project is in default and SDG&E can terminate the contract.

Capped transmission upgrade costs: Placing a cap on the amount of non-bypassable transmission upgrade costs (which are ultimately borne by customers) that a project can incur is an effective way to limit customer exposure to such costs. This type of cap is especially important for projects that do not yet have an executed interconnection agreement, because transmission upgrade cost estimates could change for these projects. The requirement that the developer execute the interconnection agreement with costs no greater than

the upgrade cap is set as a condition precedent to SDG&E's obligations under the PPA. If estimated upgrade costs exceed the cap, SDG&E has the right not to move forward with the PPA.

## Price adjustment for higher-than-expected transmission upgrade costs:

Another mechanism that SDG&E has successfully incorporated into past contracts is a mechanism whereby the seller agrees to a price reduction to offset higher than anticipated costs for customer-funded transmission upgrades. Under this mechanism, the contract price would be reduced on a dollars per megawatt-hour basis commensurate with the cost of transmission network upgrades exceeding an agreed upon cap. The price adjustment mechanism would include an upper limit on transmission upgrade costs, above which SDG&E can terminate the contract. This mechanism is similar to the cap described immediately above except, rather than giving SDG&E the right not to move forward with the PPA, it gives the developer the choice to either proceed at a reduced price equal to the amount of transmission costs above the cap, or not go forward with the PPA. If the developer chooses the lower price, that lower price acts as a funding mechanism for the additional upgrades, thereby adhering to the projected total customer costs.

**Price adjustment for failure to achieve full capacity deliverability status:** If a project is not deemed fully deliverable by CAISO at the time of COD, then the PPA price is reduced until such time as the project is deemed fully deliverable.

## XIII. ECONOMIC CURTAILMENT FREQUENCY, COSTS, & FORECASTING

SDG&E's net load profile continues to show a pronounced shift toward an evening peak as increased solar generation has begun to offset load during SDG&E's historical peak load hours (mid-day). The shift of SDG&E's net peak into the evening hours becomes more pronounced as more renewable generation (particularly solar) is brought online, as it has over the past several years and will continue to do so as RPS penetration increases. Has shift in peak load periods leads to integration issues, specifically overgeneration, which in turn leads to an increase in economic curtailment orders and negative pricing. The CAISO, the Participating Transmission Owner or distribution operator, or the Buyer (SDG&E) can instruct a generator to curtail (interrupt deliveries of power to the grid) to manage excess generation supply, minimize the effect of negative pricing, and maintain grid reliability. If negative pricing occurs, and generators are not economically curtailed, SDG&E must pay the CAISO to take this power when it is the Scheduling Coordinator for the project, which is applicable to most of its RPS generation. It is important to address and work to mitigate this issue through the valuation and contracting processes. It should also be noted that each year brings with it more information and additional opportunity for refinement of the procurement process.

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See, CAISO, Fast Facts, "Duck Chart" available at https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables FastFacts.pdf.

## 1. Factors Having the Most Impact on the Projected Increases in Incidences of Overgeneration and Negative Market Price Hours

The issue of curtailment is a result of the operational characteristics of the facilities within the renewable market.<sup>95</sup> These resources are intermittent, as-available resources that are negatively affected by atmospherics conditions which interfere with this energy production (*i.e.*, they generate only when the wind is blowing or when the sunlight strikes the panel). These factors result in generation profiles that do not necessarily follow load.

# 2. Written Description of Quantitative Analysis of Forecast of the Number of Hours Per Year of Negative Market Pricing for the Next 10 Years

SDG&E forecasts market price profiles by calculating the net load for its service territory. Net load is defined as total customer load minus utility scale solar and wind generation per hour. When combined solar and wind generation exceeds load in a given hour, this is interpreted to represent a negative pricing condition. SDG&E uses hourly solar and wind profiles that represent the average of the last 3 years of generation for each resource. These hourly resource generation profiles are forecasted to continue until each individual contract ends (which may extend beyond the next ten years), as modified for any expectation of contract renewal, "blend and extend," or added solar or wind generation procurement in the future. SDG&E may also adjust its market price profile forecast using observed recent historical price profiles or production cost modeling.

SDG&E's assessment of the planned installation of resources to meet both mandated reliability and GHG targets over the next ten years show that solar resource additions will occur in conjunction with energy storage so that some excess solar energy is utilized and shifted to the net peak or other hours of peak need. For this reason, SDG&E projects that the number of negative price hours over the next ten years will remain relatively constant and will not continue to increase as additional solar is added assuming energy storage is also added in necessary amounts. Behind the meter solar is also increasingly being coupled with storage for the same reason. increasingly ambitious solar resource additions will occur with energy storage additions decreasing as the recent IRP reliability procurement orders are satisfied.<sup>96</sup> The value of new solar resources is no longer to provide peak reliability, since solar has shifted the peak to later in the day, but to provide a clean fuel source for storage which can then provide a significant, clean, reliability contribution. Due to the interaction between storage and solar, the scale and timing of either technology buildout can affect enery prices in either an upward or downward direction. If storage is available to charge mid-day, it can utilize excess solar and prevent prices from falling. However, if solar availability far exceeds storage, prices will continue to be negative, especially during the high solar availability hours. This relationship is also dependent on season, customer electric usage behavior, scale of economy electrification, and both the scale and timing of additional capacity of both storage and solar resources. For

Both those procured pursuant to the RPS program, as well as customer-side facilities that are incremental to the RPS program under existing rules, specifically net energy metered installations.

<sup>&</sup>lt;sup>96</sup> D.21-06-035; D.23-02-040; D.24-02-047.

these reasons and the high uncertainty of many of these factors, SDG&E can't make an accurate projection if the number of negative price hours over the next ten years will remain relatively constant, and will continue to increase or start to decrease as additional solar is added.

## 3. Experience With Managing Exposure to Negative Market Prices and/or Lessons Learned from Other Retail Sellers

SDG&E manages its exposure to negative market prices by having the flexibility to reduce generation when needed. SDG&E's flexibility is the result of negotiating its ability to economically curtail its contracts for renewable generation and using economic bids for its entire dispatchable generation portfolio. Since the CAISO implemented its tariff revisions on May 1, 2014, SDG&E has acted to minimize customer exposure by economically curtailing facilities with which it has this contractual right. These instances have generally followed the same sequence of events: (a) as facility Scheduling Coordinator, SDG&E economically bids energy from a facility into the market; (b) a negative pricing event occurs; (c) the CAISO instructs the facility that was economically bid by SDG&E to dispatch down (curtail); and (d) the facility responds to the extent possible. These actions protected customers by reducing the negative pricing payments made to the CAISO, but SDG&E's ability to curtail its current portfolio is limited by several factors: (a) a few of SDG&E's existing RPS contracts do not contain economic curtailment rights (however, as mentioned below, SDG&E has renegotiated most of its larger contracts to minimize adverse impacts on customers;); (b) some contracts have operating restrictions which impact their ability to respond immediately to an economic curtailment order; and (c) (where the contract contains economic curtailment rights) SDG&E's ability to economically curtail is limited in some cases to five (5) percent of a facility's annual deliveries. SDG&E continues to work with the counterparties to reduce the number of cases where these limitations apply, and to obtain greater rights through contract amendments where the counterparty is willing to amend an existing contract.

D.14-11-042 approved SDG&E's RPS PPA modifications which allow for uncapped economic curtailment rights and require that the generator install the software necessary to receive, respond, and implement a dispatch notice/curtailment order.<sup>97</sup> That Decision also approved the incorporation of several provisions allowing payment to the generator for the economically curtailed generation (*i.e.*, the amount of energy that could have been generated but for the economic curtailment). These changes have bolstered grid management and forecasting efforts, resulting in customer benefits. First, requiring facilities to be equipped to respond to a curtailment order will assist the CAISO in complying with the North American Electric Reliability Corporation ("NERC") reliability standards. Second, this increased ability to manage excess generation could help reduce the incidence of negative pricing events overall, which provides a general benefit to all customers in the State. Third, uncapped economic curtailment will allow SDG&E to better manage the incidence of negative pricing payments made to the CAISO, which also is beneficial to SDG&E's customers.

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Required software: The Automated Dispatch System ("ADS") and the Application Programming Interface ("API"). See D.14-11-042 at 38.

## 4. Direct Costs Incurred, to Date, for Incidences of Overgeneration and Associated Negative Market Prices

SDG&E has been tracking its curtailment actions and results since 2014. Based on currently available data, its curtailment activities have resulted in cost savings for SDG&E customers. SDG&E will continue to track this data and report on it as appropriate. The increase in battery storage capacity in CAISO over the last couple of years has contributed to fewer negative pricing events thus, fewer economic curtailment cost savings. SDG&E had a direct cost impact of almost \$19.623.9 Million between 2014 to 20222023 from incidences of overgeneration and associated negative market prices. This impact was measured by the amount SDG&E paid to the CAISO for generating during times of negative prices, for all SDG&E's resources. The majority of the costs occur during "solar hours" and come between 9:00 am and 3:00 pm during the spring months.

# 5. An Overall Strategy for Managing the Overall Cost Impact of Increasing Incidences of Overgeneration and Negative Market Prices

To manage the overall cost impact of negative prices going forward, where applicable SDG&E will continue renegotiation of dispatch down, scheduling and curtailment provisions of existing RPS contracts. Negative prices affect not just renewable generating resources, but all generating resources. SDG&E mitigates the impact of negative prices to its ratepayers by economically bidding its dispatchable resources to the CAISO. To the extent SDG&E submits cost-based bids reflecting variable costs, it allows the CAISO to reduce generation from SDG&E's resources when they are not needed or uneconomic. Thus, when feasible, SDG&E's resources will have limited generation during incidences of overgeneration.

# 6. Contract Terms Included in RPS Contracts Intended to Reduce the Likelihood of Curtailment or Protect Against Negative Prices

SDG&E's pro forma RPS PPAs include standard terms allowing SDG&E to curtail the project at its or CAISO's instruction, so long as SDG&E pays the seller for energy and RECs that could have been delivered but for the curtailment. If the Seller does not comply with the instruction to curtail production, they are liable to SDG&E for the value of any excess energy produced plus any imbalance energy or CAISO charges resulting from the failure to comply.

To incent sellers to limit overbuilding of projects, SDG&E has also removed TOD factors from its contract payment calculations, thereby dampening the incentive to overproduce during the peak solar periods of the day. The standard PPA also limits the amount of energy for which SDG&E will pay by reducing to zero the contract price for generation that exceeds the project's contracted capacity in any settlement interval. Further, if and when the cumulative amount of generation from the project in any given year exceeds 115% of the expected generation for that year, the contract price becomes zero dollars per MWh for the balance of the year, and SDG&E may pass through to the seller any CAISO payments, penalties, and other costs attributable to the project.

## **Energy Storage**

Initiatives undertaken outside of the RPS proceeding also have the potential to assist in the management of intermittent generation and the resulting economic curtailment and negative pricing – specifically, the addition of flexible capacity and energy storage resources to the grid has the capability to absorb renewable energy in times of excess for later use. Please see section IV-B for more information on energy storage.

#### XIV. COST QUANTIFICATION

The tables attached hereto in Appendix 2 provide an annual summary through 20332034 of both actual and forecasted RPS procurement costs and generation, by technology type using SDG&E's bundled retail sales forecast from its conforming RNS scenario.

#### XV. COORDINATION WITH THE IRP PROCEEDING

SB 350 added a provision to the Public Utilities Code directing the Commission to implement a holistic IRP process. IRP is a wide-ranging effort at the Commission, undertaken along with input from the CEC and CARB, that would combine the numerous planning processes currently undertaken in separate, resource-specific cases into a single regulatory forum. The IRP process reviews the entire portfolio of resource options to ensure that load-serving entities will achieve the targets established by CARB related to GHG emission reductions, while also ensuring reliability and affordability.

However, as of now, RPS procurement remains a composite of several different and separate procurement programs and targets, each with its own history and set of Commission directives. As described above, these RPS programs do not necessarily address a customer's need for additional RPS procurement on a program-by-program basis. Nor do these programs take into consideration their cost-effectiveness compared to other resources, including RPS resources. Further, the RPS program-specific approach of the past does not factor in grid implications in the broader context. Nonetheless, each of these major, omitted elements is necessary to ensure that electricity customers receive the least-cost best-fit resources that are reliable and cost-effective.

SDG&E recommends that, for the benefit of the State's electricity consumers, that the Commission fully utilize the IRP process to create a sea-change away from siloed, project-specific RPS and reliability procurement and towards the statutorily mandated framework of considering first, consumers' needs and then considering all available resources on a comparative basis to meet those needs, consistent with applicable laws and regulations. In large part, the RPS proceeding should implement RPS procurement determinations made in the upstream IRP proceeding, rather than in isolation of that proceeding, which is currently the case. The benefits of removing the longstanding and outdated RPS program-by-program approach to RPS procurement and fully embracing the IRP mechanism will inure to customers. SDG&E will continue to urge the Commission to accelerate these efforts and we look forward to

the implementation of the Reliable and Clean Power Procurement Program ("RCPPP") which we hope will alleviate many of these concerns.

Regarding coordination, SDG&E has advocated for a more consolidated framework for LSEs to file annual procurement plans that address both RPS- and IRP-eligible resources and needs. SDG&E has made this point in comments on both the Staff Proposal<sup>98</sup> in the RPS proceeding and the Reliable & Clean Power Procurement Plan Staff Options Paper<sup>99</sup> in the IRP proceeding. The Commission expects - and SDG&E supports - that the IRP and RPS Plans will begin to align starting in the 2022-2023 IRP cycle.<sup>100</sup>

The 2019-2020 cycle of the IRP resulted in a Procurement Track Decision whereby SDG&E is required to procure for its bundled customers, and on behalf of other LSEs in its service territory that opt out or fail to procure their mandated procurement volume. RPS resources were eligible resources within the IRP Procurement Track solicitation and, ultimately, SDG&E selected primarily battery storage resources and a hybrid solar/battery resource.

As discussed above, the Commission issued its IRP Mid-Term Procurement Decision in 2021 and SDG&E is responsible for 475 MWs, some of which may be RPS eligible. The Commission issued a supplemental IRP Mid-Term Procurement Decision in 2023 and SDG&E is responsible for 144 MWs, some of which may be RPS eligible. The Commission also issued its Proposed System Plan ("PSP") decision and is in the process of implementing AB 1373, both of which may result in additional RPS-eligible procurement.

SDG&E's 2022 IRP incorporates portfolio optimization progress, as ordered in the Portfolio Optimization Decision, to the best of SDG&E's knowledge at the time of filing. Depending on the volume of RPS allocated or sold, SDG&E may have a future need for resources.

The table below summarizes how SDG&E's 2022 RPS Plan and renewable procurement conforms with the determinations made in the IRP Proceeding.

<sup>&</sup>lt;sup>98</sup> R.18-07-003, Administrative Law Judge's Ruling Requesting Comments on Staff Proposal (September 18, 2020), Attachment A, Staff Proposal for Alignment and Integration of RPS Procurement Planning and Integrated Resource Planning.

<sup>&</sup>lt;sup>99</sup> R.20-05-003, SDG&E Opening Comments on Staff Paper on Procurement Program (December 12, 2022), at 6-7.

<sup>&</sup>lt;sup>100</sup> ACR at 37.

<sup>&</sup>lt;sup>101</sup> D.19-11-016.

IRP Section Subsection	RPS Alignment in IRPs
III. Study Results A. Conforming and Alternative Portfolios	Retail sellers should explain how the RPS resources they plan to procure, outlined in their RPS Plan, will align with each of their Conforming Portfolios being developed in their IRP Plans for Commission approval and certification. This explanation should include:  1. Existing RPS resources that the retail seller owns or contracts. 2. Existing RPS resources that the retail seller plans to contract with in the future. 3. New RPS resources that the retail seller plans to invest in. 4. New and existing resources that will be used to meet Mid-Term Reliability obligations adopted in D.21-06-035 and the supplemental procurement ordered in D.23-02-040.  SDG&E's 2020 Individual IRP ("IIRP") determined no resource need for SDG&E due to its long position and load departure. However, the PCIA Optimization Decision, D.21-05-030, orders SDG&E to reduce its portfolio in proportion to its load share. The IRP Mid-Term Procurement Decision, D.21-06-035, and the Supplemental Mid-Term Procurement Decision, D.23-02-040, also orders SDG&E to procure a total of 619 MWs, 102 of which approximately 150 MW will be RPS eligible and may count towards SDG&E's RPS procurement requirements. SDG&E's 2022 IIRP was filed on November 1, 2022. Although SDG&E identified a need for approximately 1,546 MW in incremental capacity, any resulting procurement from either portfolio is not yet known. Any RPS-eligible resources that are procured or planned to be procured from SDG&E's IIRP will be considered as part
IV. Action Plan	of SDG&E's RPS portfolio and potential RPS procurement plans.  Pending acceptance of Retail sellers should describe how they propose
A. Proposed Activities	to use RPS resources to implement both Conforming Portfolios.  Narratives should include:
	<ol> <li>Proposed RPS procurement activities as required by         Commission decision or mandated procurement.         Procurement plans, potential barriers, and resource viability for each new RPS resource identified.     </li> </ol>

 $<sup>^{102}\,</sup>$  SDG&E's Advice Letter 3967-E, Request to Adjust the Capacity Requirements in D.21-06-035, March 16, 2022.

IRP Section Subsection	RPS Alignment in IRPs
	AL 4299-E, 103 was accepted on March 21, 2024, and SDG&E will no longer need to procure an additional 27 MW in 2024. However, it will still need to procure at least 3719 MW by 2027, and 83 MW by 2028 to meet the MTR Procurement requirements. Of the 83 MW required in 2028, 41.5 MW must be long-duration storage, and 41.5 MW must be from firm zero-emitting sources. SDG&E launched a solicitation in 2023 with no offers shortlisted for the 2027 and 2028 needs and plans to launched another solicitation in early 2024 that closed in April 2024 for the remaining deficiencies. SDG&E is currently evaluating the bids and will propose a shortlist recommendation to the PRG by July or August 2024.
	Additionally, in 2023 SDG&E launched Emergency Reliability.  In July 2023 SDG&E launched an Emergency Reliability solicitation to procure import resources to meet system reliability needs. SDG&E solicited offers for the purchase of eligible resource adequacy that would be available during both the peak and net peak demand periods and to come online or be operational by June 1, 2024, and/or June 1, 2025. SDG&E's procurement target was 170-320 MW. SDG&E has thus far procured 121 MW of supply-side resources and estimates 34 MW demand-side resources for June 2024; SDG&E is examining its portfolio to determine if there is additional excess MWs to apply toward its targets or if additional procurement is prudent.
IV. Action Plan B. Procurement Activities	Potential barriers are discussed in IRP Subsection IV. C. below.  The retail seller should describe the solicitation strategies for the RPS resources identified in both Conforming Portfolios. This description should include:  1. The type of solicitation. 2. The timeline for each solicitation. 3. Desired online dates. 4. Other relevant procurement planning information, such as solicitation goals and objectives.
	Per D.19-11-016, the Commission ordered procurement within the IRP for the purpose of ensuring reliability and allocated amounts to LSEs across the state. SDG&E was ordered to procure 292.9 MWs of the

.

 $<sup>^{103}\,</sup>$  Advice Letter requesting for approval of Mid-Term IRP contracts from SDG&E's Reliability RFO

IRP Section Subsection	RPS Alignment in IRPs
	total amount. The Commission also ordered the IOUs to procure on behalf of LSEs that "opt-out" of procurement.
	As the result of "opt-out" decisions by LSEs in its service territory, SDG&E was required to procure an additional 8.4 MW, for a total SDG&E procurement obligation of 301.3 MW. On January 14, 2021, the Commission partially approved AL 3605-E in Resolution E-5117 for 144 MW of capacity expected to come online by August 1, 2021. The Commission denied 20 MWs of utility-owned battery storage which was later included in procurement undertaken in the Summer Reliability OIR. SDG&E submitted AL 3689-E and AL 3689-E-A, which were approved effective March 18, 2021. Resolution E-5139 approved SDG&E AL-3666 requesting approval of 140 MWs. The CPUC also approved SDG&E's AL 3868-E on November 19, 2021, for 80 MW of battery storage, and AL 4010-E for 35 MW of RA-only capacity on June 13, 2022.
	As discussed above, the Commission has identified a mid-term need, and ordered SDG&E to procure 475 MWs and to procure additional 144 MWs through a supplemental order, which will include renewable resources, including RPS eligible resources. On January 12, 2023, the Commission approved AL 4096-E in Resolution E-5250 for 200 MW of capacity expected to come online by August 1, 2023, and June 1, 2024. On August 11, 2023, the Commission approved AL 4189-E in Resolution E-5283 for 163.5 MW of storage capacity paired with 178.5 MW of solar photovoltaic generation capacity expected to come online June 1, 2025, and 60 MW of storage capacity expected to come online April 1, 2026. 104 On July 14, 2023, the Commission approved AL 4182-E in Resolution E-5277 for 131 MW of storage capacity to count towards IRP mid-term procurement needs. On December 21, 2024, SDG&E filed AL 4299-E requesting approval of 47 MW of stand-alone storage capacity expected to come online June 1, in 2024. This AL was approved on March 21, 2024.
	Regarding activities in 2023 in support of the Summer Electric Reliability Proceeding, on May 25, 2023, the CPUC adopted a Decision directing the IOUs to seek contracts for additional capacity to be available by the summers of 2024 and 2025 with a target in the range

 $<sup>^{104}\,\,</sup>$  SDG&E AL 4189-E, filed April 14, 2023, CPUC Resolution E-5283, issued August 11, 2023.

IRP Section	RPS Alignment in IRPs
Subsection	
	of 170 – 320 MW for SDG&E. As part of meeting these requirements SDG&E submitted (i) Advice Letter 4290-E for two utility-owned energy storage projects totaling 39.6 MW with expected online dates on July 17, 2024, which were approved in Commission Resolution-E 5303; and, (ii) Advice Letter 4293-E for one utility-owned energy storage project (Westside Canal Energy Storage Expansion Project – Phase 1) totaling 119 MWs with an online date of October 31, 2024, for which the Commission issued its draft Resolution-E denying Advice Letter 4293-E.
	SDG&E is also allocating RPS resources as a result of the Portfolio Optimization Decision. SDG&E's PCIA-eligible RPS portfolio is reduced proportionally based on its load share allocation. Based on SDG&E's current RPS generation forecast, including eligible allocation, SDG&E anticipates meeting its RPS requirements for each CP through 2033 by utilizing its banked RECs . <sup>105</sup> If SDG&E is required to procure additional RPS-eligible resources within the IRP proceeding, then these resources will be factored into any RPS procurement considerations and count towards RPS procurement obligations.
IV. Action Plan	Retail sellers should provide a summary of the potential barriers to
C. Potential	implementing both Conforming Portfolios as they relate to RPS
Barriers	resources. The section should include:
	1. Key market, regulatory, financial, or other resource viability
	barriers or risks associated with the RPS resources coming online in retail sellers' Preferred Portfolios.
	2. Key risks associated with the potential retirement of existing
	RPS resources on which the retail seller intends to rely in the future.
	There are numerous potential barriers to SDG&E achieving its procurement targets. Project delays due to supply chain shortages or other unforeseen limitations continue to be the largest barrier to getting projects into commercial operation within the original timeline. Second, rising battery costs, interest rates, inflation, and project demand all contribute to high project costs that result in low numbers of economically feasible bids submitted to SDG&E's solicitations. This extremely tight market, while widespread, counters the efforts of the CPUC to increase resource procurement and achieve long-term goals.

 $<sup>^{105}~</sup>$  See Appendix 1 – SDG&E's Renewable Net Short Table.

IRP Section Subsection	RPS Alignment in IRPs
	In addition to the limited availability of "standard" resource types such as wind, solar, or battery storage, additional barriers are the need for procurement of less conventional types. These include long-duration storage, firm dispatchable zero-emissions generation technologies, and yet-to-be-built off-shore wind. SDG&E agrees a diverse resource portfolio is a benefit for California, but there is significant inertia in getting new technologies to market at a large scale.

#### XVI. IMPACT OF TRANSMISSION AND INTERCONNECTION DELAYS

Pursuant to the ACR issued on May 5, 2023, 17, 2024, and SB1174 (Hertzberg Stat. 2022, Ch.229), SDG&E is required to provide information on the development of transmission and interconnection facilities that enable renewable energy or energy storage resources which have executed agreements, and assessment of delays to interconnection or transmission approvals.are in development. SDG&E has reviewed and provided in this filling its transmission facilities and network upgrades that support renewable or energy storage resources. Currently, SDG&E ishas not providinghad delays in the TX and IX Delay Data template because it does not construction of the transmission facility and system network upgrade currently in development to support renewable or energy storage resources. Furthermore, SDG&E does not currently have transmission facilities andor network system-upgrades that have experienced delays during this reporting period, June 1, 2022, and May 31, 2023. This is consistent with what SDG&E has been presenting publicly in the CAISO Transmission Development Forum.are required to interconnect renewable or energy storage resources that are under its Wholesale Distribution Open Access Tariff (WDAT).

#### XVII. OTHER RPS PLANNING CONSIDERATIONS AND ISSUES

#### SDG&E's REQUEST FOR AN UPDATED SHORT-TERM RPS TRANSACTION APPROVAL FRAMEWORK

SDG&E has no additional considerations is at a disadvantage when competing with the other LSEs and issues other REC market participants due to discuss at the current Commission approval process for short-term REC transactions.

To address the challenges, SDG&E seeks the ability to transact short-term transactions through a process similar to the Quarterly Compliance Report ("QCR"). SDG&E requests the Commission to update the approval process for REC transactions less than five years. SDG&E believes that this timechange will empower SDG&E and reserves the right other IOUs to add to

this section manage RPS compliance in subsequent versions a highly competitive and evolving renewable energy product market, deliver or receive RPS products in a timely manner, and create a level playing field for SDG&E's bundled customers. SDG&E, in coordination with the other California IOUs, SCE and PG&E, proposes an updated approval process consistent with individual IOUs upfront, achievable standards and criteria, which would be pre-approved and reported in a quarterly compliance report submitted to the Commission's Auditors and Energy Division via Tier 1 Advice Letter. Long-term transactions with terms of 5 years or more and short-term transactions not consistent with upfront, achievable standards and criteria would continue to utilize the Tier 3 Advice Letter approval process. SDG&E provides its RPS Plan as circumstances warrant. upfront and achievable standards and criteria in Appendix 18.

#### Appendix 1

### Renewable Net Short and Project Development Status Update

#### SDG&E Renewable Net Short for RPS Procurement – January July 22, 2024:

The appendix herein provide provides two scenarios of the data behind SDG&E's RPS Risk Adjusted Net Short Calculation as of JanuaryJuly 2024. They include the outputs required by the Administrative Law Judge's Ruling on Renewable Net Short, dated May 21, 2014, and have been updated to reflect the banking rules adopted under D.17-06-026 and the impacts of Portfolio Optimization Decision D.21-05-030 to SDG&E's RPS portfolio. SDG&E's PCIA-eligible RPS portfolio is reduced by percent, which is equivalent to the total amount of load departure in 20232024, to show the impact of VAMO. SDG&E's methodology to calculate the PCIA-eligible portfolio volumes is consistent with the approach approved in Advice Letter 3835-E. With the additional departures mentioned in Section IV. D. of SDG&E's Final RPSDraft Plan, SDG&E estimates that approximately of the region's load will remain in SDG&E service beginning 2024. For clarity, The difference between the two scenarios is the retail sales forecast. Appendix 1a, the conforming scenario, is based on the CEC's 2023 California Demand Forecast, and Appendix 1b, the alternative scenario, uses SDG&E's internal retail sales forecast. The updated RNS illustrates scenarios illustrate that SDG&E

SDG&E's RPS eligible procurement in its RNS accounts for the MMoP. The MMoP accounts for project development risks. SDG&E's forecasted failure rate for projects under development is illustrated in the table below. A discussion of this methodology is provided in Sections VII and IX-A.

#### **Risk Assignment Table**

Severity of Risk	Project	Risk Factors (Including but	Failure Rate%
	Development	not limited to the following):	
	Phase		
High-risk	Pre-Construction	CPUC approval, projects	
	Phase	permits and interconnection	
		agreement	
Medium-risk	Construction	Financing, supply chain,	
	Phase	interconnection, project	
		delayed construction /	
		completion rate ,	
		transmission development	
		and missed milestone(s)*	
Low-risk	Post-Construction	Underperformance of	
	Phase	delivering projects/delivery	
		failure and other delays	

\* A project that is assigned a medium-risk factor will be assigned a high-risk factor when it misses a milestone.

As set forth in Advice letter 4345-E, SDG&E is not holding a future VAMO process.<sup>1</sup> After meeting all the requirements of D.21-05-030, SDG&E is providing a summary of RPS volumes not allocated and sold in the VAMO process that are available beginning in 2025 in the table below.

#### <u>Summary of RPS Volumes Not Allocated or Sold in the VAMO Process<sup>2</sup></u>

PCIA-eligible Portfolio	Estimated Total Volume in MWH
<u>Unbundled RECs (2025-2033)</u>	
Bundled RECs (2025-2032)	
Bundled RECs (2025-2042)	

#### **Volumetric and Capacity Cap**

SDG&E has established a volume	metric cap of	MWh and a capacity cap for the	
2023 RPS Plan cycle of	MW-using its RNS alte	ernative scenario.	
in the RNS table	to determine the volur	metric cap of . To	
achieve this cap, SDG&E would	d need to procure	of RPS assuming a capacity factor	or
of which is the weighted	average capacity facto	or of SDG&E's current RPS	
portfolio. Supporting informa	tion on SDG&E's volum	netric and capacity cap can be found in	
section IV under Determination	on of the Compliance No	eeds for each Compliance Period.	

#### **TABLE 4-1 from Section IV. B.1. Long-Term Procurement**

<u>As discussed in Section IV. B.1 of this Plan, SDG&E is providing the confidential summary of SDG&E's long-term and short-term procurement below:</u>

Compliance Period	Short-Term	<u>Long-Term</u>
<u>2021-2024</u>		
<u>2025-2027</u>		
<u>2028-2030</u>	N/A	4,592 GWh
<u>2031-2034</u>	<u>N/A</u>	<u>5,226 GWh</u>

On May 9, 2024, the Commission approved SDG&E's Advice Letter 4345-E request that no future Voluntary Allocation and Market Offer Processes be held, pursuant to Ordering Paragraph 4 of D.21-05-030.

Volumes identified in this summary apply to product categories if such volumes are sold. If used for SDG&E compliance, volumes would be categorized as long-term bundled product.

Contract End	Date (mm/dd/yyyy)	4/30/2038	6/30/2040	12/31/2041			T									
Contract Start	Date (mm/dd/yyyy)	5/1/2026	6/28/2025	12/1/2056												
Contract Execution	Date (mm/dd/yyyy)	11/18/2022	4/11/2023	1/24/2023												
	ct Length	12	15	15												
:	Longitude	-116.272	-120.4031	-115.7804												
	Zip Code   Latitude   Longitude   ct Length	32.658	36.5924	36.0679		1	1									-
i	Zip Code	91905	93640	89061												-
	State	CA	CA	^N												
	County	San Diego	Fresno	Nve												-
į	City	Boulevard	Mendota	Pahrump												
-	Tyroject Development Phas	Pre-Construction	Construction	Pre-Construction												
-	chnology Ty	Hybrid	Hybrid	Hybrid	,											_
	Project Name	Starlight	Luna Valley Solar	Yellow Pine Solar III												
	PS Contract	SD5086 S	SD5088	Y SD5087												
	Reporting LSE Name	San Diego Gas & Electric	San Diego Gas & Electric	San Diego Gas & Flectric												

Project Nates	69.6 Hybrid: Solar PV (Ground Mount) + Energy Storage	"Contractual hybrid" project - Luna Valley Solar, together with Daggett Energy Storage form a contractually paired hybrid project	0 Hybrid: Solar Tracking 1 Axis + Enerry Storage											
Storage: Capacity (MWh)			300											Ī
Storage: Rated Power (MWI)	17.4	113.5	20											
Transmission Status														
Commercial Operation Date (COD)	5/1/2026	6/28/2025	12/1/2026											Ī
Total Contract Volume	000009	2485500	1095000											
Expected Annual Generation	20000	73000	165700											
Contract Capacity	17.4	113.5	9											

### Appendix 1a Renewable Net Short Conforming Scenario

# Renewable Net Short Calculations - 2020 RPS Procurement Plans

LSE Name:	San Diedo Gas & Flectric	— mectric		Input required			No input required	5		Hard-coded		
					_			ı				
Variable	Calculation	Item	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2017-2020	2021 Actual	2022 Actual	2023 Actual	2024 Forecast	2021-2024
		Forecast Year					CP3				1	CP4
		Annual RPS Requirement										
A		Total Retail Sales (MWh)	15,618,767	15,036,269	14,277,607	14,270,246	59,202,889	11,255,481	7,796,873	4,619,558		
В		RPS Procurement Quantity Requirement (%)	27.0%	29.0%	31.0%	33.0%	29.9%	35.8%	38.5%	41.3%	44.0%	38.6%
C	A*B	Gross RPS Procurement Quantity Requirement (MWh)	4,217,067	4,360,518	4,426,058	4,709,181	17,712,824.4	4,023,835	3,001,796	1,905,568		
D		Voluntary Margin of Over-procurement (MWh)					-					
Ξ	C+D	Net RPS Procurement Need (MWh)	4,217,067	4,360,518	4,426,058	4,709,181	17,712,824	4,023,835	3,001,796	1,905,568		
		RPS-Eligible Procurement										
Fa		Risk-Adjusted RECs from Online Generation (MWh)	6,933,773	6,731,419	6,615,096	6,302,576	26,582,864	6,228,743	6,445,246	2,224,898		
Faa		Forecast Failure Rate for Online Generation (%)	%0'0	%0'0	%0:0	%0'0	%0.0	%0.0	%0'0	%0:0		
Fb		Risk-Adjusted RECs from RPS Facilities in Development (MWh)										
Fbb		Forecast Failure Rate for RPS Facilities in Development (%)	%0'0	%0'0	%0:0	%0:0	%0.0	%0'0	%0'0	%0:0		
Fc		Pre-Approved Generic RECs (MWh)					-			•		
Fd		Executed REC Sales (MWh)	٠	130,000	1,008,000	740,750	1,878,750		1,830,000	1		
Ŧ	Fa+Fb+Fc-Fd	Total RPS Eligible Procurement (MWh)	6,933,773	6,601,419	5,607,096	5,561,826	24,704,114	6,228,743	4,615,246	2,224,898		
F0		Category 0 RECs	2,368,303	2,294,240	2,167,158	2,192,568	9,022,269	2,108,281	2,117,256	9999		
Ħ		Category 1 RECs	4,565,470	4,307,179	3,439,938	3,369,258	15,681,845	4,120,462	2,497,991	1,558,541		
F2		Category 2 RECs			•	1	•		•	-		
F3		Category 3 RECs		-	-	-	-		-	-		
		Gross RPS Position (Physical Net Short)										
Ga	F-E	Annual Gross RPS Position (MWh)	2,716,706	2,240,901	1,181,038	852,645	6,991,290	2,204,908	1,613,450	319,331		
Gb	F/A	Annual Gross RPS Position (%)	44%	44%	39%	39%	42%	25%	29%	48%		
		Application of Bank										
Ha	Hc (from previous C	He (from previous C Existing Banked RECs above the PQR	7,045,016	9,761,722	12,002,623	13,183,661	7,045,016	14,036,306	16,241,214	17,854,664		
HP		RECs above the PQR added to Bank	2,716,706	2,240,901	1,181,038	852,645	6,991,290	2,204,908	1,613,450	319,331		
Hc		Non-bankable RECs above the PQR	-	-	-	-	-	•	1	-		
Н	Ha+Hb	Gross Balance of RECs above the PQR	9,761,722	12,002,623	13,183,661	14,036,306	14,036,306	16,241,214	17,854,664	18,173,995		
Ia		Planned Application of RECs above the PQR towards RPS Compliance				-	-		•	•		
Ib		Planned Sales of RECs above the PQR	-	-	-	-	-	•	1	-		
J	H-la-lb	Net Balance of RECs above the PQR	9,761,722	12,002,623	13,183,661	14,036,306	14,036,306	16,241,214	17,854,664	18,173,995		
)O		Category 0 RECs	4,672,602	5,495,745	5,924,851	6,226,452	22,319,650	7,024,424	7,756,227	7,812,145		
11		Category 1 RECs	5,089,120	6,506,878	7,258,810	7,809,854	26,664,662	9,216,790	10,098,437	10,361,850		
J3		Category 3 Bundled RECs (Non-CBA Utilities Only)*	-	-	-	-	-	-	1	-		
		Expiring Contracts										
К		RECs from Expiring RPS Contracts (MWh)	21,344	87,459	183,615	539	292,957		33,732	65,340		
		Net RPS Position (Optimized Net Short)										
La	Ga+la-lb-Hc	Annual Net RPS Position after Bank Optimization (MWh)	2,716,706	2,240,901	1,181,038	852,645	6,991,290	2,204,908				
Lb	(F+Ia-Ib-Hc)/A	Annual Net RPS Position after Bank Optimization (%)	0.443938552	0.43903306	0.392719587	0.389749845	0.417278861	0.553396394	0.591935516	0.481625798		

# Note: All values are to be input in MWhs

\*D.17-11-037 provides for utilities serving load in areas outside California Independent System Operator Balancing Authority (Non-CBA Utilities) to bank excess bundled PCC3 RECs



# Renewable Net Short Calculations - 2020 RPS Procurement Plans

San Diego Gas & Electric 7/22/2024

LSE Name: ©

Variable	Calculation	Item	2025 Forecast 20	2026 Forecast	2027 Forecast	2025-2027	2028 Forecast	2029 Forecast	2030 Forecast	2028-2030	2031 Forecast	2032 Forecast	2033 Forecast
		Forecast Year	2	3	4	CP5	5	9	2	CP 6	8	6	10
		Annual RPS Requirement											
V		Total Retail Sales (MWh)			3,570,806			3,878,918	4,072,885	11,657,391	4,303,440	4,536,717	4,818,422
В		RPS Procurement Quantity Requirement (%)	46.7%	49.3%	52.0%	49.4%	54.7%	57.3%	%0:09	57.4%	%0'09	%0.09	%0.09
O	A*B	Gross RPS Procurement Quantity Requirement (MWh)			1,856,819		2,025,845	2,223,784	2,443,731	6,693,359.8	2,582,064	2,722,030	2,891,053
D		Voluntary Margin of Over-procurement (MWh)											
н	C+D	Net RPS Procurement Need (MWh)			1,856,819		2,025,845	2,223,784	2,443,731	6,693,360	2,582,064	2,722,030	2,891,053
		RPS-Eligible Procurement											
Fa		Risk-Adjusted RECs from Online Generation (MWh)			1,424,309		1,424,287	1,424,287	1,423,913	4,272,486	1,411,677	1,382,378	1,169,105
Faa		Forecast Failure Rate for Online Generation (%)			0:0%		%0'0	0.0%	%0'0	%0:0	%0'0	%0'0	0.0%
Fb		Risk-Adjusted RECs from RPS Facilities in Development (MWh)			107,287		106,790	106,295	105,800	318,885	105,306	104,813	104,321
Fbb		Forecast Failure Rate for RPS Facilities in Development (%)			24.3%		24.3%	24.3%	24.3%	24.3%	24.3%	24.3%	24.4%
Fc		Pre-Approved Generic RECs (MWh)			•				-				
Fd		Executed REC Sales (MWh)			•				-				
H	Fa+Fb+Fc-Fd	Total RPS Eligible Procurement (MWh)			1,531,596		1,531,077	1,530,581	1,529,713	4,591,371	1,516,983	1,487,191	1,273,425
F0		Category 0 RECs			321,155		321,133	321,133	321,133	963,398	318,259	289,141	211,360
F1		Category 1 RECs			1,210,441		1,209,944	1,209,449	1,208,580	3,627,973	1,198,724	1,198,050	1,062,065
F2		Category 2 RECs					_	•	-		-	-	-
F3		Category 3 RECs					-		-		-	-	
		Gross RPS Position (Physical Net Short)											
Ga	F-E	Annual Gross RPS Position (MWh)			(325,223)		(494,768)	(693,202)	(914,018)	(2,101,989)	(1,065,081)	(1,234,840)	(1,617,628)
Gb	F/A	Annual Gross RPS Position (%)			43%		41%	39%	38%	39%	35%	33 %	26%
		Application of Bank											
Ha	Hc (from previous C	Hc (from previous C Existing Banked RECs above the PQR			17,949,434		17,624,211	17,129,443	16,436,240	17,624,211	15,522,222	14,457,141	13,222,301
HP		RECs above the PQR added to Bank			1								
Hc		Non-bankable RECs above the PQR			1				-		-		
Н	Ha+Hb	Gross Balance of RECs above the PQR			17,949,434		17,624,211	17,129,443	16,436,240	17,624,211	15,522,222	14,457,141	13,222,301
Ia		Planned Application of RECs above the PQR towards RPS Compliance			325,223		494,768	693,202	914,018	2,101,989	1,065,081	1,234,840	1,617,628
Ib.		Planned Sales of RECs above the PQR			1			-		-	-		-
J	H-la-lb	Net Balance of RECs above the PQR			17,624,211		17,129,443	16,436,240	15,522,222	15,522,222	14,457,141	13,222,301	11,604,673
JO		Category 0 RECs			7,285,724		7,008,642	6,658,280	6,227,578	19,894,499	5,746,581	5,205,630	4,527,201
11		Category 1 RECs			10,338,486		10,120,801	096'222'6	9,294,644	29,193,406	8,710,560	8,016,671	7,077,472

948,861 54,454 894,407

3,073,488 845,032 0.0% 1103,829

5,122,480 60.0% 3,073,488

2034 Forecast

# Note: All values are to be input in MWhs

Annual Net RPS Position after Bank Optimization (MWh)

Ga+la-lb-Hc

La

Net RPS Position (Optimized Net Short)

Expiring Contracts

(F+Ia-Ib-Hc)/A Annual Net RPS Position after Bank Optimization (%)

9,480,046 3,661,802 5,818,244

274,654

111,286

1,711

(0)

0.6

0.574173043

0.6

0.5733

(0)

11,604,673

(2,124,627

11,604,673

\*D.17-11-037 provides for utilities serving load in areas outside California Independent Syst



### Appendix 1b Renewable Net Short Alternative Scenario

# Renewable Net Short Calculations - 2020 RPS Procurement Plans

LSE Name:	San Diego Gas & Electric	 tric		Input required			No input required	ğ		Hard-coded		
Date Filed:	7/22/2024	4										
Variable	Calculation	Item	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2017-2020	2021 Actual	2022 Actual	2023 Actual	2024 Forecast	2021-2024
		Forecast Year					CP 3				1	CP 4
		Annual RPS Requirement										
A		Total Retail Sales (MWh)	15,618,767	15,036,269	14,277,607	14,270,246	59,202,889	11,255,481	7,796,873	4,619,558		
В		RPS Procurement Quantity Requirement (%)	27.0%	29.0%	31.0%	33.0%	29.9%	35.8%	38.5%	41.3%	44.0%	38.6%
О	A*B	Gross RPS Procurement Quantity Requirement (MWh)	4,217,067	4,360,518	4,426,058	4,709,181	17,712,824.4	4,023,835	3,001,796	1,905,568		
D		Voluntary Margin of Over-procurement (MWh)										
Ξ	C+D	Net RPS Procurement Need (MWh)	4,217,067	4,360,518	4,426,058	4,709,181	17,712,824	4,023,835	3,001,796	1,905,568		
		RPS-Eligible Procurement										
Fa		Risk-Adjusted RECs from Online Generation (MWh)	6,933,773	6,731,419	6,615,096	6,302,576	26,582,864	6,228,743	6,445,246	2,224,898		
Faa		Forecast Failure Rate for Online Generation (%)	%0.0	%0'0	%0'0	%0'0	%0:0	%0:0	%0'0	%0'0		
Fb		Risk-Adjusted RECs from RPS Facilities in Development (MWh)					1					
Fbb		Forecast Failure Rate for RPS Facilities in Development (%)	%0:0	%0'0	%0'0	%0'0	%0:0	%0'0	%0'0	%0'0		
Fc		Pre-Approved Generic RECs (MWh)	-				-	•		-		
Fd		Executed REC Sales (MWh)	-	130,000	1,008,000	740,750	1,878,750		1,830,000	-		
F	Fa+Fb+Fc-Fd	Total RPS Eligible Procurement (MWh)	6,933,773	6,601,419	2,607,096	5,561,826	24,704,114	6,228,743	4,615,246	2,224,898		
F0		Category 0 RECs	2,368,303	2,294,240	2,167,158	2,192,568	9,022,269	2,108,281	2,117,256	666,357		
Ħ		Category 1 RECs	4,565,470	4,307,179	3,439,938	3,369,258	15,681,845	4,120,462	2,497,991	1,558,541		
F2		Category 2 RECs	-	1	1	-	-		-	-		
F3		Category 3 RECs	-	-	-	-	-	-		-		
		Gross RPS Position (Physical Net Short)										
Ga	F-E	Annual Gross RPS Position (MWh)	2,716,706	2,240,901	1,181,038	852,645	6,991,290	2,204,908	1,613,450	319,331		
Gb	F/A	Annual Gross RPS Position (%)	44%	44%	39%	39%	42%	55%	59%	48%		
		Application of Bank										
Ha	J-Hc (from previous CP)	J-Hc (from previous CP) Existing Banked RECs above the PQR	7,045,016	9,761,722	12,002,623	13,183,661	7,045,016	14,036,306	16,241,214	17,854,664		
Hb		RECs above the PQR added to Bank	2,716,706	2,240,901	1,181,038	852,645	6,991,290	2,204,908	1,613,450	319,331		
Hc		Non-bankable RECs above the PQR	•		1	-			-	•		
Н	Ha+Hb	Gross Balance of RECs above the PQR	9,761,722	12,002,623	13,183,661	14,036,306	14,036,306	16,241,214	17,854,664	18,173,995		
Ia		Planned Application of RECs above the PQR towards RPS Compliance	•				-		•	•		
Ib		Planned Sales of RECs above the PQR	•	1	1		-			•		
J	H-Ia-Ib	Net Balance of RECs above the PQR	9,761,722	12,002,623	13,183,661	14,036,306	14,036,306	16,241,214	17,854,664	18,173,995		
JO		Category 0 RECs	4,672,602	5,495,745	5,924,851	6,226,452	22,319,650	7,024,424	7,756,227	7,812,145		
J1		Category 1 RECs	5,089,120	6,506,878	7,258,810	7,809,854	26,664,662	06/316/20	10,098,437	10,361,850		
J3		Category 3 Bundled RECs (Non-CBA Utilities Only)*	,	1	1					-		
		Expiring Contracts										
K		RECs from Expiring RPS Contracts (MWh)	21,344	87,459	183,615	239	292,957		33,732	65,340		
		Net RPS Position (Optimized Net Short)										
La	Ga+Ia-Ib-Hc	Annual Net RPS Position after Bank Optimization (MWh)	2,716,706	2,240,901	1,181,038	852,645	6,991,290	2,204,908	1,613,450	319,331		
Lb	(F+Ia-Ib-Hc)/A	Annual Net RPS Position after Bank Optimization (%)	0.443938552	0.43903306	0.392719587	0.389749845	0.417278861	0.553396394	0.591935516	0.481625798		

# Note: All values are to be input in MWhs

\*D.17-11-037 provides for utilities serving load in areas outside California Independent System Operator Balancing Authority (Non-CBA Utilities) to bank excess bundled PCC3 RECs



# Renewable Net Short Calculations - 2020 RPS Procurement Plans

LSE Name: San Diego Gas & Electric
Date Filed: 7/22/2024

Variable	Calculation	Item	2025 Forecast 2026 Fo	2026 Forecast 2027 Fc	2027 Forecast 2025-2027		2028 Forecast 2029 Forecast	2030 Forecast	2028-2030	2031 Forecast	2032 Forecast 2033 Forecast		2034 Forecast
		Forecast Year	2 3	3 4	4 CP 5	5	9	7	CP6	8	6	10	11
		Annual RPS Requirement											
V		Total Retail Sales (MWh)		4,3	4,122,998	4,249,002	4,400,741	4,568,495	13,218,238	4,776,832	4,992,649	5,249,384	5,513,141
В		RPS Procurement Quantity Requirement (%)	46.7%	49.3%	52.0% 49.4%	54.7%	27.3 %	%0'09	57.4%	%0:09	%0.09	%0'09	%0:09
U	A*B	Gross RPS Procurement Quantity Requirement (MWh)		2,3	2,143,959	2,322,929	2,522,945	2,741,097	7,586,971.0	2,866,099	2,995,590	3,149,630	3,307,884
D		Voluntary Margin of Over-procurement (MWh)							1				
Ε	C+D	Net RPS Procurement Need (MWh)		2,3	2,143,959	2,322,929	2,522,945	2,741,097	7,586,971	2,866,099	2,995,590	3,149,630	3,307,884
		RPS-Eligible Procurement											
Fa		Risk-Adjusted RECs from Online Generation (MWh)		1,4	1,424,309	1,424,287	1,424,287	1,423,913	4,272,486	1,411,677	1,382,378	1,169,105	845,032
Faa		Forecast Failure Rate for Online Generation (%)			0.0%	%0'0	%0'0	%0:0	%0.0	%0.0	%0:0	%0'0	%0.0
Fb		Risk-Adjusted RECs from RPS Facilities in Development (MWh)			107,287	106,790	106,295	105,800	318,885	105,306	104,813	104,321	103,829
Fbb		Forecast Failure Rate for RPS Facilities in Development (%)			24.3%	24.3%	24.3%	24.3%	24.3%	24.3%	24.3%	24.4%	24.4%
Fc		Pre-Approved Generic RECs (MWh)			,	٠			1				
Fd		Executed REC Sales (MWh)		_	,	-	-		-	-	-	-	
Ŧ	Fa+Fb+Fc-Fd	Total RPS Eligible Procurement (MWh)		1,5	1,531,596	1,531,077	1,530,581	1,529,713	4,591,371	1,516,983	1,487,191	1,273,425	948,861
F0		Category 0 RECs		. 61	321,155	321,133	321,133	321,133	963,398	318,259	289,141	211,360	54,454
F1		Category 1 RECs		1,2	1,210,441	1,209,944	1,209,449	1,208,580	3,627,973	1,198,724	1,198,050	1,062,065	894,407
F2		Category 2 RECs		_	•	•	-		-	-	-	1	1
F3		Category 3 RECs				•			1				
		Gross RPS Position (Physical Net Short)											
Ga	F-E	Annual Gross RPS Position (MWh)		<u> </u>	(612,363)	(791,852)	(992,364)	(1,211,384)	(2,995,600)	(1,349,116)	(1,508,399)	(1,876,205)	(2,359,023)
Gb	F/A	Annual Gross RPS Position (%)			37%	36%	32 %	33%	35%	32%	30%	24 %	17%
		Application of Bank											
Ha	J-Hc (from previous CP)	Existing Banked RECs above the PQR		17,4	17,461,653	16,849,290	16,057,437	15,065,074	16,849,290	13,853,690	12,504,573	10,996,175	9,119,970
HP		RECs above the PQR added to Bank			,	•	-			-	-		
Hc		Non-bankable RECs above the PQR			-	•			•	1	1	-	
Н	Ha+Hb	Gross Balance of RECs above the PQR		17,6	17,461,653	16,849,290	16,057,437	15,065,074	16,849,290	13,853,690	12,504,573	10,996,175	9,119,970
Ia		Planned Application of RECs above the PQR towards RPS Compliance		,	612,363	791,852	992,364	1,211,384	2,995,600	1,349,116	1,508,399	1,876,205	2,359,023
Ib		Planned Sales of RECs above the PQR		_	•	-	-		-	-	1	1	1
J	H-la-lb	Net Balance of RECs above the PQR		16,8	16,849,290	16,057,437	15,065,074	13,853,690	13,853,690	12,504,573	10,996,175	9,119,970	6,760,947
JO		Category 0 RECs		5'9	6,965,378	6,570,022	6,102,824	5,558,156	18,231,002	4,970,453	4,329,203	3,557,872	2,611,512
11		Category 1 RECs		3'6	9,883,912	9,487,415	8,962,250	8,295,534	26,745,199	7,534,120	6,666,972	5,562,098	4,149,435
J3		Category 3 Bundled RECs (Non-CBA Utilities Only)*							-				
		Expiring Contracts											
K		RECs from Expiring RPS Contracts (MWh)			22	1	1	9,362	6)362	1,711	111,286	274,654	71,381
		Net RPS Position (Optimized Net Short)											
La	Ga+Ia-Ib-Hc	Annual Net RPS Position after Bank Optimization (MWh)			0	,	(0)	(0)		(0)	(0)	(0)	(0)
TP	(F+Ia-Ib-Hc)/A	Annual Net RPS Position after Bank Optimization (%)			0.52	0.5467	0.5733	0.0	0.5739775	9.0	9.0	9.0	9.0

# Note: All values are to be input in MWhs

\*D.17-11-037 provides for utilities serving load in areas outside California Independent System Ope



#### Appendix 2

#### **Quantitative Information**

LSE Narl San Diego Gas & Electric Input Required Date Fild 7722/2024

	Table 1: Cost Quantification (Actual Net Costs, \$)	Actual RPS-Eligik	Actual RPS-Eligible Procurement and Generation Net Costs (\$)	nd Generation Net
шш	Executed RPS-Eligible Contracts by Technology Type* (Purchases and Sales)	2021	2022	2023
l	Biogas: Digester Gas			
	Biogas: Landfill Gas	\$8,753,599	\$7,892,637	3272951.295
	Biodiesel			
	Biomass			
	Muni Solid Waste			
	Geothermal			
	Small Hydro (Non-UOG)	\$143,668	\$161,573	212428.4064
	Conduit Hydro			
	Water Supply / Conveyance			
	Ocean Wave			
	Ocean Thermal			
	Tidal Current			
	Solar PV (Non-UOG)	\$389,979,212	\$397,082,781	126088139.1
	Solar Thermal			
	Wind	\$210,364,299	\$209,513,799	87290008.06
	Unbundled RECs (REC Only)			
	Various (Index Plus REC)***			
	Fuel Cell			
	UOG: Small Hydro			
	UOG: Solar PV	\$789,059	\$493,005	491587.7041
	UOG: Other			
ll	Executed REC Sales (Revenue)		\$25,071,000	
	Total RPS-Eligible Procurement and Generation Net Cost	\$610,029,837	\$590,072,794	\$217,355,115
ı	Total Retail Sales (MWh)	11,255,481	7,796,873	4619557.762
	Incremental Rate Impact	5.419846779	7.568069534	4.705106544

2026 2027 2028 2029 2030 2031 2032  2026 2027 2028 2029 2030 2031 2032  2027 2029 2030 2031  2028 2029 2030 2032  2029 2030 2032  2029 2030 2032  2020 2031 20	Tab	Table 2: Cost Quantification (Forecast Costs and Revenues, \$)				Ā	orecast RPS-Eligibl	Forecast RPS-Eligible Procurement Costs and Revenues (\$)	ts and Revenues (\$	(4)			
Biogram Digester Case   Biodresal Biomass   Biom	-	Executed But Not Approved RPS-Eligible Contracts (Purchases and Sales)**	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Biograph Landfill Case   Biograph Landfill C	2	Biogas: Digester Gas											
Bioticase  Bioticase    Bioti	3	Biogas: Landfill Gas											
Biomass   Biom	4	Biodiesel											
Munit Solid Waste   Munit Solid Record REC Saled Revorters   Munit Solid Revolute   Munit Solid	2	Biomass											
Coordinat Hydron (North-UCG)	9	Muni Solid Waste											
Cocean Wave Conduit Hydro   Wave Control Wave Control Hydro   Cocean Wave Conduit Hydro   Cocean Wave Control Hydro   Cocean Wave Complex Norman   Cocean Wave	7	Geothermal											
Water Supply Conneyance         Cocant Hydro           Ocean Thermal         Tidal Current         Cocan Thermal         P.	8	Small Hydro (Non-UOG)											
Water Supply / Conveyance         Water Supply / Conveyance         Cocean Wave	6	Conduit Hydro											
Cocean Neve	10	Water Supply / Conveyance											
Cocean Thermal Tidal Current Solar Portion Cocean Thermal	11	Ocean Wave											
Solar Put (Non-UoG)	12	Ocean Thermal											
Solar PV (Non-UOG)	13	Tidal Current											
Solar Thermal   Wind	14	Solar PV (Non-UOG)											
Wind         Unbundled RECs (REC Only)         Purple of RECS (REC On	15	Solar Thermal											
Unbundled RECs (REC Only)	16	Wind											
Various (Index Plus REC)***         Post Solidar (Index Plus REC)***         Public Solidar (Index Plus REC)***         Public Solidar (Index Plus REC)***         Public Solidar (Index Plus Recurred REC Salidar (Index Plus Recurred But Not Approved RPS-Eligible Procurement Recurred But Not Approved RPS-Eligible Recurred But Not Approved RPS-Eligible Recurred But Not Approved RPS-Eligible Recurred But N	17	Unbundled RECs (REC Only)											
Fuel Cell	18	Various (Index Plus REC)***											
UOG: Shall Hydro         UOG: Shall Hydro         LOG: Shall Hydro	20	Fuel Cell											
UOG: Solar PV         UOG: Solar PV         Color So	21	UOG: Small Hydro											
UOG: Other   UOG	22	UOG: Solar PV											
Total Executed REC Sales (Revenue)   So   So   So   So   So   So   So   S	23	UOG: Other											
Total Executed But Not Approved RPS-Eligible Procurement   \$0   \$0   \$0   \$0   \$0   \$0   \$0   \$	24	Executed REC Sales (Revenue)											
Total Retail Sales (MVh)	25	Total Executed But Not Approved RPS-Eligible Procurement and Generation Cost	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0\$	0\$	\$0
Incremental Rate Impact 0.00 ¢/kWh	26	Total Retail Sales (MWh)				3,570,806	3,705,588	3,878,918	4,072,885	4,303,440	4,536,717	4,818,422	5,122,480
	27	Incremental Rate Impact	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh				

28	Executed RPS-Eligible Contracts (Purchases and Sales)****	2024	2025	2026	2027	2028	5029	2030	2031	2032	2033	2034
29	Biogas: Digester Gas											
30	Biogas: Landfill Gas	\$2,948,668	\$2,096,422	\$2,096,422	\$534,910	\$534,910	\$534,910	\$534,910	\$199,613	0\$	0\$	\$0
31	Biodiesel											
32	Biomass											
33	Muni Solid Waste											
34	0											
35	Small Hydro (Non-UOG)	\$151,870	\$151,870	\$151,870	\$151,870	\$151,870	\$151,870	\$151,870	\$151,870	\$151,870	\$151,870	\$151,870
36	Conduit Hydro											
37	Water Supply / Conveyance											
38	Ocean Wave											
39	Ocean Thermal											
40	Tidal Current											
41	Solar PV (Non-UOG)	\$97,881,767	\$100,042,896	\$102,089,090	\$104,183,582	\$104,572,250	\$104,953,571	\$105,318,153	\$105,068,704	\$105,470,186	\$103,356,346	\$85,342,848
42	Solar Thermal											
43	Wind	\$54,701,322	\$50,892,464	\$48,598,302	\$48,515,110	\$48,515,110	\$48,515,110	\$48,515,110	\$48,515,110	\$45,335,907	\$27,228,193	\$14,931,646
44	Unbundled RECs (REC Only)											
45	Various (Index Plus REC)***											
47	Fuel Cell											
48	UOG: Small Hydro	\$234,897	\$141,562	\$141,825	\$141,357	\$133,200	\$133,869	\$134,542	\$135,218	\$135,897	\$136,580	\$137,267
49	UOG: Solar PV											
20	UOG: Other											
51	Executed REC Sales (Revenue)											
52	Total Executed and Approved RPS-Eligible Procurement and Generation Cost	\$155,918,525	\$153,325,214	\$153,077,508	\$153,526,829	\$153,907,340	\$154,289,330	\$154,654,586	\$154,070,516	\$151,093,861	\$130,872,990	\$100,563,631
53	Total Retail Sales (MWh)				3,570,806	3,705,588	3,878,918	4,072,885	4,303,440	4,536,717	4,818,422	5,122,480
54	Incremental Rate Impact				4.299500939	4.153385273	3.977638553	3.797174893	3.580170957	3.330466629	2.716096391	1.963182353
55	Total RPS-Eligible Procurement and Generation Cost	\$155,918,525	\$153,325,214	\$153,077,508	\$153,526,829	\$153,907,340	\$154,289,330	\$154,654,586	\$154,070,516	\$151,093,861	\$130,872,990	\$100,563,631
26	Total Incremental Rate Impact				4.299500939	4.153385273	3.977638553	3.797174893	3.580170957	3.330466629	2.716096391	1.963182353

Technology definitions are given in the PCC Classification Handbook located in the RPS Compliance Reporting Section of: https://www.cpuc.ca.gov/RPSComplianceReporting/ For contracts that have been executed but still require formal approval (PCV or other formal approval process) for purchases and safes. The "Various" rechnology type is to be used in the case of contracts encompassing multiple facilities where the generation type is not yet known. For IOUs and SMJUs: Include all executed contracts that required CPUC approval. For CCAs and ESPs: Include all executed contracts that required CPUC approval. For CCAs and ESPs: Include all executed contracts that required CPUC approval. For CCAs and ESPs: Include all executed contracts that required CPUC approval. For CCAs and ESPs: Include all executed contracts that required CPUC approval. For CCAs and ESPs: Include all executed contracts that required CPUC approval. For CCAs and ESPs: Include all executed contracts that have been approved through relevant formal approval processes. \*Note: \*\*Note: \*\*\*Note: \*\*\*Note:

LSE Nai	LSE Nan San Diego Gas & Eelectric		Input Required		No Input Required	Þe						
Date File	7/22/2024											
Table	Table 3: Cost Quantification (Actual Procurement / Generation and Sales, MWh)	Actual RPS-Elig	ible Procurement Sales (MWh)	Actual RPS-Eligible Procurement / Generation and Sales (MWh)								
← (	Technology Type* (Procurement / Generation and Sales)	2021	2022	2023								
3 2	Biogas: Digester Gas Biogas: Landfill Gas	105,538	92,113	32679.67376								
4	Biodiesel											
2	Biomass											
9 /	Muni Solid Waste											
- 80	Small Hydro (Non-UOG)	1,514	1,774	3199.45274								
6	Conduit Hydro											
1 10	Water Supply / Conveyance											
12	Ocean Thermal											
13	Tidal Current											
4 4 4	Solar PV (Non-UOG)	3,208,374	3,292,292	1046406.64								
16	Wind	2,910,562	3,058,118	1141111.532								
17	Unbundled RECs (REC Only)											
9 5	Various (Index Plus REC)***											
20	UOG: Small Hydro											
21	UOG: Solar PV	2,756	949	1500.894								
22	UOG: Other											
23	Executed REC Sales (MWh)		1,830,000									
24	Total RPS Eligible Procurement (MWh)	6,228,743	4,615,246	2,224,898								
								0	A MARIE V			
Table 4: C	Table 4: Cost Quantification (Forecast Procurement / Generation and Sales, MWh)				Forecast KP	s-Eligible Procu	rement / Genera	Forecast RPS-Eligible Procurement / Generation and Sales (MWN)	(MWh)			
-	Executed But Not Approved RPS-Eligible Contracts (Purchases and Sales)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2	Biogas: Digester Gas											
3	Biogas: Landfill Gas											
4	Biodiesel											
2	Biomass											
9	Muni Solid Waste											
7	Geothermal											
∞	Small Hydro (Non-UOG)											
6	Conduit Hydro											
10	Water Supply / Conveyance											
11	Ocean Wave											
15	Ocean Thermal											
13	Tidal Current											
14	Solar PV (Non-UOG)											
15	Solar Themal											
16	Wind											
17	Unbundled RECs (REC Only)											
18	Various (Index Plus REC)***											
20	Fuel Cell											
21	UOG: Small Hydro											
22	UOG: Solar PV											
23	UOG: Other											
24	Executed REC Sales (MWh)											
25	Total Executed But Not Approved RPS-Eligible Procurement	0	0	0	0	0	0	0	0	0	0	0

26	Executed and Approved RPS-Eligible Contracts (Purchases and Sales) ****	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
27	Biogas: Digester Gas											
28	Biogas: Landfill Gas	36,090	28,446	28,446	4,584	4,584	4,584	4,584	1,711	0	0	0
59	Biodiesel											
30	Biomass											
31	Muni Solid Waste											
32	Geothermal											
33	Small Hydro (Non-UOG)	2,733	2,733	2,733	2,733	2,733	2,733	2,733	2,733	2,733	2,733	2,733
34	Conduit Hydro											
35	Water Supply / Conveyance											
36	Ocean Wave											
37	Ocean Thermal											
38	Tidal Current											
39	Solar PV (Non-UOG)	819,530	854,981	890,827	926,817	926,321	925,825	924,957	915,100	914,607	893,296	754,250
40	Solar Thermal											
41	Wind	772,911	636,851	597,583	596,822	596,822	596,822	596,822	596,822	569,233	376,779	191,260
42	Unbundled RECs (REC Only)											
43	Various (Index Plus REC)***											
45	Fuel Cell											
46	UOG: Small Hydro											
47	UOG: Solar PV	829	642	642	640	617	617	219	617	219	617	617
48	UOG: Other											
49	Executed REC Sales (MWh)											
20	Total Executed and Approved RPS-Eligible Procurement	1,632,093	1,523,653	1,520,231	1,531,596	1,531,077	1,530,581	1,529,713	1,516,983	1,487,191	1,273,425	948,861
51	Total RPS Eligible Procurement (MWh)	1,632,093	1,523,653	1,520,231	1,531,596	1,531,077	1,530,581	1,529,713	1,516,983	1,487,191	1,273,425	948,861
*Note:	Technology definitions are given in the PCC Classification Handbook located in the RPS	RPS Compliance	Reporting section	Compliance Reporting section of: https://www.cpuc.ca.gov/RPSComplianceReporting.	ic.ca.gov/RPSCo	mplianceReportin	ıg/					
**Note:	For contracts that have been executed but still require formal approval (CPUC or other formal approval process) for purchases and sales	other formal approv	al process) for pur	chases and sales.								
***Note:	The "Various" technology type is to be used in the case of contracts encompassing multiple facilities where the generation type is not yet known	g multiple facilities	where the generat	ion type is not yet k	nown							
****Note:	Por IOUs and SMJUs: Include all executed contracts that required CPUC approval. For CCAs and ESPs: Include all executed contracts that have been approved through relevant formal approval processes.	. For CCAs and E8	SPs: Include all exe	cuted contracts that	t have been app	oved through rele	evant formal app	roval processes.				

#### **APPENDIX 3**

#### **Information Only TOD Factor Workpapers**

Pursuant to D.19-02-007, SDG&E participated in a stakeholder process to develop information-only Time of Delivery factors ("TODs"), and the Commission approved SDG&E, PG&E's and SCE's May 29, 2019 Joint IOU Information-Only TOD Factor proposal ("TOD Proposal"). SDG&E's approved TOD Factors for 2020 and 2024 are within the Commission-approved May 29, 2019 TOD Proposal. Per OP 26 of D.19-12-042, below are workpapers to confirm there is a high correlation between the public information-only TOD factors and SDG&E's confidential forecasts. <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> D.19-12-042, OP 18.

<sup>&</sup>lt;sup>2</sup> To confirm there is a high correlation between the public information-only TOD factors, SDG&E uses 2025, which is in line with the May 2024 ERRA filing, and 2028, using the forward gas prices at the time of the May 2024 filing.

## CONFIDENTIAL TOD WORKPAPERS ARE NOT INCLUDED IN THE PUBLIC VERSION OF THE 2024 DRAFT RPS PLAN

## APPENDIX 9 Least Cost Best Fit

#### SDG&E's 20232024 RPS RFO Evaluation Methodology - Least-Cost Best-Fit

Below is the assessment methodology and process to be taken by SDG&E and the Independent Evaluator ("IE") to ensure that the bid selection process is transparent and does not favor any technology or counterparty, and is aligned with SDG&E's compliance requirements. Although SDG&E has worked diligently with its IE to develop this methodology, this document may require adjustment related to the specific product(s) being procured before issuing of the RFO in order to account for potential market, regulatory, and/or business context changes.

#### 1. Receive all bids prior to Bids by the closing date at Noon Pacific Standard Time Deadline

- a. Bids will be uploaded to the PowerAdvocate® website for any RPS RFO event, to which the IE will have access.
- <u>b.</u> By Noon on the day after closing, SDG&E will accept bids that, <u>because</u> were submitted by of technical difficulties, could not be uploaded to the PowerAdvocate® website. the designated offer submittal deadline.

#### 2. Organize Bid Data

b. The day after offer submittal deadline, the IE makes the call of "no more bids."

#### 2. After the day after closing, organize bid data

- a. The IE and SDG&E will compare folder structures and file sizes the offer inventory to ensure the bid population of the IE is identical to the bid population to be analyzed by the SDG&E RFO team. To the extent the folders do not match, a reconciliation effort begins until folders match.
- b. The relevant data of all bids is exported into a data table for analysis.

#### 3. <u>Perform Initial Bid Assessment & Completeness Conformance</u> Check

a. A snapshot of the key statistics of the bids is produced for presentation to the PRG. These statistics will not include prices; At this stage of the process, bids are being checked for conformance vis-à-vis the RFO requirements. Bids are reviewed for completeness and certain relative to the RFO's eligibility requirements.

#### 4. Quantitative Evaluation

a. Determine Congestion Cost: SDG&E will conduct a marginal analysis to determine the difference in locational pricing between the project's point of delivery and SDG&E's default load aggregation point ("DLAP"). SDG&E and the IE will add the relevant Congestion Charges to the Bids once derived or obtained from SDG&E Transmission.

- i. In the event that a congestion study is required, SDG&E and the IE will jointly prepare the relevant data needed for the SDG&E Transmission Planning team to calculate Congestion Costs. This process will group together, on a noname basis, the relevant data of bids (mainly anticipated generation and energy delivery profile) by interconnection points. The SDG&E evaluation team or IE will then forward this information to SDG&E's Transmission Planning team.
- ii. Transmission Planning will run studies to determine hourly congestion costs associated with each of the proposed offer groups and provide results to SDG&E's evaluation team and the IE.
- b. Determine Transmission Cost: For offers for new projects or projects proposing to increase the size of existing facilities, SDG&E performs an initial analysis of costs for transmission network upgrades or additions that are to be directly reimbursed to the bidder using the relevant transmission network upgrade cost studies submitted with the bids. SDG&E has a preference for project offers with transmission upgrade cost studies or equivalent process.
  - i. The total reimbursable transmission upgrade cost specified in the project's transmission studies will be divided by the number of years in which the utility will reimburse the network transmission costs to the bidder to produce an annual transmission upgrade cost.
  - ii. The present value of the annual transmission upgrade costs will be divided by the present value of the estimated energy deliveries during the contract period to produce the Transmission Cost Charge.
  - iii. SDG&E and the IE will add the relevant Transmission Cost Charges to the Bids once they are determined from the transmission cost studies submitted with the Bids and confirmed by both SDG&E and the IE after mutual agreement.
- c. Levelized Contract Cost: The contract cost is calculated based on the present value of the total cost of the contract over the term of the contract, converted to equal annual payments.

#### Calculate the

Net Market Value Calculation: Quantitative evaluation of bundled product offers will utilize Net Market Value (NMV) principles, calculated as follows:

- For bundled products NMV = [(Energy Benefit + REC Benefit + Ancillary Services
   Benefit + Capacity Benefit)] [(Levelized Contract Cost + Transmission Cost + Congestion Cost + Integration Cost Adder)]
- For unbundled RECs: the unbundled REC price measured in \$/MWh

#### A. Calculation of Offer Benefits

- **a. Energy Benefit:** The Energy Benefit is calculated based on <u>applicable</u> forecasted electricity prices for each contract year.
- **b.** Calculate the REC Benefit: The REC Benefit is calculated based on the Market Price Benchmarks ("MPB") used in Power Charge Indifference Adjustment ("PCIA") for each contract year.
- c. Calculate the Ancillary Services Benefit: (if any): The Ancillary Services ("A/S")

  Benefit is calculated based on a 5-year average of historical A/S prices. This ratio is applied to the forecasted electricity price for each A/S type: Spin, Non-Spin, Regulation Up and Regulation Down, for each month to determine the forecasted A/S prices. The forecasted A/S prices are multiplied by the product of the available A/S capacity for each of the A/S types and the expected commitment percentage to determine the A/S Benefit. The expected commitment percentage is a value cited by the CAISO in its most recent Annual Report on Market Issues Performance.
- d. Calculate the Capacity Benefit: (if any): To measure the resource's contribution to the system's reliability, Capacity Benefit will be calculated as a percentage of Capacity Value as described below. Capacity Value is based on the estimated Net Qualifying Capacity ("NQC") for each technology multiplied by SDG&E's forecasted capacity price. NQC will be calculated using the effective load carrying capacity methodology ("ELCC"). The most recently published ELCC values from the Integrated Resource Planning ("IRP") proceeding will be used. According to the proposed decision adopting the 2023 Preferred System Plan released by the Commission on January 10, 2023, ELCC values will be updated and published periodically by Commission staff. Any procurement associated with D. 21-06-035 or D. 23-02-040 will use the ELCC values specified in those decisions for the respective resource type.

 For projects located in SDG&E's service territory connecting to transmission or distribution facilities at a point that is electrically west of the ECO or Suncrest substations ("Local Area Projects") bidding as fully deliverable:<sup>1</sup>

Capacity Benefit = 100 % of Capacity Value

• For projects that are in the greater Imperial Valley ("IV") area as defined by the CAISO,<sup>2</sup> meaning those projects connecting to transmission or distribution facilities at a point that is at, or electrically east of, the ECO or Suncrest substations bidding as fully deliverable<sup>3</sup> and for projects other than Local Area Projects or IV Area Projects that still qualify for Resource Adequacy pursuant to the CAISO Tariff ("System Area Projects") bidding as fully deliverable:

Capacity Benefit = Capacity Value x 33.59%

• For all energy-only projects, or projects interconnected to non-California Balancing Authorities unable to provide resource adequacy benefits to SDG&E that are specific to the project being bid to SDG&E:

Capacity Benefit = 0

Resource adequacy substitutions will not be granted any non-zero Capacity Benefit projects under SDG&E's RPS bid process.

#### B. Calculate the Calculation of Offer Costs

a. Congestion Cost: SDG&E will conduct a marginal analysis to determine the difference in locational pricing between the project's point of delivery and SDG&E's default load aggregation point ("DLAP"). SDG&E and the IE will add the relevant Congestion Charges to the Bids once derived or obtained from SDG&E Transmission.

i. In the event that a congestion study is required, SDG&E and the IE will jointly prepare the relevant data needed for the SDG&E Transmission Planning team to calculate Congestion Costs. This process will group together, on a noname basis, the relevant data of bids (mainly anticipated generation and energy delivery profile) by interconnection points. The SDG&E evaluation

<sup>&</sup>lt;sup>1</sup> Projects connecting at the ECO or Boulevard Substation are considered to be IV Area Projects for these purposes.

<sup>&</sup>lt;sup>2</sup> Please Refer to the CAISO's 2014 Local Capacity Technical Analysis, Final Report and Study Results, April 30, 2013.

<sup>&</sup>lt;sup>3</sup> Projects connected to the Imperial Valley, Drew, Ocotillo, ECO or Boulevard Substations are considered to be IV Area Projects for these purposes.

- team or IE will then forward this information to SDG&E's Transmission Planning team.
- ii. Transmission Planning will run studies to determine hourly congestion costs associated with each of the proposed offer groups and provide results to SDG&E's evaluation team and the IE.
- b. Transmission Cost: For offers for new projects or projects proposing to increase the size of existing facilities, SDG&E performs an initial analysis of costs for transmission network upgrades or additions that are to be directly reimbursed to the bidder using the relevant transmission network upgrade cost, if any, from the bidders' offer forms and verified in project interconnection studies submitted with the bids.
  SDG&E has a preference for project offers with transmission upgrade cost studies or equivalent process.
  - i. The total reimbursable transmission upgrade cost specified in the project's
     transmission studies will be divided by the number of years in which the
     utility will reimburse the network transmission costs to the bidder to produce
     an annual transmission upgrade cost.
  - ii. The present value of the annual transmission upgrade costs will be divided by the present value of the estimated energy deliveries during the contract period to produce the Transmission Cost Charge.
  - iii. SDG&E and the IE will add the relevant Transmission Cost Charges to the Bids once they are determined from the transmission cost studies submitted with the Bids and confirmed by both SDG&E and the IE after mutual agreement.
- c. Levelized Contract Cost: The contract cost is calculated based on the present value of the total cost of the contract over the term of the contract, converted to equal annual payments.
- **d.** Renewable Integration Cost Adder:<sup>4</sup> If applicable, the integration cost adder will be calculated using the adopted interim valuation methodology. This methodology calculates two components for the cost of integration:
  - 1. Variable integration cost

<sup>&</sup>lt;sup>4</sup> SDG&E's valuation process does not lead to double-counting of the Integration Cost adder. The creation of SDG&E's price forecasts does not use the Integration Cost adder as an input. The Integration Cost adder is applied in the LCBF process during the NMV calculation, as a separate component that differentiates variable renewable energy resources from each other and other resource types. The calculated energy benefit attributed to renewable resources in the NMV calculation is the same with or without an Integration Cost adder, which is added later in the valuation process.

- 2. Fixed integration cost the cost to SDG&E of procuring additional flexible and non-flexible RA over the contract period. This is a product of (a) and (b) below:
  - a. The monthly increase (or decrease) in flexible capacity requirement due to the increment of wind or solar being considered for the solicitation. Calculated based on the overall system flexible capacity requirement and then applies the percentage contribution from wind and solar.
  - b. The forecasted monthly flexible RA price.
- e. Calculate Net Market Value: For bundled product purchase offers, convert Bid prices into the Net Market Value (NMV) prices as follows:

  For bundled products NMV = (Energy Benefit + REC Benefit + Ancillary Services Benefit + Capacity Benefit) = (Levelized Contract Cost + Transmission Cost + Congestion Cost) = (Integration Cost Adder)

For unbundled RECs: the negative unbundled REC price measured in \$/MWh

#### 5. Qualitative Evaluation

SDG&E will be conducting a qualitative evaluation in conjunction with the quantitative evaluation—by reviewing. Initially, offers undergo a conformance screen for completeness to the protocol requirements. To the extent offers are not conforming, SDG&E may discard the bid. Next, offer evaluation review qualitative factors including, but not limited to, the following: (in no particular order of preference):5

- Project Viability<sup>6</sup>
- Deliverability and reliability
- Benefits to Disadvantaged Communities: Disadvantaged Communities (DAC) are those identified as Environmental Justice (EJ) communities through California's Environmental Protection Agency's CalEnviroScreen 4.0. Offer documents must

<sup>&</sup>lt;sup>5</sup> As discussed above, procurement protocols may need to be adjusted to account for potential market, regulatory, and/or business context changes, which may include: evaluation criteria for existing or re-powered facilities; interconnection status, particularly as related to changes necessary to account for CAISO's Interconnection Process Enhancements; supply chain and permitting issues and other potential impacts to project schedules; developer experience and standing with SDG&E.

<sup>&</sup>lt;sup>6</sup> SDG&E considers project viability as a qualitative factor and relies on the Energy Division's Project Viability Calculator. For projects that SDG&E rejects due to low viability scores, SDG&E rescores the projects to affirm the bidder did not unfairly score itself too low. For projects that SDG&E shortlists, SDG&E rescores the project to affirm that the bidder did not unfairly score itself too high. Projects below a certain viability threshold will not be considered for the shortlist.

include any environmental or economic benefits that the proposed project would provide to EJ communities with high poverty or unemployment rates, and/or high emission levels of toxic air contaminants.

- Resource diversity
- Supplier diversity, including as defined in G.O. 156
- Environmental stewardship
- Rate Impacts
- Portfolio Needs
- Emissions targets
- Compliance with procurement requirements outside RPS
- Workforce Development Assessment: Offer documents must include projected California employment growth during construction and operation, including: number of hires; duration of hire; and indication of whether the bidder has entered into Project Labor Agreements or Maintenance Labor Agreements in California for the proposed project.

#### 6. Develop Shortlist:

SDG&E determines its Renewable Net Short ("RNS") by compliance period as described in its RPS Plan and ranks all the Bids by NMV price until SDG&E has met its need. The shortlist ranking enables SDG&E to determine which offers are most attractive based on an NMV price.

Offers with deliveries outside the acceptable RPS delivery windows will be considered non-conforming, unless SDG&E's need assessment has changed materially between the time of issuance of this RPS Plan and the determination of the shortlist.

#### 7. Final Shortlists:

a. The Offers will be ranked on a levelized Net Market Value, \$/MWh basis from highest ranking bids are subjected to a detailed conformance screen before being added to the shortlist. To the extent offers are not conforming, lowest value. SDG&E will likely discard (given the high number of anticipated offers) the bid.

b.a. SDG&E and the IE will then develop the preliminary final shortlists that includes congestion costs and transmission cost study results. shortlist based on the highest-ranking NMV of bids, while taking into account qualitative factors may impact the

<sup>&</sup>lt;sup>2</sup> Conformance check will start earlier if possible.

final shortlistin Section 5 in determining the least-cost, best fit for procurement goals.

- e.b. The preliminary final shortlist is prepared and shared with the PRG during the next available meeting.
- d.c. After discussion with the PRG and the Energy Division, SDG&E will determine the final shortlist.

### APPENDIX 10 RPS Procurement Protocol



#### SAN DIEGO GAS AND ELECTRIC COMPANY

ENERGY PROCUREMENT

8315 CENTURY PARK COURT, CP21D

SAN DIEGO, CA 92123

## SDG&E'S 20XX REQUEST FOR OFFERS (RFO) SEEKING ELIGIBLE RENEWABLE RESOURCES

ISSUED [INSERT]

OFFERS DUE [INSERT]

RFO WEBSITE [INSERT]

**EMAIL QUESTIONS/COMMENTS TO**RFO@sdge.com

INDEPENDENT EVALUATOR (IE)
[INSERT]

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#### 1.0 SCOPE OF REQUEST

As authorized by Decision (D.) [INSERT] and Advice Letter-XXXX approving San Diego Gas & Electric Company's ("SDG&E's") Renewable Program Standard ("RPS") Procurement Plan and solicitation protocols, SDG&E is issuing this Request for Offers ("RFO" or "solicitation") to solicit offers from eligible renewable energy generators. An entity responding to this RFO ("Respondent") agrees to be bound by the terms and conditions set forth in this document ("Solicitation Protocol"). SDG&E is seeking to procure [INSERT] MWh per year or [INSERT] MW to achieve the volumetric cap and capacity cap established in its Commission approved RPS Procurement Plan, as part of its Senate Bill ("SB") 100 RPS Compliance efforts. Resources offered must meet the California RPS eligibility criteria set forth by the California Energy Commission ("CEC"). (See Section 5.0 RPS Program Parameters for additional information.)

#### A. Procurement Needs

SDG&E is required by SB100 to serve its customers 60% of electricity retail sales with renewable resources by the end of Compliance Period ("CP") 6, ending December 31, 2030.

SDG&E must meet these goals by procuring renewable resources that meet the requirements of the products outlined in Public Utilities Code 399.16(b), summarized below:

Category 1 Bundled Products (Public Utilities Code 399.16(b)(1)(A-B)). Resources delivering Category 1 Product must:

- have first point of interconnection ("POI") with a California Balancing Authority ("CBA"); or
- have first POI with distribution facilities used to serve end users within a CBA; or
- be scheduled from the eligible renewable resource ("ERR") into a CBA without substituting electricity from another source<sup>2</sup>; **or**.
- have an agreement to dynamically transfer electricity to a CBA.

# Category 2 Firmed and Shaped Products (Public Utilities Code 399.16(b)(2):

For Category 2 product, to be Firmed and Shaped the ERR delivering such product must substitute electricity attribute deliveries by providing incremental electricity scheduled into a CBA within the same calendar year as the generation from the ERR for which it is substituting.

Category 3 Unbundled Renewable Energy Credits ("RECs"), (Public Utilities Code 399.16(b)(3):

<sup>&</sup>lt;sup>1</sup> SDG&E's 20XX RPS Procurement Plan

<sup>&</sup>lt;sup>2</sup> If using another source to provide real-time ancillary services required to maintain an hourly or sub-hourly import schedule into a CBA is permitted, but only the fraction generated by the ERR will count as Category 1.

• ERR products, or any fraction of the electricity generated, **including unbundled RECs**, that do not qualify under 399.16(b)(1-2)

The table below provides a high-level overview of SDG&E's procurement needs for this RFO. SDG&E's need is defined in terms of the time frame within which deliveries are needed and the product categories with which SDG&E intends to meet such needs. A more detailed discussion of RFO eligibility requirements is provided at Section 7.0.

[select as applicable]	Description of Procurement Need	Project Size [in MW and/or MWh]
Category 1	[select as applicable: "Long-term energy, short-term energy or fully deliverable"] products (term of [INSERT] years or less, projects with CODs as early as 20XX will be accepted, but the initial PPA delivery date will be January 20XX at the earliest, projects with CODs as late as 20XX will also be considered)	
Category 2	[select as applicable: "Long-term energy, short-term energy or fully deliverable"] products (term of [INSERT] years or less, projects with CODs as early as 20XX will be accepted, but the initial PPA delivery date will be January 20XX at the earliest, projects with CODs as late as 20XX will also be considered)	
Category 3	Unbundled RECs that will be generated in January of 20XX at the earliest with a preference for those generated in [Year(s) TBD]	

[select as applicable]: Proposed products may be for Peaking, Baseload, Dispatchable (unit firm), As-available or unbundled RECs. Proposed resources may include capacity (fully-deliverable), energy, or unbundled RECs from:

- 1) Re-powering of existing facilities;
- 2) Incremental capacity upgrades of existing facilities;
- 3) New facilities;
- 4) New facilities that are scheduled to come online during the years specified in this RFO that have excess or uncontracted quantities of power for a short time frame;
- 5) Existing facilities with expiring contracts; or
- 6) Eligible resources currently under contract with SDG&E. SDG&E will consider bids from facilities with which it has existing agreements that propose a price reduction and a term extension.

# B. Transmission and Deliverability

The generating facility and transmission interconnection must be designed and constructed in conformance with the CAISO's various reliability agreements, procedures, protocols, tariffs and standards. [MAY BE REVISED, based on the outcome of CAISO's Interconnection Process Enhancement (IPE): SDG&E has a preference for Projects that, at a minimum, have completed CAISO Generator Interconnection Procedures ("GIP") Phase II or equivalent process or exemption, and an existing interconnection agreement for the duration of the Power Purchase Agreements ("PPA") for existing facilities]. See RFO Section 4.0 – "RFO Response Instructions" for additional information.

# C. Power Purchase Agreements ("PPA")

Respondents offering *[select as applicable:* "bundled energy ("Category 1"), or firmed and shaped energy ("Category 2")"] product shall propose modifications to the power purchase agreement for energy only and/or energy plus capacity attributes, as applicable if the project(s) delivering such product is fully deliverable. PPA pricing may be subject to reduction if the total cost of network upgrades required to make the project deliverable exceed a dollar cap determined by SDG&E. Respondents offering Category 1 or 2 products must be poised to sign an agreement in substantially the form of the *[select as applicable:* "Long-Term Model, Short-Term Model or RPS Plus Storage"] Power Purchase Agreements ("PPA") (See Section 4.0 RFO Response Instructions). Agreement(s) must be executed as outlined in the RPS solicitation schedule and is (are) subject to CPUC approval. Additional resource criteria are described in Section 7.0 Resource Criteria.

# **D.** Deliverability

Respondents may provide bids for projects that will achieve Full Capacity Deliverability Status (FCDS), as defined by the CAISO Tariff and determined by the CAISO or, for projects that will not achieve FCDS, provide bids for Energy Only. Respondents may also choose to provide both FCDS and Energy Only bids for the same project. SDG&E intends that FCDS projects will count towards SDG&E's Resource Adequacy (RA) obligations when possible. In order to achieve FCDS, a project must apply for a deliverability study to be conducted by the CAISO. Respondents with winning bids for FCDS projects must demonstrate that: [TO BE UPDATED BASED ON THE CAISO'S IPE: (1) the project has been assessed for deliverability; or (2) the Respondent will request a deliverability assessment through the next available CAISO cluster window.] This condition must be met for winning bids that will interconnect at either the distribution or transmission level. For winning FCDS project bids that result in an executed and approved PPA, during the project development process, the project is at a minimum required to obtain final interconnection studies (i.e. for transmission level projects, a final Phase II interconnection study report, or for distribution level projects, a final interconnection facilities study report (or Phase II study equivalent)). Note, however, projects located in the Imperial Valley and dynamically transferred via pseudo-tie into SDG&E's service territory by the CAISO must submit Energy Only bids and may offer in projects

that may count as RA if the project can demonstrate Maximum Import Capability (MIC) allocations.

# E. [Select if applicable: "Unbundled REC Agreements

Respondents offering unbundled RECs (Category 3) products shall offer unbundled RECs from an eligible renewable resource that can meet the criteria described herein and is registered in WREGIS. Seller of Category 3 products shall enter into an Edison Electric Institute ("EEI") Master Agreement with SDG&E if it has not done so already. The Model REC Agreement will be appropriate for Respondents offering Category 3 products (See Section 4.0 RFO Response Instructions). Agreement(s) must be executed as outlined in the RPS solicitation schedule and is (are) subject to CPUC approval. Additional resource criteria are described in Section 7.0 Resource Criteria."

# F. Participation from Diverse Business Enterprises

SDG&E strongly encourages Diverse Business Enterprises ("DBEs"), Women-Owned, Minority-Owned, Disabled Veteran-Owned, Lesbian-Owned, Gay-Owned, Bisexual-Owned and/or Transgender-Owned Business Enterprises ("WMDVLGBTBEs") as defined in G.O. 156,<sup>3</sup> to participate in the RPS program and in this RFO. Furthermore, SDG&E encourages developers to utilize DBEs during various stages of project development and construction. As a part of G.O. 156, SDG&E will require developers to identify and verify their DBE contractors/subcontractor spending if any. Additional information on SDG&E's DBE program and utilizing DBEs can be found at:

https://www.sdge.com/more-information/doing-business-with-us/supplier-diversity?keywords=supplier%20diversity and http://www.cpuc.ca.gov/puc/supplierdiversity/

Like other qualitative factors, in the event of a tie between two Offers, SDG&E will consider a Respondents status as a DBE and or a Respondent's plan to utilize the services of DBEs during project development. DBEs can request additional information by contacting SDG&E at vendorrelations@semprautilities.com.

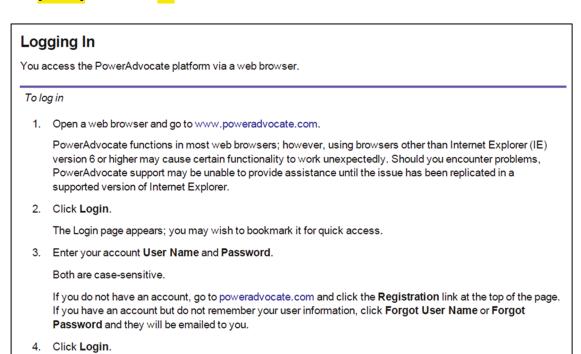
#### G. Standards of Care

Seller must comply with all applicable standards including safety and reliability standards requirements as set forth in Long-Term and Short-Term Model PPAs.

<sup>&</sup>lt;sup>3</sup> See http://www.thesupplierclearinghouse.com/eligibility/default.asp for the definition of a DBE.

#### 2.0 REO WEBSITE AND COMMUNICATIONS

The RFO and all subsequent revisions and documents are available for download from the RFO Website [insert] and the 20XX SDG&E RPS RFO event on the PowerAdvocate® website.



Potential Respondents are responsible for monitoring the RFO Website and PowerAdvocate® for subsequent updates, notices and postings. The 20XX SDG&E RPS RFO event on the PowerAdvocate® website contains the following: required RFO forms, documents, ands schedule. Respondents intending to bid and do not have an existing account with PowerAdvocate® must first register to create a username/password in order to receive access to the event. See below for instructions to log in/register:

First-time users must register as a Supplier using the instructions above and the Referral information below to access the RFO event:



Users with an existing PowerAdvocate® account may request for access to the event using the link below:

# [Link TBD]

The RFO website contains RFO forms and documents, RFO Schedule, and a Question and Answer forum. All questions or other communications regarding this RFO must be submitted via email to <a href="RFO@sdge.com">RFO@sdge.com</a> by the DEADLINE TO SUBMIT QUESTIONS as specified in Section 3.0 RFO Schedule. SDG&E will not accept questions or comments in any other form.

#### 3.0 RFO SCHEDULE

The following schedule and deadlines apply to this RFO. SDG&E reserves the right to revise this schedule at any time and in SDG&E's sole discretion. SDG&E will be utilizing a platform designed and maintained by PowerAdvocate® for launching and managing Offers received in response to this RFO. To access the RFO event, Respondent must register to create a username and password for PowerAdvocate®. A link and instructions on how to register is provided in Section 2.0, RFO Website and Communications. Respondents are responsible for accessing the RFO Website and PowerAdvocate® for updated schedules and possible amendments to the RFO or the solicitation process. Respondents shall register on PowerAdvocate® for the RFO no later than [DATE TBD], and submit Offers no later than [DATE TBD] at 12:00 PM PST.

NO.	ITEM	DATE
1.	RFO Issued	TBD
2.	Pre-Bid Conference / Bidder Outreach Event	TBD
	DEADLINE TO SUBMIT QUESTIONS	
3.	Question submittal cut-off date.	TBD
	Answers to questions will be posted on the website no later than January 31, 2020.	
4.	DEADLINE TO REGISTER for PowerAdvocate® access / to download RFO	TBD
	forms and documents	
	CLOSING DATE:	
5.	Offers must be uploaded to and received on PowerAdvocate® no later than 12:00	TBD
	PM Pacific Prevailing Time on <u>TBD.</u> February 7, 2020.	
6.	SDG&E Begins Bid Evaluation Process	TBD
7.	Shortlist determination	TBD
8.	SHORTLIST NOTIFICATION	TDD
	SDG&E notifies Shortlisted Bidders	TBD

NO.	ITEM	DATE
9.	SHORTLISTED BIDDERS ACCEPTANCE/WITHDRAWAL	
	Letter due from Shortlisted Bidders indicating:	+10 Days
J.	a. Withdrawal from SDG&E's solicitation; OR	after Shortlist Notification
	b. Acceptance of shortlisted standing and including Shortlist Acceptance Fee	
10.	SDG&E commences with PPA negotiations	+11 Days after Shortlist
		Notification
11.	SDG&E issues appreciation notices to unsuccessful Respondents	+2 week
		after Shortlisted Bidders
		accept/withdraw
12.	Target date to complete PPA negotiations	TBD
13.	SDG&E Submits Application with PPAs to CPUC for approval	TBD

# [SELECT IF NECESSARY: "PRE-BID CONFERENCE

SDG&E will host one pre-bid conference webinar. Though encouraged, participation in the pre-bid conference webinar is NOT mandatory in order to submit an offer. Please monitor the RFO Website periodically. The information and time will be posted as soon as arrangements are finalized.

Any party interested in attending this pre-bid conference should register on the PowerAdvocate® site and must email the following information to renewablerfo@semprautilities.com. Please limit your participation to two representatives per organization.

- Company name
- Attendees' names and titles
- Contact information (E-mail address and telephone number)"]

#### 4.0 RFO RESPONSE INSTRUCTIONS

Respondents are required to submit the forms submitted below. Forms are available on the RFO Website and PowerAdvocate®. The failure to provide the listed information may result in the proposal being deemed non-conforming and may disqualify the proposal from further consideration.

# **Limit on Number of Bids**

A MAXIMUM OF [NUMBER (X)] OFFERS PER RESPONDENT WILL BE ACCEPTED.

Fill out separate offer forms for each offer. Only one Project Description Form is required per Respondent to the extent that all bids can be adequately summarized in the space provided.

If the respondent has questions or concerns regarding bid limits, please contact SDG&E at: RFO@sdge.com

# A. Required Forms for Category 1 or Category 2 Offers:

If the respondent is submitting offers for more than one project, each project must be submitted in a separate compressed ZIP archive with its required forms. Forms and compressed ZIP archives must be clearly labeled to identify the project name and the submitted forms. All forms are located on the PowerAdvocate® site's "1. Download Documents" Tab and must be submitted by uploading to the "2. Upload Documents" Tab.

- 1) RPS Offer Form Respondents may submit up to six (6) offers per project.
- 2) **Project Description Form** Submit one per project.<sup>4</sup>
- 3) Credit Application
- 4) Long-Term Model PPA for terms 10 years or longer, Short-Term Model PPA for term less than 10 years or RPS Plus Storage PPA. These are the PPAs required for offers that include energy deliveries. Respondents shall download, populate, and redline the Model PPA.
- 5) Interconnection Documents<sup>5</sup> Respondents must provide an electronic copy of the proposed project's completed CAISO/WDAT Phase II Interconnection Study or equivalent process or exemption.<sup>6</sup> If the facility is existing, Respondent must provide the facility's interconnection agreement.<sup>7</sup>
- 6) Site Control Information
- 7) **Permitting Status** In the project description form, provide a description of permitting requirements and progress in meeting such requirements.
- 6)8) Resource Report Respondents must submit a verifiable fuel resource plan ("solar resource" or "wind resource" etc.) for the duration of the PPA based on

<sup>&</sup>lt;sup>4</sup> Please note this form MUST describe the substation at which the project interconnects

<sup>&</sup>lt;sup>5</sup> Note that interconnection documents should be in the name of the entity that will sign the PPA. If not, Respondent must assign such documents to the entity that will sign the PPA by the time that Respondent accepts its position on the shortlist.

<sup>&</sup>lt;sup>6</sup> D.13-11-024 required that the IOUs make this clarification to address potentially different requirements for existing or repowered facilities.

<sup>&</sup>lt;sup>7</sup> Note that interconnection documents should be in the name of the entity that will sign the PPA. If not, Respondent must assign such documents to the entity that will sign the PPA by the time that Respondent accepts its position on the shortlist.

historical actuals taken at the site with equipment maintenance and cleaning records, correlated to long term satellite data, with probabilities of different weather and productions scenarios for the site, range of equipment outputs, range of plant downtime and curtailments, historical and/or estimated project curtailments reports due to transmission or system constraints. For wind bids, you must submit the full AWS/GLGH or similar wind resource report.

- exporting the entire project that contains the prj, met, inv, pan, et.c files and submitting that file through PowerAdvocate. The contract DC must match the pvsyst file and the output of the file must match the 8760 in the Offer Form. All future discussions about plant production will refer to this prj file, where this future prj file will govern. No changes to plant design that changes the PVSyst model will be allowed unless written approval is given by SDG&E. Please set uptime percentage to 100% in PVSyst and enter that information in the Offer form. The model should include all losses to the interconnection point except for LGIA limitations losses, which will be computed in the Offer Form.
- 8)10) Diverse Business Enterprise Subcontracting Commitment and Reporting Requirements (DBE) Form (optional) Provide a copy of certification documents received from the California Public Utilities Commission. An application can be made before submission of the offer and referenced in the offer.
- <u>9)11)</u> Applicable to Category 2 Offers Only: Firming and Shaping/Substitute Energy Agreement Respondent must provide evidence of the proposed project's firming and shaping agreement (either draft or executed version if completed).

# B. [Select if applicable: "Required Forms for Category 3 Offers:

If the respondent is submitting offers for more than one project, each project must be submitted in a separate ZIP archive with its required forms. Forms and ZIP archives must be clearly labeled to identify the project name and the submitted forms. All forms are located on the PowerAdvocate® site's "1. Download Documents" Tab and must be submitted by uploading to the "2. Upload Documents" Tab.

- 1) **RPS Offer Form** Respondents may submit up to six (6) offers per project to this solicitation.
- 2) **Project Description Form** Submit one per project.<sup>8</sup>
- 3) Credit Application

4) **Model REC Agreement** – Required for offers for unbundled RECs only. Respondents shall populate and redline the Model REC Agreement."

<sup>&</sup>lt;sup>8</sup> Please note this form MUST describe the substation at which the project interconnects

The Project Description Form, Credit Application, and redlines to the applicable agreement(s) must be in Word or Word-compatible format (not in PDF). The Offer Form and Project Viability Calculator must be in Excel or Excel-compatible format (not in PDF).

Submissions containing unsolicited materials or submissions of individual bid documents in file formats other than the formats of the original bid forms will be rejected. This RFO is an electronic only Solicitation; Respondents need not submit paper documents or e-binders.

Any party interested in submitting an Offer must register to receive access to the SDG&E RPS RFO event on PowerAdvocate® in order to submit an Offer. To register, Respondents must follow the instructions outlined in Section 2, RFO Website and Communications. All Offers must be uploaded to the PowerAdvocate® no later than [12:00 P.M.], Pacific Prevailing Time, on the CLOSING DATE (see RFO Schedule). If Respondents encounter technical difficulties with the uploading process, they should provide evidence of such difficulties (e.g. a screen shot of the error message) and email the bid to:

The RFO mailbox: <u>mailto:</u> RFO@sdge.com

Must CC IE: [insert]

Emails shall be received by 12:00 P.M., Pacific Prevailing Time, on the Closing Date.

All offer materials submitted in accordance with the above Response Instructions shall be subject to the confidentiality provisions of Section 11 Confidentiality of this RFO.

SDG&E will review and may utilize all information, if any, submitted by a Respondent that is not specifically requested as a part of any forms. During all stages of the RFO process, SDG&E reserves the right to request additional information from individual Respondents or to request any Respondent to submit supplemental materials in fulfillment of the content requirements of this RFO or to meet additional information needs. SDG&E also reserves the unilateral right to waive any technical or format requirements contained in the RFO.

#### 5.0 RESOURCE CRITERIA

# A. Compliance Period X Procurement Needs

In order to meet its RPS goals for Compliance Period X, SDG&E intends to solicit long term Category 1, 2, and 3 projects. SDG&E will accept bids from Category 1 and 2 facilities with CODs as early as 20XX, but the initial PPA delivery date will be January 20XX at the earliest, and projects with CODs as late as 20XX will also be considered. SDG&E will accept bids from Category 3 facilities that will be generated in January of 20XX at the earliest with a preference for those generated in 20XX and 20XX. SDG&E will accept offers for Unit Contingent Structures only (from a single facility). Requirements for such products are defined below.

# I. Category 1 and Category 2 Products

- a. Term: [INSERT] years or less;
- b. Pricing: fixed price for the bundled product, expressed in \$/MWh;
- c. Eligible Renewable Resources: All proposed resources must be CEC-certifiable as an eligible renewable resource ("ERR"), and cannot be subject to any moratorium or injunction against procurement by the California Energy Commission, California Public Utility Commission, or other legal authority with jurisdiction over utility procurement;
- d. Minimum Size: <u>[for capacity targets:</u> Net Contract Capacity must be ≥ [INSERT] MW (rated in alternating current, or "AC") or, for energy targets: Net Contract Quantity in an amount not less than [X] MWh]; ");
- e. Maximum Size: <u>[for capacity targets:</u> Net Contract Capacity must be ≤ [INSERT] MWs AC, <u>and</u> SDG&E encourages Respondents to limit deliveries to [INSERT] GWh per year<sup>9</sup> Net Contract Quantity in an amount not to exceed [X] MWh];
- f. Deliverability: Offers may provide energy only products or fully deliverable products. SDG&E will incorporate any deliverability value in its evaluation of these offers<sup>10</sup>;
- g. Green Attributes: All green attributes associated with the project must be tendered to SDG&E;
- h. Dynamic Transfers: Proposed resources using dynamic transfer for delivery to a CBA must provide documentation certifying the existence of the dynamic transfer arrangements. Such documentation must have a sufficient level of detail for SDG&E to determine conformance with Category 1 specifications, and to ensure that the dynamic transfer arrangement conforms with all other California state laws and decisions issued by the California Public Utilities Commission, the California Energy Commission, and any other regulatory authorities with jurisdiction over utility procurement in California;

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<sup>&</sup>lt;sup>9</sup> SDG&E's approved volumetric and capacity caps requested in 20XX RPS Procurement Plan

<sup>&</sup>lt;sup>10</sup> Resource Adequacy (RA) is a capacity attribute of a CAISO Participating Generator. An RA resource can provide either Local and/or System RA attributes based on its location as determined by the CAISO. Annually the CPUC and the CAISO assign a Net Qualifying Capacity (NQC) to each RA resource. In order to receive an NQC the resource's capacity output must be deliverable to load as described in the CAISO Tariff. The methodology for determining a resource's NQC can be found in the CPUC's Qualifying Capacity Methodology Manual located at: http://www.cpuc.ca.gov/NR/rdonlyres/2526B26C-BEEA-46FE-904F-A99D2F042FD8/0/AdoptedQCmethodologymanualfromD1006036APPENDIXB.doc.

i. Project Stewardship: The Respondent will own and operate<sup>11</sup> the facility(ies) associated with the offer and be responsible for development, land acquisition, fuel supply source and transportation, permitting, financing and construction for the facility(ies).

# II. [select as applicable: "Category 3 Products

- a. Pricing: the implied price for the Green Attributes, expressed in \$/MWh;
- b. Eligible Renewable Resource: All proposed resources must be CEC-certifiable as an eligible renewable resource ("ERR"), and cannot be subject to any moratorium or injunction against procurement by the California Energy Commission, California Public Utility Commission, or other legal authority with jurisdiction over utility procurement;
- c. REC Shelf Life: SDG&E will accept offers for RECs that have been generated no earlier than January 20XX, with a preference for RECs generated in 20XX and 20XX [to accommodate 36 \_month shelf life for unbundled RECs];
- d. Respondents must take all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in the Western Renewable Energy Generation Information System prior to the first delivery under the contract."1

# Additional Requirements for Shortlisted Category 1 and 2 Offers:

Additional requirements for Respondents successfully entering into an agreement for Category 1 or 2 products with SDG&E, for deliveries in Compliance Period [TBD], may include, but are not limited to:

- a. Firmed and Shaped Products only: The transaction must conform to the Commission's definition of a firmed and shaped product. The energy and associated RECs from the facility must be sold simultaneously to SDG&E; the energy must not be sold back to the generator and must not be already committed to another party; and the initial contract for substitute energy may be acquired no earlier than the time the energy is purchased by SDG&E and no later than prior to the initial date of generation of the energy under the terms of the contract between SDG&E and the facility;
- Respondents shall be financially and operationally responsible for the transmission gen-tie up to the point of interconnection with the local transmission/distribution network in accordance with applicable laws. Gen-tie costs must be included in the offer price for energy and/or capacity;
- c. Respondents must have a verifiable fuel resource plan for the duration of the PPA;
- d. Respondents will provide personnel required to operate the Facility;

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<sup>&</sup>lt;sup>11</sup> A direct contractual relationship with the operator of the facility is sufficient to meet this criteria.

- e. Resource operations will be scheduled in accordance with the CAISO Tariff, as from time to time modified. CAISO compliant real-time metering of the generation will be required for Energy Management System (EMS) data;
- f. Respondents must execute Participating Generator Agreements and Meter Service Agreements as required by the CAISO. If the project is outside of CAISO's jurisdiction, Respondents must make all interconnection and wheeling arrangements required;
- g. To facilitate monthly settlement processes, Respondents shall authorize Buyer to view the Facility's CAISO on-line meter data by identifying SDG&E as an authorized user with "read only" privileges on Schedule 3 of Respondent's Meter Service Agreement with the CAISO. For resources outside of CAISO's area, Respondent will provide similar access to SDG&E, if such an interface exists, with the system operator having jurisdiction over the project; and
- h. Respondents must take all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in the Western Renewable Energy Generation Information System prior to the first delivery under the contract."]

#### 6.0 RPS PROGRAM PARAMETERS

#### **CALIFORNIA RPS PROGRAM**

California's RPS program was established in 2002 by Senate Bill (SB) 1078 (Sher, 2002) with the initial requirement that 20% of electricity retail sales must be served by renewable resources by 2017. The program was accelerated in 2015 with SB 350 (de León, 2015) which mandated a 50% RPS by 2030. SB 350 includes interim annual RPS targets with three-year compliance periods and requires 65% of RPS procurement to be derived from long-term contracts of 10 or more years. In 2018, SB 100 (de León, 2018) was signed into law, which again increases the RPS to 60% by 2030 and requires all the state's electricity to come from carbon-free resources by 2045.

The CPUC implements and administers RPS compliance rules for California's retail sellers of electricity or load serving entities (LSEs), which include large and small investor-owned utilities (IOUs), electric service providers (ESPs) and community choice aggregators (CCAs). The California Energy Commission (CEC) is responsible for the certification of electrical generation facilities as eligible renewable energy resources and adopting regulations for the enforcement of RPS procurement requirements of public owned utilities (POUs).

The California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) jointly implement the RPS program. The CPUC's responsibilities include:

1. Determining annual procurement targets and enforcing compliance.

- 2. Reviewing and approving each IOU's renewable energy procurement plan.
- 3. Reviewing IOU contracts for RPS-eligible energy.
- 4. Establishing the standard terms and conditions used by IOUs in their contracts for eligible renewable energy.

Current law requires all Load Serving Entities (LSEs) are required by the CPUC to procure renewable energy in the amount of 60% of retail sales by 2030<sup>12</sup>. The 60% target sets increasing targets for three or four multi-year Compliance Periods ("CPs"). The targets are set at 33% by the end of CP3 (2017-2020), 44% by the end of CP5 (2025-2027) and 60% by the end of CP6 (2028-2030). The CPUC issued its first decision implementing the RPS Program, D.03-06-071 on June 19, 2003. This decision established certain basic RPS Program parameters. The CPUC has subsequently issued several additional RPS-related decisions in rulemaking proceeding R.04-04-026, and successor proceedings R.06-02-012, R.06-05-027, R.08-08-009, R.11-05-005, R-15-02-020 and the most current RPS proceeding, R-18-07-003. SDG&E will comply with all CPUC decisions governing RPS procurement. These decisions are publicly available on the CPUC's website at <a href="https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-power-procurement/rps/rps-program-overview/rps-decisions-and-proceedings">https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-power-procurement/rps/rps-program-overview/rps-decisions-and-proceedings</a>.

This RFO is being conducted in compliance with relevant statutory and regulatory directives. Requirements set forth within the law and all directives shall be incorporated herein by reference. A full text of the law and the above-mentioned CPUC decisions can be downloaded from the CPUC website. Respondents are encouraged to review all RPS-related, CPUC issued directives available on the same Internet websites and are responsible for understanding and abiding by all RPS provisions.

#### **RPS ELIGIBILITY CRITERIA**

Respondents successfully signing agreements with SDG&E must warrant that the resources being offered in response to this solicitation are certifiable as an "eligible renewable resource" by the California Energy Commission (CEC). Eligibility criteria are set forth by the CEC in its Renewable Portfolio Standard Eligibility Guidebook. The most recent revision to the CEC guidebook was adopted in January 2017. It can be downloaded from the CEC's website at <a href="https://efiling.energy.ca.gov/getdocument.aspx?tn=217317">https://efiling.energy.ca.gov/getdocument.aspx?tn=217317</a>. Respondents are encouraged to review all RPS-related, CEC issued directives available on the same Internet website and are responsible for understanding and abiding by all RPS provisions. All requirements set forth within the CEC's guidebooks and all RPS-related documents shall be incorporated herein by reference. SDG&E has no preferred "eligible renewable resource" or resource stack and will judge the merits of each bid based on the provisions of Section 9.0.

<sup>&</sup>lt;sup>12</sup> See, Senate Bill (SB) 100 (DeLeon, Stats. 2018, ch. 312)

Respondents are encouraged, although not required, to apply for pre-certification from the CEC in advance of submitting an offer. Pre-certification forms are available from the above-entitled guidebook.

#### PROCUREMENT REVIEW GROUP

The Procurement Review Group (PRG), a CPUC-endorsed entity, is composed of non-market participants such as ratepayers' advocacy groups, state energy and water commissions, power authorities, utility-related labor unions and other non-commercial, energy-related special interest groups. CPUC Decision D.03-06-071 established the role of the PRG in the RPS Program. The PRG is charged with overseeing the IOU's procurement process, reviewing procedural fairness, examining overall procurement prudence and providing feedback during all stages. From RFO language development to offer evaluation to contract negotiation, IOU's brief the PRG on a periodic basis during the entire process.

Respondents are hereby notified that revealing confidential offer information to the PRG is required during PRG briefings in accordance with Section 11 ("Confidentiality"). Each Respondent must clearly identify, as part of its offer, what type of information it considers to be confidential.

#### INDEPENDENT EVALUATOR

The CPUC requires each IOU to use an Independent Evaluator to separately evaluate and report on the IOU's entire solicitation, evaluation, and selection process for this solicitation. This will serve as an independent review of SDG&E's implementation of the RFO process and final selections. The Independent Evaluator shall make periodic presentations regarding its findings to the IOU, and the IOU's PRG including the CPUC Energy Division staff. The intent is to preserve the independence of the Independent Evaluator by ensuring free and unfettered communication between the Independent Evaluator and the CPUC as well as an open, fair, and transparent process that the Independent Evaluator can affirm.

SDG&E is committed to ensuring an open and transparent solicitation, and to providing a fair, reasonable and competitive process.

#### 7.0 SDG&E BACKGROUND

SDG&E is a regulated public utility that provides clean, safe and reliable energy service to 3.76 million consumers through 1.54 million electric meters and 900873,000 natural gas meters in San Diego and southern Orange counties. The utility's area spans 4,100 square miles. SDG&E is committed to creating ways to help customers save energy and money every day. SDG&E is a subsidiary of Sempra Energy (NYSE: SRE), a Fortune 500 energy services holding company based in San Diego. Connect with SDG&E's Customer Contact Center at 800-411-7343, on Twitter (@SDGE) and Facebook.



For a map California IOU service territories please visit:

http://www.energy.ca.gov/maps/serviceareas/electric service areas.html

#### 8.0 ASC 810 (FIN46) REQUIREMENTS

Generally Accepted Accounting Principles and SEC rules require SDG&E to evaluate whether or not SDG&E must consolidate a Seller's financial information. SDG&E will require access to financial records and personnel to determine if consolidated financial reporting is required. If SDG&E determines at any time that consolidation is required, SDG&E shall require the following during every calendar quarter for the term of any resultant agreement:

1.

- a) Unaudited financial statements with footnotes, within 15 calendar days of the end of each quarter;
- b) Audited financial statements with footnotes within 90 calendar days of the end of the year,
- c) Financial schedules underlying the financial statements, within 15 calendar days of the end of each quarter;
- d) Access to records and personnel, so that SDG&E's internal or independent auditor can conduct financial audits (in accordance with generally accepted auditing standards) and internal control audits (in accordance with Section 404 of the Sarbanes-Oxley Act of 2002)) and SDG&E can meet its SEC filing requirements. The rights and obligations under the agreement shall survive the termination of this agreement for a period of two years;
- e) Certifications by duly authorized representatives as may be reasonably requested by SDG&E; and
- f) Such other information as reasonably requested by SDG&E.
- g) If consolidation is required and considered material by the buyer to buyer's financial statements or its parent company's financial statements and buyer reasonably determines seller's internal controls over financial reporting are considered to be significantly deficient or a material weakness, then seller is to remediate within 30 calendar days;
- h) Seller to provide to buyer any SEC Form 8K disclosures, two calendar days after the occurrence of the SEC Form 8K event; and
- Seller to notify buyer at any time during the term of the agreement of any consulting (nonindependent) services proposed to be provided to seller by the buyer's independent auditor.

Any information provided to SDG&E shall be treated as confidential, except that it may be disclosed for financial statement purposes. Full details of SDG&E's requirements in connection with consolidation are set forth in the Model PPA or REC Agreement.

#### 9.0 EVALUATION CRITERIA AND SHORTLISTING

All incoming offers will be assessed for conformance based on the requirements outlined in Eligibility Requirements section. Respondents' offers shall conform with minimum participation criteria and eligibility requirements in order to be considered.

SDG&E will utilize the Offer Response Forms and narratives to evaluate all offers. Respondents are responsible for the accuracy of all figures and calculations. Errors discovered during negotiations may impact Respondents standing on the short-list. SDG&E has provided instructions and requirements for this solicitation. Initially, all offers will go through a conformance check to ensure that the project meets the requirements outlined in the RFO document. Conforming offers will then go through a Least-Cost / Best-Fit (LCBF).

SDG&E will periodically brief the members of the PRG during the various stages of evaluation. Upon completion of SDG&E's evaluation process, SDG&E will brief the PRG members regarding SDG&E's recommendations for its short-list. Based upon the comments and recommendations received from the PRG, SDG&E may modify the preliminary short-list as necessary.

SDG&E will consider any proposal by shortlisted counterparties to reduce the price for shortlisted projects provided that no other material changes are made to the terms of the offer.

### **EVALUATING OFFERS**

In order to be considered a conforming long-term offer, bids for renewable projects must, at a minimum, declare:

- a. A single specific geographical location (e.g. a set of contiguous parcels not bisected by a right-of-way) where the project will be located, with an address, coordinates, or a legal description of the project that conforms with the standards of the township/range/section methods of the Public Land Survey System;
- b. A single Guaranteed Commercial Operation Date when the project will provide the product described in the Bid Pricing Form, or a single Initial Commercial Operation Date for the beginning of deliveries from a project's initial phase together with a single Guaranteed Commercial Operation Date when the project will provide the maximum capacity described in the Bid Pricing Form;
- c. A single contract term, in years, between the Guaranteed Commercial Operation Date and the ending date of the contract;
- d. A single set of net output capacities, estimated contract deliveries, and energy prices for the duration of the contract term for quantities and prices as delivered to SDG&E, using alternating current (AC) and in the appropriate units of measure

- as specified on the Bid Pricing Form and inclusive of all losses due to expected curtailment, transmission losses, distribution losses, and transmission costs up to the point of delivery;
- e. Expected hourly capacity factors in the Typical Profile of the Bid Pricing Form, which shall be the ratio of estimated contract deliveries in megawatts (AC) delivered to SDG&E in a typical hour to the net output capacity at the point of delivery to SDG&E in megawatts (AC) during that same hour, in Pacific Time (including Pacific Standard Time and Pacific Daylight Time for appropriate time periods).

Absence of any of the above may result in a bid being rejected due to nonconformance. SDG&E may require clarifying information for certain projects in addition to those specified above; failure to provide such clarifying information in a timely fashion, or the provision of information which conflicts with original bid documents, may also result in a bid being rejected due to nonconformance.

Pursuant to D.XXXXXXXI<sup>3</sup>, SDG&E will evaluate all offers using the Least-Cost Best-Fit ("LCBF") Methodology. Passing each step below is required in order to advance to the next level, with the eventual Short-Listed offers having to pass all levels. The following provides a general description of each evaluation level.

- Step I: Check for Conformance. Check to ensure that all offers meet minimum RFO criteria. All offers meeting minimum requirements will pass Step I, will be deemed "conforming" and will move on to Step II.
- Step II: Preliminary Ranking and Short Listing. This assessment will be based on a project's Net Market Value, which consists of <a href="benefits">benefits</a> including: (1) the Energy Benefit, a project-specific energy, REC value, <a href="derived from forecasted electricity prices for each year adjusted by SDG&E's energy-only;">Services Benefit;</a>; and, <a href="if any">if any</a>, other benefits including ancillary services and <a href="tel:">(2)</a> the Capacity Benefit, which is the project-specific capacity value, depending on the project's technology, delivery profile, and location; less, offer costs including levelized contract costs, the sum of (a) the project's Levelized Contract Cost, (b) transmission network upgrade costs as determined by the costs of network upgrades as presented in the project's transmission cost studies, and <a href="other costs">other costs</a>, such as<a href="other costs">other costs</a> and renewable integration cost adders.

<u>Step III:</u> —Offers will be ranked on a levelized Net Market Value, <u>on a \$/MWh basis</u>, from highest to lowest value, <u>and shortlist determined by least-cost, best fit</u>

<sup>&</sup>lt;sup>13</sup> Decision on 20XX RPS Procurement Plans approving SDG&E's LCBF Methodology

<u>principles as relates to procurement targets</u>. After the preliminary short list has been approved by the PRG, the Offers may be modeled to determine impacts to SDG&E's portfolio. If modeling occurs, the shortlist may be updated based on modeling results which identify offers that best meet SDG&E's bundled customer needs.

SDG&E is evaluating offers in accordance with CPUC direction and criteria established for the RPS Program. SDG&E will be conducting a qualitative evaluation in conjunction with the quantitative evaluation (Step II) by reviewing qualitative factors including, but not limited to, the following: (in no particular order of preference)

- a) Project viability
- b) Deliverability and reliability
- c) Benefits to low income or minority communities
- d) Resource diversity
- e) Environmental stewardship
- f) Supplier Diversity, as defined in G.O. 156
- g) Rate Impacts
- h) Portfolio needs
- i) Emissions targets
- j) Compliance with procurement requirements outside of RPS
- k) Workforce Development Assessment

These factors will be used to differentiate long-term offers with similar costs for those resources under consideration near the annual procurement target. SDG&E requests that Respondents elaborate in their offer on the benefits of their project with regard to these factors. SDG&E notes that a project scoring low on the Project Viability Calculator may not be shortlisted even if it ranks high on the LCBF quantitative evaluation.

Consistent with CPUC Decision D.04-07-029 issued on July 8, 2004, SDG&E will treat dispatchability, curtailability and repowering as quantitative attributes and will evaluate these factors using quantitative methods. SDG&E requests that Respondents elaborate in their offer on the benefits of their project with regard to these factors.

ALL OFFERS SHALL BE VALID AND BINDING UPON THE RESPONDENT AFTER BEING SELECTED FOR THE SHORT LIST UNTIL CONTRACT EXECUTION.

Respondents as part of responding to the shortlist letter will have an opportunity to improve the pricing – keeping unchanged all other terms – of their offer as well as any time thereafter.

SDG&E WILL NOT REIMBURSE RESPONDENTS FOR THEIR EXPENSES UNDER ANY CIRCUMSTANCES, REGARDLESS OF WHETHER THE RFO PROCESS PROCEEDS TO A SUCCESSFUL CONCLUSION OR IS ABANDONED BY SDG&E IN ITS SOLE DISCRETION.

#### 10.0 REJECTION OF OFFERS

SDG&E SHALL TREAT ALL RESPONDENTS FAIRLY AND EQUALLY AND SHALL EVALUATE ALL OFFERS IN GOOD FAITH. WHILE SDG&E IS MINDFUL OF THE BENEFITS OF RENEWABLE ENERGY AND IS VIGOROUSLY PURSUING THE GOALS OF THE RPS, IT MAKES NO GUARANTEE THAT A CONTRACT AWARD SHALL RESULT FROM THIS RFO EVEN AFTER AN OFFER HAS BEEN SHORTLISTED. IN ADDITION, SDG&E NOTES THAT SHORTLISTING AN OFFER DOES NOT CONSTITUTE SDG&E ACCEPTANCE OF ALL REDLINED CHANGES TO THE PROFORMA CONTRACT. SDG&E RESERVES THE RIGHT AT ANY TIME, AT ITS SOLE DISCRETION, TO ABANDON THIS RFO PROCESS, TO CHANGE THE BASIS FOR EVALUATION OF OFFERS, TO TERMINATE FURTHER PARTICIPATION IN THIS PROCESS BY ANY PARTY, TO ACCEPT ANY OFFER OR TO ENTER INTO ANY DEFINITIVE AGREEMENT, TO EVALUATE THE QUALIFICATIONS OF ANY RESPONDENT OR THE TERMS AND CONDITIONS OF ANY OFFER, OR TO REJECT ANY OR ALL OFFERS, ALL WITHOUT NOTICE AND WITHOUT ASSIGNING ANY REASONS AND WITHOUT LIABILITY OF SEMPRA ENERGY, SDG&E, OR ANY OF THEIR SUBSIDIARIES, AFFILIATES, OR REPRESENTATIVES TO ANY RESPONDENT. SDG&E SHALL HAVE NO OBLIGATION TO CONSIDER ANY OFFER.

#### 11.0 CONFIDENTIALITY

EXCEPT WITH THE PRIOR WRITTEN CONSENT OF SDG&E, RESPONDENTS MAY NOT DISCLOSE (OTHER THAN BY ATTENDANCE ALONE AT ANY MEETING TO WHICH MORE THAN ONE RESPONDENT IS INVITED BY SDG&E) TO ANY OTHER RESPONDENT OR POTENTIAL RESPONDENT THEIR PARTICIPATION IN THIS RFO, AND RESPONDENTS MAY NOT DISCLOSE, COLLABORATE ON, OR DISCUSS WITH ANY OTHER RESPONDENT, OFFER STRATEGIES OR THE SUBSTANCE OF OFFERS, INCLUDING WITHOUT LIMITATION THE PRICE OR ANY OTHER TERMS OR CONDITIONS OF ANY INDICATIVE OR FINAL OFFER.

SDG&E WILL USE THE HIGHER OF THE SAME STANDARD OF CARE IT USES WITH RESPECT TO ITS OWN PROPRIETARY OR CONFIDENTIAL INFORMATION OR A REASONABLE STANDARD OF CARE TO PREVENT DISCLOSURE OR UNAUTHORIZED USE OF RESPONDENT'S CONFIDENTIAL AND PROPRIETARY INFORMATION THAT IS LABELED AS "PROPRIETARY AND CONFIDENTIAL" ON THE OFFER PAGE ON WHICH THE PROPRIETARY INFORMATION APPEARS ("CONFIDENTIAL INFORMATION"). RESPONDENT SHALL SUMMARIZE ELEMENTS OF THE OFFER(S) IT DEEMS CONFIDENTIAL. THE SUMMARY MUST CLEARLY IDENTIFY WHETHER OR NOT PRICE, PROJECT NAME, LOCATION, SIZE, TERM OF DELIVERY AND TECHNOLOGY TYPE (EITHER COLLECTIVELY OR INDIVIDUALLY) ARE TO BE CONSIDERED CONFIDENTIAL INFORMATION. CONFIDENTIAL INFORMATION MAY BE MADE AVAILABLE ON A "NEED TO KNOW" BASIS TO SDG&E'S DIRECTORS, OFFICERS, EMPLOYEES, CONTRACTORS, CONSULTANTS, THE INDEPENDENT EVALUATOR, AGENTS AND ADVISORS ("REPRESENTATIVES"), BUT SUCH REPRESENTATIVES SHALL BE REQUIRED TO OBSERVE THE SAME CARE WITH RESPECT TO DISCLOSURE AS SDG&E.

NOTWITHSTANDING THE FOREGOING, SDG&E MAY DISCLOSE ANY OF THE CONFIDENTIAL INFORMATION TO COMPLY WITH ANY LAW, RULE, OR REGULATION OR ANY ORDER, DECREE, SUBPOENA OR RULING OR OTHER SIMILAR PROCESS OF ANY COURT, SECURITIES EXCHANGE, CONTROL AREA OPERATOR, GOVERNMENTAL AGENCY OR GOVERNMENTAL OR REGULATORY AUTHORITY AT ANY TIME EVEN IN THE ABSENCE OF A PROTECTIVE ORDER, CONFIDENTIALITY AGREEMENT OR NON-DISCLOSURE AGREEMENT, AS THE CASE MAY BE, WITHOUT NOTIFICATION TO THE RESPONDENT AND WITHOUT LIABILITY OR ANY RESPONSIBILITY OF SDG&E TO THE RESPONDENT.

IT IS EXPRESSLY CONTEMPLATED THAT MATERIALS SUBMITTED BY A RESPONDENT IN CONNECTION WITH THIS RFO WILL BE PROVIDED TO THE CPUC, ITS STAFF, THE CEC, ITS STAFF, SDG&E'S INDEPENDENT EVALUATOR, SDG&E'S PRG, AND THE COST ALLOCATION METHODOLOGY ("CAM") GROUP. ADDITIONALLY, SDG&E MAY PROVIDE LIMITED INFORMATION SUCH AS (BUT NOT LIMITED TO) ON-LINE DATE, INTERCONNECTION POINT, TECHNOLOGY AND OTHER OPERATIONAL CHARACTERISTICS TO THE CAISO FOR MODELING PURPOSES. SDG&E WILL SEEK CONFIDENTIAL TREATMENT PURSUANT TO PUBLIC UTILITIES CODE SECTION 583 AND GENERAL ORDER 66-D OF THE CPUC, WITH RESPECT TO ANY RESPONDENT CONFIDENTIAL INFORMATION SUBMITTED BY SDG&E TO THE CPUC. SDG&E WILL ALSO SEEK CONFIDENTIALITY PROTECTION FROM THE CALIFORNIA ENERGY COMMISSION ("CEC") FOR RESPONDENT'S CONFIDENTIAL INFORMATION AND WILL SEEK CONFIDENTIALITY AND/OR NON-DISCLOSURE AGREEMENTS WITH THE PROCUREMENT REVIEW GROUP ("PRG"). SDG&E CANNOT, HOWEVER, ENSURE THAT THE CPUC OR CEC WILL AFFORD CONFIDENTIAL TREATMENT TO A RESPONDENT'S CONFIDENTIAL INFORMATION OR THAT CONFIDENTIALITY AGREEMENTS OR ORDERS WILL BE OBTAINED FROM AND/OR HONORED BY THE PRG, CEC, OR CPUC.

SDG&E, ITS REPRESENTATIVES, SEMPRA ENERGY, AND ANY OF THEIR SUBSIDIARIES DISCLAIM ANY AND ALL LIABILITY TO A RESPONDENT FOR DAMAGES OF ANY KIND RESULTING FROM DISCLOSURE OF ANY OF RESPONDENT'S INFORMATION.

#### 12.0 CREDIT TERMS AND CONDITIONS

SDG&E has the unilateral right to evaluate and determine the credit-worthiness of the Respondent relative to this RFO. The Respondent is required to complete, execute and submit the RFO credit application as part of its offer. The application requests financial and other relevant information needed to demonstrate creditworthiness. Respondents may download the application from the RFO Website. Winning bidders will be required to comply with the credit and collateral requirements set forth in the pro forma agreement. The amount of such requirements will be determined by SDG&E at the time of shortlisting and will be based on product, deliveries, price, and term, among other variables. For clarity, bidders should **not** include credit costs within their bid price (note: respondents are required to provide information regarding the added cost of collateral per \$100,000 increment to satisfy the initial collateral requirement if SDG&E decides not to extend unsecured credit - this information will be gathered via the credit application form. These costs will be considered as discussed in the quantitative evaluation section within this document).

#### A. SHORTLISTACCEPTANCE FEE.

The Shortlist Acceptance Fee is the greater of \$[TBD] or \$[TBD] per kW of project nameplate / aggregate program capacity and shall be required to be paid to SDG&E within ten (10) business days of notification by SDG&E that the offer has been shortlisted. The Shortlist Acceptance Fee shall be refunded (with interest for cash deposits) to Respondent if Respondent and SDG&E fail to reach an agreement and such failure is not due to Respondent's withdrawal of its offer or a material misrepresentation of pricing or non-pricing information provided by Respondent.

#### 13.0 CPUC APPROVAL

SDG&E shall submit all signed contracts to the CPUC for approval. CPUC approval will be required as a condition precedent to the effectiveness of any contract resulting from this RFO, however, SDG&E, in its sole discretion, may choose to take deliveries prior to such approval.

# **APPENDIX 11**

**RPS Sales RFP** 

# <del>2023</del>2024

# REQUEST FOR PROPOSAL FOR THE SALE OF RENEWABLE ENERGY PRODUCTS

**ISSUED** 

[]

**OFFERS DUE** 

[]

**RFP WEBSITE** 

[ ]

**EMAIL QUESTIONS/COMMENTS TO**RECsaleRFP@sdge.com

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#### 1.0 SCOPE OF REQUEST

As authorized by D.XX-XX-XXX, San Diego Gas & Electric Company ("SDG&E") is issuing this Request for Proposal ("RFP") seeking proposals from third parties ("Respondents") who are interested in purchasing products from eligible renewable resources under contract with SDG&E ("Resources"). By responding, Respondents are bound by the terms and conditions of this RFP. Products are derived from Resources that meet the California Renewables Portfolio Standard ("RPS") eligibility criteria set forth by the California Energy Commission ("CEC") (See Section 5.0 for additional information on RPS Program Parameters). This RFP solicits bids from financial institutions, energy service providers, utilities, municipal utilities, industrial end users, wholesale power marketers, and any other entity that would have a need to purchase bundled energy and Renewable Energy Credits ("RECs"), unbundled RECs, and/or RPS Contracts.

Table 1 — Acceptable Product Types<sup>1</sup>

Table 1 – Unit Contingent and Firm Products

	Bundled Firm	<b>Bundled Unit Contingent</b>	Unbundled
Product Types:	Bundled Energy and	Bundled Energy and RECs	Unbundled RECs
	RECs from pool of RPS-	from specific project(s)	
	eligible projects	only	
Minimum	1 Month	1 Month	One-time transfer of
Term:			firm quantities
Maximum	1 Year (12 months)	10 Years (120 months)	Recurring transfers of
Term:			unit contingent
			quantities during Term
			up to 10 years
Delivery	Start no earlier than	Start no earlier than	Start no earlier than
Window:	CPUC Approval ("X"),	CPUC Approval ("X"), End	CPUC Approval
	End no later than X+12	no later than X+120	
	months <sup>2</sup>	months <sup>3</sup>	
Point of	Point of	Point of Interconnection	n/a
Delivery:	Interconnection of the	of the Project to the	
	Project to the CAISO	CAISO Grid	
	Grid		
Min Volume:	No Min	No Min	No Min

<sup>&</sup>lt;sup>1</sup> RPS Contract Assignment/Novation may be offered in a solicitation.

<sup>&</sup>lt;sup>2</sup>-Respondent to propose dates for purchase (See "Delivery Period" in RFP WSPP Agreement).

<sup>&</sup>lt;sup>3</sup> Respondent to propose dates for purchase (See "Delivery Period" in RFP WSPP Agreement).

Table 2 – Portion of PCIA-eligible Volumes Not Allocated in VAMO

	Bundled Firm	<u>Unbundled</u>
Product Types:	Bundled Energy and RECs from available pool of PCIA-eligible projects	Unbundled RECs from the available pool of out-of-state PCIA-eligible projects
<u>Term:</u>	<ul> <li>Short-term transactions, for the remainder of the Compliance Period ending in 2027, or</li> <li>Long-term transactions, for the remaining terms of the PPAs s in the available pool of PCIA-eligible projects</li> </ul>	<ul> <li>Short-term transactions, for the remainder of the Compliance Period ending in 2027, or</li> <li>Long-term transactions, for the remaining terms of the PPAs s in the available pool of PCIA-eligible projects</li> </ul>
Point of Delivery:	Point of Interconnection of the Project to the CAISO Grid	<u>n/a</u>
<u>Volume:</u>	One percent increments of the "slice" or portion of the Bundled PCIA-eligible portfolio available after the VAMO process.	One percent increments of the "slice" or portion of the out-of-state PCIA-eligible portfolio available after the VAMO process.

# A. Definition of Products

SDG&E is required to serve its customers with 33% of retail sales from renewable resources by December 31, 2020, with reasonable progress made in 2017-2019 ("Compliance Period" or "CP" 3). Following CP3, the renewable procurement requirements are: (a) 44% of retail sales by December 31, 2024, with reasonable progress made in 2021-2023 (CP4); (b) 52% of retail sales by December 31, 2027, with reasonable progress made in 2025-2026 (CP5); (c) 60% of retail sales by December 31, 2030, with reasonable progress made in 2028-2029 (CP6); and (d) 60% of retail sales for all subsequent CPs.

SDG&E must meet these goals by procuring renewable resources that meet the requirements of the products outlined in Public Utilities Code 399.16(b). A summary of two eligible product types is provided below:

Load-serving entities ("LSEs") in California are required to serve its customers with 44% of retail sales by December 31, 2024, with reasonable progress made in 2021-2023 (CP4); (b) 52% of retail sales by December 31, 2027, with reasonable progress made in 2025-2026 (CP5); (c) 60% of retail sales by December 31, 2030, with reasonable progress made in 2028-2029 (CP6); and (d) 60% of retail sales for all subsequent CPs.

LSEs must meet these goals by procuring renewable resources that meet the requirements of the products outlined in Public Utilities Code 399.16(b). A summary of two eligible product types is provided below:

# (Public Utilities Code 399.16(b)(1)(A-B)): Bundled Energy Products

- Must have first point of interconnection ("POI") with a California Balancing Authority ("CBA"); or
- Must have first POI with distribution facilities used to serve end users within a CBA;
   or
- Must be scheduled from the eligible renewable resource ("ERR") into a CBA without substituting electricity from another source<sup>4</sup>; **or**
- Have an agreement to dynamically transfer electricity to a CBA.

# (Public Utilities Code 399.16(b)(3): Unbundled Renewable Energy Credits ("RECs")

• ERR products, or any fraction of the electricity generated, **including unbundled RECs**, that do not qualify under 399.16(b)(1-2).

Projects from SDG&E's allocation portion of its Power Charge Indifference Adjustment (PCIA)-eligible RPS portfolio, projects from the PCIA-eligible resources prior to the distribution of Voluntary Allocation and Market Offer ("VAMO"), or portion of PCIA-eligible resources that are not allocated and sold in the VAMO process made available are offered to eligible Participants are RPS-eligible resources that are interconnected to the CAISO grid, or located in Imperial Valley (or outside California) and dynamically transferred via pseudo-tie into CAISO.

SDG&E is not selling Resource Adequacy ("RA") with any of these transactions. The final portfolio sale will be shaped as specified by the seller in the bid form. Offered resources may be:

<sup>&</sup>lt;sup>4</sup> If using another source to provide real-time ancillary services required to maintain an hourly or sub-hourly import schedule into a CBA is permitted, but only the fraction generated by the ERR will count as a bundled energy product.

- 1) Re-powered or existing facilities;
- 2) New facilities;
- 3) New facilities that are scheduled to come online during the years specified in this RFP; and/or
- 4) Other facilities.

# B. Transaction Documents

# a) Bundled Energy Products (Bundled Firm and Bundled Unit Contingent)

Respondents bidding on bundled energy products must mark up SDG&E's Long-form Confirmation to the Western Systems Power Pool ("WSPP") Agreement. Any resulting agreement shall be subject to CPUC approval. Additional respondent criteria are described in Section [] "Products & Eligibility Requirements."

# b) <u>Unbundled REC Agreements (Unbundled Firm and Unbundled Unit Contingent)</u>

Respondents bidding on unbundled RECs products must mark up SDG&E's Long-form Confirmation to the WSPP or EEI Agreement. Any resulting agreement shall be subject to CPUC approval. Additional eligibility requirements are described in Section [] "Products & Eligibility Requirements".

#### 2.0 RFP WEBSITE AND COMMUNICATIONS

The RFP and all subsequent revisions and documents are available for download from the RFP Website [ ]. Potential Respondents are responsible for monitoring the RFP Website for subsequent updates, notices and postings.

Offers for the 2020 RPS REC Sale RFP must be submitted through the PowerAdvocate® website. Offerors intending to submit an Offer but who do not yet have an existing account with PowerAdvocate® must first register to create a username/password to receive access to the event. See below for instructions to log in/register:

First-time users must register as a <u>Supplier</u> using the instructions above and the Referral information below to access the RFP event:

# Logging In

You access the PowerAdvocate platform via a web browser.

#### To log in

1. Open a web browser and go to www.poweradvocate.com.

PowerAdvocate functions in most web browsers; however, using browsers other than Internet Explorer (IE) version 6 or higher may cause certain functionality to work unexpectedly. Should you encounter problems, PowerAdvocate support may be unable to provide assistance until the issue has been replicated in a supported version of Internet Explorer.

2. Click Login.

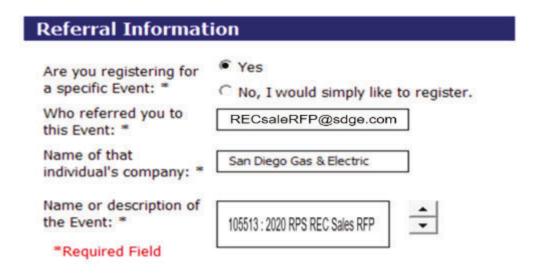
The Login page appears; you may wish to bookmark it for quick access.

3. Enter your account User Name and Password.

Both are case-sensitive.

If you do not have an account, go to poweradvocate.com and click the **Registration** link at the top of the page. If you have an account but do not remember your user information, click **Forgot User Name** or **Forgot Password** and they will be emailed to you.

4. Click Login.



Users with an existing PowerAdvocate® account may request access to the event by searing open RFPS or by using the link below:

Public Registration Link: [ ]

All questions or other communications regarding this RFP must be submitted via email to SDG&E's RFP inbox <u>RECsaleRFP@sdge.com</u> and <u>MUST</u> cc the Independent Evaluator (IE) [ ]. SDG&E will not accept questions or comments in any other form, except at the Bidder's Conference. Questions submitted after the deadline as specified in the RFP Schedule will only be answered at the sole discretion of SDG&E or the IE. All questions and their answers will be posted publicly on this website anonymously soon after receipt. We cannot respond directly to or confidentially to any questions.

#### 3.0 RFP SCHEDULE

The following schedule and deadlines apply to this RFP. SDG&E reserves the right to revise this schedule at any time and in SDG&E's sole discretion. Respondents are responsible for accessing the RFP Website for updated schedules and possible amendments to the RFP or the solicitation process.

NO.	ITEM	APPROX. DATE
1.	RFP Issued	
2.	Pre-Bid Conference (Webinar)	
	DEADLINE TO SUBMIT QUESTIONS	
3.	Question submittal cut-off date. Answers to all questions will be posted on the website no later than 3 business days following question submittal cutoff date	
4.	CLOSING DATE: Offers must be submitted to PowerAdvocate® website no later than NOON (Pacific Standard Time).	
6.	SDG&E notifies shortlisted Bidder(s).	
8.	SDG&E submits FINAL list of shortlisted Bidders to Commission and PRG.	
9.	SDG&E issues appreciation notices to unsuccessful Bidders.	
10.	SDG&E commences with Transaction Document negotiations.	
11.	SDG&E submits Tier 1 or Tier 3 Advice Letter(s) with agreements for Commission approval.	

#### **PRE-BID CONFERENCES**

SDG&E will host one pre-bid webinar conference on [ ]. While encouraged, participation in the pre-bid conference is NOT mandatory to submit an offer.— Please monitor the RFP Website periodically. The venue and time of the pre-bid conference will be posted as soon as arrangements are finalized.

Any party interested in attending this pre-bid conference and/or webinar should email the following information to <a href="RECsaleRFP@sdge.com">RECsaleRFP@sdge.com</a>.— Please limit your participation to two representatives per organization.

- Company name
- Attendees' names, titles and contact information

#### 4.0 RFP RESPONSE INSTRUCTIONS

Forms are available on the RFP Website. The failure to provide the listed information may result in the bids being deemed non-conforming and may disqualify the proposal from further consideration.

# **Required Forms for Bundled Energy Product Offers:**

- 1) Participation Summary and Bid Form
- 2) Credit Application
- 3) Transaction Document Respondents shall populate and redline the Transaction Agreement.

# **Required Forms for Unbundled REC Offers:**

- 1) Participation Summary and REC Bid Form
- 2) Credit Application
- 3) Model REC Agreement To be provided by SDG&E at time of shortlisting.

Submissions containing unsolicited materials or submissions of individual Offer documents in file formats other than the formats of the original Offer forms, will be rejected. This RFP is an electronic only Solicitation; Respondents need not submit paper documents nor e-binders.

All offer materials submitted in accordance with the above Response Instructions shall be subject to the confidentiality provisions of Section 10 "Confidentiality" of this RFP.

SDG&E will review and may utilize all information, if any, submitted by a Respondent that is not specifically requested as a part of any forms. During all stages of the RFP process, SDG&E reserves the right to request additional information from individual Respondents or to request any Respondent to submit supplemental materials in fulfillment of the content requirements of this RFP or to meet additional information needs. SDG&E also reserves the unilateral right to waive any technical or format requirements contained in the RFP.

ALL BIDS SHOULD BE VALID AND BINDING FOR THE DURATION OF THE RFP.

SDG&E WILL NOT REIMBURSE RESPONDENTS FOR THEIR EXPENSES UNDER ANY CIRCUMSTANCES, REGARDLESS OF WHETHER THE RFP PROCESS PROCEEDS TO A SUCCESSFUL CONCLUSION OR IS ABANDONED BY SDG&E IN ITS SOLE DISCRETION.

#### CALIFORNIA RPS PROGRAM

California's Renewable Portfolio Standard ("RPS") Program was adopted in 2002 and is codified at Public Utility Code sec 399.11, et seq.<sup>5</sup> In adopting the RPS legislation, the Legislature specifically found and declared that increasing California's reliance on renewable energy resources promotes the purpose of and may accomplish each of the following:

- Increase the diversity, reliability, public health and environmental benefits of the energy mix
- Promote stable electricity prices
- Protect public health and improve environmental quality
- Stimulate sustainable economic development and create new employment opportunities
- Reduce reliance on imported fuels
- Ameliorate air quality problems
- Improve public health by reducing the burning of fossil fuels

Current law requires retail sellers to procure renewable energy in the amount of 60% of retail sales by 2030.<sup>6</sup> Unlike the prior annual RPS program, the 60% regime sets increasing targets for multi-year Compliance Periods ("CPs"). The CPUC issued its first decision implementing the RPS Program, D.03-06-071 on June 19, 2003. This decision established certain basic RPS Program parameters. The CPUC has subsequently issued several additional RPS-related decisions in rulemaking proceeding R.04-04-026, and successor proceedings R.06-02-012, R.06-05-027, R.08-08-009, R.11-05-005, R.15-02-020, and R.18-07-003. SDG&E will comply with all CPUC decisions governing RPS procurement. These decisions are publicly available on the CPUC's website at: <a href="https://www.cpuc.ca.gov/RPS">https://www.cpuc.ca.gov/RPS</a> Overview/

#### **RPS ELIGIBILITY CRITERIA**

Resources being offered in this solicitation are certifiable as an "eligible renewable resource" by the CEC. Eligibility criteria are set forth by the CEC in its Renewable Portfolio Standard Eligibility Guidebook, which can be downloaded from the CEC's website at <a href="http://www.energy.ca.gov/renewables/documents/index.html">http://www.energy.ca.gov/renewables/documents/index.html</a>. Respondents are encouraged to review all RPS-related, CEC issued directives available on the same Internet website and are responsible for understanding and abiding by all RPS provisions. All requirements set forth within the CEC's guidebooks and all RPS-related documents shall be incorporated herein by reference.

<sup>&</sup>lt;sup>5</sup> See, Senate Bill (SB) 1078 (Stats. 2002 Ch. 516), as amended by SB 107, (Stats. 2006, Ch. 464).

<sup>&</sup>lt;sup>6</sup> See, Senate Bill (SB) 100.

#### PROCUREMENT REVIEW GROUP

The Procurement Review Group ("PRG"), a CPUC-endorsed entity, is composed of non-market participants such as ratepayers' advocacy groups, state energy commissions, power authorities, utility-related labor unions and other non-commercial, energy-related special interest groups. CPUC Decision D.03-06-071 established the role of the PRG. The PRG is charged with overseeing the IOU's procurement process, reviewing procedural fairness, examining overall procurement prudence and providing feedback during all stages. From RFP language development to offer evaluation to contract negotiation, IOUs brief the PRG on a periodic basis during the entire process.

Respondents are hereby notified that revealing confidential offer information to the PRG is required during PRG briefings in accordance with Section 11 ("Confidentiality"). Each Respondent must clearly identify, as part of its offer, what type of information it considers to be confidential.

#### INDEPENDENT EVALUATOR

The CPUC requires each IOU to use an Independent Evaluator to separately evaluate and report on the IOU's entire solicitation, evaluation, and selection process for this solicitation. This will serve as an independent review of SDG&E's implementation of the RFP process and final selections. The Independent Evaluator shall make periodic presentations regarding its findings to the IOU, and the IOU's PRG including the CPUC Energy Division staff. The intent is to preserve the independence of the Independent Evaluator by ensuring free and unfettered communication between the Independent Evaluator and the CPUC as well as an open, fair, and transparent process that the Independent Evaluator can affirm.

SDG&E is committed to ensuring an open and transparent solicitation, and to providing a fair, reasonable and competitive process.

#### 6.0 SDG&E BACKGROUND

SDG&E is a regulated public utility that provides clean, safe and reliable energy service to 3.7 3.6-million consumers through 1.5 1.4 million electric meters and 873900,000 natural gas meters in San Diego and southern Orange counties. The utility's area spans 4,100 square miles. SDG&E is committed to creating ways to help customers save energy and money every day. SDG&E is a subsidiary of Sempra Energy (NYSE: SRE), a Fortune 500 energy services holding company based in San Diego. Connect with SDG&E's Customer Contact Center at 800-411-7343, on Twitter (@SDGE) and Facebook.



For a map California IOU service territories please visit:

http://www.energy.ca.gov/maps/serviceareas/electric service areas.html

#### 7.0 PRODUCTS & ELIGIBILITY REQUIREMENTS

#### A. Compliance Periods.

In this RFP, SDG&E intends to offer bundled and unbundled RECs for the periods defined in Table 2 of this document. Such products are defined below.

#### I. Bundled Energy Products (Bundled Firm and Bundled Unit Contingent)

a. Term: 10 years or less

b. Pricing: Index Price plus Green Attributes Price \$/MWh

c. Volume: To be bid in

#### II. Unbundled REC Products (Unbundled Firm and Unbundled Unit Contingent)

a. Term: One-time transfer or recurring unit contingent transfers during specified term up to 10 years to designated WREGIS Account

b. Pricing: Bid REC price expressed in \$/MWh

c. Volume: To be bid in

#### **Eligibility Requirements**

1. WREGIS Account; and

2. Credit Capability (See Section 12.0 "Credit Terms and Conditions").

#### 8.0 EVALUATION CRITERIA AND SHORTLISTING

All incoming Bids will be assessed for conformance to the RFP requirements. Respondents shall conform to the minimum eligibility criteria in order to be considered, please see RFP Response Instructions.

SDG&E will utilize all the information provided in the required forms and narratives to evaluate all Bids. Respondents are responsible for the accuracy of all information provided in response to this RFP.

SDG&E will periodically brief the members of the PRG during the various stages of evaluation. Upon completion of SDG&E's evaluation process, SDG&E will brief the PRG members regarding SDG&E's recommendations for its shortlist. Based upon the comments and recommendations received from the PRG, SDG&E may modify the preliminary list of shortlisted bids.

#### QUANTITATIVE EVALUATION

SDG&E evaluates and ranks bids based on the pricing, volume and term information provided by the Bidders. SDG&E's analysis evaluates both quantitative and qualitative aspects of each bid to estimate its value to SDG&E's customers and its relative value in comparison to other Offers. SDG&E considers the value of selling Renewable Energy as compared to the potential value of using such Renewable Energy to defer future RPS purchases to meet RPS compliance targets through REC banking. The quantitative valuation of an Offer takes into account SDG&E's RPS position and any opportunity costs associated with each transaction. A bid that minimizes overall cost to SDG&E's customers and satisfies all volumetric and timing constraints will be selected. The Offer will be shortlisted if it fulfills the quantitative and qualitative criteria and SDG&E decides to move forward to close a transaction.

#### **QUALITATIVE EVALUATION**

Qualitative factors and benefits may be used to determine advancement onto the shortlist or evaluate tie-breakers, if any. In addition, SDG&E analyzes the qualitative aspects of each conforming offer to establish how well the offer satisfies priorities set out by the CPUC, including supplier diversity. SDG&E strongly encourages Diverse Business Enterprises ("DBEs"), Women-Owned, Minority-Owned, Disabled Veteran-Owned, Lesbian-Owned, Gay-Owned, Bisexual-Owned and/or Transgender-Owned Business Enterprises ("WMDVLGBTBEs") as defined in G.O. 156, to participate in this RFO. Furthermore, SDG&E strongly encourages developers to utilize DBEs during various stages of project development and construction. As a part of G.O. 156, SDG&E will require developers to identify, verify and report their DBE contractors/subcontractor spending if any. Additional information on SDG&E's DBE program can be found at: <a href="https://www.sdge.com/more-information/doing-business-with-us/supplier-diversity.!">https://www.sdge.com/more-information/doing-business-with-us/supplier-diversity.!</a>

#### ADHERENCE TO TERMS AND CONDITIONS

Respondents may not make material modification(s) to the supplied Transaction Documents. SDG&E will review modifications of any terms and conditions proposed in the Offer and consider the materiality of these changes. Material changes will result in disqualification.

#### **BID CONFORMANCE EVALUATION**

In addition to the elements described above, SDG&E may also reject a Bid if:

- SDG&E uncovers evidence of market manipulation in the bid preparation and Offer process;
- 2. The Respondent does not provide adequate evidence it meets minimum participation criteria;
- 3. If there is a question as to whether the bids meet minimum eligibility criteria;
- 4. If the Respondent cannot fulfill the terms and conditions of the supplied Transaction Documents;
- 5. If the Respondent is unable to comply with RFP timing and other solicitation requirements; and/or
- 6. Respondent in SDG&E's sole judgment may not be able to provide or maintain the level of security of the transaction.

#### 9.0 REJECTION OF OFFERS

WHILE SDG&E IS MINDFUL OF THE BENEFITS OF THIS RFP, IT MAKES NO GUARANTEE THAT A CONTRACT AWARD SHALL RESULT FROM THIS RFP EVEN AFTER A BID HAS BEEN SHORTLISTED. IN ADDITION, SDG&E NOTES THAT SHORTLISTING A BID DOES NOT CONSTITUTE SDG&E ACCEPTANCE OF ALL REDLINED CHANGES TO THE REQUIRED TRANSACTION AGREEMENT. SDG&E RESERVES THE RIGHT AT ANY TIME, AT ITS SOLE DISCRETION, TO ABANDON THIS RFP PROCESS, TO CHANGE THE BASIS FOR EVALUATION OF BIDS, TO TERMINATE FURTHER PARTICIPATION IN THIS PROCESS BY ANY PARTY, TO ACCEPT ANY BID OR TO ENTER INTO ANY DEFINITIVE AGREEMENT, TO EVALUATE THE QUALIFICATIONS OF ANY RESPONDENT OR THE TERMS AND CONDITIONS OF ANY BID, OR TO REJECT ANY OR ALL BIDS, ALL WITHOUT NOTICE AND WITHOUT ASSIGNING ANY REASONS AND WITHOUT LIABILITY OF SEMPRA ENERGY, SDG&E, OR ANY OF THEIR SUBSIDIARIES, AFFILIATES, OR REPRESENTATIVES TO ANY RESPONDENT. SDG&E SHALL HAVE NO OBLIGATION TO CONSIDER ANY BID.

#### 10.0 CONFIDENTIALITY

EXCEPT AS STATED BELOW OR WITH THE PRIOR WRITTEN CONSENT OF SDG&E, RESPONDENTS MAY NOT DISCLOSE (OTHER THAN BY ATTENDANCE ALONE AT ANY MEETING TO WHICH MORE THAN ONE RESPONDENT IS INVITED BY SDG&E) TO ANY OTHER RESPONDENT OR POTENTIAL RESPONDENT THEIR PARTICIPATION IN THIS RFP, AND RESPONDENTS MAY NOT DISCLOSE, COLLABORATE ON, OR DISCUSS WITH ANY OTHER RESPONDENT, OFFER STRATEGIES OR THE SUBSTANCE OF OFFERS, INCLUDING WITHOUT LIMITATION THE PRICE OR ANY OTHER TERMS OR CONDITIONS OF ANY INDICATIVE OR FINAL OFFER. RESPONDENT MAY DISCLOSE THEIR PARTICIPATION IN THIS RFP, THEIR OFFER INFORMATION, AND THE NEGOTIATION PROCESS, TO THE CPUC, ITS STAFF, THE PRG AND THE IE UNDER APPROPRIATE CONFIDENTIALITY PROTECTIONS.

SDG&E WILL USE THE HIGHER OF THE SAME STANDARD OF CARE IT USES WITH RESPECT TO ITS OWN PROPRIETARY OR CONFIDENTIAL INFORMATION OR A REASONABLE STANDARD OF CARE TO PREVENT DISCLOSURE OR UNAUTHORIZED USE OF RESPONDENT'S CONFIDENTIAL AND PROPRIETARY INFORMATION THAT IS LABELED AS "PROPRIETARY AND CONFIDENTIAL" ON THE OFFER PAGE ON WHICH THE PROPRIETARY INFORMATION APPEARS ("CONFIDENTIAL INFORMATION"). RESPONDENT SHALL SUMMARIZE ELEMENTS OF THE OFFER(S) IT DEEMS CONFIDENTIAL. THE SUMMARY MUST CLEARLY IDENTIFY WHETHER PRICE, PROJECT NAME, LOCATION, SIZE, TERM OF DELIVERY AND TECHNOLOGY TYPE (EITHER COLLECTIVELY OR INDIVIDUALLY) ARE TO BE CONSIDERED CONFIDENTIAL INFORMATION. CONFIDENTIAL INFORMATION MAY BE MADE AVAILABLE ON A "NEED TO KNOW" BASIS TO SDG&E'S DIRECTORS, OFFICERS, EMPLOYEES, CONTRACTORS, CONSULTANTS, THE INDEPENDENT EVALUATOR, AGENTS AND ADVISORS ("REPRESENTATIVES") FOR THE PURPOSE OF EVALUATING RESPONDENT'S OFFER, BUT SUCH REPRESENTATIVES SHALL BE REQUIRED TO OBSERVE THE SAME CARE WITH RESPECT TO DISCLOSURE AS SDG&E.

NOTWITHSTANDING THE FOREGOING, SDG&E MAY DISCLOSE ANY OF THE CONFIDENTIAL INFORMATION TO COMPLY WITH ANY LAW, RULE, OR REGULATION OR ANY ORDER, DECREE, SUBPOENA OR RULING OR OTHER SIMILAR PROCESS OF ANY COURT, SECURITIES EXCHANGE, CONTROL AREA OPERATOR, GOVERNMENTAL AGENCY OR GOVERNMENTAL OR REGULATORY AUTHORITY AT ANY TIME EVEN IN THE ABSENCE OF A PROTECTIVE ORDER, CONFIDENTIALITY AGREEMENT OR NON-DISCLOSURE AGREEMENT, AS THE CASE MAY BE, WITHOUT NOTIFICATION TO THE RESPONDENT AND WITHOUT LIABILITY OR ANY RESPONSIBILITY OF SDG&E TO THE RESPONDENT.

IT IS EXPRESSLY CONTEMPLATED THAT MATERIALS SUBMITTED BY A RESPONDENT IN CONNECTION WITH THIS RFP WILL BE PROVIDED TO THE CPUC, ITS STAFF, THE CEC, ITS STAFF, AND THE PRG. SDG&E WILL SEEK CONFIDENTIAL TREATMENT PURSUANT TO CPUC DECISION NUMBER 06-06-066 AND ITS SUCCESSIVE DECISIONS, PUBLIC UTILITIES CODE SECTION 583 AND

GENERAL ORDER 66-D OF THE CPUC, WITH RESPECT TO ANY RESPONDENT CONFIDENTIAL INFORMATION SUBMITTED BY SDG&E TO THE CPUC FOR THE PURPOSES OF OBTAINING REGULATORY APPROVAL. SDG&E WILL ALSO SEEK CONFIDENTIALITY PROTECTION FROM THE CEC FOR RESPONDENT'S CONFIDENTIAL INFORMATION AND WILL SEEK CONFIDENTIALITY AND/OR NON-DISCLOSURE AGREEMENTS WITH THE PRG. SDG&E CANNOT, HOWEVER, ENSURE THAT THE CPUC OR CEC WILL AFFORD CONFIDENTIAL TREATMENT TO A RESPONDENT'S CONFIDENTIAL INFORMATION OR THAT CONFIDENTIALITY AGREEMENTS OR ORDERS WILL BE OBTAINED FROM AND/OR HONORED BY THE PRG, CEC, OR CPUC.

SDG&E, ITS REPRESENTATIVES, SEMPRA ENERGY, AND ANY OF THEIR SUBSIDIARIES DISCLAIM ANY AND ALL LIABILITY TO A RESPONDENT FOR DAMAGES OF ANY KIND RESULTING FROM DISCLOSURE OF ANY OF RESPONDENT'S INFORMATION.

#### 11.0 CREDIT TERMS AND CONDITIONS

SDG&E has the unilateral right to evaluate and determine the credit-worthiness of the Respondent relative to this RFP. The Respondent is required to complete, execute and submit the RFP credit application as part of its offer. The application requests financial and other relevant information needed to demonstrate creditworthiness. Respondents may download the application from the RFP Website.

All credit support arrangements (e.g., parent guaranty letter of credit, or cash) must be negotiated prior to an offer being accepted as a winning offer. The form of the security (e.g. parent guaranty, letter of credit, or cash) will be at SDG&E's sole discretion and will depend on various factors including Respondent's credit-worthiness, product type, the volume and the term of the agreement. A guaranty template and a letter of credit template may be downloaded from the RFP Website as separate attachment to the Transaction Document.

#### 12.0 CPUC APPROVAL

SDG&E may, in its sole discretion, submit all signed agreements to the CPUC for approval. CPUC approval that is final and non-appealable will be required as a condition precedent to the effective date of any contract resulting from this RFP. Deliveries under any contract will not start prior to CPUC approval.

## APPENDIX 14 RPS SALES OFFER FORM

#### Renewable Products Offer Form (2022 BioRAM RPS REC Sale RFP)



General Insti	ructions	
Form Field Key:		
Free Form Field		
Pull Down Menu		
Instructions: - Follow instructions as they appear in each fields' comments or pop-up messages - Complete ALL fields. Enter N/A if the question is not applicable. Don't put units in the cells, just the - Fill out all fields in the units requested - Do not add, change, or move any cells, rows, columns or worksheets in the workbook - Confidential Information should be entered in Red Font - Limit and focus the discussion of the free form fields - Submit One Offer Form per offer variation - There is no limit on the number of Forms that can be submitted. Therefore, respondents are encounonsideration, such as bids with different tenors and escalators		ur
	Company Information	
Company Name Submitting Offer:		
Company Name on Potential Contract: Company Address:		
Company City		
Company State		
Company Zip		
Company Country		
Is the company Women/Minority/Disabled Veteran owned Business Enterprise as per CPUC General Order 156?		
How did the company hear of the RFO? (SDG&E website, SDG&E email, Colleague, Other (please elaborate)		
Does the Developer have the appropriate experience?		
	Company Representative	
<u> </u>	Primary Contact	Secondary Contact
Contact Name:		
Contact Title:		
Office Number:		
Cell Number:		
Email:		
Is the Respondent an affiliate of SDG&E?		
Does the Respondent have one or more contracts with SDG&E?		
	Corporate Profile and Experience	
Describe your corporate background and organizational structure for the project. Please submit a complete organizational chart with <b>all</b> affiliates and parents.		

#### For Firm and Unit Contingent Products:

Product Information						
Product:						
Point of Delivery:						
Comments / Other Information						
Is there additional relevan	t information necessary for	SDG&E to evaluate the merits of the proposal?				

Note: Tables below are illustrative and start/stop months will vary based on the timing in which SDG&E launches a solicitation.

Quantitative Description
Provide Bid Quantity and Bid Price in the schedule below.

Annually						
Date	Bid Quantity (RECs or MWhs)	REC Price (\$/MWh)				
Month-Year						
Month-Year						
Month-Year						
Month-Year						
Month-Year						
Month-Year						

Annually						
Date	Bid Quantity (RECs or MWhs)	REC Price (\$/MWh)				
<u>Year</u>						
<u>Year</u>						
Year						
Year						
<u>Year</u>						
Year						



# Renewable Products Offer Form Market Offer RFP

Product Information			
	Product Type:	Point of Delivery:	

If submitting multiple offers, Respondent must duplicate this "Product & Bid Information" tab for each distinct offer to be considered and submit in one Offer Form workbook to SDG&E.

Comments / Other Information Is there additional relevant information necessary for SDG&E to evaluate the merits of the proposal?

Quantital Provide selected percentages in 1% increments and Bid Price in the schedule below.

(Please note that all bids will bid in as unit contingent product. See attachments for the estimated volumes.)

	PCIA-elignie Portiolio Avallable After the VAIVIO Process	ter the VAIMO Process	
Date	Percentage of Long-Term Portfolio	REC Price (\$/MWh)	Long-term or Short-term**
Product to be Delivered			
For Multiple Offers - Mu	For Multiple Offers - Mutually Exclusive? Yes/No*		

\*for bidders who submit multiple offer forms, please confirm if the offer form is multially each usive with other offer forms. "Yes," means SIG&R may select one or more of the offers within the offer forms, and "No" means that SIG&R must select all offers

together.

\*\*Long-term means for so long as product is delivered to SDG&E for long-term PPAs in the PLOS II and short-term means beginning with Commission approval of transaction(s) through the end of the 2027 calendar year.

#### **APPENDIX 15**

#### SDG&E's Framework for Assessing Potential RPS Sales

#### SDG&E's 2023 Framework for Assessing Potential RPS Sales

SDG&E's 2023-2024 RPS Plan addresses the potential sale of renewable generation, stating that SDG&E will address opportunities as they arise, and SDG&E will bank, if possible, or sell, based on whether such a sale is beneficial for bundled customers.<sup>1</sup>

#### I. Products

SDG&E could sell bundled energy and Renewable Energy Credits (RECs) or unbundled RECs from its allocated portion of the PCIA-eligible RPS portfolio-. SDG&E could sell bundled energy products generated from and after the effective date of the resale contract<sup>2</sup> and unbundled RECs from any contract within its portfolio.<sup>3</sup> As described in SDG&E's RPS Procurement Plan, Attachment A, SDG&E may also right size its portfolio, in part, through sales, by assigning or novating contracts, in which case SDG&E will file a Tier 3 advice letter for Commission review and approval.<sup>4</sup>

#### II. Criteria

SDG&E will consider both quantitative and qualitative criteria when determining whether to bank or sell excess renewable generation from its allocation of the PCIA-eligible RPS portfolio including the portion of PCIA-eligible portfolio. As a threshold matter, if the results of this analysis indicate that a sales scenario would provide the greatest value to customers, then a sale may be pursued. If the banking vs. sales analysis indicates that banking provides the greatest customer value, then the excess generation will likely be banked.<sup>5</sup>

#### • Quantitative Criteria

 Banking vs. Sales Analysis: As described in more detail under Section 4 in Attachment A, SDG&E will consider the time value of revenues from the potential sale, and the potential replacement cost when evaluating potential sales opportunities.

<sup>&</sup>lt;sup>1</sup> See Section 4 of Attachment A.

<sup>&</sup>lt;sup>2</sup> D.11-12-052, pp. 37, 52.

<sup>&</sup>lt;sup>3</sup> D.11-12-052, pp. 36, 56.

<sup>&</sup>lt;sup>4</sup> Consistent with D.21-05-030 (PCIA DECISION), SDG&E will issue an RFI for contract Assignment and contract modifications.

<sup>&</sup>lt;sup>5</sup> Future Commission decisions within the PCIA proceeding may impact SDG&E's sales criteria.

 Impact on Rates: Another consideration is the magnitude of the impact a potential sale will have on customer bills.

#### Qualitative Criteria

- RPS Position: SDG&E regularly reviews its portfolio positions and considers actions based on future need, which include but are not limited to, procuring, selling and banking renewable generation.
- Procurement Mandates: Integrated Resources Plan ("IRP") Reliability procurement mandates that SDG&E solicit to procure a broad range of resources, including renewable generation, geothermal, and hybrid renewable energy plus storage, which provide additional renewable energy attributes towards SDG&E's RPS position.
- Load Departure: Future portfolio need and fit are regularly evaluated and encompass a review of load departure that will impact SDG&E's RPS portfolio positions.
- Market Liquidity: It is important to SDG&E that the market for renewable products remains liquid so that sales and purchases on behalf of customers can be made at competitive prices. Currently, SDG&E has one of the largest RPS portfolios in the State, and therefore it must consider possible impacts on the market of any potential sales volumes.
- Accounting Rules: SDG&E will consider the potential accounting impacts
  of selling renewable generation. Such impacts may include a scenario in
  which both the sales contract and the underlying contract(s) supplying
  the energy for the sales contract are marked to market value in each
  reporting period in accordance with generally accepted accounting
  principles. Due to market volatility, the mark to market adjustment
  associated with the sale may create volatility in SDG&E's financial
  statements.
- o Impact on GHG Reduction Goals and IRP Targets: With the passage of SB 350 and SB 100, the State is moving toward a more holistic planning process with the goal of reducing GHG emissions through a suite of tools, one of which is the RPS program.<sup>6</sup> As described under Section 2 of Attachment A, SDG&E has taken a strong leadership position with respect to the State's RPS targets, and in doing so has inherently advanced the goals of the IRP. The impact of any potential sale as it relates to SDG&E's

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<sup>&</sup>lt;sup>6</sup> See Section 4 of Attachment A.

progress towards IRP goals will be incorporated into SDG&E's analysis as appropriate.

 Uncertainty: SDG&E's analysis involves assumptions regarding future market pricing and structure, regulatory framework, and legislative goals many years into the future. Further, there is some uncertainty with respect to load departure and potential impacts of load returning. While SDG&E believes its assumptions to be reasonable, it acknowledges that markets change over time and the future is not predictable; therefore, this risk must be considered when evaluating any potential sale.

Additionally, SDG&E, along with all other public utilities, is required by law to seek and receive authorization from the Commission to sell assets valued above five million dollars that are useful in its services to the public.<sup>7</sup> In other words, SDG&E's quantitative and qualitative evaluation must determine that the generation being sold through the potential resale contract is in fact not needed by customers.<sup>8</sup>

#### III. Buyers

Potential buyers could contract with SDG&E under various scenarios. One scenario would be by responding to a Sales RFP that SDG&E may issue. As mentioned above, SDG&E's 2023-2024 Plan includes a Sales RFP that SDG&E may choose to issue, and if so, it would receive and evaluate purchase proposals from the market. AnotherOther scenarios would be through a bilateral transaction, a broker or exchange. In this scenario, a counterparty may approach SDG&E with an unsolicited proposal, or may be approached by SDG&E. Section 4 of Attachment A describes the potential benefits of a bilateral, broker and exchange -transactions, which is a valuable tool for both purchases and sales due to its flexibility in addressing situations that involve timing constraints and/or complex terms.

#### IV. Pricing

The overarching goal of SDG&E's sales framework is to identify the best possible outcome for its customers. As with SDG&E's past Commission-approved sales transactions, and considering Section 5 below, the appropriate price thresholds of any potential sales opportunity will be dependent upon the results of SDG&E's quantitative and qualitative evaluation at the time of the transaction, and its reasonableness will be determined by the Commission as it acts on SDG&E's advice letter requesting approval of the transaction.

<sup>&</sup>lt;sup>7</sup> Section 851.

<sup>&</sup>lt;sup>8</sup> For example, see Commission Resolution E-4741.

#### V. Maximum REC Sale Volume,

#### **Maximum REC Sale Volume Methodology:**

The following formula represents SDG&E's methodology for calculating its maximum REC sales volume for any particular portfolio content category (PCC) RECs it elects to sell for any given year. This methodology is also consistent in considering assignment or novation.

REC

For example, volumes from mandated programs such as BioRAM are deducted in SDG&E's methodology because the green attributes are mandated to be monetized pursuant to the Tree Mortality Non-Bypassable Charge decision; therefore, the associated RECs cannot be sold pursuant to this analysis.

<sup>&</sup>lt;sup>10</sup> Percent to be determined prior to solicitation, with Independent Evaluator and Procurement Review Group review and consultation.

#### **APPENDIX 17**

#### SDG&E's Request for Information

#### SDG&E's Request for Information – January 22 July 22, 2023:

The appendix herein provides the summary of SDG&E's Request for Information from its second RFI process. It includes a summary of responses received from the RFI solicitations issued in 2023 as required by Decision 21-05-030 on Request for Information, dated May 20, 2021.

SDG&E issued an RFI to 35 supplier counterparties of existing RPS\_eligible power purchase agreements and to 2,500 RPS market participants to determine interest in contract assignments and/or modifications to optimize SDG&E's portfolio. SDG&E is currently evaluating responses from both counterparties and third-party market participants. SDG&E has provided and will continue to provide updates to the PRG regarding SDG&E's RFI process. All resulting contracts, if there are any, from the RFI process, will be submitted to the Commission for approval via Tier 3 Advice Letter filing.

CONFIDENTIAL APPENDIX 16 - Table 1	2023 RFI Response from Supplier Counterparties  Projects Facility Size Est. Annual Generation Contract End Date Comments		2023 RFI Resposes from Market Participants  Third Party  Eacility Type  Duration  Capacity Size  Capacity Size  Capacity Size  Capacity Size  Anew information as of July 2024
		1 2 8 4	1 2 8 4 4

#### **APPENDIX 18**

#### **Achievable, Upfront Standards & Criteria**

#### SDG&E's Achievable, Upfront Standards and Criteria

CATEGORY	STANDARDS & CRITERIA				
<u>Volume</u>	SDG&E will consider volume limits in sales and/or purchases –(i.e.,				
	quantities within a volumetric cap (in MWh) and identified in, and				
	approved by the Commission in the RPS Plan)				
<u>Delivery Years</u>	<u>Less than 5 years forward</u>				
<u>Products</u>	PCC 1 / 2 / 3				
<u>Transaction Type</u>	Purchase/Sell				
<u>Price</u>	Sales - Price Floor				
	<u>Purchases - Price Ceiling or Strong Showing (if price is above the ceiling)</u>				
Entities Type	Brokers, Counterparties, and Exchanges				
Process/Method	IOU solicitations, 3rd party solicitations, bilateral, and broker/exchange				
	<u>transactions</u>				
<b>PRG Consultation</b>	PRG consultation for transactions greater than three months except for				
	those transactions which (1) cannot wait for PRG consultation, (2) are in				
	keeping with a strategy or plan already discussed with and reviewed by				
	the PRG, and (3) involve transparent exchanges, brokers, or electronic				
	solicitations				
<u>Administrative</u>	The quarterly RPS Reporting will be submitted to CPUC auditing staff and				
Review	the relevant Energy Division staff				
Attachments to	IE Report when applicable (ie., SDG&E held Solicitations), copy of				
<b>Quarterly Report</b>	executed agreement, summary of volumes transacted are within the				
	volumetric caps, strong showing for bilaterals				
<u>Cost Recovery</u>	<ul><li>Purchases &lt; or equal 1 year: ERRA</li></ul>				
	<ul><li>Purchases &gt; 1 year and &lt; 5: PABA subaccount</li></ul>				
	<ul> <li>Unit specific sales: PABA subaccount for sold resource</li> </ul>				
	<ul> <li>Non-Unit Specific resource: PABA subaccount pro rata allocation</li> </ul>				
	<ul> <li>IOU VA share: ERRA</li> </ul>				
	<ul> <li>Brokers &amp; exchange fees: ERRA/subaccount of PABA based on</li> </ul>				
	whether the purchase/sales would record to ERRA or PABA				
	<ul> <li>Request an order in Commission Decision for Tier 1 AL to modify</li> </ul>				
	tariffs as needed				
Contract Method	Either via Commission-adopted pro forma, or transactions using other				
	documentation that must include, at a minimum, the Commission-				
	adopted RPS Standard Terms and Conditions, with the exception of the				
	defined term "CPUC Approval"				
List of Approved	List of Approved Brokers and Exchanges for REC Sales and Purchases				
Brokers &	(See SDG&E's list of brokers and exchanges below)				
Exchanges	1000 00 000 01 01 01 01 01 01 01 01 01 0				
Exchanges					

#### SDG&E's List of Brokers and Exchanges<sup>1</sup>

<u>Brokers</u>
BGC Environmental Brokerage Services
BGC Financial, L.P.
Choice Natural Gas, LP and Choice Power, LP
Elk Mountain Energy, LLC
Energy Trade Management GP, LLC
Equus Energy Group, LLC
Evolution Markets Inc.
Intercontinental Exchange Inc.
IVG Energy, Ltd.
SCB Brokers LLC.
<u>TFS Brokers</u>
TFS Energy Futures, LLC
<u>Tullet Prebon Americas Corp</u>
Wells Fargo Advisors, LLC

<u>Exchanges</u>		
Intercontinental Exchange (ICE)		
New York Mercantile Exchange (NYMEX)		

Note: SDG&E will update its brokers and exchanges list in its Bundled Procurement Plan as needed.

<sup>&</sup>lt;sup>1</sup> SDG&E's 2014 Bundled Procurement Plan, on pages 48 and 49.

# APPENDIX 19 SDG&E's RPS Procurement Offer Form

#### 1. <u>Instructions</u>

								Page 1	
Renewable F	Products Of	fer Fo	orm						
Renewable Portfolio St	andard RFO - Rene	wables							
San Diego Gas and Elect	ric Company ("SDG&E	") is issuinç	this RFO	o meet the RPS co	mplian	ce requirem	ents.		
			1			1			
Form Field Key:									
Free Form Field									
Pull Down Menu									
Calculated Field									
Comment Field									
Instructions:									
- Follow instructions as t	they appear in each fi	elds' comn	nents or po	p-up messages					
- Complete all applicable fields in the "Contact Information", "Project Description", "Pricing", and "Typical Profile" workshee									ets
- Fill out all fields in the									
- Do not add, change, or	move any cells, rows	, columns o	or workshe	ets in the workboo	k				

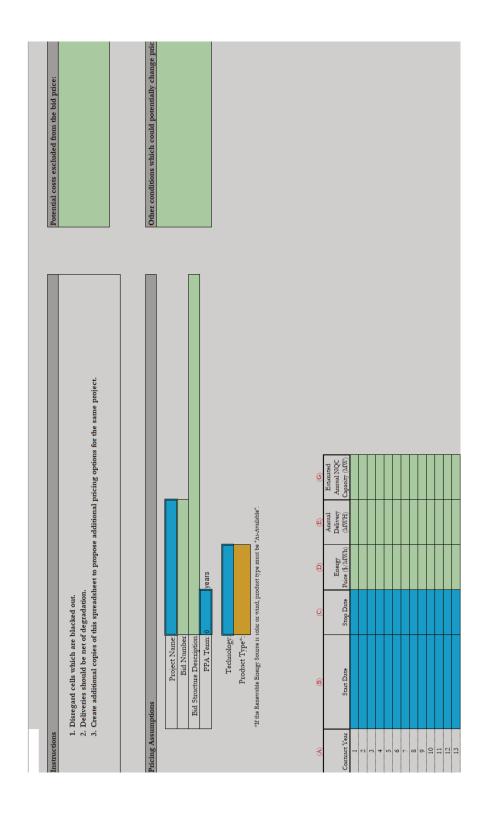
#### 2. Contact Information

			Page 2	
Renewable Products Offer Form				
Renewable Portfolio Standard RFO - Renewables				
Contact Information				
Primary Contact Information:				
Name:				
Title:				
Company:				
E-Mail:				
Phone Number:				
Secondary Contact Information:				
Name:				
Title:				
Company:				
E-Mail:				
Phone Number:				
Bidder Information:				
Business Address 1				
Business Address 2				
City				
State				
Zip Code				
General Information				
Bidder or Contact listed above is an affiliate of SDG&E?				
Bidder or Contact listed above has one or more contracts with SDG&E?				
Bidder or Sponsor is certified as a Diverse Business Entity (DBE)?				

#### 3. Project Description tab

Renewable Products Offer Form			
Renewable Products Offer Form			
Renewable Portfolio Standard RFO - Renewables			
Project Description			
Burlant Marian		<u>,                                      </u>	
Project Name: Site Address:			
Technology:			
Resource Origin:			
Solar Panel Nameplate Capacity (MWdc) or Maximum Wind Turbine Power Curve Output (MW			
Inverter Nameplate AC Capacity (MWac) or Nameplate Turbine Output (MW):	,		
Maximum Contract Capacity at the point of interconnect net of all plant losses (MWac):			
Interconnection Point:			
Maximum deliveries allowed in any hour per the LGIA (MWac)			
Nearest Substation:			
Deliverability restrictions:			
Interconnection Status:			
Deliverability Status:			
Full or Partial TP Deliverability Capacity (MW):			
Refundable Network Upgrade Costs:			
Technology (Solar Panel type or WTG drive type)			
Manufacturer and expected Model Number			
Tracking system (Solar Only)			
Installation Area (acres)			
Contract Start Date			
Contract End Date			
Contract Term (years)	0.0		
Required NTP Date			
Long-lead Time Renewable Resource: (Y/N)			
Brief Description of Project:			

#### 4. a. Bundled RECs Pricing



#### 4. b. Unbundled RECs Pricing

Other conditions which could potentially change pricing: Estimated Annual Delivery (MWH) Disregard cells which are blacked our.
 Deliveries should be net of degradation.
 Greate additional copies of this spreadsheet to propose additional pricing. Technolog:

Product Type\*\*

Product Type\*\*

We he Perevable Energy Source is sold or owind, product type must be "As-Available". REC Price (\$/MWh) years Stop Date Project Name:
Bid Number
Bid Structuse Description
PPA Term: 0 Start Date Contract Year

Renewable Products Offer Form

Renewable Portfolio Standard RFO - Renewables

#### 5. <u>Delivery Profile</u>

Smaller of LGIA or Contract Maximum

# Renewable Products Offer Form Renewable Portfolio Standard RFO - Renewables Instructions: File date Description Project Geographical Site Meteorology Data Simulation Variant Simulation Run Date Solar Plant's Location relative to TOD Timezone (hours east of PPT) For example, PPT is -8 GMT, if the timezone is -7 GMT (AZ for example), then the value entered should be 1 Expected Plant Uptime % excluding external system curtailments Solar or Wind

Annual 87	60 Hourly profile			
			WindVel (Solar or	Energy (E_Grid) (Solar
		T Amb (Solar or Wind)	Wind)	or Wind)
Hour of standard year (8760 hours)	W/m²	°C	m/s	MWh
1				
2				
3				
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18				
10				

#### **APPENDIX 20**

#### SDG&E's Transmission and Interconnection Delay

#### **PUBLIC**

#### SB 1174 Reporting

\*\*IMPORTANT\* All fields, except "Notes", are mandatory. Returned data with blank fields will be considered incomplete. The Input Format described below must be followed for each field, i.e. date fields must have dates entered. Tab sections in black text refer to transmission projects, tab sections in red text refer to generation projects.

Pursuant to SB 1174 [Hertcherg, Stat, 2022, Ch. 229] and Pub. Util. Code § 399.31(a)(2)(B), electrical corporations that own transmission facilities are required to provide information within their RPS Procurement Plans detailing the impact that delays to transmission facilities and network system upgrades have had on renewable energy and energy storage resources with executed interconnection agreements. Electrical corporations should use this template to report the related data and include data on all projects currently in development, regardless of if it has been delayed or not.

Electrical corporations shall list each of their transmission facility and system network upgrades that are currently in development, in the "Transmission Project Name" column/field on the "1. Transmission Delay Reporting" tab. For each project listed in the "Transmission Project Name" column/field on the "1. Transmission Delay Reporting" tab. fill in the corresponding data fields for the project. Fill in all construction and inservice dates for all projects regardless of if the project has been delayed or not. For each transmission facility and system network upgrade project, list every renewable energy and energy storage resource that depends on the project's completion in section 4: "GENERATION RESOURCE DEPENDENCIES".

Additionally, electrical corporations are to fill in the "2. Generation Reporting" tab and list every renewable energy and energy storage resource (with executed interconnection agreements) currently in the CAISO, WDAT, or other interconnection queues. For each resource make sure to list every transmission facility and system network upgrade project that it depends on in section 3: "CONNECTING TRANSMISSION PROJECTS".

			"1. Transmission D	elay Reporting" TAB
			Section 1: TRANSMIS	SION PROJECT DETAILS
Field #	Project Data Field	Input Format	Input Example	Input Description
1	Transmission Project Name	Text string.	Manzanita Substation	Project's name at the date of filing this report and this is currently in development. Identify all prior project names and alternative names currently used in different venues, including the name as approved and included in the CAISO's TPP.
2	Transmission Project Unique ID	Text string.	78493	Unique identification (ID) code(s) or number(s) for transmission project. List most specific (PG&E = Planning Order, SCE = SCE ID, SDG&E = Project ID).
3	Description	Text string.	Project will repair the transmission line connecting 4th and Townsend to the East Northfork station which failed as a consequence of the 2019 San Clemente Hedge Fire.	Brief project summary, including assets to be installed.
4	Status	Drop-down menu selection.	Construction (10%-25%)	See drop-down menu. Indicate the status of the project.
5	Action Taken	Drop-down menu selection.	Upgrade/Retrofit	See drop-down menu. If two or more options are required, select "Multiple Options" and provide remaining responses, pipe-delimited, in 'Notes' data field. If the purpose or purpose details relates to complying with a NERC, WECC, or CAISO requirement, list specific standard(s), requirement(s), and/or any contingencies that are being addressed.
6	Purpose	Drop-down menu selection.	Reliability	See drop-down menu. In the "Notes" data field, please explain a purpose identified as "Other" or provide additional details on the purpose identified.
7	Purpose Details	Drop-down menu selection.	Age/Condition - Anti Climb Guards	See drop-down menu. If the purpose details is to comply with a NERC, WECC, or CAISO requirement, list the standard, requirement, and/or any contingencies that are being addressed in the "Notes" data field.
			Section 2: TRANSMISSI	ON PROJECT VARIANCES
Field #	Project Data Field	Input Format	Input Example	Input Description
8	Original Construction Start Date	Date, formatted YYYY-MM-DD.	2025-07-30	The expected construction start date when the project was first approved.
9	Current Planned or Actual Construction Start Date	Date, formatted YYYY-MM-DD.	2024-12-15	At the time the data was extracted from the utility's database(s) as provided in Section 2.1.5 of the Transmission Project Review Process Description. If the project has not been delayed, the original and current construction dates should match.
10	Construction Start Date Change Initiator	Drop-down menu selection.	Utility	See drop-down menu. Select the party that initiated the change from the original construction start date. The initiator is the party closest to the source of the delay. Select N/A only if the project is NOT delayed.
11	Construction Start Date Change Reason	Drop-down menu selection.	Land Rights	See drop-down menu. Select the reason for the change from the original construction start date. Select N/A only if the project is NOT delayed.
12	Original In-service Date	Date, formatted YYYY-MM-DD.	2025-06-01	The expected in-service start date when the project was first approved.
13	Current Planned or Actual In-service Date	Date, formatted YYYY-MM-DD.	2021-01-01	At the time the data was extracted from the utility's database(s) as provided in Section 2.1.5 of the Transmission Project Review Process Description. If the project has not been delayed, the original and current in-service dates should match.
14	In-service Date Change Initiator	Drop-down menu selection.	Customer	See drop-down menu. Select the party that initiated the change from the original in-service date. The initiator is the party closest to the source of the delay. Select N/A only if the project is NOT delayed.
15	In-service Date Change Reason	Drop-down menu selection.	Financing	See drop-down menu. Select the reason for the change from the original in-service date. Select N/A only if the project is NOT delayed.
			Section 3: TRANSMIS	SION PROJECT NOTES
Field #	Project Data Field	Input Format	Input Example	Input Description
16	Notes	Text strings, inclusive of field identifiers in brackets, separated by	[4. Status] PPA negotiation failure.	For all fields in which an option including "[See Notes]" was selected, please enter a description or explanation here.
		line break.	[6. Purpose] Experimental breaker testing.	
				RESOURCE DEPENDENCIES
Field #	Project Data Field	Input Format	Input Example	Input Description
	Dependent In-Queue Generation Resource (CAISO and WDAT)	Text string.	0002CONV	CAISO and WDAT queue numbers. Identify all generation resources (with executed interconnection agreements) that are operationally dependent on this project. List all queue position #s both CAISO and WDAT generation projects. Types of queue position labels include, but are not limited to:  -##, or, if two queues have combined then the queue number will reflect ##,##.
17+				-####CONV is a two-to-three party contract conversion or is a conversion project repowering with new generation####PEC, that is an existing two-party generating facility that has yet to complete a contract conversion####Ff or generation resources that are dynamic or pseudo-ties (projects in a balancing authority area other than the CAISO but are treated as Participating Generators under the CAISO Tariff).
				If the generation resource is connecting to a PTO's distribution system then Queue numbers can include "W", "WDT", "WD", "GFID", "RD" or "Rule 21".
				Submitter may add additional columns for additional generation projects as necessary.

1 G	Generation Facility Name	Input Format Text string. Text string.	Section 1: GENERATIO Input Example Sierra Solar Farm Project 0002CONV	N RESOURCES DETAILS  Input Description  Name of generating facility (with executed interconnection agreement) that is currently in development.  CAISO queue or WDAT (Wholesale Distribution Access Tariff) queue number of the generating facility. Types of queue position labels include:
1 G	Generation Facility Name In-Queue Number (CAISO	Text string.	Sierra Solar Farm Project	Name of generating facility (with executed interconnection agreement) that is currently in development.
ı In	In-Queue Number (CAISO			
		Text string.	0002CONV	CAISO queue or WDAT (Wholesale Distribution Access Tariff) queue number of the generating facility. Types of queue position labels include:
2				- III, or, if two queues have combined then the queue number will reflect III, III IIII. ON is a two-to-three party contract conversion or is a conversion project repowering with new generation IIIII or an existing two-party generating facility that has yet to complete a contract conversion IIIII for generation resources that are dynamic or pseudo-ties (projects in a balancing authority area other than the CASO but are treated as Participating Generators under the CASO Tariff).  If the generation resource is connecting to a Participating TO's distribution system then Queue numbers can include "W", "WDT", "WD", "GFID", "NO" or "Nule 21".
3 G		TEXT STRING IN CAPS, underscore(_), #(s), underscore (_), TEXT STRING IN CAPS, #(s).	HENRUA_6_ACDSR3	The resource ID for this generating facility. Resource ID is assigned during "model build" stage of the New Resource implementation (NRI) Process.
4 Pr	Primary Developer		SuperSun Renewables, LCC	Developer with the highest percentage interest in the project.
	Developer Parent Company Name	Text string.	Orion Energy Corp.	Parent company name of primary developer. For wholesale aggregated contracts, use name of aggregator (e.g., Shell, Barclays etc.).
6 N	Nameplate Capacity	Number (decimal).	100.5	Total nameplate capacity of the whole project in MW. This should be the maximum MW it can deliver under the interconnection agreement.
	Expected Annual RPS Eligible Generation (MWh)	Number (decimal).	29396.8	The anticipated total energy generated by this RPS eligible resource each year in MWh.
	Planned Construction Start Date	Date, formatted YYYY-MM-DD.	2024-06-17	Identify planned construction start dates for in-queue resource or generation project.
		Date, formatted YYYY-MM-DD.	2025-09-01	Identify planned in-service date for in-queue resource and generation project.
	Interconnection Request Type	Drop-down menu selection.	Fully deliverable	See drop-down menu. Select deliverability status sought in interconnection agreement.
11 Te	Technology Type	Drop-down menu selection.	Biogas	See drop-down menu. Select resource technology type.
12 R	RPS Eligible	Drop-down menu selection.	Yes	Is this resource RPS-eligible? (Yes or No)
			Section 2: GENERATION	ON RESOURCES NOTES
Field # P	Project Data Field	Input Format	Input Example	Input Description
	Notes	Text strings, inclusive of field identifiers in brackets, separated by line break.	[11. Technology Type] Mixed technology, solar and battery storage.	For all fields in which an option including "[See Notes]" was selected, please enter a description or explanation here.
			Section 3: CONNECTING 1	TRANSMISSION PROJECTS
		Input Format	Input Example	Input Description
	Transmission Project Unique ID	Text string.	78493	Corresponding "Transmission Project Unique ID" from transmission projects in "1. Transmission Delay Reporting" tab, field 2, that this generating facility is dependent on.  Submitter may add additional columns for additional transmission projects as necessary.

Transmission L	Transmission Delay Reporting																			
he followed for each fi	St. except Notes: , are it.	The CHARLES AND SECTION OF THE MEMORY OF THE	stank heds will be considered to	incompress, the input forms	t desgraded on the instruction	ins the mule														
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Transmission Transmission Freign ST. Unique 10	Description Status	Actor Man Purpose Acres Coulo	Ougod Curetter Co	Supplied Correstor Constantine Contraction Organic August Contraction Contraction Output Survivo Contraction Contr	Cornert bosenicolos   Parente or Charge   Cardon le Adhard le balance   Cardon le bala	In service Date News	Dependent to Queue De Generalise Se succe (CASO) General and MOAN)	20 20 20 20 20 20 20 20 20 20 20 20 20 2	3.0 be us Departient In-Que us or EABO De earticles Fascuros (O450) a and MDMT)4	Department to Quara Department of the earther Present of Service (CMSO) Deveration in a set that the CMSO (Service of the Present of the CMSO) is set that the CMSO (Service of the CMSO) in the CMSO (Service of	2)  In Quase  Dependent in Quase  surve (OE) Of the eaten in source (OE)  ENV(4)  and MON(5)	Dispersional to Queue Dispersional Conservational and WICANG CONSERVATIONAL AND CONSERVATIONAL	25 N. Service Department in Queue Paraceure (CARD) Generalise Energy (CARD) Generalise Energy (CARD)	Diperdent in Qui us Diper Diperdent in Qui us Diper Diperdiperdent (CASO Divertible and M.DV)   1.1	Signal State	Perfectives bestides	1)Quare Dependent to Quare acce (Odd Opens No Sac No Sacker (CAS) ClA-25 and MONEY 36	Dispercion to Ocean Dispercional Operative Practice (Note of Street and Wilder Transport and Wilder and Wilder and and and and and and and and	N. N. Objected to	No spendent In-Queue ration Passeuror ICA SO and MICATE III
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# Acronym List

Acronym	Definition
AFUDC	Allowance for Funds Used During Construction
CAISO	California Independent System Operator
CPUC	California Public Utilities Commission
FERC	Federal Energy Regulatory Commission
09	General Order
ID	Identification
ISD	In-service Date
П	Information Technology
X	Interconnection
KV	Kilovolt
MPAC	Modular Protection Automation & Control
MVA	Megavolt-ampere
MW	Megawatt
MWh	Megawatt-hour
N/A	Not applicable
NERC	North American Electric Reliability Corporation
NRI	New Resource Implementation
OAI	Operative as Installed
PG&E	Pacific Gas and Electric
PTO	Participating Transmission Owner
RPS	Renewables Portfolio Standard
RTU	Remote Terminal Unit
SB	Senate Bill
SCADA	Supervisory Control and Data Acquisition
SCE	Southern California Edison
SDG&E	San Diego Gas & Electric
TDF	Transmission Development Form
TPP	Transmission Planning Process
TX	Transmission
WDAT	Wholesale Distribution Access Tariff
WECC	Western Electricity Coordinating Council

# Date Change Reasons Defined

Reason	Definition
<b>Bundling Dependencies</b>	undling Dependencies Have other projects or work (outside of this project) been delayed that were necessary to complete before this project could move forward. This can be in any phase of the project (i.e. planning, engineering, construction, etc.)
Clearances	Non-permit related clearance delays from any governmental entity with authority or jurisdiction over any phase of this project.
Completed Early	Project completed before originally scheduled in-service date.
Customer Action	For this context; generators' (in most circumstances, interconnecting generators) actions that specifically impacted the timeline of this project.
Financing	Project delayed due to capital and financial availability constraints.
ISO Action	The CAISO de-prioritized or re-prioritized the project. De-prioritization would typically manifest with an on-hold project status.
Land Rights	The project required easements, exercise of eminent domain, etc. that the utility has not been able to effect.
Material	Issues with equipment or components themselves but are not related to vendor error (see "Vendor Quality/Delays")
Outage	Outages (planned or unplanned) that impacted the in-service date.
Permitting (Customer)	Impacts on the permitting process (or an existing permit) that affects the in-service date. Instances where the customer is waiting for permitting.
Permitting (Utility)	Impacts on the permitting process (or an existing permit) that affects the in-service date. Instances where the utility is responsible for permitting.
Project Design	Any redesigns or additional design work needed outside of the initially approved first project design but not related "Workforce", "Bundling Dependencies" or "Clearances".
Supply Chain Delays	Requested project resources have not been delivered as scheduled.
Vendor Quality/Delays	Issues with vendor/suppliers that are not related to the failure of equipment, material, or components (see "Material").
Weather	An unforeseen weather event that causes a delay or set-back in construction work. Example: mudslides resulting from El Nino.
Workforce Availability	Workforce Availability   Staffing impacts at any phase of the project (i.e., planning, engineering, construction, etc.).
Other [See Notes]	A date change reason for delay that is not listed. Please describe the other delay reason in the "Notes" field.

			1. TRANSMISSION DELAY REPORTING	c)					2. GENERATION REPORTING	
4. STATUS	5. ACTION TAKEN	6. PURPOSE	7. PURPOSE DETAILS	10. CONSTRUCTION START DATE CHANGE INITIATOR	11. CONSTRUCTION START DATE 14. IN-SERVICE DATE CHANGE REASON CHANGE INITIATOR	14. IN-SERVICE DATE CHANGE INITIATOR	15. IN-SERVICE DATE CHANGE REASON	10. INTERCONNECTION REQUEST TYPE	11. TECHNOLOGY TYPE	12. RPS ELIGIBLE
Abandoned	New	Address Results of Power Flow Analysis	3rd Party Damage	Customer	Bundling Dependencies	Customer	Bundling Dependencies	Energy Only	Battery Storage	Yes
Canceled	Relocate	Address Results of Protection Studies	Age/Condition	Utility	Clearances	Utility	Clearances	Fully Deliverable	Biodiesel	No
Construction (10%-25%)	Removal	Age/End of Life	Age/Condition - 230/115/70/60 kV Relay Replacement	N/A	Completed Early	N/A	Completed Early	Partially Deliverable	Biogas	
Construction (25%-50%)	Replace	Asset Condition	Age/Condition - 500 kV Relay Replacement		Customer Action		Customer Action	Other [See Notes]	Biomass	
Construction (50%-75%)	Upgrade/Retrofit	CAISO Transmission Planning Standards (See Not Age/Condition - Anti Climb Guards	Age/Condition - Anti Climb Guards		Financing		Financing		Conduit Hydro	
Construction (over 75%)	N/A	Economic	Age/Condition - Insulator Replacement - Steel		ISO Action		ISO Action		Digester Gas	
Construction (under 10%)	Multiple Options [See Notes]	Emergency Event	Age/Condition - Insulator Replacement - Wood		Land Rights		Land Rights		Geothermal	
Engineering less than 50% complete	olete	FieldTestResults	Age/Condition - Raptor Protection - Steel		Material		Material		Hybrid	
Engineering more than 50% complete	mplete	Generator Interconnection	Age/Condition - Replace 230/115/70/60 kV Breakers		Outage		Outage		Hybrid/Paired Solar and Battery	
On Hold		Load Growth	Age/Condition - Replace 230/115/70/60 kV Transformers		Permitting (Customer)		Permitting (Customer)		Landfill Gas	
Operational		Local Capacity Requirement	Age/Condition - Replace 500 kV Breakers		Permitting (Utility)		Permitting (Utility)		Muni Solid Waste	
Permitting		Location, Environmental Conditions	Age/Condition - Replace 500 kV Transformers		Project Design		Project Design		Ocean/Tidal	
Planning		Physical Security	Age/Condition - Replace Boardwalks		Supply Chain Delays		Supply Chain Delays		PumpedStorage	
Other [See Notes]		Policy	Age/Condition - Replace Breakers		Vendor Quality/Delays		Vendor Quality/Delays		Solar	
		Reliability	Age/Condition - Replace Civil Structures		Weather		Weather		Various	
		Safety	Age/Condition - Replace Conductor		Workforce Availability		Workforce Availability		Wind	
		Wildfire Mitigation	Age/Condition - Replace Insulators		Other [See Notes]		Other [See Notes]		Other [See Notes]	
		Work Requested by Others	Age/Condition - Replace Other Substation Equipment		N/A		N/A			ı
		Another Project Or Resource [See Notes]	Age/Condition - Replace Other T-Line Equipment							
		Other [See Notes]	Age/Condition - Replace Reactors, Age/Condition - Replace Relay	Relays						
			Age/Condition - Replace Relays							

Age/Condition - Replace SCADA/RTII	
Ase/Condition - Replace Steel Poles	
Age/Condition - Replace Switches, Age/Condition - Replace	anlace Transformers
Age/Condition - Replace Underground System	
Age/Condition - Replace Wood Poles	
Age/Condition - Switch Replacement - Steel	
Age/Condition - Switch Replacement - Wood	
Age/Condition - Targeted Relay Replacement	
Age/Condition - Wood Pole Reframe	
Animal Abatement	
Automation	
Bus Upgrade	
Compliance - Remove Idle Facilities	
Construct Roads/Gates/Culverts	
Emergency Response - Fire Related	
Emergency Response - Storm Related	
Environmental	
Facility Relocation	
Fire Protection	
Generation Interconnection	
GO95 Mitigation - Steel	
Install SCADA/RTU	
Line Reconductoring	
Line Termination	
Load Interconnection	
Modular Protection and Automation Control	
NERC CIP Compliance	
NERC Compliance - GO 95	
New Substation	
New T-Line	
Priority 1 Steel Structure Replacement	
Priority 1 Wood Structure Replacement	
Protection NERC Compliance	
Relay Upgrades	
Replace Breakers	
Replace Other Substation Equipment	
Replace Transformer	
Safety - Line Right of Way Access	
SCADA Emergency Replacement	
SCADA Switch Installation	
Security Upgrades	
Seismic Upgrade - Replace Conductor	
Special Protection Scheme	
Substation Capacity	
Substation Reliability	
System Design Upgrade	
System Operations	
Targeted Line Reliability	
T-Line Capacity	
T-Line Emergency	
T-Line Reliability	
Tools, Transformer Addition/Replacement	
Underground Emergency	
Voltage Conversion	
Voltage Support	

#### BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Implementation and Administration, and Consider Further Development, of California Renewables Portfolio Standard Program. Rulemaking 24-01-017

## SAN DIEGO GAS & ELECTRIC COMPANY (U 902 E) NOTICE OF AVAILABILITY OF DRAFT 2024 RENEWABLES PORTFOLIO STANDARD PROCUREMENT PLAN

Walter C. Waidelich 8330 Century Park Court San Diego, CA 92123 Telephone: (858) 331-0806 Facsimile: (619) 699-5027

E-mail: wwaideli@sdge.com

Attorney for: SAN DIEGO GAS & ELECTRIC COMPANY

#### BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Implementation and Administration, and Consider Further Development, of California Renewables Portfolio Standard Program. Rulemaking 24-01-017

### SAN DIEGO GAS & ELECTRIC COMPANY (U 902 E) NOTICE OF AVAILABILITY OF DRAFT 2024 RENEWABLES PORTFOLIO STANDARD PROCUREMENT PLAN

Pursuant to Rule 1.9(d) of the Rules of Practice and Procedure of the California Public Utilities Commission (the "Commission"), San Diego Gas & Electric Company ("SDG&E") hereby provides notice that it has electronically filed with the Commission's docket office its SAN DIEGO GAS & ELECTRIC COMPANY (U 902 E) DRAFT 2024 RENEWABLES PORTFOLIO STANDARD PROCUREMENT PLAN.

The public version of the Draft 2024 RPS Plan filing is available on SDG&E's website at the following link: https://www.sdge.com/rates-and-regulations/proceedings/rps-oir.

The Draft 2024 RPS Plan filing may also be obtained by contacting:

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Respectfully submitted,

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