

2022 Demand Response Auction Mechanism (“DRAM 7”)



Pre-Bid (Bidders) Web Conference

March 1, 2021

Presentation will begin at 10:00 a.m. (PPT)

Introduction

Conference Scope/Logistics

Scope: Focus on DRAM 7 Pilot Request For Offers (RFO)

Out of Scope: We will not discuss other DR programs or other utility procurement programs

Housekeeping Items:

- All participant phone lines will be muted
- Please provide any questions or comments using the Q&A chat box via the webinar
- Note that there will be opportunities for Q&A throughout this presentation after each presented section

Agenda

- **Introduction** 10:00 am – 10:10 am
 - Mari Turner, Pacific Gas & Electric (PG&E)
- **DRAM RFO Pilot Overview** 10:10 am – 10:20 am
 - Monalee Ronquillo, San Diego Gas & Electric (SDG&E)
- **Bid Valuation and Selection:** 10:20 am – 10:40 am
 - Mari Turner, Pacific Gas & Electric (PG&E)
- **DRAM Request for Offer (RFO) Bid Materials:** 10:40 am – 11:00 am
 - Angela Taglinao, Southern California Edison (SCE)
- **QC Template & Offer Forms:** 11:00 am – 11:20 am
 - Mari Turner, PG&E
- **Walk-Through of IOU Offer Forms:** 11:20 am – 11:55 am
 - Mari Turner, PG&E
 - Steven Van Deventer, SCE
 - Aaron Lu, SDG&E
- **Closing Remarks:** 11:55 am – Noon
 - Mari Turner, PG&E

Legal Disclaimers: Anti-Trust Guidelines & Document Conflict

Anti-Trust Guidelines

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.

Document Conflict

This presentation is intended to be a summary level discussion of the information and requirements established in the DRAM 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.

General Q&A Guidance

- We have posted (and will continue to post) questions and answers on the DRAM RFO websites:
 - [PG&E: www.pge.com/dram](http://www.pge.com/dram)
 - [SCE: www.on.sce.com/DRAM](http://www.on.sce.com/DRAM)
 - [SDG&E: www.sdge.com/2022-DRAM-RFO](http://www.sdge.com/2022-DRAM-RFO)
- Q&A's that apply to all three IOUs are included on all three sites, but IOU-specific questions are only on the associated IOU's site.
- Questions and answers from today's conference will be documented on the sites.
- Questions can be submitted via email at any time until the question submittal deadline as follows:

and **MUST** cc the Independent Evaluators (IE):

- MerrimackIE@merrimackenergy.com

Questions received (and answers) will be posted to the website periodically

- **Deadline to submit questions: Tuesday, March 2, 2021, and we will post the final set of answers no later than Friday, March 5, 2021 (offers are due on March 12, 2021).**

DRAM RFO Pilot Overview

Monalee Ronquillo
San Diego Gas & Electric

What is the DRAM RFO Pilot?

Originated as a California Public Utility Commission (CPUC) staff proposal in the demand response (DR) OIR (R.13-09-011); changed to a pilot by D.14-12-024 and continued for subsequent years pursuant to D.16-06-029, D.17-10-017, D.19-07-009 as modified by D. 19-09-041, and D.19-12-040.

Envisioned as supply-side DR approach for third-parties

- Provides a **capacity**, also referred to as **resource adequacy (RA)**, payment for DR aggregators
- DR aggregators participate directly in the California Independent Operator System (CAISO) markets with customers in the Investor Owned Utility (IOU) service area
- An alternative to bilateral Aggregator Managed Portfolio (AMP) contracts and other IOU DR offerings
- A vehicle to encourage new participants in the DR market; 2022 DRAM continues to have a 10 percent set aside for new market entrants
- Minimum August 2022 Offer Capacity Bid
- Minimum Energy Requirement
- Standard contract for RA; no bilateral negotiations of the contract
- Capacity may vary by month for delivery during one or more months from **January to December 2022**
- Budget: SCE: \$6 million, PG&E: \$6 million, and SDG&E: \$2 million

Capacity Product Definitions

System Capacity: IOU-wide, must be bid per CAISO must-offer obligation in day ahead and/or real-time market as PDR resource.

Local Capacity: Must be located in Local Capacity Areas (LCAs). Same must-offer obligation (MOO) as System.

- SCE: Covers the LA Basin and Big Creek/Ventura Substations;
- PG&E: Local Capacity Product must be within one of PG&E's seven LCAs listed in Appendix A - Offer Form, and Exhibit F of the Purchase Agreement;
- SDG&E: Entire service area.

Flexible Capacity (Category 1, 2 or 3): Bids into Day-Ahead and Real-Time Energy market, able to ramp and sustain energy output for a minimum of three hours, must be a PDR resource. Addresses variability and unpredictability created by intermittent resources. Must bid per CAISO must-offer obligation for flexible resources.

What is the DRAM RFO Pilot? (Cont'd)

- General bid can have any type of customer included
- Customers can use onsite renewable generation or energy storage to provide load reductions
- Customers can have back-up fossil generation but cannot use it for DRAM load reductions. Seller is responsible for enforcing this requirement (see Article 7 of Pro Forma). Please note that this language is subject to change pursuant to Commission resolutions or decisions on prohibited resources.

Roles & Responsibilities

CAISO

- Receives product registration from DRP
- Receives bidding and scheduling activity from SC
- Operates market and dispatches resources
- Determines performance and settlement in conjunction with SC

Scheduling Coordinator (SC)

- Can act as a DRP
- To bid PDR into the CAISO market, Sellers will be required to use a CAISO-qualified SC to conduct market and business transactions with the CAISO
 - Facilitates DRP scheduling and bidding activity with CAISO
 - Facilitates settlement and calculation of baselines and performance
 - The SC will handle business relationships and transactions with CAISO
- Provides information should there be an IOU audit of demonstrated capacity
- Visit the link below for the '2022 Scheduling Coordinator Aggregated Information Packets'
 - https://www.pge.com/pge_global/common/pdfs/save-energy-money/energy-management-programs/demand-response-programs/2022-demand-response/2022-DRAM-SC-Aggregated-Info-Packets.pdf

Roles & Responsibilities (Cont'd)

Wholesale Demand Response Provider (DRP) or Aggregator

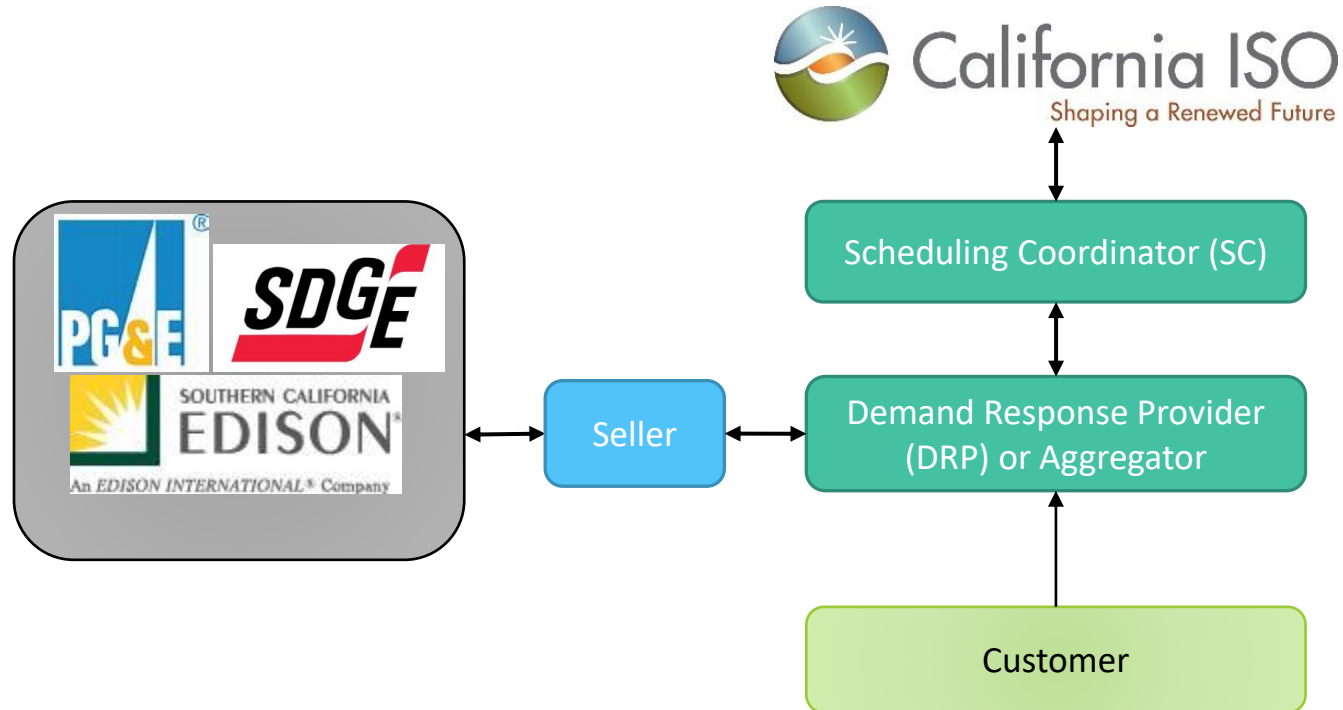
- Submits resource registration to CAISO consisting of unique customers
- Submits Customer Information Service Request/Demand Response Provider (CISR-DRP) for each service account to authorize IOU to release customer data
- Meets CAISO's PDR requirements

Roles & Responsibilities (Cont'd)

Seller

- Abides by all provisions of the DRAM Purchase Agreement; please be familiar with your obligations as a deemed DRP
- Provides required security posting to Buyer per contract
- Submits Qualifying Capacity information roughly 75 days prior to delivery month, and Supply Plan roughly 60 days prior to delivery month
- Works with SC to provide statement of demonstrated capacity
- Works with SC if there is an audit of demonstrated capacity
- Provides required registration data for Residential DRAM resource
- Complies with CAISO Market Rules (Demand Response Registration System and Resource Adequacy), CPUC RA Rules, Rule 24/32 Tariff
- Works with customers or Aggregators to provide load reduction
- Works with SC to bid DRAM resources via appropriate CAISO product and market and comply with the CAISO Must Offer Obligation
- Receives meter data for settlement from IOU (per authorization provided in CISR-DRP)
- Settles with customers and SC and retains earnings from market participation

Direct Participation and Resource Adequacy Illustration



Third Party Direct Participation

- Seller aggregates customers for DRAM Resource
- Seller participates (bids) directly in the CAISO market through SC
- Dispatches and settlements are between the CAISO and Seller's SC
- All earnings in the CAISO markets go to Seller and Seller's customers; no IOU involvement

RA

- Seller provides Supply Plan to IOU 60 days prior to month
- Seller provides Qualifying Capacity information to IOU roughly 75 days prior to month
- Seller provides demonstrated capacity through SC to IOU at end of the month

Roles & Responsibilities (Cont'd)

Buyer (IOU) abides by the provisions of the DRAM Purchase Agreement

- Evaluates the Qualifying Capacity (QC) estimates for reasonableness and determines if capacity should be de-rated
- Claims RA credit for DR resource provided by Seller
- Not involved in the CAISO market settlements
- Pays Seller all undisputed amounts for DR capacity after delivery month upon receipt of statement of demonstrated capacity by Seller
- Right to audit capacity delivered under “demonstrated capacity” contract provisions

Customer Data Provision by IOU

- Validates customer eligibility upon receipt of CISR-DRP from Aggregator/DRP
- Provides meter data to Aggregator/DRP per conditions of CISR-DRP and Rule 24/32

Independent Evaluator (IE)

- Merrimack Energy Group is the IE for this solicitation
 - Wayne Oliver
 - Keith Oliver
- Role of the IE is to ensure reasonable and uniform treatment of all potential counterparties by :
 - Monitoring IOU solicitation and discussion processes
 - Monitoring IOU valuation methodologies and selection processes
 - Reviewing bids to assure competitive process and no market collusion or market manipulation by some Sellers
 - Reporting to the Commission on the auction process
- The IE is privy to all offers, invited to participate in all discussions, reviews all bids, reviews bid scoring and selection, and must be copied on all correspondence between each IOU and their bidders

Bidders MUST cc MerrimackIE@merrimackenergy.com
on all emails and correspondences with the IOUs

Questions



Valuation and Selection

Mari Turner
Pacific Gas & Electric

Supplier Diversity

The IOUs encourage Women, Minority, Disabled Veteran, Lesbian, Gay, Bisexual and Transgender Business Enterprises (“Diverse Business Enterprises” or “DBE”s) to participate in the DRAM RFO

General Order (GO) 156

- Adopted by the CPUC in 1986, with electric procurement added in 2012
- Promote greater competition among utility suppliers by expanding the available supplier base and to encourage greater economic opportunity for Diverse Business Enterprises historically left out of utility procurement.
- Sets the rules governing the development of programs to increase participation of DBEs in procurement of contracts from utilities as required by CPUC Code

For additional information, please visit or contact:

- PG&E: www.pge.com/supplychainresponsibility
- SCE: www.sce.com/SD
- SDG&E: www.sdge.com/supplierdiversity

Valuation and Selection Processes

Bids MUST comply with all the requirements of the RFO

- Any bids with conformance issues will be discussed with the IE
- The goal is to ensure all bidders are treated in a fair manner
- There will be a “cure” period
 - During this period Bidders will only be allowed to change fields that the IOU has stated require revision(s), if any. No changes will be allowed to any other fields.
 - Bidders will not be allowed to correct pricing level unless specifically requested by the IOU during the cure period. It is the responsibility and duty of the Seller to accept full risk for pricing and developing their project.
 - Failure to respond to inquiries by the IOUs regarding incomplete or incorrect information could result in disqualification from the RFO.

The IE will review and validate methods of processing the bid information and evaluating offers to ensure that the evaluation is done fairly, with no preferential treatment to any Bidder.

Affiliate bids, if any, will be closely examined during the evaluation offer process to ensure the offer is evaluated in the same manner as the other offers.

All communications and negotiations will be closely monitored and assessed by the IE, to ensure no preferential terms and conditions are included in the offer.

Valuation and Selection Processes (Cont'd)

In accordance with CPUC approvals, DRAM Offers will be selected according to the following method:

- Offers shall be ranked by Net Market Value (NMV) per unit, adjusted for qualitative criteria
- IOUs will not select Offers, that in aggregate of all contracts, will exceed their authorized budgets*
- IOUs may elect not to select an Offer if:**
 - The Offer's price is above the long-term avoided cost of generation***
 - One or more of the monthly capacity prices of the Offer are outliers
 - The offer is not viable, based on assessment of the QC estimate provided by the Bidder
- At least 10% of August MW procured must be set aside for new market entrants****

*Budgets includes both contract costs and administration costs

**The IOUs shall make such exception in consultation with its Procurement Review Group and with approval of the Energy Division

***IOUs using a prorated LRAC methodology to assess partial year bids and to weigh months by short-run RA value

****A new market entrant is defined as a Provider who has not integrated any demand response resources into the CAISO market during the three years prior to a new Auction Mechanism solicitation involving any form of market-integrated demand response including but not limited to the Auction Mechanism or other resource adequacy contracts

Qualitative Scoring Matrix

Criteria Description	Yes	No	Cost Adjustment Score
Is the bidder a certified small business?	1	0	-1%
Has the bidder declined an Auction Mechanism contract when extended a shortlist offer?	1	0	+3%
Has the bidder willfully terminated or defaulted on an Auction Mechanism contract, since 2019?	1	0	+10%
Has the bidder delivered Demonstrated Capacity invoices to the Utility totaling less than 75 percent of the total contracted capacity for all contracted months since January 1, 2019?	1	0	+5%
Has the bidder delivered Demonstrated Capacity invoices totaling more than 95 percent of its total Contracted Capacity in all of its contract months in its most recent Auction Mechanism contract?	1	0	-5%

Procurement Review Group (PRG) and Independent Evaluator (IE) Report

The PRG includes the CPUC Energy Division, PAO, TURN, and other interveners.

The PRG oversees the procurement process of all three IOUs.

During the course of this RFO, the IE will be reporting on the progress and any issues on this RFO to the PRG.

Public and confidential IE reports will follow the required IE template guidelines.

These reports are submitted to the CPUC with the request for CPUC contract approval.

Questions



DRAM RFO Materials

Angela Taglinao
Southern California Edison
Contract Origination

Keys to a Successful Offer

- Read, understand, and follow instructions in each of the IOU's RFO Protocols
- Know deadlines and what is expected at each deadline
- Review all documents on each of the IOUs' DRAM RFO websites, as referenced in Slide 5
- Refer to the Frequently Asked Questions, which will be posted on each of the IOU's DRAM websites
- If you have any questions after fully reviewing the DRAM websites, email all three DRAM RFO teams at:
 - [PG&E: www.pge.com/dram](http://www.pge.com/dram)
 - [SCE: www.on.sce.com/DRAM](http://www.on.sce.com/DRAM)
 - [SDG&E: www.sdge.com/2022-DRAM-RFO](http://www.sdge.com/2022-DRAM-RFO)
- When emailing any of the DRAM RFO teams, also CC Wayne Oliver and Keith Oliver, the Independent Evaluators, at MerrimackIE@merrimackenergy.com

IOU DRAM RFO Schedule

Event	Day	Date
2022 DRAM RFO Launch	Tuesday	2/23/21
2022 DRAM RFO Bidders' Web Conference	Thursday	3/1/21
Deadline for RFO Bid Submittal*	Friday	3/12/21
Notice to Bidders of selection	Tuesday	4/27/21
IOUs file Tier 1 Advice Letter for CPUC contract approval	Friday	5/28/21

**Please refer to each IOU's schedule as posted in their RFO protocols or instructions*

Summary of 2022 DRAM Program

Items	DRAM 7 (2022)
Valuation	<ul style="list-style-type: none"> • System, <u>Local</u> & Flex • Minor updates to the qualitative criteria • Weighted long-run avoided cost of generation methodology for offers of less than 12 months • Offer selection includes assessment of QC estimate viability • DRAM resources short listed in the solicitation process will be assessed for cost effectiveness using the Net LRAC methodology
Showing (Operating) Months	<ul style="list-style-type: none"> • January – December 2022 (12 months)
Authorized Annual Budget D.19-07-009, OP 2	<ul style="list-style-type: none"> • SCE \$6 M • PG&E \$6M • SDG&E \$2M
Program Updates	<ul style="list-style-type: none"> • Resource ID sharing between contracts is prohibited • Customer movement across Resource IDs in different delivery months is limited, including the exemptions adopted in D.19-07-009 for customer movements within a delivery month

System Capacity: must be located in the IOU's service area, must be bid into CAISO as PDR, and must bid per CAISO must-offer obligation (MOO) in day ahead or real-time market.

Local Capacity: must be located in a local capacity area (LCA), must be bid into CAISO as PDR, and same must-offer obligation (MOO) as System.

Flexible Capacity (category 1, 2 or 3): Bids into Day Ahead and Real Time Energy market, able to ramp and sustain energy output for a minimum of three hours, must be bid as PDR. Addresses variability and unpredictability created by intermittent resources. Must bid per CAISO must-offer obligation for flexible resources.

DRAM Purchase Agreement Highlights

Article 1 – Transaction

- Type of Products
 - Residential/Non-Residential
 - System, Local & Flexible Capacity
- Demonstrated Capacity (DC)
 - DC Dispatch must align with Clock Hour or other interval consistent with the CAISO dispatch instruction
- Minimum Energy Dispatch Requirements

Article 3 – Seller Obligations

- Supply Plan
 - Due 10 Business Days prior to Buyer’s Compliance Showing deadlines
- Qualifying Capacity (QC) Information - Exhibit G
 - Due 10 Business Days prior to the deadline for Seller’s Supply Plan
- QC-De-Rate Notice
 - For compliance filings less than the qty in Seller’s Supply Plan
 - Due eight (8) business days prior to Buyer’s Compliance Showing deadlines
- RA Obligations
- Mandatory testing

Article 4 – Payment and Billing

- Invoicing (includes DC in a form similar to Exhibits C1, C2)
- DC payment and penalty structure adopted in D.19-07-009, was modified so that the DC/QC performance ratio shall be assessed at the individual resource (Resource ID) level with the permitted exception involving the concurrent dispatch of multiple resources as a prerequisite for performance aggregation

Article 5 – Credit and Collateral

- Due within 10 Business Days after contract execution
- Collateral calculation includes 20% of estimated Undelivered Energy Penalty based on Monthly Contracted Quantity

Article 7 – Representations, Warranties and Covenants

- Prohibited Resources (DRP cost sharing obligations subject to change pending outcome of A. 18-10-008, et al.)

Article 9 – Events of Default

- Failure to achieve Milestone by applicable deadline
- Laws & rules protecting the confidentiality & privacy of Customer & Personal Confidential Information

Article 13.1 – Confidentiality

- Privacy Obligations & Obligation to Notify

Exhibits

- **Exhibit C1 – Notice of Demonstrated Capacity (QC)*
- **Exhibit C2 – Notice of Demonstrated Capacity (EFC)*
- **Exhibit D – Communication Protocols for Data Issues*
- **Exhibit E – Minimum Energy Dispatch Requirements*
- *Exhibit F – Notice of Showing Month Supply Plan*
- **Exhibit G – Implementation Guidelines for Qualifying Capacity*
- **Exhibit H – Milestone Schedule & Form of Progress Report*

**Exhibits that have been updated for DRAM 7*

Read and know the obligations you are taking on in the event of an awarded DRAM contract. Read your Contract!!

Supply Plan Requirements

- IOUs expect Respondents to provide resource ID(s), NQC values, year-ahead supply plan, and other relevant information about their resources in a form substantially similar to Exhibit F to the IOUs.
 - This information is needed both for our year ahead RA compliance and monthly RA compliance
- QC information is also due (10 business days before supply plan information)
- All values on the supply plans, and in the offer forms submitted by Respondents should be entered to the nearest hundredth of MW (i.e. 5.21, not 5.208)

EXHIBIT C-1

Form of Notice of Demonstrated Capacity

EXHIBIT C1 - Notice of Demonstrated Capacity (QC)

For use with System and Local Capacity Product

Showing Month: _____
 Seller: _____
 Seller Contact Name: _____
 Seller Contact Phone: _____
 SCID: _____
 Local Capacity Area (LCA): _____ (mark "n/a" if not a Local Capacity Product)

Total "Qualifying Capacity" (MW): _____
 Total "Demonstrated Capacity" (MW): _____
 Residential Product (Yes/No): _____
 In Delivered Capacity Payment formula, "A" = _____

PDRs in the DRAM Resource				--- "Demonstrated Capacity" (MW) ---						Prohibited Resources Adjustment		Demonstrated Capacity Payment formula				Residential Product Delivery			Local Capacity Product Delivery		
PDR Resource Name	CAISO Resource ID	Assigned QC (MW)	Assigned NQC (MW)	For each PDR Resource (row), choose one demonstration method (column) to establish monthly Demonstrated Capacity				Complete for all resources		Complete for all resources				Residential Product			Local Capacity Product				
				DC Test Maximum hourly load reduction during DC Test(s) conducted by Seller's SC during Showing Month		Must Offer Obligation (MOO) Average amount of capacity Seller bid into CAISO Markets during Showing Month		DC Dispatch Maximum hourly load reduction from DC Dispatch(es) during Showing Month		Adjusted MW Claimed Specify the MW portion used to meet the contract obligation		DC-QC Ratio	B Value	C Value	Delivered Capacity Payment	This section is only required if delivering Residential Customer Product			This section is only required if delivering Local Capacity Product		
				Raw Demonstrated Capacity	Lessee of Assigned NQC or Raw Demonstrated Capacity	Raw Demonstrated Capacity	Lessee of Assigned NQC or Raw Demonstrated Capacity	Raw Demonstrated Capacity	Lessee of Assigned NQC or Raw Demonstrated Capacity	Default Adjustment Value (DAV) (MW)	Net MW Claimed	Ratio	Adjusted DC	Residential Customer Product Threshold, if applicable	A * B * C	Total Service Accounts**	Residential Customer Service Accounts**	Small Business Customer Service Accounts**	Total Service Accounts**	Customer Service Accounts with specified LCA**	
		0.00 MW	0.00 MW		0.00 MW		0.00 MW		0.00 MW		0.00 MW										
					0.00 MW		0.00 MW		0.00 MW		0.00 MW										
					0.00 MW		0.00 MW		0.00 MW		0.00 MW										
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					0.00 MW		0.00 MW		0.00 MW		0.00 MW										
					0.00 MW		0.00 MW		0.00 MW		0.00 MW										
Demonstrated Capacity ==>					0.00 MW		0.00 MW		0.00 MW		0.00 MW				\$0.00					0	0
IMPORTANT NOTES: * "Total Qualifying Capacity" is the total Supply Plan quantity identified through Section 3.1.				1) August Showing Month requires average hourly load reduction for two consecutive clock hours. 2) Only include results during the CAISO Availability Assessment Hours (AAH).		1) PDR must be bid into the Day-Ahead Market		1) August Showing Month requires average hourly load reduction for two consecutive clock hours. 2) Only include results during the CAISO AAH.		Per DRAM Agreement Section 7.2(b)(v), provide the Default Adjustment Value, if any.		Per DRAM Agreement Section 4.1		Percent Residential Accounts		Percent Local Accounts					
				2) Calculate using the same PDR Capacity Baseline used for Month Ahead Supply Plan		2) Only include bids submitted in compliance with the CAISO AAH.		2) Calculate using the same PDR Capacity Baseline used for Month Ahead Supply Plan and CAISO Settlement Baseline													

The Information provided by Seller in this Notice of Demonstrated Capacity is required by Section 1.6 of the Agreement.

*A combination of a market dispatch and test could be used to satisfy the August two consecutive hour requirement if the CAISO market dispatch does not cover the two consecutive hours.

EXHIBIT C-2

Form of Notice of Demonstrated Capacity

EXHIBIT C2 - Notice of Demonstrated Capacity (EFC)

For use with System and Local Capacity Product

Showing Month: _____
 Seller: _____
 Seller Contact Name: _____
 Seller Contact Phone: _____
 SCD: _____
 Local Capacity Area (LCA): _____ (mark 'n/a' if not a Local Capacity Product)

 Total "Qualifying Capacity"^{**} (MW): _____
 Total "Demonstrated Capacity" (MW): _____
 Residential Product (Yes/No): _____
 In Delivered Capacity Payment formula, "A" = _____

PDRs in the DRAM Resource				--- "Demonstrated Capacity" (MW) ---						Prohibited Resources Adjustment		Demonstrated Capacity Payment formula			Residential Product Delivery			Local Capacity Product Delivery					
PDR Resource Name	CAISO Resource ID	Assigned QC (MW)	Assigned EFC (MW)	Flexible Category (1, 2, or 3)	For each PDR Resource (row), choose <u>one</u> demonstration method (column) to establish monthly Demonstrated Capacity						Complete for all resources		Complete for all resources			Residential Product			Local Capacity Product				
					DC Test Maximum hourly load reduction during DC Test(s) conducted by Seller's SC during Showing Month		Must Offer Obligation (MOO) Average amount of capacity Seller bid into CAISO Markets during Showing Month		DC Dispatch Maximum hourly load reduction from DC Dispatch(es) during Showing Month		Adjusted MW Claimed Specify the MW portion used to meet the contract obligation		DC-QC Ratio	B Value	C Value	Delivered Capacity Payment	This section is only required if delivering Residential Customer Product			This section is only required if delivering Local Capacity Product			
		0.00 MW	0.00 MW		Raw Demonstrated Capacity	Lessee of Assigned NQC or Raw Demonstrated Capacity	Raw Demonstrated Capacity	Lessee of Assigned NQC or Raw Demonstrated Capacity	Raw Demonstrated Capacity	Lessee of Assigned NQC or Raw Demonstrated Capacity	Default Adjustment Value (DAV) (MW)	Net MW Claimed	Ratio	Adjusted DC	Residential Customer Product Threshold, if applicable	A * B * C	Total Service Accounts**	Residential Customer Service Accounts**	Small Business Customer Service Accounts**	Total Service Accounts**	Customer Service Accounts within specified LCA**		
					0.00 MW		0.00 MW		0.00 MW							\$0.00							
					0.00 MW		0.00 MW		0.00 MW							\$0.00							
					0.00 MW		0.00 MW		0.00 MW							\$0.00							
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Demonstrated Capacity ==>							0.00 MW		0.00 MW			0.00 MW				\$0.00					0	0	
IMPORTANT NOTES:																							
▲ "Total Qualifying Capacity" is the total Supply Plan quantity identified through Section 3.1.					1) August Showing Month requires average hourly load reduction for two consecutive clock hours. 2) Only include results during the CAISO Availability Assessment Hours (AAH).		1) PDR must be bid into the Day-Ahead Market		1) August Showing Month requires average hourly load reduction for two consecutive clock hours. 2) Only include results during the CAISO AAH.		Per DRAM Agreement Section 7.2(b)(v), provide the Default Adjustment Value, if any.		Per DRAM Agreement Section 4.1			Percent Residential Accounts		Percent Local Accounts					
					2) Calculate using the same PDR Capacity Baseline used for Month Ahead Supply Plan		2) Only include bids submitted in compliance with the CAISO AAH.		2) Calculate using the same PDR Capacity Baseline used for Month Ahead Supply Plan and CAISO Settlement Baseline														

The information provided by Seller in this Notice of Demonstrated Capacity is required by Section 16 of the Agreement.

*A combination of a market dispatch and test could be used to satisfy the August two consecutive hour requirement if the CAISO market dispatch does not cover the two consecutive hours.

**EXHIBIT D
COMMUNICATION PROTOCOLS FOR DATA ISSUES
(D.19-12-040, OP 26)**

Below are the approved Protocols for Data Issues Communication - DRAM Sellers must use the most current version of the Final DRAM Template, "Data Issue Reporting" (originally published March 13, 2020, and subsequently updated on July 21, 2020).

- Buyer and Seller shall each designate a point of contact for all data delivery inquiries and notify the Commission's Energy Division, the Buyer, and the Seller of any changes to this point of contact.
- Buyer shall facilitate a monthly call for Seller to report data issues.
- Seller shall perform troubleshooting prior to notifying Buyer of any data issues including:
 - a) verifying the Application Programming Interface data request was correctly formatted;
 - b) verifying Seller's customer lists are updated, including removing customers whose service accounts have been closed; and c) verifying that missing data is not a result of a planned or unplanned outage where Buyer has notified Seller.
- Seller shall notify Buyer of data errors using the standardized data template finalized by the Commission's Energy Division pursuant to OP 27 of D.19-12-040, as the same may be modified from time to time.
- Buyer shall confirm receipt of Seller's inquiry and provide an estimated time of resolution of the inquiry within two (2) Business Days after receipt thereof.
- Buyer shall update Seller on a regular basis and when the estimated time of resolution could change.
- Buyer shall confirm resolution of the inquiry and data delivery.

DRP/Seller Contact Info	Name of DRP	
	Rule 24/32 DRP ID	
	Submission Date	
	DRP Contact Name	
	DRP Email addresses	
Issue Info	Authorization Mode	
	Type of data issue	
	Describe the data issue	
	Account Number	
	Subscription ID	
	UUID(s)	
	Date range for requested data	
	API call used and error message(s) received	
Date and time of API call error		

Instructions:

Item	Field	Description	
DRP Contact Info	1	Name of DRP	Enter name of vendor registered with IOU as a Demand Response Provider (DRP)
	2	Rule 24/32 DRP ID	PG&E only. Enter the PG&E assigned 10 digit identifier
	3	Date Submitted to IOU	Enter date in MM/DD/YYYY format
	4	Name of person submitting form	Provide first and last name
	5	DRP Email addresses for IOU responses	Enter DRP email addresses for IOU responses on this issue
Issue Info	6	Authorization Mode (CISR-DRP Form vs Online)	Identify the mode used by the customer to create the data sharing authorization
	7	Type of data issue	Identify the type of data issue by making a selection in the drop down: Revenue Quality Meter Data (RQMD) interval; Raw/Non-RQMD interval; Billing; Customer; DR Program Info; API Call Failure; File Retrieval issue. Note: DRPs are to submit one intake form per data issue.
	8	Describe the data issue	Describe the issue you are encountering for the type of data issue identified in Item 7 above.
	9	Account Number	SCE & SDG&E only. Enter the Account Number for the customer impacted by the data issue. If the data issue impacts multiple Accounts, please add the Account Number information in the tab titled Multiple UUIDs.
	10	Subscription ID	PG&E & SCE only. Provide the subscription ID associated with each UUID impacted by the data issue. If the data issue impacts multiple Subscription IDs, please add the Subscription ID information in the tab titled Multiple UUIDs.
	11	UUID(s)	PG&E & SDG&E only. Enter the UUID for the customer impacted by the data issue. If the data issue impacts multiple UUIDs, please add the UUID information in the tab titled Multiple UUIDs.
	12	Date range for requested data	Specify the start and end dates of requested data on a per customer basis. If there are multiple UUIDs, please add the date information in the tab titled Multiple UUIDs per customer. Note: This item only pertains to issues related to Billing or Interval data.
	13	API call used and error message(s) received	Paste the actual API call used into this field and indicate the response error code and response error message you received
	14	Date and time of API call error	Enter the dates and times of failed API calls

By submitting this form, the DRP attests that it has performed basic troubleshooting steps before notifying the IOU of the issue. Basic troubleshooting steps, include: (1) verifying that the applicable API calls were correctly formatted; (2) verifying that the DRP's customer list has been updated to remove service accounts that are closed; (3) verifying that missing data is not a result of a planned or unplanned outage where the IOU has notified the DRP; and (4) verifying that the customer's data sharing authorization is in the active status (i.e., it has not expired or been revoked).

**EXHIBIT E
MINIMUM ENERGY DISPATCH REQUIREMENTS
(D.19-12-040 Attachment 1, Appendix C)**

Below are the approved Requirements for Minimum Energy Dispatch Requirements – DRAM Sellers must use the most current version of the Final DRAM Templates, "Required Energy Quantity – A/B" (originally published March 13, 2020, and subsequently updated on July 21, 2020), as represented by the template diagram at the end of this Exhibit E for Seller's submission pursuant to Section 1.7(b).

1. DRAM Resources must deliver a "Required Energy Quantity" ("REQ") equal to 30 megawatt hours (MWh) per megawatt (MW) of Average Qualifying Capacity ("AQC"). The AQC shall be assessed as a total sum of the individual PDRs in the DRAM Resource.
2. The REQ shall be delivered during the Term and during the Availability Assessment Hours.
3. Seller shall submit documentation to the Buyer showing CAISO settlements for the Delivered Energy Quantity ("DEQ"), along with the calculation of AQC, at the time of the Seller's last Demonstrated Capacity invoice submission or when Seller has received sufficient Revenue Quality Meter Data, whichever is earlier. The DEQ shall be assessed as a total sum of the individual PDRs in the DRAM Resource, and shall not exceed the REQ. To protect the confidentiality of market related data, Sellers may omit price and revenue data.
4. If the REQ is not delivered by the end of the Term, Seller will be assessed an Undelivered Energy Penalty based on the calculation set forth in Section 1.7(c) of the Agreement.



**STATE OF CALIFORNIA
PUBLIC UTILITIES COMMISSION**

**REQUIRED ENERGY QUANTITY
TEMPLATE - A**
Last Update: 3/13/2020

Demand Response Provider (DRP) Name	Investor Owned Utility (IOU)	Contract ID	Required Energy Quantity (MWh)	Delivered Energy (MWh)	Undelivered Energy (MWh)	Undelivered Energy Penalty (\$)	Monthly Quantity (MWh)												Average of 3 Highest Monthly AQC (MWh)
							J	F	M	A	M	J	J	A	O	N	D		
							1	2	3	4	5	6	7	8	9	10	11		

E-1

From REQ, B	(\$10,000)*	9)* (1 - (10/10))	
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**STATE OF CALIFORNIA
PUBLIC UTILITIES COMMISSION**

DATA ISSUE REPORTING TEMPLATE

EXHIBIT F

Form of Notice of Showing Month Supply Plan

Sample Counterparty Monthly Supply Plan Template																	
Contact Information			Supply Plan Information for Resources under DRAM Purchase Agreement to [insert IOU name]														
Contact Person	Phone Number	Email	Seller (or Seller's agent) SCID	Resource ID in CAISO Master File	System RA Capacity (QC) (MW 00.00 No rounding)	Local RA Capacity (QC) (MW 00.00 No rounding)		Flex RA Capacity (EFC) (MW 00.00 No rounding)	Flex RA Category (1, 2, or 3)	System RA Capacity used for Contract (MW 00.00)	If Joint Resource Local RA Capacity used for Contract (MW 00.00)		Flex RA Capacity used for Contract (MW 00.00)	RA Capacity Effective Start Date (mm/dd/yyyy hh: mm:ss)	RA Capacity Effective End Date (mm/dd/yyyy hh: mm:ss)	Resource Capacity Contract Number	SCID of Load Serving Entity
						LCA 1	LCA 2				LCA 1	LCA 2					
The information provided by Seller in this monthly Supply Plan template is required by Section 1.4 of the DRAM Resource Purchase Agreement with Buyer.																	
[Relevant IOU LCA's to be inserted in final form]																	

**EXHIBIT G
IMPLEMENTATION GUIDELINES FOR QUALIFYING CAPACITY
(D.19-07-009 Appendix A)**

Below are the approved Guidelines for Qualifying Capacity – DRAM Sellers must use the most current versions of the Final DRAM Templates, “QC Supporting Data-Monthly” and “QC Monthly-Historical Data” (originally published March 13, 2020, and subsequently updated on July 21, 2020, and November 20, 2020), as represented by the template diagram at the end of this Exhibit G, for Seller’s submission pursuant to Section 3.1(a)(ii).

- A. Seller shall provide the following details to the Buyer for each PDR in the DRAM Resource by the deadline specified in Section 3.1(a)(ii):
 - 1. Customer class (or percent of mix): Residential Customer, non-Residential Customer
 - 2. Nature of load being aggregated: such as, whole house, air conditioning load, storage, building load, pumps, electric vehicles, or other (Seller shall provide a description)
 - 3. Dispatch method: automated via cloud control, or other (Seller shall provide a description)
 - 4. Projected number of SAIDs, including a breakdown of the active and registered number of SAIDs within the total projected service account numbers. Active and Registered SAIDs shall be defined as SAIDs that have been registered in the CAISO Demand Response Registration System (DRRS) as of the date of this submission with an active status.
 - 5. Projected aggregated load (if storage based, projected aggregated capacity)
 - 6. For Residential Customers, projected percentage of load impact or reduction (if storage based, projected percentage of capacity delivered). For non-Residential Customers, total load impact.
 - 7. Supporting historical performance data for A.6 (from a prior test or market dispatch for a demand response resource with similar characteristics as A.1, A.2, and A.3). Where historical data is not available, Seller shall reference suitable publicly available performance data that best represents the anticipated performance of the DRAM Resource. Along with the supporting performance data, the following details for the DRAM Resource associated with the supporting performance data should be provided to establish similar characteristics:
 - a. Customer class (or percentage mix): Residential Customer, non-Residential Customer
 - b. Nature of load being aggregated: such as, whole house, air conditioning load, storage, building load, pumps, electric vehicles, or other (Seller shall provide a description)
 - c. Dispatch method: automated via cloud control, or other (Seller shall provide a description)
 - d. Number of SAIDs
 - e. Aggregated load (if storage based, aggregated capacity)
 - f. Percentage of load impact or reduction delivered (if storage based, percentage of capacity delivered.)

G-1

- 8. Estimated Qualifying Capacity = A.5 x A.6 for Residential Customers. A.6 for non-Residential Customers.
- B. Qualifying Capacity estimates should be provided for the Resource Adequacy measurement hours and the CAISO Availability Assessment Hours.
- C. The same baseline must be used for estimation of Qualifying Capacity at different stages of the Agreement.
- D. To the extent the projected percentage load impact for capacity delivered in A.6 deviates from the supporting data in A.7, Seller shall provide supplemental information to explain the reasonableness of the resulting “Estimated Qualifying Capacity” provided in A.8.
- E. To the extent the DRAM Resource consists of heterogenous combination of load types (in terms of A.1 through A.3 characteristics), Seller shall subdivide the contract/resource and provide the above information for each component and apply a weighted average to estimate Qualifying Capacity in A.8.
- F. For Seller’s submission prior to Buyer’s Compliance Showing deadline for each year, it is sufficient to provide the information required by this Exhibit for the Showing Month with the highest megawatts. For Seller’s submission prior to Buyer’s Compliance Showing deadline for each Showing Month, the information required by this Exhibit shall correspond to the applicable Showing Month.
- G. At the time of Seller’s submission prior to the Buyer’s Compliance Showing deadline each year, it is sufficient to provide the information required by this Exhibit at the aggregate DRAM Resource level. For Seller’s submission prior to Buyer’s Compliance Showing deadline for each Showing Month, the information required by this Exhibit must be provided at the PDR level.

G-2

EXHIBIT H

MILESTONE SCHEDULE AND FORM OF PROGRESS REPORT

From the Effective Date of this Agreement and continuing until the commencement of the Delivery Period, Seller shall provide a monthly Progress Report containing, at a minimum, the information listed below, as applicable. In accordance with Section 3.3(b), the report must be sent via e-mail in the form of a single Adobe Acrobat file or facsimile to Buyer, on the tenth (10th) calendar day of each month, or within five (5) calendar days after Buyer’s request.

1. An executive summary;
2. An updated Milestone Schedule
3. Chart showing schedule, percent completion, and percent change from previous report of major items and activities;
4. Forecast activities for next month; and
5. Potential issues affecting the DRAM Resource.

A list of milestones and completion dates for the DRAM Resource (“Milestone Schedule”) is as follows. DRAM Sellers must use the most current version of the Final DRAM Template, “Milestone Progress” originally published March 13, 2020, and subsequently updated on July 21, 2020, as represented by the template diagram below.



**STATE OF CALIFORNIA
PUBLIC UTILITIES COMMISSION**

**DRAM SELLER/DRP MILESTONE
PROGRESS TEMPLATE**

Last Update: 11/20/2020

Seller Info	Name of Seller	
	Rule 24/32 DRP ID	
	Contract Term Start Date	
	Seller Contact Name	
	Seller Email address	

Submission Date	Milestone
CAISO Registration Milestones:	
Deadline for achievement of each Milestone is forty-five (45) calendar days prior to first Month-Ahead Supply Plan submission	

H-1

	Seller or its Scheduling Coordinator registers as a CAISO Demand Response Provider, including execution of a DR Provider Agreement.
	Seller has become or has contracted with a Scheduling Coordinator or CAISO DR Provider and has identified the name of the Scheduling Coordinator
	Seller or its Scheduling Coordinator has completed other CAISO requirements, including executing a Meter Service Agreement (MSA SC) and obtaining DR Registration System (DRRS) access.
	Seller or Scheduling Coordinator has registered a resource pursuant to Section 4.13 of the CAISO tariff and applicable CAISO BPM and received Net Qualifying Capacity (NQC) approval from the CPUC and CAISO
	Seller has attested to having reviewed the CAISO’s Demand Response User Guide
Buyer/Utility Data Systems Integration Milestones:	
Deadline for achievement of each Milestone is forty-five (45) calendar days prior to first Month-Ahead Supply Plan submission	
	Seller has completed Buyer Onboarding Process for Rule 24/32
	Seller has completed registration with Buyer’s data sharing platform and completed all connectivity requirements
	Seller has obtained a Click-Through authorization and/or submitted a Customer Information Service Request DR Provider form for processing
	Seller has utilized Buyer’s Application Programming Interface to obtain the full Rule 24/32 data set for a customer authorization
California Public Utilities Commission (CPUC) Registration Milestones:	
Deadline for achievement of each Milestone is forty-five (45) calendar days prior to first Supply Plan submission	
	Seller has executed the Demand Response Provider Service Agreement with Buyer.
	Seller has executed and notarized the CPUC Demand Response Service Provider Registration Application Form
	Seller has paid the \$100 fee
	If Seller includes residential or small commercial customers in its aggregation, Seller has received approval for the customer letter and posted the bond
	Seller has obtained a CPUC registration certificate or registration has been published on the CPUC’s website
Resource Adequacy Milestones:	
Deadline for achievement of each Milestone is set forth in Exhibit F, “Implementation Guidelines for Qualifying Capacity”	
	Prior to first month of meeting Qualifying Capacity requirements, Seller has had phone call with Buyer to discuss resource creation and progress
	Seller has submitted Qualifying Capacity information in a timely manner

H-2

Questions



QC Template & Offer Forms

Mari Turner
Pacific Gas & Electric

SAMPLE TEMPLATE: DRAM Seller Estimate of Qualifying Capacity (QC) - For Bid Submission

Demand Response Provider (DRP) Name	Investor Owned Utility (IOU)	Offer No.
Highest QC Month [Residential and Non-Residential Customers Sections]		
Load Type(s)	Air Conditioning, Energy Storage-Building Load, Pumps, Electric Vehicles, Other - describe	
Dispatch Method	DRP Controlled, Customer Automated, Manual or Other - describe	
# Registered Service Accounts	[A]	
# Forecasted Service Accounts	[B]	
Total Projected Service Accounts	[A] + [B] = [C]	
Projected Load of Registered Customers (kW)	[D]	
Projected Load of Forecasted Customers (kW)	[E]	
Total Projected Load (MW)	[D] + [E] = [F]	
Per-customer Impact of Registered SAs (kW)	[G]	
Per-customer Impact of Forecasted SAs (kW)	[H]	
Total Projected Load Impact (kW)	([A]*[G]) + ([B]*[H]) = [I]	
Total Load Impact/ Total Load (%)	[I] / [F] = [J]	
Optional Notes		
Historical Performance [Residential and Non-Residential Customers Sections]		
Load Type	Air Conditioning, Energy Storage-Building Load, Pumps, Electric Vehicles, Other - describe	
Dispatch Method	DRP Controlled, Customer Automated, Manual or Other - describe	
# Registered SAs		
Per-customer Load Impact (kW)		
Total Load (kW)		
Total Load Impact (kW)		
% Load Impact		
Optional Notes		
Estimated QC (MW)	$([I]_{Res} + [I]_{Non-Res}) / 1000 = [K]$	

QC Template Column	Definition	Guidance	Historical Support Definition & Guidance
Residential and Non-Residential Customers Sections Guidance to support improved clarity and consistency in completing QC form (Source: Resolution E-5110 and IOU AL 6064-E et al)			
Customer Class	Based on the Customer Class Indicator provided in the Rule 24/32 data set.		
Load Type(s)		List all applicable options that expect to be utilized to support the Seller's DR response, and if "other" is selected, provide a description in the corresponding Optional Notes column.	
Dispatch Method			
# Registered Service Accounts	Registered Service Accounts refers to IOU service agreements that have been registered in the CAISO Demand Response Registration System (DRRS) as of the due date of your applicable QC assessment with an active	If the Bidder lists a significant ratio of Forecasted Service Accounts, IOU requests that Bidder utilize the notes field to indicate:	Where historical data is not available, the Bidder should reference suitable publicly available performance data that best represents the anticipated performance of the resource. Along with the supporting performance data, the following details for the resource associated with the supporting performance data should be provided to establish similar characteristics (see definitions and guidance above):
# Forecasted Service Accounts	Forecasted Service Accounts refers to any service agreements that have not yet been registered in the CAISO DRRS or are not active, but the Bidder expects to need to register in order to meet the Estimated QC.	<ul style="list-style-type: none"> the percentage of total estimated QC (in MW) attributed to the Active and Registered Service Accounts, and the percentage of total estimated QC (in MW) that have been enrolled in the Seller's DR program. Include the capacity associated to customers that are firmly committed to provide DR capacity but may not yet be registered or active in the CAISO DRRS. 	<ul style="list-style-type: none"> Customer class (or percentage mix): Residential, Non-residential Load type (nature of load being aggregated): such as, whole house, Air Conditioning load, storage, building load, pumps, Electric Vehicles, or other (describe) Customer size (Non-residential only): large, medium, small Dispatch method: automated via cloud control, or other (describe) Number of Service Accounts Load Impact
Total Projected Service Accounts	Total Projected Service Accounts should be calculated as a sum of the Registered Service Accounts and Forecasted Service Accounts.		
Projected Load of Registered Customers (kW)	Estimates of the projected aggregated load of Active and Registered Service Accounts and Forecasted Service Accounts during the Availability Assessment Hours (AAH) for the applicable Month with the highest MWs.	If the bid includes Registered Customers, this forecasted load should be calculated based on each customer's average historical customer meter data during the AAH in the associated month in prior year(s), adjusted for more recent shifts in load.	
Projected Load of Forecasted Customers (kW)	If storage based, provide the projected aggregated capacity.	Provide any descriptions of the calculation methodology used to support the projected aggregated load forecast.	<u>Guidance:</u>
Total Projected Load (MW)	Total Projected Load should be calculated as a sum of the Projected Load of Registered Customers and Projected Load of Forecasted Customers.		Feel free to use multiple rows or a separate tab to provide historical event data for each event if summarizing the results into one row is not helpful (i.e., to demonstrate improving performance over time) and provide any explanations or calculations on how the historical performance was assessed.
Per-customer Impact of Registered SAs (kW)	Weighted average load impact or reduction with respect to the Projected Aggregated Load during the RA measurement hours and the CAISO AAH and relative to a baseline.	If this value differs significantly from the historical data, then the Bidder should explain why it expects the load reduction to change.	If the historical performance does not support the estimated Qualifying Capacity, please provide an explanation demonstrating why the estimated Qualifying Capacity is reasonable and likely to be delivered.
Per-customer Impact of Forecasted SAs (kW)	If storage based, provide the projected percentage of capacity delivered.	If the baseline method is expected to be changing from that used for historical performance, please include this here.	

Comparison Between IOUs' Offer Forms, Evaluations, and Submission Requirements

RFO Requirements	PG&E	SCE	SDG&E
Offer Submittal Platform:	Power Advocate for all IOUs		
Offer Deadline time on March 12, 2021:	1 pm PT	12:00 pm PT	12:00 pm PT
Quantitative Evaluation Method	Net Market Value for all IOUs		
Qualitative Factors:			
Adder included in evaluation score, based on qualitative factors	Several for all IOUs		
Eligibility Requirements:			
Number of bids/variations allowed	20 for all IOUs		
Maximum bid size per month	10 MW	10 MW	N/A
Min bid size for PDR per month, if not 0 kW	100 kW for all IOUs		
August Capacity > 0 kW	Yes, required for all IOUs each year		
Min bid size required for all months for Local Capacity	Not Applicable		

Offer Forms – Offer Information highlights

- **Offer Products**
 - System Capacity, Local or Flex
 - PDR
 - Residential or non-residential customers
- **Expected number of Rule 24/32 service accounts expected per Offer**
 - Bidders may specify how many customers/Offer would require *new* Rule 24/32 service accounts, and how many customers already have Rule 24/32 service accounts.
- **Indication of which bids are Exclusive or Inclusive**
- **Exclusive** – offers are exclusive of each other, if two or more offers cannot both be awarded contracts in this RFO (e.g., Offers 1 and 4 cannot both be shortlisted, as customers are the same). PG&E & SDG&E calls Exclusive Offers “variations.”
- **Inclusive** – offers that are inclusive of each other means that they all must be awarded contracts together (e.g., Offer 2 must be selected with Offer 4). (SCE & PG&E)

Questions



Walk-Through: IOU DRAM Offer Forms

Mari Turner – PG&E

Steven Van Deventer – SCE

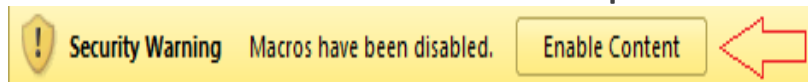
Aaron Lu – SDG&E

PG&E-Specific Offer Form Instructions

- You must submit an **Excel** Offer Form – no other formats will be accepted.
- Each Participant should only submit one Offer Form.
- If you need more rows on your Offer Form, please contact us at DRAMRFO@pge.com and cc Independent Evaluator, and we will reformat your Offer Form to enable more rows.
- Enable macros when opening the Offer Form. This can be done in two ways:
 - a. Enable macros on the “Microsoft Excel Security Notice” that is displayed before the form opens...



- b. Enable macros by clicking the “Enable Content” button that is often displayed at the top of the screen when the form first opens:



PG&E Offer Form – “Participant Information” tab

Validates if all required fields are completed



0 of 50 entries made.

You must select “Yes” for each of the Acknowledgement, Participant, Attestation, and Affirmation of ability to perform sections.

Participant Authorization	
By selecting 'Yes', Bidder hereby confirms that they are "a duly authorized representative of Bidder."	
Electronic Signature	<input type="text"/>
Title	<input type="text"/>
Select "Yes" to certify that the typed name acts as Bidder's electronic signature	<input type="radio"/>

Attestation	
By providing the electronic signature, below, Bidder hereby attests that all information provided in this Offer Form and in response to this DRAM RFO is true and correct to the best of Bidder's knowledge as of the date such information is provided.	
Electronic Signature	<input type="text"/>
Title	<input type="text"/>
Select "Yes" to certify that the typed name acts as Bidder's electronic signature	<input type="radio"/>

Affirmation of ability to perform all obligations under the PA	
Bidder has read and understands the Purchase Agreement (PA) and attests that Bidder is able to perform all obligations under the PA and Protocol.	
Electronic Signature	<input type="text"/>
Title	<input type="text"/>
Select "Yes" to certify that the typed name acts as Bidder's electronic signature	<input type="radio"/>

PG&E Offer Form – “Participant Information” tab: CONFIDENTIALITY

Acknowledgement of Protocol	
By selecting “Yes” Bidder hereby agrees to the terms of the Solicitation Protocol. Bidder acknowledges that any costs incurred to become eligible or remain eligible for the solicitation, and any costs incurred to prepare an offer for this RFO are solely the responsibility of Bidder.	<Choose One>
Section VII: Bidder will abide by the confidentiality terms and conditions.	
Section X: Bidder knowingly and voluntarily waives all remedies or damages at law or equity concerning or related in any way to the Solicitation.	
Electronic Signature	Select "Yes" to certify that the typed name acts as Bidder's electronic signature <Choose One>
Title	

2022 DRAM Solicitation Protocol, Section VII: Confidentiality

- No Bidder shall collaborate on or discuss with any other Bidder or potential Bidder Offer strategies, the substance of any Offer(s), including without **limitation the price or any other terms or conditions of any Offer(s), or whether PG&E has Selected Offers or not.**
- PG&E shall follow a similar confidentiality protocol regarding submitted bids.
- The treatment of confidential information described above shall continue to apply to information related to Selected Offers which are formalized through execution of a Purchase Agreement.

PG&E Offer Form – “Offer Information” tab

You can have different Products for the same Offer on multiple rows. These rows are, in effect, “inclusive” of each other.

Each Offer may contain a portfolio of Product Types: System, Local or Flex

Offer Number	Offer Name and/or Comment (Optional)	Describe any Exclusivity (i.e., where two or more offers cannot all be awarded contracts in this RFO due to shared customers or some other reason), using Offer Numbers in Column B	Offer Number Exclusive With (leave blank if not applicable)	Residential or Non-residential	Type of Product A=System Resource Adequacy (RA) B = Local and System RA C= Flexible and System RA D=Flexible, System, and Local RA	Registered and Confirmed Rule 24 Service Accounts	Estimated Additional Rule 24 Service Accounts Required (NOTE: You may provide us additional documentation of monthly service accounts you anticipate obtaining in the “Optional – Monthly Registration” tab.)	TOTAL Accounts	[A] 2022 Monthly Quantity (kW) PDR--If not 0 kW, minimum is 100 kW maximum offer size is 10,000 kW											
(#)		(select from drop-down list)		(select from drop-down list)	(select from drop-down list)				Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
.1	Offer 1 - part a	Individual Offer		Residential	D2-1_Flex2_Greater Bay	100	1100	1,200	100	100	100	100	100	100	100	100	100	100	100	100
.1	Offer 1 - part b	Individual Offer		Non-residential	C3-0_Flex3_System	200	1200	1,400	-	-	-	-	-	-	-	500	-	-	-	-
2	Offer 2	Exclusive With	.3	Residential	A0_System	300	1300	1,600	300	300	300	300	300	300	300	300	300	300	300	300
.3	Same as Offer 2, but with Local and Flex RA	Exclusive With	2	Residential	D3-2_Flex3_Humboldt	300	1300	1,600	500	500	500	500	500	500	500	500	500	500	500	500
Example Offers Are Above--Actual Offers MUST Be Entered Below																				
1		<Choose One>		<Choose One>	<Choose One>															

Cells are peach when incomplete, and turn to a mint green color once you enter a value.

These 2 offers are exclusive of each other (i.e., they can't both be shortlisted, it's one or the other). Offers that are exclusive of each other have variations of the same offer.

The monthly Offer maximum is 10,000 KW (10 MW)

For August, you must provide at least 100 kW for PDRs

PG&E Offer Form – “Supply Chain Responsibility” tab

Supply Chain Responsibility	
1) Is your company certified as a minority, woman, service disabled veteran-owned (DVBE) business, lesbian, gay, transgender (LGBT) business? (select only one):	<input type="text" value="CPUC"/>
2) Is your company a certified small business?	<input type="text" value="SBA"/>
3) Does your company have specific programs designed to recruit and develop small, diverse suppliers/subcontractors (e.g. outreach, training, mentorship, etc.):	<input type="text" value="Yes"/>
4) Does your company plan to subcontract any of the work pertaining to this solicitation to California CPUC-certified diverse firms?	<input type="text" value="<Choose>"/>
5) Does your company have a Code of Conduct policy for its employees and suppliers?	<input type="text" value="<Choose>"/>

If your business is certified by more than one agency and one of those agencies is the CPUC, please select CPUC.

Make sure you provide information on any diverse business entity subcontractors that you use here.

Optional tab – monthly registrations

Ordering Paragraph 6 of Resolution E-4817

The IOUs shall include in their 2022 DRAM RFO estimates of the additional Rule 24 registrations that they plan to make available for each month of the 2022 DRAM pilot. However, the 2022 DRAM RFO shall state that these monthly estimates serve as illustrative, that the registrations are dynamic and do not serve to limit bid evaluation and selection, and shall explicitly permit bidders to submit monthly estimates of their Rule 24 registration needs.

	Monthly estimates of Rule 24 registration needs (*Note - do not include already registered and confirmed service accounts)												
Offer Name and/or Comment	In accordance with Ordering Paragraph 6 of Resolution E-4817: The IOUs shall explicitly permit bidders to submit monthly estimates of their Rule 24 registration needs.												
(Optional)	2022 Monthly Rule 24 Registrations (incremental per month)												
	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Grand Total
Offer 1	50	100	7										157

Walk-Through: SCE DRAM Offer Form

Steven van Deventer, SCE

SCE RFO Website: www.on.sce.com/DRAM

Offer Form	Excel spreadsheet in which Offeror inputs information for SCE's valuation of Offers
Estimated Qualifying Capacity template*	Excel spreadsheet in which Offeror inputs information on the Estimated Qualifying Capacity for each offer. This is combined with the Offer Form

*This a sample template and may be modified by the Commission at a later time

SCE Offer Form – “Instructions” tab

SOUTHERN CALIFORNIA EDISON OFFER WORKBOOK
2022 DRAM Offers Workbook Instructions

Instructions:
The following worksheets must be completed by each Offeror.

- 1) Offeror Information
- 2) RA Offers
- 3) QC Supporting Data

Important:
Each unique offeror will require a separate offer workbook.
Please fill out all data in units requested.
Please remember to provide additional notes on inclusivity / exclusivity for each offer.
The correct completion and return of this offer workbook to SCE does not guarantee an award from SCE.

Workbook Conventions:

- Type in Required Information
- Select from a Drop-Down Box
- Text | Info | Error | Good to Go
- Error Text/Number
- Good Text/Number

- If the offer has unique characteristics/parameters that do not fit within this offer workbook, please explain those unique attributes in a cover letter.
- Pay close attention to the units required for each field.
- Follow instructions exactly as they appear on this page as well as the pop-up messages on each worksheet.
- Submit any questions by email through PowerAdvocate® <https://www.poweradvocate.com/pR.do?okey=111604&pubEvent=true>

Version: 2021.02.18

Instructions | 1. Offeror Info | 2. RA Offers | 3. QC Support Data | 4. Optional Historical Data | 5. Additional Notes

Offer form is “protected” with the exception of these color-coded INPUT areas (blue and yellow)

SCE Offer Form – “Offeror Info” tab

Seller Name **must** match
Non-Disclosure
Agreement **exactly**

Must be S&P &
Moody's credit
ratings only, if
applicable

SOUTHERN CALIFORNIA EDISON 2022 DRAM OFFER WORKBOOK
OFFEROR INFORMATION CONFIDENTIAL

A. OFFEROR & CONTACT INFORMATION

Offeror Legal Name:
Business Address:
City, State, Zip:

Contact Name #1: Contact Name #2:
Company: Company:
Title: Title:
Address: Address:
City, State, Zip: City, State, Zip:
Office Phone: Office Phone:
Cell Phone: Cell Phone:
Email: Email:

B. CONTRACT INFORMATION & TERMS

Offeror S&P Credit Rating:
Offeror Moody's Credit Rating:

C. ADDITIONAL INFORMATION

- Offeror or Sponsor listed above is certified as a WMDVBE. For eligibility and certification, please see: <http://www.sce.com/CommunityandRecreation/Diversity/supplier-diversity/faqs.htm>
- Supplier diversity policy statement exists which encourages and promotes providing Diverse Business Enterprise the maximum practicable opportunity to compete for your business.
- Supplier diversity program is documented.
- Supplier diversity program oversight is provided by an officer or majority owner.
- Measurable goals exist for Diverse Business Enterprise' participation in bid opportunities and results /
and with subsuppliers / subcontractors providing direct support (not overhead expenses, such as cleaning and

Instructions | **1. Offeror Info** | 2. RA Offers | 3. QC Support Data | 4. Optional Historical Data | 5. Additional Notes


SCE Offer Form – “RA Offers” tab

Pricing is limited to two decimal places

Column C, Select Inclusivity from drop down

Column D, Select Exclusivity with *, as characterized by the Package ID# in Column C

Please check the Validation Message and QC Validation Message



2022 DRAM OFFER WORKBOOK
OFFERS

Product Types	No Flex	Flex 1	Flex 2	Flex 3
System	A	C1	C2	C3
LA Basin (LAB)	B1	D1-1	D2-1	D3-1
Big Creek Ventura (BCV)	B2	D1-2	D2-2	D3-2

Maximum number of Offers: 20

Offers Entered: 0

Validation Message: Enter Offers

QC Validation Message: Enter Offers

Please Submit Offer through PowerAdvocate® using the following link:
<https://www.poweradvocate.com/appNavigator?navType=bidevent&okey=108649>

- 1) EXAMPLE/"SAMPLE" offer is shown on Rows 36 to 39.
- 2) All Offers must be entered in columns H thru S, U thru AF, and AH thru AI. No blanks (zero decimal points only).
- 3) Select Product Type in column E and Select Customer type in column F.
- 4) Do not skip rows. Do not cut and paste.
- 5) Product is defined by the Monthly Quantity (MW) and Contract Price (\$/kW-month) entered.
- 6) Check validation comment in column AJ.

						Monthly Quantity (MW for each day of Showing Month)															
Offer ID	Inclusive Package ID	Exclusive of Package ID(s) X, Y, Z	Product Type (Contract §1.1.b)	Customer Type	Product	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-22	Feb-22	Mar-22	
00	A	None (Standalone)	A-System	Residential	Monthly	1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00		3.00			
00	A	None (Standalone)	A-System	Commercial	YR	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20		2.50	2.50	2.50
00	B	Exclusive of C	A-System	Commercial	YR	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		2.00	2.00	2.00	
00	C	Exclusive of B	A-System	Commercial	Q3							1.00	1.00	1.00							
EXAMPLE/SAMPLE OFFER IS ABOVE. ACTUAL OFFERS MUST be entered BELOW (COLUMNS C, D, F through R, U through AF and AK). Modify AK and AJ only if needed for inclusivity																					
01					None																
02					None																
03					None																
04					None																
05					None																
06					None																
07					None																
08					None																
09					None																
10					None																
11					None																
12					None																
13					None																
14					None																

SCE Offer Form – “Estimate of Qualifying Capacity” tab

Please check the Validation Message

Please complete the appropriate section for each offer (residential, non-residential, or both) using data for the *Highest QC Month*

The instructions include specific descriptions of each field to be completed

SOUTHERN CALIFORNIA EDISON 2022 DRAM OFFER WORKBOOK
Qualifying Capacity Support Data

Validation Message: **Enter Offers**

Residential Customers (if applicable)

Highest QC Month - Residential Customers

Offer No.	Load Type(s)	Dispatch Method	# Registered Service Accounts	# Forecasted Service Accounts	Total Projected Service Accounts	Projected Load of Registered Customers (kW)	Projected Load of Forecasted Customers (kW)	Total Projected Load (MW)	Per-customer Impact of Registered SAs (kW)	Per-customer Impact of Forecasted SAs (kW)	Total Projected Load Impact (kW)	Total Load Impact/Total Load (%)	Optional Notes	Load Type
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														

Instructions (by Column)

Column	Description
A	Offer No. for the Bid
B.1	Load Type (Air Conditioning, Energy Storage-Building Load, Pumps, Electric Vehicles, Other - describe)
B.2	Dispatch Method (DRP Controlled, Customer Automated, Manual or Other - describe)
B.3	Number of active service agreements (SA) registered with CAISO
B.4	Number of forecasted SAs
B.5	Total SAs (i.e. number of active SAs registered with CAISO plus number of forecasted SAs)

Additional Instructions:

- If contract/ resource consists of heterogeneous combination of load types, subdivide the contract/resource information for each component and apply a weighted average to estimate Qualifying Capacity.
- Where historical data is not available, Seller should reference suitable publicly available performance anticipated performance of the resource.
- If contract/ resource consists of heterogeneous combination of load types, subdivide the contract/resource information for each component and apply a weighted average to estimate Qualifying Capacity.

Navigation: Instructions | 1. Offeror Info | 2. RA Offers | **3. QC Support Data** | 4. Optional Historical Data | 5. Additional Notes

SCE Offer Form – Other tabs

2022 DRAM OFFER WORKBOOK

Optional - Historical Performance Data

- If the proposed product or resource has underlying historical performance data, offeror may provide supporting historical data consistent with how monthly QC Support Data is reported to the CPUC.
- Supporting historical performance data must be from a prior test or market dispatch for a DR resource characteristics as the customer class, nature of load being aggregated, and dispatch method.

Demand Response Provider (DRP) Name	Investor Owned Utility (IOU)	Contract ID	CAISO Resource ID	Historical Performance					
				Load Type(s) (Air Conditioning, Energy Storage-Building Load, Pumps, Electric Vehicles, Other - describe)	Dispatch Method (DRP Controlled, Customer Automated, Manual or Other - describe)	Dispatch Date	Dispatch Time	# Registered Residential Service Accounts	# Registered Non-Residential Service Accounts

Add rows to this table as necessary.

Instructions | 1. Offeror Info | 2. RA Offers | 3. QC Support Data | **4. Optional Historical Data** | 5. Additional Notes

If the proposed product or resource has underlying historical performance data, offeror may provide this additional supporting historical data consistent with how monthly QC Support Data is reported to the CPUC.

Supporting historical performance data must be from a prior test or market dispatch for a DR resource with similar characteristics as the customer class, nature of load being aggregated, and dispatch method.

Additional room for an info that would not fit otherwise within the workbook

Walk-Through: SDG&E DRAM Offer Form

Aaron Lu – SDG&E

- RFO Website: www.sdge.com/2022-DRAM-RFO
- These forms must be used – no substitutes will be evaluated
- See the RFO website for the required submittal documents

Walk-Through: SDG&E DRAM Offer Form

- Enter company information in the left side of the worksheet

If some offers, or groups of offers, are exclusive from one another, use Variation Number to indicate which offers can be included together

Please use caution with auto-fill, numbers often unintentionally auto-increment. Use copy/paste instead.

San Diego Gas & Electric Company
2022 DRAM RFO

Offer Form

Contact Information																
Legal Entity Name that will sign the Contract	Offer Number	Variation Number	Street Address 1	Street Address 2	City	State	Zip	Primary Contact First Name	Primary Contact Last Name	Title	Email Address	Office Phone Number	Cell Phone Number	Fax Number	Secondary Contact First Name	Secondary Contact Last Name
ABC Company, INC.	1	1	110 ABC Ave									888-111-1234				
ABC Company, INC.	2	1	110 ABC Ave									888-111-1234				
ABC Company, INC.	3	1	110 ABC Ave									888-111-1234				
ABC Company, INC.	4	1	110 ABC Ave									888-111-1234				
ABC Company, INC.	5	1	110 ABC Ave									888-111-1234				

Walk-Through: SDG&E DRAM Offer Form

- Enter Registration Information, RA flex category, capacity (kW), cost (\$/kW-mo)

Offer Information					Will the project be able to provide flexible capacity and if so what category for 2021												Project Capacity (kW) 2021												Capacity Cost (\$/kW-month) 2021													
Total Expected Registrations	Of the Total Expected Registrations, how many registrations will you need in addition to those you have	Minimum Registrations Available for this Offer to be Accepted	Residential or Non-Residential?	New Market Participant (NMP)?	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Total	NMP Total	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21
					No Flex	No Flex	No Flex	No Flex	Cal Flex	Cal Flex	Cal Flex	No Flex	No Flex	No Flex	No Flex	No Flex	10	20	30	40	50	60	70	80	90	100	110	120	700	750	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00

- Enter Qualitative Criteria Responses - All Responses To Be in Yes/No format

Yes	Yes	Yes	Yes	Yes	
-1%	3%	10%	5%	-5%	
Qualitative Criteria					
Is the bidder a certified small business?	Has the bidder declined an Auction Mechanism contract when extended a shortlist offer?	Has the bidder willfully terminated or defaulted on an Auction Mechanism contract, since 2019?	Has the bidder delivered Demonstrated Capacity invoices to the Utility totaling less than 75 percent of the total contracted capacity for all contracted months since January 1, 2019?	Has the bidder delivered Demonstrated Capacity invoices totaling more than 95 percent of its total Contracted Capacity in all of its contract months in its most recent Auction Mechanism contract?	Total Qualitative Score Adder

Questions



Closing Remarks
