
**Welcome to SDG&E's 2020
Disadvantaged Community
Green Tariff (DAC-GT)
& Community Solar Green Tariff (CSGT)
Request for Offers
Bidders' Conference**

March 20, 2020 | 1:00 pm to 2:30 pm PPT

Hosted on Skype

Safety Moment

Josh Stewart | Senior Origination Analyst

Bidders' Conference Outline

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- | | |
|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| 1. Welcome and Legal Disclaimer
1:00 pm – 1:10 pm | Josh Stewart Senior Origination Analyst |
| 2. SDG&E and Supplier Diversity
1:10 pm - 1:15 pm | David Thai E&FP Diversity Champion |
| 3. Role of Independent Evaluator
1:15 pm – 1:20 pm | Harry Judd Independent Evaluator |
| 4. Overview of Programs
1:20 pm – 1:30 pm | Mike McConnell Customer Programs Advisor |
| 5. a) RFO Goal, Scope & Evaluation
b) Bid Submission Process; Q&A Session
1:30 pm - 2:00 pm | Josh Stewart Senior Origination Analyst |
| 6. Power Purchase Agreement Overview
2:00 pm - 2:15 pm | Mike Ruzzo Energy Procurement Advisor |
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Legal Disclaimers:

Anti-trust:

All participants in today's meeting shall comply with anti-trust guidelines. These guidelines direct meeting participants to avoid discussions of topics or behavior that would result in anti-competitive behavior, including restraint of trade and conspiracy to create unfair or deceptive business practices or discrimination, allocation of production, imposition of boycotts and exclusive dealing arrangements.

Rejection of Offers:

SDG&E MAKES NO GUARANTEE THAT A CONTRACT AWARD SHALL RESULT FROM THIS RFO EVEN AFTER AN OFFER HAS BEEN SELECTED AS A WINNING BID. 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.

Document Conflict:

This presentation is intended to be a summary level discussion of the information and requirements established in the RFO Materials. To the extent that there are any inconsistencies between the information provided in this presentation and the requirements in the RFO Materials, the RFO Materials shall govern.

Welcome

Josh Stewart | Senior Origination Analyst

Overview of Solicitation

- SDG&E is committed to advancing the State's RPS goals and to continue to be compliant with RPS regulations.
- SDG&E worked together with the CPUC and other IOUs to develop a successful solicitation process. Incorporated in this RFO are lessons learned from the prior RAM and Green Tariff Shared Renewables (GTSR) RFOs.
- SDG&E endeavors to fulfill the needs of the following Programs:
 - Disadvantaged Community Solar Green Tariff (DAC-GT) – <https://www.sdge.com/DACGTRFO>
 - Community Solar Green Tariff (CSGT) – <https://www.sdge.com/CSGTRFO>
- Assessment and selection transparency is paramount to us. Our Independent Evaluator, Harry Judd, will be involved in every step of the process.

General Q&A Guidance

- SDG&E will post questions and answers on the solicitation websites
- Questions can be submitted to either:
 - ECRRAMSolicitation@sdge.com (CSGT)
 - RAMSolicitation@sdge.com (DAC-GT)
- Respondents **MUST** copy the IE on all communications
- Questions received and answers will be posted to the website periodically
- Deadline to submit questions is March 27
- Offers are due by April 10

SDG&E and Supplier Diversity

David Thai | Origination Analytics Manager

Background on Diverse Business Enterprises (DBE) Program

- *SDG&E encourages Women, Minority, Disabled Veteran, Lesbian, Gay, Bisexual and Transgender (LGBT) Business Enterprises (“Diverse Business Enterprises” or “DBE”s) to participate in the RFO*
- *Obtaining Certification*
 - *Minority, Woman or LGBT Owned Business*

California Public Utilities Commission (CPUC) Supplier Clearinghouse
<http://www.thesupplierclearinghouse.com/>
 - *Service Disabled Veteran Business*

State of California, General Services Office of Small Business and Disabled Veteran Business Enterprise Services (OSDS)
<https://www.dgs.ca.gov/PD/Services/Page-Content/Procurement-Division-Services-List-Folder/Certify-or-Re-apply-as-Small-Business-Disabled-Veteran-Business-Enterprise#@ViewBag.JumpTo>
 - *Others Offering Certification*
 - Regional affiliates of the National Minority Supplier Development Council (NMSDC)
 - Small Business Administration 8(a) (SBA)
 - Women Business Enterprise Council (WBEC-WEST)

Supplier Diversity Contact Information

*DBEs can request additional information by contacting SDG&E
at vendorrelations@sdge.com*

Role of the Independent Evaluator

Harold Judd | Accion Group

Overview Independent Evaluator

ACCION GROUP (ACCION) is approved by the CPUC as the Independent Evaluator for the RFO.

ACCION was founded in 2001 and has experienced professionals with extensive industry experience in the areas of:

- Evaluation & Dispatch Modeling
- Transmission & Distribution Systems
- Power Plant Construction & Operation
- Risk Analysis
- Legal Services (contracting & contract review)
 - PPA / APSA / Green Field Development / Turnkey Projects

Harry Judd has more than thirty-five years of experience in regulated industries and emerging markets; His experience includes the following:

- 100 Independent Evaluator engagements over the previous thirteen years
- Conducted RFPs for major clients including Duke Energy, BPA, the Colorado PUC, the Nuclear Decommissioning Finance Committee, the Georgia Public Service Commission, and Xcel.

Bid Conformance

- *IE's role in the DAC-GT and CSGT RFOs:*
 - Monitor the Standards of Conduct to
 - Ensure equal treatment of all bids and bidders
 - Set separation of the Company's Evaluation Team & Bidders
 - Support clear & consistent Communication & Messaging
 - Create confidence in the Market regarding the Process
 - Review Draft Documents & Process before PUC Filing
 - Provide Independent Contact for Bidders
 - Monitor evaluation process and review results
 - Inform PUC of status, complaints & issues
- *Bids should comply with all the requirements of the RFO*
 - Any bids that are rejected because of conformance issues will be discussed with the IE
 - Any bids that are accepted that may have minor conformance issues will also be discussed with the IE
 - The goal is to ensure all bidders are treated in a fair manner

Overview of Programs

Mike McConnell | Customer Programs Advisor

DAC-GT and CSGT Program Overview & Procurement Targets

Overview of Programs

- DAC-GT and CSGT Programs were implemented by the CPUC in D.18-06-027, D.18-10-007, and Resolution E-4999.
- **DAC-GT Program:**
 - Intended to provide low-income households within DACs, as defined in Schedule DAC-GT, to have an opportunity to access clean, renewable energy.
 - SDG&E solicitation target of **0.5 - 18 MW of DAC-GT capacity.**
- **CSGT Program:**
 - Intended to provide low-income households located in a census tract that is in the top 25% statewide disadvantaged communities or in the highest 5% of CalEnviroScreen's Pollution Burden that do not have a CalEnviroScreen Score, to meet 100% of residential electric needs through local renewable generation and receive a 20% bill discount from their current electric rate.
 - SDG&E solicitation target of **up to 5 MW of CSGT capacity.**

DAC-GT and CSGT Program Overview

Overview of Programs

- **DAC-GT:**

- SDG&E enrolls eligible customers based on their historical electric usage, up to the generation capacity that is online.
- Eligible customers receive a 20% bill credit on the electric portion of their SDG&E bill. (applied as a line item discount).
- Customer Eligibility: Located in a qualified DAC, residential, CARE / FERA eligible. Does not apply to NEM, DA, or CCA customers.

- **CSGT:**

- Each Project must have Community Sponsor (community based non-profit or local govt.)
- Community Sponsors are eligible to subscribe to 25% of project generation (up to 100% of their usage).
- 50% of project generation is reserved for CARE / FERA eligible customers. Once the 50% low income reservation is reached, other DAC residents can be enrolled.
- Eligible customers must take electric service in a qualified DAC, and the census tract boundary must be within 5 miles from the CSGT project.
- Participants receive a 20% discount on the electric portion of their SDG&E bill.

Overview of Schedule, Product, Procurement Targets and Eligibility Requirements

Mike Ruzzo | Energy Procurement Advisor

RFOs Schedule / PPA Execution and Approval

NO.	ITEM	DATE
1.	RFO Issued	February 26, 2020
2.	Bidder's Conference; 1:00 PM to 4:00 PM, PDT	March 20, 2020
3.	DEADLINE TO SUBMIT QUESTIONS	March 27, 2020
4.	Answers to all questions will be posted on SDG&E's website	April 3, 2020
5.	DEADLINE TO SUBMIT OFFERS/CLOSING DATE Offers must be uploaded to PowerAdvocate® by no later than 12 P.M. (i.e. NOON) Pacific Daylight Time	April 10, 2020
6.	NOTIFICATION TO WINNING AND CONTINGENT BIDDERS	May 2020

*Note: SDG&E has no control over CPUC approval, these date are approximate

DAC-GT Eligibility Requirements

Resource Requirements:

- Resources must be new facilities;
- Resources must be an Eligible Renewable Energy Resource as defined in PUC Section 399.12;
- Resources must be CEC-certifiable as an eligible renewable resource by the commercial operation date;
- Resources must utilize a commercially proven solar technology;
- Resources must sell its entire output and all plant attributes to SDG&E (full buy/sell) or sell all output and all plant attributes in excess of onsite load to SDG&E (excess sales);
- The full output from the facility must be sold to SDG&E, which means SDG&E will not consider purchasing a portion of a project larger than 18 MW;
- All renewable energy resources procured in this solicitation shall comply with the California Air Resources Board's (CARB) Voluntary Renewable Electricity (VRE) Program; and,
- Each DAC-GT Project must meet Green-e© Energy eligibility criteria throughout the Delivery Term of the PPA.

Project Capacity:

- Project contract minimum size is 0.5 MWac nameplate capacity; and,
- Project contract maximum size is 18 MWac nameplate capacity.
- SDG&E may, at its sole discretion, determine that the Project appears to be sharing facilities with one or more additional projects.

CSGT Eligibility Requirements

Resource Requirements:

- Resources must be new facilities;
- Resources must be an Eligible Renewable Energy Resource as defined in PUC Section 399.12;
- Resources must be CEC-certifiable as an eligible renewable resource by the commercial operation date;
- Resources must utilize a commercially proven solar technology;
- Resources must sell its entire output and all plant attributes to SDG&E (full buy/sell) or sell all output and all plant attributes in excess of onsite load to SDG&E (excess sales);
- The full output from the facility must be sold to SDG&E, which means that SDG&E will not consider purchasing a portion of a project larger than 5 MW;
- All solar resources procured on behalf of CSGT customers from an CSGT Project shall comply with the California Air Resources Board's (CARB) Voluntary Renewable Electricity (VRE) Program. California-eligible greenhouse gas allowances associated with purchases from an CSGT Project shall be retired on behalf of CSGT Customers as part of the VRE Program; and,
- Each CSGT Project must meet Green-e[®] Energy eligibility criteria throughout the Delivery Term of the PPA.

Project Capacity:

- Project contract maximum size is 5 MWac nameplate capacity.
- SDG&E may, at its sole discretion, determine that the Project appears to be part of an installation larger than 5 MW in the same general location that has been or is being developed by the respondent or the respondent's Affiliates, or appears to be sharing facilities.

DAC-GT & CSGT Eligibility Requirements

Location/Site Control:

- Projects must be located within the service territory of SDG&E or located in the Imperial Valley; and,
- The Respondent must have, at time of bidding, site control for the duration of the 10, 15, or 20-year power purchase agreement, as applicable, evidenced by documentation of:
 - Direct ownership
 - Lease
 - Option to lease or purchase upon PPA approval. The option must be an exclusive option to the Bidder effective until the completion of the RFO cycle.
- If notified of contract award, Respondent's site control documents must be: 1) in the name of the same entity that will execute the PPA, or 2) shall have been assigned to such entity by the time Respondent accepts its position on the shortlist.

DACGT & CSGT Eligibility Requirements

Interconnection:

- Respondents must have completed a Phase II interconnection study (or distribution level equivalent) or executed an interconnection agreement or have passed the Wholesale Distribution Access Tariff (WDAT) or California Independent System Operator (CAISO) Fast Track screens and provide:
 - A copy of the most recent completed interconnection agreement or Phase II interconnection study with their offer, or Evidence of having passed the WDAT or CAISO Fast Track screen
 - Transmission level projects that that have a Phase II interconnection study but do not yet have a completed interconnection agreement are required to apply for interconnection through the CAISO process to obtain an interconnection agreement.
 - Distribution level projects that do not yet have a completed interconnection agreement will be required to apply through SDG&E's WDAT process.

Note: If shortlisted, Respondent's interconnection documents must be: 1) in the name of the same entity that will execute the ECR PPA, or 2) shall have been assigned to such entity by the time Respondent accepts its position on the shortlist.

DAC-GT & CSGT Eligibility Requirements

Developer Experience:

- The Respondent and/or members of the project development team must have experience. Respondents must provide evidence of having completed, or begun construction, of a project using a technology similar to the offered technology
- The Respondent will maintain contractual control of the facilities and be responsible for development, land acquisition, permitting, financing and construction for the facilities. Respondents must provide a description of how operational control will be maintained.

Project Start Date:

- Offers must provide an anticipated delivery start date that is **within 36 months after the expected CPUC PPA Approval date.**
- **For CSGT projects,** CSGT subscriptions by low income customers are required to be a **minimum of 25% of the project's contract capacity** prior to the project achieving commercial operations.

Other Incentives Not Permitted:

- Respondents shall not have sought Small Generator Incentive Program (SGIP) benefits, California Solar Incentives (CSI) or Net Energy Metering (NEM) Program benefits for the projects being offered and shall not plan to seek or participate in such programs for the entire term of the PPA.

Overview of the DAC-GT & CSGT Offer Evaluation Process

Josh Stewart | Senior Origination Analyst

Evaluation process for the DAC-GT & CSGT RFO

Once the bids are received and the relevant data is identified and extracted to a database, the evaluation process for the RFO will consist of the following steps:

1. Screen the bids for conformance with the eligibility requirements
2. Analyze the bids using SDG&E's Least-Cost / Best-Fit (LCBF) evaluation methodology to create an initial quantitative ranking, and a subsequent final ranking which may modify the initial ranking based on qualitative criteria
3. Select winning bids for projects based on the final ranking

LCBF Overview

- Valuation and Selection Process
 - Least-Cost/Best-Fit (LCBF)
- Quantitative Evaluation
 - Net Market Value (NMV)
 - Each conforming offer is valued using this discounted cash flow analysis
- Qualitative Evaluation
 - Used to differentiate similarly valued offers
- Shortlisted Offers



NMV - Typical Benefits and Costs

Typical Benefits	Typical Costs
Energy	Contract Payments
Ancillary Services (A/S) - Spin, Non-Spin, Reg Up, Reg Down	Variable Energy Costs (Fuel, VOM, GHG Compliance)
Capacity (RA)	Transmission Interconnection
Renewable Energy Credits (REC's)	Renewable Integration Adder

Transmission Adder Calculation

Transmission Adder

1. Transmission costs from a project's latest transmission study will be used to calculate a transmission adder that will be applied to the project's Bid Ranking Price.
2. Only transmission costs that are reimbursable to the bidder will be used to compute the transmission adder. Amounts paid by the bidder for distribution interconnections and transmission-level upgrades that are not reimbursed will not be used in calculating the transmission adder. Those should be included in the respondents bid price.
3. In all cases, the reimbursable costs shown in the transmission studies submitted by the bidder will be used for adder computation.

Qualitative Evaluation

Criteria may be considered in the Qualitative Evaluation:

- Project development status:
 - Electrical interconnection status
 - Permitting status
 - Fuel and water interconnections
 - Site control
- Developer attributes
 - Project financing
 - Development experience
 - Project viability
- Other attributes
 - Contribution to other procurement targets (CHP, RPS, Energy Storage)
 - Portfolio fit
 - Technology risk
 - Proximity to High Hazard Fuel Zone and ability to exceed the minimum fuel requirements from these zones
 - Start Date and Term

Overview of Bidding Protocols

Josh Stewart | Senior Origination Analyst

Required Bid Forms

Offer Form – 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 with shorter tenors or with escalators.

Interconnection Agreement or Phase II Interconnection Study (or distribution level equivalent) and / or Fast Track Documentation – Submit a copy of the most recent completed interconnection agreement, Phase II interconnection study or equivalent Fast Track documentation. For Projects located in Imperial Valley and dynamically transferred via pseudo-tie into SDG&E's service territory by the CAISO, submit copies of a completed Phase II interconnection study and provide documentation certifying the existence of the dynamic transfer arrangements.

Site Control Documentation – Submit copies of site control documents demonstrating: a) direct ownership; b) a lease; or c) an option to lease or purchase upon PPA approval (must be an exclusive option to the Bidder that will last until the completion of the RFO cycle).

Site Maps – Submit copies of all project maps showing location, facilities, layout, Interconnection, etc. and the Project single line diagram.

Resource Report - please submit a verifiable fuel resource plan

Full PVSyst Model (Solar Only) – the full PVSyst file must be submitted by exporting the entire project that contains the prj, met, inv, pan, etc. files.

Mistakes on forms that can cause rejection of a bid

- **Critical information missing from your bid submissions**
- **Entering information incorrectly: i.e. prices in cents/kWh and deliveries in kWh, instead of \$/MWh and MWh**
- **Adding to or renaming worksheets in offer form**
- **Making the utility fill out your offer form**

Bid Submission Process

Josh Stewart | Senior Origination Analyst

Registration and Logging On

Ways to Register:

1. Receive an invitational email from SDG&E followed by a link to access PowerAdvocate®
2. Register as a first-time user on www.PowerAdvocate.com
 - Request for access using the Referral Information

Referral Information

Are you registering for a specific Event: * Yes
 No, I would simply like to register.

Who referred you to this Event: *

Name of that individual's company: *

Name or description of the Event: * ▲ ▼

*Required Field

Referral Information

Are you registering for a specific Event: * Yes
 No, I would simply like to register.

Who referred you to this Event: *

Name of that individual's company: *

Name or description of the Event: * ▲ ▼

*Required Field

3. Request for access using the PowerAdvocate® link located at:
<https://www.poweradvocate.com/pR.do?okey=102499&pubEvent=true>
<https://www.poweradvocate.com/pR.do?okey=102500&pubEvent=true>

How to Log On:

1. Launch a web browser and go to: www.poweradvocate.com, and then click on the orange **Login** button.
2. Enter your account **User Name** and **Password** (both are case-sensitive)
3. Click **Login**.

The Supplier Dashboard

What information is displayed on my Dashboard?

Your Dashboard displays all bid events to which you have been invited.

Dashboard Company Filter: All Companies

Event / Buyer	Msg	Open	Close	Download Documents	Upload Documents	Commercial	Technical	Pricing
190 -cbl-1: 190 First St. Cable/Wiring Electric Power Utility		05/16/10 8:00 AM EDT	06/08/10 4:00 PM EDT	1	2	3	4	5
T42g: Colorado River Sluice Gates Great Western Utilities	1/1	04/04/10 10:00 AM EDT	06/30/10 4:00 PM EDT	1	2	3	4	5
1998-01: Grid Expansion Electric Power Utility		09/01/10 8:00 AM EDT	12/29/10 4:00 PM EST	1	2	3	4	5

Open and Pending Pre-Bid events (points to the first two rows)

Pending (not Pre-Bid) and Closed events (points to the third row)

Buying entity (points to the buyer name in the third row)

Event name/number (points to the event name in the third row)

Number of unread/total messages; click to access the Messaging tab. (points to the '1/1' message count in the third row)

The numbers on the Dashboard represent a general workflow, though you can work in any order:

- 1 Download the bid package.
- 2 Upload bid documents, proposals, etc.
- 3 4 5 Fill in online datasheets if present.

More Information & Additional Help

PowerAdvocate Support

- Support@poweradvocate.com
- (857) 453-5800

Online Help

- Access the Help System at any time by clicking on the **Help** button



Dashboard Profile Company **Help** Logout

Event Dashboard

Fill-In Data Sheets

Event	Msg	Open	Close	Download Documents	Upload Documents	Commercial	Technical	Pricing
35697 : 2013 SDGE Energy RFP Sempra Energy		05/02/13 5:00 PM EDT	05/14/13 4:00 PM EDT	1	2	3	4	5

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*Please submit your questions by
March 27th*

Overview of Power Purchase Agreements

Mike Ruzzo | Energy Procurement Advisor

Standard PPA Terms - Applicable to GTSR Programs

Term	Description
Contract Document	<ul style="list-style-type: none"> SDG&E non-modifiable, standard RAM Power Purchase Agreement (PPA)
Contract Duration	<ul style="list-style-type: none"> 10, 15, or 20 contract years
Commercial Operation Deadline	<ul style="list-style-type: none"> Must achieve Commercial Operation within 36 months of CPUC approval. One, 6 month extension allowed for certain delays related to permitting, interconnection or force majeure, in the aggregate
Performance Security	<ul style="list-style-type: none"> <u>CPUC Approval Security (Execution to CPUC Approval)</u>: The greater of \$100,000 or \$2.50/MWh multiplied by 2 times expected annual generation <u>Development Period Security (CPUC Approval to CP Satisfaction Date)</u>: \$5.00/MWh multiplied by 2 times expected annual generation <u>Construction Period Security (CP Satisfaction Date to COD)</u>: \$10.00/MWh multiplied by 2 times expected annual generation <u>Delivery Term Security (COD to End of Term)</u>: \$20.00/MWh multiplied by 2 times expected annual generation

Standard PPA Terms - Applicable to GTSR Programs

Term	Description
Energy Price Adjustments	<ul style="list-style-type: none"> • Deliveries exceeding the Contract Capacity in each hour are paid \$0/MWh, and if the real time Locational Marginal Price (LMP) during delivery is less than zero dollars (\$0), Seller reimburses Buyer for the negative LMP prices for such excess energy amounts • Energy deliveries exceeding 115% of expected annual Contract Quantity in any period are paid 0% of the energy price for excess energy and is entitled to revenues from positive LMPs / responsible for costs associated with negative LMPs.
Guaranteed Deliveries	<ul style="list-style-type: none"> • Minimum annual net energy production: <ul style="list-style-type: none"> ○ 90% for baseload projects (applicable to DAC-GT projects only), based on sum of one-year rolling average production; or, ○ 80% for peaking projects, based on sum of two-year of rolling average production.
Economic Curtailment	<ul style="list-style-type: none"> • SDG&E shall curtail energy deliveries from the project for the economic purposes • Seller is be paid for amounts the project is deemed to have been able to deliver
Resource Adequacy/Full Capacity Deliverability Status	<p>Seller must apply for deliverability as soon as possible (but not required as part of bid) if bidder is selecting FCDS pricing. Seller must receive FINAL deliverability studies (e.g. Final Phase II deliverability studies)</p> <ul style="list-style-type: none"> • FCDS is not a condition precedent to commercial operation • For FCDS projects, the PPA Contract Price includes the value of FCDS. • The Contract Price will be reduced by a Deliverability Value until the project achieves FCDS. • FCDS projects must achieve FCDS by no later than Jan. 1, 2030 • For Energy Only projects, the PPA TOD factors do not include the value of FCDS

Appendix

Wholesale Distribution Open Access Tariff (WDAT) and Rule 21 Generator Interconnection Processes

Michael Turner | Customer Generation

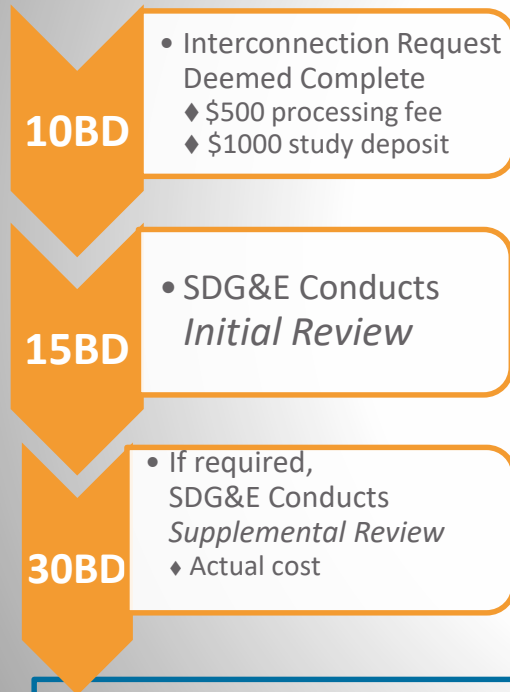
Safety

- Safety is a core value at SDG&E.
- The generator interconnection studies are intended to ensure no adverse impacts to the safety and reliability of the electric grid.
- Generator interconnection customers are expected to comply with all applicable federal, state, and local laws, ordinances and regulations, and to ensure the safety of their employees, SDG&E employees, and the public.

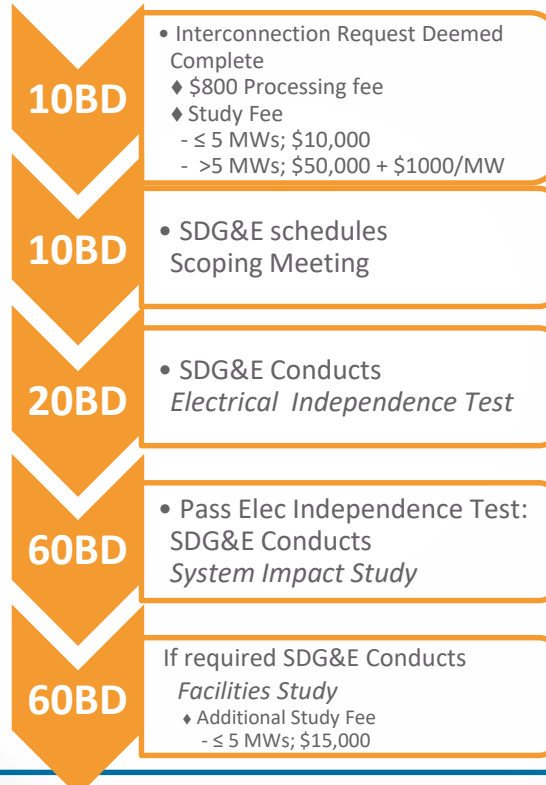
WDAT Flow Charts & Timing

Fast Track

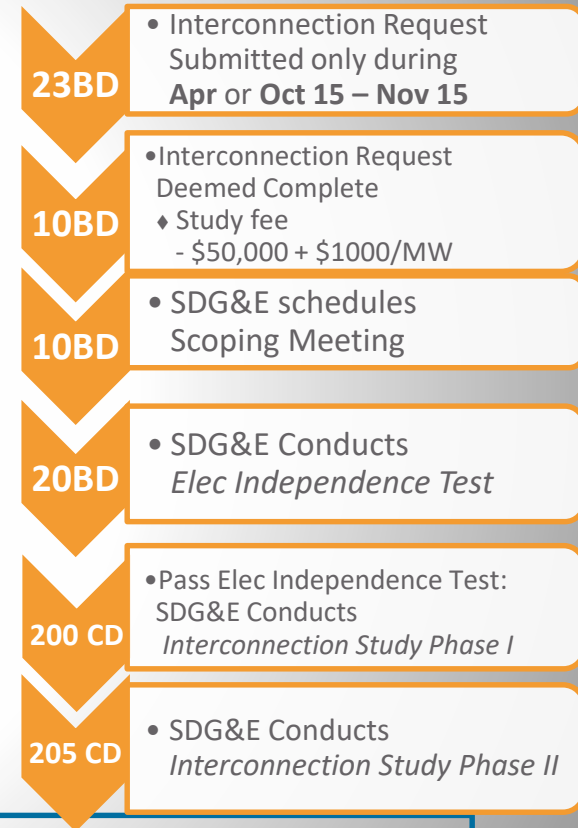
2 MW or less: any location
3 MW or less: 2.5 mi from sub and feeder conductor



Independent Study Process (Deliverability requires CAISO approval)



Cluster Study Process (Deliverability → CAISO approval)



Interconnection Agreement



WDAT Application Form and Location

WDAT tariff: <https://www.sdge.com/node/6991>

The Interconnection Request is located in the WDAT tariff in Appendix 1 on pages 329-345

Send the completed interconnection request to:
[***DGAPPLICATIONS@semprautilities.com***](mailto:DGAPPLICATIONS@semprautilities.com)

Or mail hardcopy application package to:

Customer Generation – CP52F

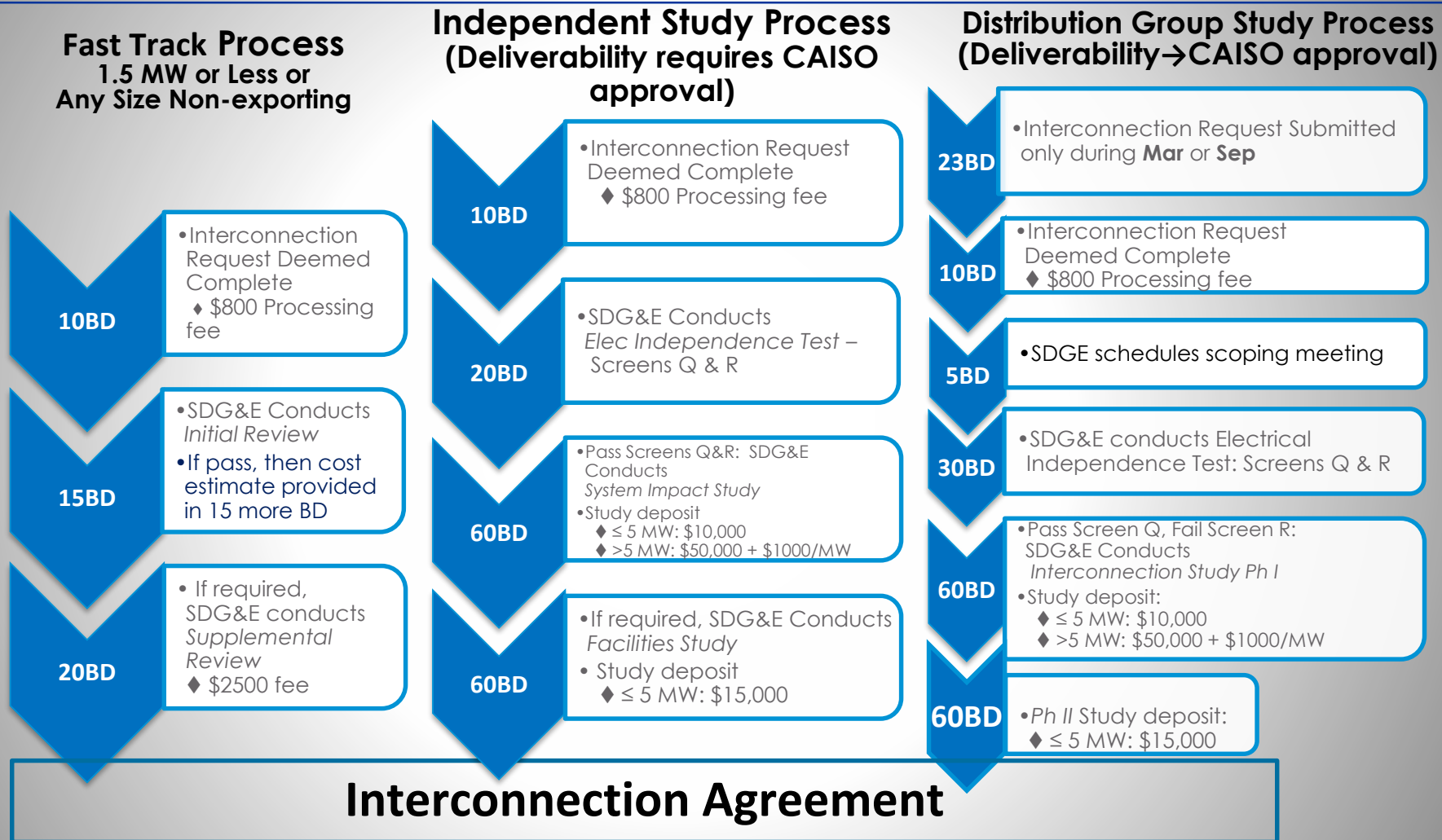
San Diego Gas & Electric

8316 Century Park Court

San Diego, CA 92123-1582

SDG&E will review the interconnection request and provide instructions where to send the application fee.

Rule 21 Study Process Timelines



Rule 21 Application Form and Location

Rule 21 Application Location:

<https://www.sdge.com/more-information/customer-generation/electric-rule-21/apply-rule-21-behind-meter>

Rule 21 Interconnection Package can be submitted to:

DGAPPLICATIONS@semprautilities.com

Or mail hardcopy application package to:

Customer Generation - CP52F

San Diego Gas & Electric

8316 Century Park Court

San Diego, CA 92123-1582

SDG&E will review the interconnection request and provide instructions where to send the application fee.



SDG&E Distribution Interconnection Process

Additional resources listed below are available at www.sdge.com/more-information/customer-generation

- Pre-Application Report (\$300)
- SDG&E WDAT and Rule 21 Interconnection Queue
- WDAT tariff
- Rule 21 tariff
- Interconnection Interactive Map (shows line capacity and available capacity after existing and queued generators)
- Generator Interconnection Handbook

SDG&E Distribution Interconnection Process

Questions:

Ken Parks - Customer Generation Manager

kparks@sdge.com

858-636-5581

Mike Turner - Principal Engineer

mturner@sdge.com

858-654-8326

2020 CAISO Generator Interconnection & Deliverability Allocation Procedures

Darren George
Transmission Planning

CAISO Generator Interconnection and Deliverability Allocation Procedures

Interconnection to SDG&E transmission system is governed by the CAISO's FERC approved Tariff:

- CAISO Tariff Appendix Y (GIP tariff) applies to interconnection requests as of 11-27-2018
<http://www.aiso.com/Documents/AppendixY-GIPForInterconnectionRequests-asof-Nov27-2018.pdf#search=appendix%20y>
- CAISO Tariff Appendix DD (GIDAP tariff) applies to interconnection requests as of 8-12-2019
<http://www.aiso.com/Documents/AppendixDD-GeneratorInterconnection-DeliverabilityAllocationProcedures-asof-Aug12-2019.pdf#search=appendix%20dd>
- **Cluster Windows:** As of Cluster 12, April 1st to April 15th of each year.

GIDAP PROCESS

-
- Phase I Interconnection Study
-
- Phase II Interconnection Study
-
- Posting of Financial Security
-
- ❖ Large/Small Generator Interconnection Agreements (LGIA/SGIA)

Phase I Interconnection Study

- Commences July 1st each year - Completed and Final Phase I Study report issued by year-end
- SDG&E - Reliability Network Upgrade (RNU) studies (a short circuit, stability, and power flow analysis, including off-peak analysis)
- CAISO - Delivery Network Upgrade (DNU) studies (an On-Peak and Off-Peak (for information only) Deliverability Assessment for FC projects, required to receive Resource Adequacy (RA) qualification for PPA)
- Preliminary identification of the Interconnection Facilities and Network Upgrades required for each IR - Assess the POI and potential alternatives
- Establish max. cost responsibility for RNU, Local Delivery Network Upgrades (LDNU), and Interconnection Facilities
- Phase I Study Results Meeting - within 30 Days of study completion
- Within 5 B-Days of Results Meeting, IC may submit to CAISO desired modifications to the IR, including: decrease in the electrical output of proposed project, modify technical parameters of facility, and/or modify the interconnection configuration.

Phase I Interconnection Study

- GIDAP Phase I results provide each project with cost cap for its RNU and LDNU
 - *Retains GIP provisions on security postings*
 - *LDNU cash reimbursement to align with TP deliverability allocation*
- ADNUs
 - *Costs have no cap*

Between Phase I and Phase II Interconnection Studies

- To continue to Phase II, IC must elect either Option (A) or Option (B)
- **Option (A)**
 - *Project requires TP deliverability to continue to commercial operation, also meaning the IC chooses to not fund ADNU(s).*
 - *Project posts security for RNU and LDNU*
- **Option (B)**
 - *Project is willing & able to pay for all Network Upgrades without cash reimbursement by ratepayers*
 - *Project posts security for RNU, LDNU, and ADNU*
 - *ADNU security posting equals \$/MW cost rate determined in Phase I Study, times project MW deliverability*
 - *ADNU no cash reimbursement, treated as merchant transmission, eligible for Congestion Revenue Rights (CRRs)*

Phase II Interconnection Study

- Commences May 1st each year – Completed and Final Phase II Study by end of year
- Updates analyses performed in the Phase I studies to account for changes, i.e. changes to IRs, withdrawal of IRs, as applicable
- Identifies final Network Upgrades (RNU, LDNU, ADNU) needed to physically interconnect the Generating Facilities and assigns responsibility for financing the identified final Network Upgrades
- Identifies ADNU cost estimates, but not cost caps for Option (B) projects
- Identifies final POI and SDG&E's and IC's Interconnection Facilities and provides cost estimate of the final SDG&E's and IC's Interconnection Facilities
- Phase II Study Results Meeting within 30 Days following Study completion. CAISO, SDG&E, and the IC discuss the Phase II Interconnection Study report, including selection of the final COD.

Note: CAISO shall coordinate the Phase I and Phase II Interconnection Studies with SDG&E and any Affected System Operators

Application of Posting Requirements for NUs to (A)& (B) Projects

<p style="text-align: center;"><i>Network Upgrades</i></p> <p style="text-align: center;">•ADNU, LDNU, RNU for B projects</p> <p style="text-align: center;">•LDNU and RNU for A projects</p>			
Project Size	First Posting (Due 90 days after phase I study complete)	Second Posting (Due 180 days after phase II study complete)	Third Posting (Due at start of construction)
20 MW or less	<p>Lesser of</p> <ul style="list-style-type: none"> 15% of phase I study estimated network upgrade costs \$20,000 per MW <p>(but not less than the lesser of \$50,000, or the estimated cost of network upgrades)</p>	<p>Lesser of</p> <ul style="list-style-type: none"> \$1 million 30% of lower of phase I or phase II study estimated network upgrade costs <p>(but not less than the lesser of \$100,000, or the estimated cost of the network upgrades)</p>	100% of lower of phase I or phase II study estimated network upgrade costs
Greater than 20MW	<p>Lesser of</p> <ul style="list-style-type: none"> \$7.5 million 15% of Phase I estimated network upgrade costs \$20,000 per MW <p>(but not less than the lesser of \$50,000, or the estimated cost of network upgrades)</p>	<p>Lesser of</p> <ul style="list-style-type: none"> \$15 million 30% of lower of phase I or phase II study estimated network upgrade costs <p>(but not less than the lesser of \$500,000, or the estimated cost of the network upgrades)</p>	100% of lower of phase I or phase II study estimated network upgrade costs

Generator Interconnection Agreements (LGIA & SGIA)

- Three-party agreement between the CAISO, SDG&E, and IC
- SDG&E to provide Draft GIA to IC within 30 Days of final Phase II Study report
- IC written comments/indication of no comments to the SDG&E and CAISO due within 30 Days of receipt of the Draft GIA
- Negotiations to be completed and GIA executed within ~120 Days following completion of Phase II Interconnection Study report.
- SDG&E and CAISO provide final GIA to IC within 15 Business Days after completion of GIA negotiation process.

Reimbursement of LDNU postings

- *All projects are reimbursed for RNU costs up to \$60,000 per MW of installed capacity after commercial operation.*
- *Option (A) and (B) projects allocated TP deliverability receive full reimbursement of LDNU postings after commercial operation.*
- *Option (A) projects not allocated TP deliverability that remain in queue as energy only are reimbursed for first LDNU posting.*
- *Option (B) projects not allocated TP deliverability are not eligible for reimbursement of LDNU or ADNU costs*

Generation Interconnection Information

SDG&E Interconnection Website: <https://www.sdge.com/more-information/customer-generation>

- Download and review SDG&E Interconnection Handbook
- Links to CAISO interconnection queue, tariffs and websites
- Links to SDG&E interconnection queue, tariffs and websites
- Link to NERC/WECC Reliability Standards
- Links to Process Summaries
- Link to SDG&E Self Generation Technologies site

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