

PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298



Pacific Gas & Electric Company
ELC (Corp ID 39)
Status of Advice Letter 6072E
As of March 8, 2021

Subject: Update to Capacity Bidding Program (CBP) Tariff Starting in the 2021 Program Year

Division Assigned: Energy

Date Filed: 01-28-2021

Date to Calendar: 02-01-2021

Authorizing Documents: D1712003

Disposition:	Accepted
Effective Date:	02-27-2021

Resolution Required: No

Resolution Number: None

Commission Meeting Date: None

CPUC Contact Information:

edtariffunit@cpuc.ca.gov

AL Certificate Contact Information:

Kimberly Loo

415-973-4587

PGETariffs@pge.com

PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298



To: Energy Company Filing Advice Letter

From: Energy Division PAL Coordinator

Subject: Your Advice Letter Filing

The Energy Division of the California Public Utilities Commission has processed your recent Advice Letter (AL) filing and is returning an AL status certificate for your records.

The AL status certificate indicates:

- Advice Letter Number
- Name of Filer
- CPUC Corporate ID number of Filer
- Subject of Filing
- Date Filed
- Disposition of Filing (Accepted, Rejected, Withdrawn, etc.)
- Effective Date of Filing
- Other Miscellaneous Information (e.g., Resolution, if applicable, etc.)

The Energy Division has made no changes to your copy of the Advice Letter Filing; please review your Advice Letter Filing with the information contained in the AL status certificate, and update your Advice Letter and tariff records accordingly.

All inquiries to the California Public Utilities Commission on the status of your Advice Letter Filing will be answered by Energy Division staff based on the information contained in the Energy Division's PAL database from which the AL status certificate is generated. If you have any questions on this matter please contact the:

Energy Division's Tariff Unit by e-mail to
edtariffunit@cpuc.ca.gov



Erik Jacobson
Director
Regulatory Relations

Pacific Gas and Electric Company
77 Beale St., Mail Code B13U
P.O. Box 770000
San Francisco, CA 94177

Fax: 415-973-3582

January 28, 2021

Advice 6072-E

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: Update to Capacity Bidding Program (CBP) Tariff Starting in the 2021 Program Year

Purpose

Pacific Gas and Electric Company (PG&E) hereby submits this advice letter (AL) to the California Public Utilities Commission (Commission or CPUC) pursuant to prior guidance provided by the CPUC in Decision (D.) 17-12-003, which approved PG&E's 2018-2022 Demand Response Program Application (A. 17-01-012). This AL includes proposed updates to the CBP Tariff along with the related CBP Add/Delete Form (Form 79-1075) that both strengthen the CBP program and improves clarity for third-party Aggregators who administer the CBP program. These proposed updates are consistent with the authority provided in D. 17-12-003, specifically, that "non-controversial" modifications be made through a Tier 2 AL.¹ Consistent with this authority, PG&E presented these proposed modifications to Energy Division staff on November 20, 2020.

¹ D. 17-12-003, page 137 indicates that "We reiterate the direction we provided to the Utilities in D.09-08-027 and D.12-04-045 regarding the process for requesting changes or adjustments to the demand response programs and budgets we approve in this decision. Changes such as requests for new demand response programs, increases in the total budget for a demand response program area, or changes to policies specifically adopted in this decision should be made through an Application or a Petition for Modification. We authorize the Utilities to request **non-controversial** changes to program tariffs and implementation procedures via a Tier 2 Advice Letter. If uncertain whether a particular change is appropriate for review through the Advice Letter process, we encourage the Utilities to *consult with Commission Staff* before submitting an Advice Letter."

Discussion

As part of ongoing refinements to the CBP program, PG&E is proposing a number of enhancements.² Several of these modifications are based on learnings since CBP was integrated into the CAISO market in 2018, along with more recent dispatches associated with the August and September 2020 grid challenges that the State of California experienced. Furthermore, certain changes are being proposed to better align PG&E's CBP tariff with that of Southern California Edison (SCE) and San Diego Gas and Electric Company (SDG&E), the other two utilities.

These proposed changes to the CBP tariff and Add/Delete Form are discussed below, including reasons for the changes and identification of the specific tariff modifications as applicable.

1. Program notification time (5 p.m.)

PG&E proposes to push the Day-Ahead notification back one hour from 4 p.m. to 5 p.m., which would allow for additional processing time of CAISO market awards once received.

Reason: This proposal maximizes the ability for Demand Response Operations to properly process market awards and issue dispatch notifications, and better aligns with the planned day-ahead notification time utilized by SCE and SDG&E.

CBP Tariff Impact: Sheet 11, section titled "Program Trigger and Notification" is being updated to indicate 5 p.m. instead of 4 p.m.

2. Nomination window (15th of the month prior)

A previous trial of enabling changes to nominations until the 15th day of the month (instead of the current 5th business day) prior to the operating month resulted in an average monthly increase in nominations of 2.2MW (7.4%) in 2020. Therefore, PG&E is requesting that the nomination window be extended from the current 5th business day of the month prior to the operating month to the 15th day of the month prior to the operating month in order to promote increased capacity nominations and availability of CBP resources.

Reason: This proposed modification provides greater flexibility for Aggregators, has proven to result in an increase in nominations, and aligns more closely with the other two IOUs.

² These proposed enhancements were contemplated prior to the issuance of the new Reliability OIR (R. 20-11-003). While these modifications are independent of proposals that would be introduced in the Reliability OIR, they are supportive of making the CBP program more efficient and responsive to grid needs.

CBP Tariff Impact: Sheet 5, section titled “Capacity Nominations” is being updated to indicate “submitted by the 15th” with the removal of the phrase “completed within the first five business days”.

3. Bidding window (3 days prior to trade day)

The August and September 2020 heatwaves demonstrated that a bid price window that closes seven days in advance of the trade day (the current window) does not give Aggregators the flexibility to respond to emergency grid conditions as they become known. In general, a shortened bid price window would allow Aggregators to more accurately manage the value of their resources. Therefore, PG&E proposes to shorten the bid window to 3 (three) days [from 7(seven)] days prior to the trade day.

Reason: The proposal better supports real-time grid conditions.

CBP Tariff Impact: Sheets 3 and 4, section titled “Options Products and Bidding,” subsections “Elect” and “Elect +” are being modified to 3 days (from 7) prior to the trade day.

4. Remove 100kW requirement for nomination

CBP Aggregators with all customer and load types have indicated they have stranded resources that cannot be nominated due to the 100 kilowatt (kW) per sub-Load Aggregation Point (LAP) nomination requirement. In order to make use of these resources, an option will be added for Aggregators to nominate customers less than (<) 100kW per sub-LAP in the Prescribed 1-4 Hour Product, which PG&E would then combine to create a PDR resource greater than or equal to (>=) 100kW per sub-LAP. For such a nomination, there would be a requirement that it be greater than 25kW in order to successfully combine these stranded resources.

Reason: This proposal maximizes availability of resources and allows for increased nominations to support grid needs. Moreover, this is consistent with SDG&E’s approach of allowing resources less than 100kW per sub-LAP to participate.

CBP Tariff Impact: Sheet 5, sections titled “Capacity Nominations” and “Rates” have been edited and include new language to describe the details of this change,³ and Sheet 8, section “Energy Payment,” includes new language specific to nominations less than (<) 100kW per sub-LAP.

³ The removal of the reference to “Pass through....” on Sheet 6 is directly related to the proposed change to energy payments specifically for nominations less than 100kW. Energy payments from CAISO cannot be passed through to Aggregators for nominations less than 100kW because the performance calculation provided to PG&E is for the entire resource, not at the meter level. For all nominations equal to or greater than 100kW, the energy payment will continue to be a pass through from CAISO, as stated on Sheet 8.

5. 5-in-10 residential baseline

A 5-in-10 baseline option for residential customers more closely reflects the variability of home energy use. Conversations with existing and potential Aggregators indicate that a 5-in-10 residential baseline option would lead to increased participation from various residential load types.⁴

Reason: This proposal facilitates the growth of the residential CBP market.

CBP Tariff Impact: Sheet 4, section titled “Customer Specific Energy Baseline” now includes language describing the ability for residential Aggregators to select a 5-in-10 baseline. This would be optional and a residential Aggregator could still select the 10-in-10 baseline. The 10-in-10 would continue to be the only option for non-residential aggregators. If an Aggregator has both residential and non-residential customers, then the 10-in-10 baseline can be applied to both residential and non-residential customers or be separated in accordance with the ‘CAPACITY NOMINATIONS’ section of this tariff to assign a 5-in-10 baseline for the residential nomination and a 10-in-10 baseline for the non-residential nomination.

6. Process for de-enrollment clarification

Current tariff language does not accurately describe the timing of the process that occurs when a de-enrollment (“Delete”) form is submitted by an Aggregator. Clarification will avoid confusion and potentially incorrect de-enrollment.

Reason: The proposal provides clarity to Aggregators and efficiency for Demand Response Operations.

CBP Tariff Impact: Sheet 4, section titled “Aggregator’s Portfolio” contains edits to better clarify the de-enrollment process.

Add/Delete Form Impact: Modifies the first page of Form 79-1075 to indicate that “Deletions from the portfolio will be effective upon the date indicated by the Aggregator or upon the first date which the SA ID is not actively nominated, whichever occurs first.

⁴ PG&E’s proposal for a 5 in 10 baseline for CBP residential participants was included in its Mid-Cycle Advice Filing (AL) 5799-E dated April 1, 2020. The proposal was predicated on a provisional implementation for 2021 and 2022, with the option to convert into a permanent offering in the subsequent five-year DR cycle (2023-2027). The estimated cost set forth in AL 5799-E ranged from \$40,000 - \$60,000, which PG&E can absorb in its current IT budget, although it may require some level of fund shifting to be approved by the Commission. PG&E requests approval by March 1, 2021, of this submittal (AL-6072-E), as it would enable PG&E to roll-out the 5 in 10 baseline by May 1, 2021, which is the start of the CBP season.

7. Baseline exclusions clarification

Current tariff language does not specify whether non-PG&E demand response events are included in the days excluded from baseline calculations. Clarification will explicitly indicate that only PG&E demand response events are excluded from the baseline calculation, to avoid confusion and potential dispute.

Reason: The proposal intends to minimize confusion for Aggregators and Demand Response Operations. This change also better aligns with SCE's current CBP tariff.

CBP Tariff Impact: Sheet 4, section titled "Aggregator's Portfolio" contains edits to specifically what events are included in the baseline calculation.

Protests

*****Due to the COVID-19 pandemic and the shelter at home orders, PG&E is currently unable to receive protests or comments to this advice letter via U.S. mail or fax. Please submit protests or comments to this advice letter to EDTariffUnit@cpuc.ca.gov and PGETariffs@pge.com*****

Anyone wishing to protest this submittal may do so by letter sent via U.S. mail, facsimile or E-mail, no later than February 17, 2021, which is 20 days after the date of this submittal. Protests must be submitted to:

CPUC Energy Division
ED Tariff Unit
505 Van Ness Avenue, 4th Floor
San Francisco, California 94102

Facsimile: (415) 703-2200
E-mail: EDTariffUnit@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest shall also be sent to PG&E either via E-mail or U.S. mail (and by facsimile, if possible) at the address shown below on the same date it is mailed or delivered to the Commission:

Erik Jacobson
Director, Regulatory Relations
c/o Megan Lawson
Pacific Gas and Electric Company
77 Beale Street, Mail Code B13U
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-3582
E-mail: PGETariffs@pge.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Section 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name, telephone number, postal address, and (where appropriate) e-mail address of the protestant; and statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11).

Effective Date

Pursuant to General Order (GO) 96-B, Rule 5.2, this advice letter is submitted with a Tier 2 designation. PG&E requests that this Tier 2 advice submittal become effective on regular notice, February 27, 2021 which is 30 calendar days after the date of submittal.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and the parties on the service list for A.17-01-012. Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter submittals can also be accessed electronically at: <http://www.pge.com/tariffs/>.

/S/

Erik Jacobson
Director, Regulatory Relations

Attachments

- Attachment 1- Clean Tariffs (CBP Tariff and CBP Add/Delete Form (79-1075))
- Attachment 2 – Redline Tariff Revisions

cc: Service List A.17-01-012



ADVICE LETTER SUMMARY

ENERGY UTILITY



MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Pacific Gas and Electric Company (ID U39E)

Utility type:

- ELC GAS WATER
 PLC HEAT

Contact Person: Kimberly Loo

Phone #: (415)973-4587

E-mail: PGETariffs@pge.com

E-mail Disposition Notice to: KELM@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas WATER = Water
 PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 6072-E

Tier Designation: 2

Subject of AL: Update to Capacity Bidding Program (CBP) Tariff Starting in the 2021 Program Year

Keywords (choose from CPUC listing): Compliance, Caapacity

AL Type: Monthly Quarterly Annual One-Time Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #: D.17-12-003

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL:

Confidential treatment requested? Yes No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required? Yes No

Requested effective date: 2/27/21

No. of tariff sheets: 10

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: See Attachment 1

Service affected and changes proposed¹: N/A

Pending advice letters that revise the same tariff sheets: N/A

¹Discuss in AL if more space is needed.

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102
Email: EDTariffUnit@cpuc.ca.gov

Name: Erik Jacobson, c/o Megan Lawson
Title: Director, Regulatory Relations
Utility Name: Pacific Gas and Electric Company
Address: 77 Beale Street, Mail Code B13U
City: San Francisco, CA 94177
State: California Zip: 94177
Telephone (xxx) xxx-xxxx: (415)973-2093
Facsimile (xxx) xxx-xxxx: (415)973-3582
Email: PGETariffs@pge.com

Name:
Title:
Utility Name:
Address:
City:
State: District of Columbia Zip:
Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email:

Cal P.U.C. Sheet No.	Title of Sheet	Cancelling Cal P.U.C. Sheet No.
48376-E	Electric Sample Form No. 79-1075 Notice to Add or Delete Customers Participating in the Capacity Bidding Program Sheet 1	42640-E**
48377-E	ELECTRIC SCHEDULE E-CBP CAPACITY BIDDING PROGRAM Sheet 3	42148-E
48378-E	ELECTRIC SCHEDULE E-CBP CAPACITY BIDDING PROGRAM Sheet 4	46309-E
48379-E	ELECTRIC SCHEDULE E-CBP CAPACITY BIDDING PROGRAM Sheet 5	46310-E
48380-E	ELECTRIC SCHEDULE E-CBP CAPACITY BIDDING PROGRAM Sheet 6	42659-E
48381-E	ELECTRIC SCHEDULE E-CBP CAPACITY BIDDING PROGRAM Sheet 8	42152-E
48382-E	ELECTRIC SCHEDULE E-CBP CAPACITY BIDDING PROGRAM Sheet 11	43320-E
48383-E	ELECTRIC TABLE OF CONTENTS Sheet 1	48374-E
48384-E	ELECTRIC TABLE OF CONTENTS Sheet 9	47349-E
48385-E	ELECTRIC TABLE OF CONTENTS Sheet 30	47796-E



Electric Sample Form No. 79-1075

Sheet 1

Notice to Add or Delete Customers Participating in the Capacity Bidding Program

**Please Refer to Attached
Sample Form**

Advice 6072-E
Decision D.17-12-003

Issued by
Robert S. Kenney
Vice President, Regulatory Affairs

Submitted January 28, 2021
Effective _____
Resolution _____



NOTICE TO ADD OR DELETE CUSTOMERS PARTICIPATING IN THE CAPACITY BIDDING PROGRAM

Instructions: Aggregators and Customers use this notice to officially notify Pacific Gas and Electric Company (PG&E) of their intent to add or delete PG&E customers from the Aggregator’s CBP portfolio and are required to attest to whether they have a Prohibited Resource, and if they do, whether they intend to use the resource to reduce load during a demand response (DR) event.

PG&E may verify the information on this notice with the Customer.

Aggregator Company Name:	
--------------------------	--

This notice adds or deletes a customer’s Service Agreements from the Aggregator’s CBP portfolio. PG&E will review and approve each Service Agreement to be added to determine if it meets the minimum requirements as specified in Schedule E-CBP. PG&E must approve each Service Agreement before the Service Agreement can be included in an Aggregator’s portfolio. Additions to the portfolio will be effective upon PG&E’s approval date. Deletions from the portfolio will be effective upon the date indicated by the Aggregator or upon the first date which the SA ID is not actively nominated, whichever occurs first.

By signing this notice, Aggregator and Customer understand that the Aggregator has the authority to act on behalf of the Customer in connection with the CBP for the Customer’s Service Agreements shown below. Such authority is subject to the applicable terms and conditions of Schedule E-CBP and the Agreement For Aggregators Participating In The Capacity Bidding Program (Form 79-1076).

Customer designates the above-named Aggregator to act on its behalf as its Aggregator pursuant to Schedule E-CBP for all purposes, including, but not limited to, the receipt of payments, the payment of penalties, if any, and the receipt of all notices sent by PG&E under the E-CBP program.

Customer understands that PG&E will provide its electric usage and electric meter data for the Service Agreements to Aggregator so Aggregator can determine the payment payable to and penalties chargeable to Customer under Schedule E-CBP. Customer also agrees to allow personnel from the California Energy Commission (CEC), PG&E, and their contracting agents, reasonable access to conduct a site visit for measurement and evaluation, access to the Customer’s interval meter data, and agree to complete any surveys needed to enhance this program.

Customer acknowledges that Aggregator is not PG&E’s agent for any purpose. PG&E shall not be liable to the Customer for any damages resulting from any acts, omissions, or representations made by Aggregator in connection with Aggregator’s solicitation of Customer or with the Aggregator’s performance any of its functions in the CBP. PG&E shall not be liable to Customer for any damages caused to the Customer by any failure by Aggregator to comply with PG&E’s tariffs or for any damages caused by Aggregator’s failure to perform any commitment to the Customer.

This agreement at all times shall be subject to such modifications as the California Public Utilities Commission may direct from time to time in the exercise of its jurisdiction

Customer Name:		Aggregator Name:	
Title:		Title:	
Signature:		Signature:	
Date:		Date:	



NOTICE TO ADD OR DELETE CUSTOMERS PARTICIPATING IN THE CAPACITY BIDDING PROGRAM

Notice by Aggregator to Add/Delete Customers

(Please Print or Type Clearly)

Aggregator Name: _____

	Add/ Delete	Customer Site Name	PG&E Service Agreement Number	Electric Meter Number	Service Address and City
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					

NOTICE TO ADD OR DELETE CUSTOMERS PARTICIPATING IN THE CAPACITY BIDDING PROGRAM

Prohibited Resources Attestation

Customers enrolling in Schedule E-CBP are required to attest to whether or not they have a Prohibited Resource, and if they do, whether or not they intend to use the resource to reduce load during a Demand Response (DR) event.

The following list of distributed energy technologies are prohibited in providing load reduction during DR events: Technologies using diesel, natural gas, gasoline, propane, or liquefied petroleum gas, in topping Combined Heat and Power (CHP) or non-CHP configuration (“Prohibited Resources”). The following resources are exempt from the prohibition: pressure reduction turbines, waste-heat-to-power bottoming cycle CHP, as well as energy storage resources not coupled with fossil-fueled generation.

Customers must select one of the following options and agree to the Terms and Conditions to be able to enroll into the Capacity Bidding Program by completing the options on page 4 of this form:

- I do not have a Prohibited Resource on-site.
- I do have a Prohibited Resource on-site and I will not use the resource to reduce load during any Demand Response Event.
- I do have a Prohibited Resource on-site and I may have to run the resource(s) during Demand Response events for safety reasons, health reasons, or operational reasons. My Prohibited Resource(s) has (have) a total nameplate capacity of kW. I understand that this value will be used as the Default Adjustment Value (DAV) to adjust the Demand Response incentives / charge for my account.

If a customer attests to having a Prohibited Resource and plans to use it for safety, health, or operational reasons to reduce load during a Demand Response event, then the customer’s aggregator will be responsible for collecting and providing the Default Adjustment Value (DAV) based on the nameplate capacity of the resource. If the customer has multiple prohibited resources for the same service agreement, then the DAV will be the sum of the nameplate capacity values from all prohibited resources on the same site that are used to reduce load during a Demand Response event. Customers participating in Schedule E-CBP will be allowed to adjust their DAV at any time, under certain conditions, namely that: (a) the customer’s change in DAV results from a change in the operational status of a prohibited resource associated with the customer’s service agreement; and (b) that the PG&E can verify this and approves. The DAV will be used to adjust the demand response incentives/charges.

Customers in Schedule E-CBP who do not complete the attestation and return it to PG&E, will not be eligible to participate in the program until they do so. A customer that is found in violation of the prohibited resources requirements will be removed from the program by their aggregator if they are enrolled via a third party, and certain violations may cause the customer to be ineligible for all demand response programs subject to the prohibited resource requirement in Decision 16-09-056.

Customer compliance may be subject to verification by a Verification Administrator (which may be either PG&E or a third-party).



NOTICE TO ADD OR DELETE CUSTOMERS PARTICIPATING IN THE CAPACITY BIDDING PROGRAM

Prohibited Resource Attestation (Please Print or Type Clearly)

Aggregator Name: _____

	PG&E Service Agreement Number	I do not have a Prohibited Resource on-site.	I do have Prohibited Resources on-site.		Number of Prohibited Resources <i>(If applicable)</i>	Total Nameplate Capacity of all Prohibited Resources [capacity kW] <i>(If applicable)</i>	Default Adjustment Value (*) [capacity kW] <i>(If applicable)</i>
			I will not use them during any Demand Response Event.	I may have to run them during Demand Response Events.			
1.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
2.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
3.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
4.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
5.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
6.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
7.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
8.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
9.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
10.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
11.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
12.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
13.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
14.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
15.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
16.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
17.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
18.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
19.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
20.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

(*) Only if the prohibited resource(s) will be used for operational, health, and safety purposes during DR events. The total Default Adjustment Value (DAV) of the resource(s) will be subtracted from the Potential Load Reduction or Nominated Capacity. The DAV of all prohibited resources should equal the Total Nameplate Capacity.



**ELECTRIC SCHEDULE E-CBP
CAPACITY BIDDING PROGRAM**

Sheet 3

OPTIONS PRODUCTS
AND BIDDING: (Cont'd.)

Elect Option	Minimum Duration per Event	Maximum Duration per Event	Maximum Event Hours Per Operating Month	Maximum Events Per Day	Maximum Number of Consecutive Event Days	Maximum Number of Events per Month
1-4 Hour	1 hour	4 hours	30+ (Participant can choose more hours during the Operating Hours)	1	3+ (Participant may choose more)	5+ (Participant may choose more)
2-6 Hour	2 hours	6 hours	30+ (Participant can choose more hours during the Operating Hours)	1	3+ (Participant may choose more)	5+ (Participant may choose more)
1-8 Hour	1 hour	8 hours	40+ (Participant can choose more hours during the Operating Hours)	1	3+ (Participant may choose more)	5+ (Participant may choose more)

Elect + Option	Minimum Duration per Event	Maximum Duration per Event	Maximum Event Hours Per Operating Month	Maximum Events Per Day	Maximum Number of Consecutive Event Days	Maximum Number of Events per Month
1-4 Hour	1 hour	4 hours	20+ (Participant can choose more hours during the Operating Hours)	1	3+ (Participant may choose more)	5+ (Participant may choose more)
2-6 Hour	2 hours	6 hours	30+ (Participant can choose more hours during the Operating Hours)	1	3+ (Participant may choose more)	5+ (Participant may choose more)
1-24 Hour	1 hour	24 hours	120+ (Participant can choose more hours during the Operating Hours)	1	3+ (Participant may choose more)	5+ (Participant may choose more)

Bidding Options:

Elect:

- Aggregators must bid every hour during the program Operating Hours
- Aggregators must submit their bids 3 days before trade day
- Bids must meet the Net Benefit Test (NBT) \leq Bid Price \leq Market Cap Price
- CAISO is required to implement a NBT that establishes a price threshold above which DR resource bids are deemed cost effective.

(T)

Elect +

- Aggregators must bid every hour during the program Operating Hours
- Aggregators can bid more hours outside the program Operating Hours, but must keep the same nominated price and MW value that was nominated during the program Operating Hours
- Hours outside of the program Operating Hours must be contiguous
- Aggregators can choose an event duration up to 24 hours

(Continued)

Advice 6072-E
Decision D.17-12-003

Issued by
Robert S. Kenney
Vice President, Regulatory Affairs

Submitted
Effective
Resolution

January 28, 2021



**ELECTRIC SCHEDULE E-CBP
CAPACITY BIDDING PROGRAM**

Sheet 4

OPTIONS
PRODUCTS AND
BIDDING:
(Cont'd.)

- Aggregators must submit their bids 3 days before trade day
- Bids must meet Net Benefit Test (NBT) \leq Bid Price \leq Market Cap Price
- CAISO is required to implement a NBT that establishes a price threshold above which DR resource bids are deemed cost effective.

(T)

AGGREGATOR'S
PORTFOLIO:

To add or delete a customer's SAs to or from an Aggregator's portfolio, the Aggregator can submit a Notice to Add or Delete Customers Participating in the Capacity Bidding Program (Form 79-1075), or utilize a PG&E approved electronic enrollment pilot process. PG&E will review and approve each SA before the SA can be included or deleted in an Aggregator's portfolio. Additions to the portfolio will be effective upon PG&E's approval date. Requests for deletions from the portfolio will be effective upon the date indicated on the Delete form or via the electronic de-enrollment process, or upon the first date in which the SA ID is not actively nominated, whichever occurs first. An SA can be included in only one DR program portfolio at a time.

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PG&E will assign each CBP customer SA to a CAISO Sub-Load Aggregation Point (Sub-LAP). A CAISO Sub-LAP may change over time. PG&E will provide notice of the Sub-LAP change to the current Aggregator. The effective date of the change will occur at the end of a calendar month.

To initiate the process to be removed from participation under this Schedule, customers can submit an Election To Withdraw (Form 79-1149). Customers electing this option may not join another PG&E Aggregator program, which includes this Schedule and the Base Interruptible Program Schedule (E-BIP) for the remainder of the DR Season (i.e. the calendar months of May through October).

The Election To Withdraw from the program under this schedule shall be effective and binding upon the date indicated on the Election To Withdraw form or upon the first date in which the SA ID is not actively nominated, whichever occurs first. If PG&E receives the form after the fifteenth (15th) calendar day of the month, then customer's withdrawal from this program will be effective the following month. PG&E shall notify the customer's current Aggregator of the customer's election once the form has been received and validated. The notice shall include the effective date of withdrawal.

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CUSTOMER
SPECIFIC
ENERGY
BASELINE:

To participate under this schedule, a customer must have a valid customer specific energy baseline (CSEB) at least 5 calendar days prior to the first day of the operating month.

CSEB will be valid for purposes of participation if there are at least ten (10) similar days of interval data available in PG&E's system.

Each Capacity Nomination will have its own CSEB based on the aggregated CSEBs of each customer within the nomination. The CSEB on any given day during the program is the sum total of each individual SA's baseline in the nomination. Residential Aggregators have the option to select a 5-in-10 baseline. Non-residential customers will be evaluated with a 10-in-10 baseline. Each individual SA baseline is the average load for each corresponding hour over the immediate past five (5) or ten (10) similar weekdays prior to an event, depending on the baseline option assigned, with the option of a day-of adjustment. The load during each corresponding hour of the ten days will be averaged to calculate a baseline for each hour. Similar days will include Monday through Friday, excluding NERC holidays and days prior to the event in which the customer was: 1) subject to a CBP event; 2) subject to an outage; 3) subject to an Optional Binding (OBMC) event, or 4) was interrupted.

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**ELECTRIC SCHEDULE E-CBP
CAPACITY BIDDING PROGRAM**

Sheet 5

CUSTOMER
SPECIFIC
ENERGY
BASELINE:
(Cont'd.)

The day-of adjustment is the ratio of a) the average load of the first three of the four hours prior to the event to b) the average load of the corresponding hours from the past 10 similar weekdays, as discussed above. The day-of adjustment will be limited to +/- 40% of each individual SA baseline in the group, and will be based on the first three of the four hours prior to the start of the event. The day-of adjustment is applied by multiplying it by each hourly baseline value. The Aggregator must elect or opt-in to receive this adjustment on behalf of the customer. The Aggregator is responsible for determining the applicable baseline day-of adjustment amount at the time of a nomination. PG&E will only be responsible for determining the applicable baseline day-of adjustment following each event for the purpose of evaluating customer compliance. If more than one event (either within the same or across multiple programs) occurs on the same day, the day-of adjustment from the event with the earliest start time will be used for the individual SA's events that day requiring a day-of adjustment.

The hourly load profile on any given day during the program is determined by summing the hour by hour interval data for each of the SAs in the aggregated group.

CAPACITY
NOMINATIONS:

Capacity Nominations must be submitted by the 15th of the month prior to the operating month. Aggregators can include only those SAs that are enrolled in their portfolio. Aggregators are required to specify which of its SAs will participate in which of the program options (i.e. Prescribed, Elect, or Elect +), and event duration products (e.g. 1-4 hour or 2-6 hour and for Elect + 24 hour option), and must provide their Capacity Nomination amount at the Sub-LAP level. These Sub-LAP-level nominations will be used to determine the CSEB and performance during the operating month. The Capacity Nomination cannot be greater than the sum of max demand of the nominated SAs. All Capacity Nominations are fixed for their associated operating months.

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Resource aggregations of 10 MW and above require telemetry. Aggregators with resource aggregations over 10 MW and above are responsible for coordinating with the CAISO and pay any applicable cost and fees to meet the telemetry requirements.

Alternatively, a larger than 10 MW resource aggregation may be nominated as several sub-10 MW resources to avoid telemetry requirements but still retain performance as one resource.

An Aggregator must submit aggregations of customers that include 25 kW or more of load curtailment for each unique combination of:

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Product
Sub-LAP

Due to the CAISO requirement that a PDR resource consist of 100 kW or greater, if a nomination is greater than 25 kW but less than 100 kW, it will be combined with nominations from other Aggregators within the same Sub-LAP to meet this requirement. Multiple nominations of less than 100kW within the same Sub-LAP from the same Aggregator is not permitted. Additionally, in order to submit a nomination that is between 25 kW and 100 kW, Aggregators must select the **1-4 Hour Prescribed option**, and will receive energy incentives as described in the 'ENERGY PAYMENT' section. If nominations within the Sub-LAP cannot be combined to create a resource that is 100 kW or greater, the nomination(s) will not be eligible for bidding, and PG&E will notify all impacted Aggregators no later than the 20th of the month prior to the operating month.

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Aggregators can combine non-residential and residential customers' SAs in their Capacity Nominations.

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**ELECTRIC SCHEDULE E-CBP
CAPACITY BIDDING PROGRAM**

Sheet 6

RATES: The payments under this rate schedule will be determined from the following components.

1. Capacity Price
2. Capacity Payment and Capacity Penalty
3. Energy Payment

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CAPACITY PRICE: Capacity Price by Month

Product	May	June	July	August	September	October
Prescribed	\$3.18/kW	\$3.88/kW	\$16.30/kW	\$22.54/kW	\$13.90/kW	\$2.27/kW
Elect	\$3.18/kW	\$3.88/kW	\$16.30/kW	\$22.54/kW	\$13.90/kW	\$2.27/kW
Elect +	\$3.18/kW	\$3.88/kW	\$16.30/kW	\$22.54/kW	\$13.90/kW	\$2.27/kW

CAPACITY PAYMENT AND CAPACITY PENALTY: All Capacity Payments will be determined for each Capacity Nomination as specified below. The Aggregator will receive Capacity Payments and Capacity Penalties for Bundled, DA, CCA service customers.

If a CBP Event was not called for a Capacity Nomination during the operating month, then the Capacity Payment for the operating month is equal to the product of Nominated Capacity (adjusted for the sum of the Prohibited Resource Default Adjustment Values) and Capacity Price for the applicable operating month, option, and product.

If one or more CBP Events were called for a Capacity Nomination during the operating month, then the Capacity Payment for the operating month will be determined for each called Capacity Nomination as follows:

- 1) The Hourly Delivered Capacity for the event hour is equal to the sum of the baselines for each individual SA in the Capacity Nominations called for the event hour minus the sum of the event demands for each individual SA in the Capacity Nominations called for the event hour. The event demand is defined as the energy consumed during the event plus the Prohibited Resource Default Adjustment Value.
- 2) The Hourly Delivered Capacity Ratio for the event hour is the sum of Hourly Delivered Capacity for all Capacity Nominations called for that hour divided by the sum of the Nominated Capacity for all Capacity Nominations called for that hour. When a CBP event is called for one or more Sub-LAPs, the Hourly Delivered Capacity Ratio for the event hour will be calculated on a cumulative basis for Aggregator's performance in all Sub-LAPs that received a Notice of the CBP event for the hour.
- 3) The Unadjusted Hourly Capacity Payment for a Capacity Nomination equals the product of the Nominated Capacity for the operating month, minus the sum of the Prohibited Resource Default Adjustment Values and the Capacity Price for the operating month divided by the number of event hours in the operating month for the Capacity Nomination.

(Continued)

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Vice President, Regulatory Affairs

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Resolution



**ELECTRIC SCHEDULE E-CBP
CAPACITY BIDDING PROGRAM**

Sheet 8

**ENERGY
PAYMENT:**

All Energy Payments will be determined separately for each Capacity Nomination.

If no CBP Events were called during the operating month, then the monthly Energy Payment is zero (0).

Monthly Energy Payments will be invoiced separately from the Capacity Payments.

Nominations between 25kW and 100kW

Energy payments will equal the day-ahead award price received for the MW/h delivered during each hour of an event, as calculated by PG&E.

Nominations greater than 100kW

The energy payment that each Aggregator's customer SA may receive based on performance for events will equal the underlying CAISO wholesale market Proxy Demand Resource (PDR) award.

The total energy payment is calculated by netting the day-ahead wholesale energy payment with the real-time wholesale energy settlement, as calculated below:

$$(Price_{DA} \times Energy_{DA}) - [Price_{UIE} \times (Energy_{DA} - Energy_{Delivered})]$$

Price_{DA} = day-ahead aggregated PNode locational marginal price (LMP) associated with the PDR

Energy_{DA} = day-ahead energy award

Price_{UIE} = real-time Uninstructed Imbalance Energy (UIE) price

Energy_{Delivered} = metered performance

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**ELECTRIC SCHEDULE E-CBP
CAPACITY BIDDING PROGRAM**

Sheet 11

**PROGRAM
TRIGGER AND
NOTIFICATION:**

For the CBP Prescribed Option, PG&E may trigger a CBP Event for one or more Sub-LAPs when: 1) the CAISO day-ahead market price exceeds \$95/MWh; 2) PG&E receives a market award or dispatch instruction from the CAISO for a Proxy Demand Resource (PDR) that's part of CBP, 3) when PG&E, in its sole opinion, forecasts that generation resources or electric system capacity may not be adequate, or 4) forecasted temperature for a Sub-LAP exceeds the temperature threshold for the Sub-LAP. PG&E reserves the right not to call an event even when these thresholds are reached when PG&E, in its sole opinion, forecasts that resources may be adequate.

For the CBP Elect Option and CBP Elect Plus Option, PG&E may trigger a CBP Event for one or more Sub-LAP when PG&E receives a market award from the CAISO for a PDR that's part of CBP as a result of the offer price specified by the aggregator for a nominated portfolio.

PG&E will notify the affected Aggregators by 5:00 p.m. (or as soon as reasonably possible) on a day-ahead basis of a CBP Event for the following calendar day. (T)

**PROGRAM
RESEARCH AND
ANALYSIS:**

All customers participating on this program agree to allow personnel from the California Energy Commission (CEC), PG&E, and their contracting agents, reasonable access to conduct a site visit for measurement and evaluation, access to the customer's interval meter data, and agree to complete any surveys needed to enhance this program.

PG&E may release customer information to the CAISO in order to facilitate direct participation of retail demand response resources in the CAISO wholesale market.

(Continued)

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January 28, 2021

Attachment 2

Redline Tariff Revisions



NOTICE TO ADD OR DELETE CUSTOMERS PARTICIPATING IN THE CAPACITY BIDDING PROGRAM

Instructions: Aggregators and Customers use this notice to officially notify Pacific Gas and Electric Company (PG&E) of their intent to add or delete PG&E customers from the Aggregator’s CBP portfolio and are required to attest to whether they have a Prohibited Resource, and if they do, whether they intend to use the resource to reduce load during a demand response (DR) event.

PG&E may verify the information on this notice with the Customer.

Aggregator Company Name:	
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This notice adds or deletes a customer’s Service Agreements from the Aggregator’s CBP portfolio. PG&E will review and approve each Service Agreement to be added to determine if it meets the minimum requirements as specified in Schedule E-CBP. PG&E must approve each Service Agreement before the Service Agreement can be included in an Aggregator’s portfolio. Additions to the portfolio will be effective upon PG&E’s approval date. Deletions from the portfolio will be effective upon the date indicated by the Aggregator or upon the first date which the SA ID is not actively nominated, whichever occurs first at the end of the current calendar month in which this notice is received provided PG&E receives this notice at least 15 calendar days prior to the end of the current month.

By signing this notice, Aggregator and Customer understand that the Aggregator has the authority to act on behalf of the Customer in connection with the CBP for the Customer’s Service Agreements shown below. Such authority is subject to the applicable terms and conditions of Schedule E-CBP and the Agreement For Aggregators Participating In The Capacity Bidding Program (Form 79-1076).

Customer designates the above-named Aggregator to act on its behalf as its Aggregator pursuant to Schedule E-CBP for all purposes, including, but not limited to, the receipt of payments, the payment of penalties, if any, and the receipt of all notices sent by PG&E under the E-CBP program.

Customer understands that PG&E will provide its electric usage and electric meter data for the Service Agreements to Aggregator so Aggregator can determine the payment payable to and penalties chargeable to Customer under Schedule E-CBP. Customer also agrees to allow personnel from the California Energy Commission (CEC), PG&E, and their contracting agents, reasonable access to conduct a site visit for measurement and evaluation, access to the Customer’s interval meter data, and agree to complete any surveys needed to enhance this program.

Customer acknowledges that Aggregator is not PG&E’s agent for any purpose. PG&E shall not be liable to the Customer for any damages resulting from any acts, omissions, or representations made by Aggregator in connection with Aggregator’s solicitation of Customer or with the Aggregator’s performance any of its functions in the CBP. PG&E shall not be liable to Customer for any damages caused to the Customer by any failure by Aggregator to comply with PG&E’s tariffs or for any damages caused by Aggregator’s failure to perform any commitment to the Customer.

This agreement at all times shall be subject to such modifications as the California Public Utilities Commission may direct from time to time in the exercise of its jurisdiction

Customer Name:		Aggregator Name:	
Title:		Title:	
Signature:		Signature:	
Date:		Date:	



NOTICE TO ADD OR DELETE CUSTOMERS PARTICIPATING IN THE CAPACITY BIDDING PROGRAM

Notice by Aggregator to Add/Delete Customers

(Please Print or Type Clearly)

Aggregator Name: _____

	Add/ Delete	Customer Site Name	PG&E Service Agreement Number	Electric Meter Number	Service Address and City
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					

NOTICE TO ADD OR DELETE CUSTOMERS PARTICIPATING IN THE CAPACITY BIDDING PROGRAM

Prohibited Resources Attestation

Customers enrolling in Schedule E-CBP are required to attest to whether or not they have a Prohibited Resource, and if they do, whether or not they intend to use the resource to reduce load during a Demand Response (DR) event.

The following list of distributed energy technologies are prohibited in providing load reduction during DR events: Technologies using diesel, natural gas, gasoline, propane, or liquefied petroleum gas, in topping Combined Heat and Power (CHP) or non-CHP configuration (“Prohibited Resources”). The following resources are exempt from the prohibition: pressure reduction turbines, waste-heat-to-power bottoming cycle CHP, as well as energy storage resources not coupled with fossil-fueled generation.

Customers must select one of the following options and agree to the Terms and Conditions to be able to enroll into the Capacity Bidding Program by completing the options on page 4 of this form:

- I do not have a Prohibited Resource on-site.
- I do have a Prohibited Resource on-site and I will not use the resource to reduce load during any Demand Response Event.
- I do have a Prohibited Resource on-site and I may have to run the resource(s) during Demand Response events for safety reasons, health reasons, or operational reasons. My Prohibited Resource(s) has (have) a total nameplate capacity of kW. I understand that this value will be used as the Default Adjustment Value (DAV) to adjust the Demand Response incentives / charge for my account.

If a customer attests to having a Prohibited Resource and plans to use it for safety, health, or operational reasons to reduce load during a Demand Response event, then the customer’s aggregator will be responsible for collecting and providing the Default Adjustment Value (DAV) based on the nameplate capacity of the resource. If the customer has multiple prohibited resources for the same service agreement, then the DAV will be the sum of the nameplate capacity values from all prohibited resources on the same site that are used to reduce load during a Demand Response event. Customers participating in Schedule E-CBP will be allowed to adjust their DAV at any time, under certain conditions, namely that: (a) the customer’s change in DAV results from a change in the operational status of a prohibited resource associated with the customer’s service agreement; and (b) that the PG&E can verify this and approves. The DAV will be used to adjust the demand response incentives/charges.

Customers in Schedule E-CBP who do not complete the attestation and return it to PG&E, will not be eligible to participate in the program until they do so. A customer that is found in violation of the prohibited resources requirements will be removed from the program by their aggregator if they are enrolled via a third party, and certain violations may cause the customer to be ineligible for all demand response programs subject to the prohibited resource requirement in Decision 16-09-056.

Customer compliance may be subject to verification by a Verification Administrator (which may be either PG&E or a third-party).



NOTICE TO ADD OR DELETE CUSTOMERS PARTICIPATING IN THE CAPACITY BIDDING PROGRAM

Prohibited Resource Attestation

(Please Print or Type Clearly)

Aggregator Name: _____

	PG&E Service Agreement Number	I do not have a Prohibited Resource on-site.	I do have Prohibited Resources on-site.		Number of Prohibited Resources <i>(If applicable)</i>	Total Nameplate Capacity of all Prohibited Resources [capacity kW] <i>(If applicable)</i>	Default Adjustment Value (*) [capacity kW] <i>(If applicable)</i>
			I will not use them during any Demand Response Event.	I may have to run them during Demand Response Events.			
1.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
2.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
3.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
4.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
5.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
6.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
7.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
8.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
9.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
10.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
11.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
12.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
13.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
14.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
15.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
16.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
17.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
18.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
19.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
20.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

(*) Only if the prohibited resource(s) will be used for operational, health, and safety purposes during DR events. The total Default Adjustment Value (DAV) of the resource(s) will be subtracted from the Potential Load Reduction or Nominated Capacity. The DAV of all prohibited resources should equal the Total Nameplate Capacity.



**ELECTRIC SCHEDULE E-CBP
CAPACITY BIDDING PROGRAM**

Sheet 3

OPTIONS PRODUCTS
AND BIDDING: (Cont'd.)

Elect Option	Minimum Duration per Event	Maximum Duration per Event	Maximum Event Hours Per Operating Month	Maximum Events Per Day	Maximum Number of Consecutive Event Days	Maximum Number of Events per Month
1-4 Hour	1 hour	4 hours	30+ (Participant can choose more hours during the Operating Hours)	1	3+ (Participant may choose more)	5+ (Participant may choose more)
2-6 Hour	2 hours	6 hours	30+ (Participant can choose more hours during the Operating Hours)	1	3+ (Participant may choose more)	5+ (Participant may choose more)
1-8 Hour	1 hour	8 hours	40+ (Participant can choose more hours during the Operating Hours)	1	3+ (Participant may choose more)	5+ (Participant may choose more)

Elect + Option	Minimum Duration per Event	Maximum Duration per Event	Maximum Event Hours Per Operating Month	Maximum Events Per Day	Maximum Number of Consecutive Event Days	Maximum Number of Events per Month
1-4 Hour	1 hour	4 hours	20+ (Participant can choose more hours during the Operating Hours)	1	3+ (Participant may choose more)	5+ (Participant may choose more)
2-6 Hour	2 hours	6 hours	30+ (Participant can choose more hours during the Operating Hours)	1	3+ (Participant may choose more)	5+ (Participant may choose more)
1-24 Hour	1 hour	24 hours	120+ (Participant can choose more hours during the Operating Hours)	1	3+ (Participant may choose more)	5+ (Participant may choose more)

Bidding Options:

Elect:

- Aggregators must bid every hour during the program Operating Hours
- Aggregators must submit their bids ~~73~~ days before trade day
- Bids must meet the Net Benefit Test (NBT) \leq Bid Price \leq Market Cap Price
- CAISO is required to implement a NBT that establishes a price threshold above which DR resource bids are deemed cost effective.

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Elect +

- Aggregators must bid every hour during the program Operating Hours
- Aggregators can bid more hours outside the program Operating Hours, but must keep the same nominated price and MW value that was nominated during the program Operating Hours
- Hours outside of the program Operating Hours must be contiguous
- Aggregators can choose an event duration up to 24 hours

(Continued)

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**ELECTRIC SCHEDULE E-CBP
CAPACITY BIDDING PROGRAM**

Sheet 4

OPTIONS
PRODUCTS AND
BIDDING:
(Cont'd.)

- Aggregators must submit their bids ~~37~~ days before trade day
- Bids must meet Net Benefit Test (NBT) \leq Bid Price \leq Market Cap Price
- CAISO is required to implement a NBT that establishes a price threshold above which DR resource bids are deemed cost effective.

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AGGREGATOR'S
PORTFOLIO:

To add or delete a customer's SAs to or from an Aggregator's portfolio, the Aggregator can submit a Notice to Add or Delete Customers Participating in the Capacity Bidding Program (Form 79-1075), or utilize a PG&E approved electronic enrollment pilot process. PG&E will review and approve each SA before the SA can be included or deleted in an Aggregator's portfolio. Additions to the portfolio will be effective upon PG&E's approval date. Requests for deletions from the portfolio will be effective upon the date indicated on the Delete form or via the electronic de-enrollment process, or upon the first date in which the SA ID is not actively nominated, whichever occurs first, at the end of the month in which the request was received if PG&E receives this notice at least 15 calendar days prior to the end of the month. Deletion requests received after the 15th calendar day of the month will be effective starting the following month. An SA can be included in only one DR program portfolio at a time.

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PG&E will assign each CBP customer SA to a CAISO Sub-Load Aggregation Point (Sub-LAP). A CAISO Sub-LAP may change over time. PG&E will provide notice of the Sub-LAP change to the current Aggregator. The effective date of the change will occur at the end of a calendar month.

To initiate the process to be removed from participation under this Schedule, customers can submit an Election To Withdraw (Form 79-1149). Customers electing this option may not join another PG&E Aggregator program, which includes this Schedule and the Base Interruptible Program Schedule (E-BIP) for the remainder of the DR Season (i.e. the calendar months of May through October).

The Election To Withdraw from the program under this schedule shall be effective and binding upon the date indicated on the Election To Withdraw form or upon the first date in which the SA ID is not actively nominated, whichever occurs first, at the end of the month in which PG&E receives this form as long as: 1) the form identifies the SA's to which the Customer withdrawal applies, 2) PG&E receives the form at least fifteen (15) calendar days prior to the end of the month. If PG&E receives the form after the fifteenth (15th) calendar day of the month, then customer's withdrawal from this program will be effective the following month. PG&E shall notify the customer's current Aggregator of the customer's election once the form has been received and validated. The notice shall include the effective date of withdrawal.

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CUSTOMER
SPECIFIC
ENERGY
BASELINE:

To participate under this schedule, a customer must have a valid customer specific energy baseline (CSEB) at least 5 calendar days prior to the first day of the operating month.

CSEB will be valid for purposes of participation if there are at least ten (10) similar days of interval data available in PG&E's system.

Each Capacity Nomination will have its own CSEB based on the aggregated CSEBs of each customer within the nomination. The CSEB on any given day during the program is the sum total of each individual SA's baseline in the nomination. Residential Aggregators have the option to select a 5-in-10 baseline. Non-residential customers will be evaluated with a 10-in-10 baseline. Each individual SA baseline is the average load for each corresponding hour over the immediate past five (5) or ten (10) similar weekdays prior to an event, depending on the baseline option assigned, with the option of a day-of adjustment. The load during each corresponding hour of the ten days will be averaged to calculate a baseline for each hour. ~~The past ten (10) s~~ Similar days will include Monday through Friday, excluding NERC holidays and ~~event~~ days prior to the event in which the

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**ELECTRIC SCHEDULE E-CBP
CAPACITY BIDDING PROGRAM**

Sheet 4

~~customer was: 1) subject to a CBP event; 2) subject to an outage; 3) subject to an Optional Binding (OBMC) event, or 4) was interrupted. (including events of this program, or any other interruptible or curtailment programs enrolled by the customer, or days when a rotating outage was called).~~

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Advice 5752-E-A
Decision

Issued by
Robert S. Kenney
Vice President, Regulatory Affairs

Submitted
Effective
Resolution

March 4, 2020
March 3, 2020



**ELECTRIC SCHEDULE E-CBP
CAPACITY BIDDING PROGRAM**

Sheet 5

CUSTOMER
SPECIFIC
ENERGY
BASELINE:
(Cont'd.)

The day-of adjustment is the ratio of a) the average load of the first three of the four hours prior to the event to b) the average load of the corresponding hours from the past 10 similar weekdays, as discussed above. The day-of adjustment will be limited to +/- 40% of each individual SA baseline in the group, and will be based on the first three of the four hours prior to the start of the event. The day-of adjustment is applied by multiplying it by each hourly baseline value. The Aggregator must elect or opt-in to receive this adjustment on behalf of the customer. The Aggregator is responsible for determining the applicable baseline day-of adjustment amount at the time of a nomination. PG&E will only be responsible for determining the applicable baseline day-of adjustment following each event for the purpose of evaluating customer compliance. If more than one event (either within the same or across multiple programs) occurs on the same day, the day-of adjustment from the event with the earliest start time will be used for the individual SA's events that day requiring a day-of adjustment.

The hourly load profile on any given day during the program is determined by summing the hour by hour interval data for each of the SAs in the aggregated group.

CAPACITY
NOMINATIONS:

Capacity Nominations must be ~~submitted by the 15th completed within the first five business days~~ of the month prior to the operating month. Aggregators can include only those SAs that are enrolled in their portfolio. Aggregators are required to specify which of its SAs will participate in which of the program options (i.e. Prescribed, Elect, or Elect +), and event duration products (e.g. 1-4 hour or 2-6 hour and for Elect + 24 hour option), and must provide their Capacity Nomination amount at the Sub-LAP level. These Sub-LAP-level nominations will be used to determine the CSEB and performance during the operating month. The Capacity Nomination cannot be greater than the sum of max demand of the nominated SAs. All Capacity Nominations are fixed for their associated operating months.

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Resource aggregations of 10 MW and above require telemetry. Aggregators with resource aggregations over 10 MW and above are responsible for coordinating with the CAISO and pay any applicable cost and fees to meet the telemetry requirements.

Alternatively, a larger than 10 MW resource aggregation may be nominated as several sub-10 MW resources to avoid telemetry requirements but still retain performance as one resource.

An Aggregator must ~~submit~~have aggregations of customers that ~~meet the Proxy Demand Resource (PDR) requirements in the CAISO market, which includes having 40025~~ kW or more of load curtailment for each unique combination of:

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- Product
- Sub-LAP

Due to the CAISO requirement that a PDR resource consist of 100 kW or greater, if a nomination is greater than 25 kW but less than 100 kW, it will be combined with nominations from other Aggregators within the same Sub-LAP to meet this requirement. Multiple nominations of less than 100kW within the same Sub-LAP from the same Aggregator is not permitted. Additionally, in order to submit a nomination that is between 25 kW and 100 kW, Aggregators must select the 1-4 Hour Prescribed option, and will receive energy incentives as described in the 'ENERGY PAYMENT' section. If nominations within the Sub-LAP cannot be combined to create a resource that is 100 kW or greater, the nomination(s) will not be eligible for bidding, and PG&E will notify all impacted Aggregators no later than the 20th of the month prior to the operating month.

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Aggregators can combine non-residential and residential customers' SAs in their Capacity Nominations.

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**ELECTRIC SCHEDULE E-CBP
CAPACITY BIDDING PROGRAM**

Sheet 6

RATES: The payments under this rate schedule will be determined from the following components.
1. Capacity Price
2. Capacity Payment and Capacity Penalty
3. Energy Payment (~~Pass through payment from CAISO Proxy Demand Resource award~~)

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CAPACITY PRICE: Capacity Price by Month

<u>Product</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>
Prescribed	\$3.18/kW	\$3.88/kW	\$16.30/kW	\$22.54/kW	\$13.90/kW	\$2.27/kW
Elect	\$3.18/kW	\$3.88/kW	\$16.30/kW	\$22.54/kW	\$13.90/kW	\$2.27/kW
Elect +	\$3.18/kW	\$3.88/kW	\$16.30/kW	\$22.54/kW	\$13.90/kW	\$2.27/kW

CAPACITY PAYMENT AND CAPACITY PENALTY: All Capacity Payments will be determined for each Capacity Nomination as specified below. The Aggregator will receive Capacity Payments and Capacity Penalties for Bundled, DA, CCA service customers.

If a CBP Event was not called for a Capacity Nomination during the operating month, then the Capacity Payment for the operating month is equal to the product of Nominated Capacity (adjusted for the sum of the Prohibited Resource Default Adjustment Values) and Capacity Price for the applicable operating month, option, and product.

If one or more CBP Events were called for a Capacity Nomination during the operating month, then the Capacity Payment for the operating month will be determined for each called Capacity Nomination as follows:

- 1) The Hourly Delivered Capacity for the event hour is equal to the sum of the baselines for each individual SA in the Capacity Nominations called for the event hour minus the sum of the event demands for each individual SA in the Capacity Nominations called for the event hour. The event demand is defined as the energy consumed during the event plus the Prohibited Resource Default Adjustment Value.
- 2) The Hourly Delivered Capacity Ratio for the event hour is the sum of Hourly Delivered Capacity for all Capacity Nominations called for that hour divided by the sum of the Nominated Capacity for all Capacity Nominations called for that hour. When a CBP event is called for one or more Sub-LAPs, the Hourly Delivered Capacity Ratio for the event hour will be calculated on a cumulative basis for Aggregator's performance in all Sub-LAPs that received a Notice of the CBP event for the hour.
- 3) The Unadjusted Hourly Capacity Payment for a Capacity Nomination equals the product of the Nominated Capacity for the operating month, minus the sum of the Prohibited Resource Default Adjustment Values and the Capacity Price for the operating month divided by the number of event hours in the operating month for the Capacity Nomination.

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**ELECTRIC SCHEDULE E-CBP
CAPACITY BIDDING PROGRAM**

Sheet 8

**ENERGY
PAYMENT:**

All Energy Payments will be determined separately for each Capacity Nomination.

If no CBP Events were called during the operating month, then the monthly Energy Payment is zero (0).

Monthly Energy Payments will be invoiced separately from the Capacity Payments.

Nominations between 25kW and 100kW

Energy payments will equal the day-ahead award price received for the MW/h delivered during each hour of an event, as calculated by PG&E.

Nominations greater than 100kW

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The energy payment that each Aggregator's customer SA may receive based on performance for events will equal the underlying CAISO wholesale market Proxy Demand Resource (PDR) award.

The total energy payment is calculated by netting the day-ahead wholesale energy payment with the real-time wholesale energy settlement, as calculated below:

$$(\text{Price}_{\text{DA}} \times \text{Energy}_{\text{DA}}) - [\text{Price}_{\text{UIE}} \times (\text{Energy}_{\text{DA}} - \text{Energy}_{\text{Delivered}})]$$

Price_{DA} = day-ahead aggregated PNode locational marginal price (LMP) associated with the PDR

Energy_{DA} = day-ahead energy award

Price_{UIE} = real-time Uninstructed Imbalance Energy (UIE) price

Energy_{Delivered} = metered performance

(Continued)

Advice 5234-E-B
Decision 17-12-003

Issued by
Robert S. Kenney
Vice President, Regulatory Affairs

Date Filed March 30, 2018
Effective March 30, 2018
Resolution



**ELECTRIC SCHEDULE E-CBP
CAPACITY BIDDING PROGRAM**

Sheet 11

**PROGRAM
TRIGGER AND
NOTIFICATION:**

For the CBP Prescribed Option, PG&E may trigger a CBP Event for one or more Sub-LAPs when: 1) the CAISO day-ahead market price exceeds \$95/MWh; 2) PG&E receives a market award or dispatch instruction from the CAISO for a Proxy Demand Resource (PDR) that's part of CBP, 3) when PG&E, in its sole opinion, forecasts that generation resources or electric system capacity may not be adequate, or 4) forecasted temperature for a Sub-LAP exceeds the temperature threshold for the Sub-LAP. PG&E reserves the right not to call an event even when these thresholds are reached when PG&E, in its sole opinion, forecasts that resources may be adequate.

For the CBP Elect Option and CBP Elect Plus Option, PG&E may trigger a CBP Event for one or more Sub-LAP when PG&E receives a market award from the CAISO for a PDR that's part of CBP as a result of the offer price specified by the aggregator for a nominated portfolio.

PG&E will notify the affected Aggregators by 4:50 p.m. (or as soon as reasonably possible) on a day-ahead basis of a CBP Event for the following calendar day.

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**PROGRAM
RESEARCH AND
ANALYSIS:**

All customers participating on this program agree to allow personnel from the California Energy Commission (CEC), PG&E, and their contracting agents, reasonable access to conduct a site visit for measurement and evaluation, access to the customer's interval meter data, and agree to complete any surveys needed to enhance this program.

PG&E may release customer information to the CAISO in order to facilitate direct participation of retail demand response resources in the CAISO wholesale market.

(Continued)

Advice 5425-E
Decision

Issued by
Robert S. Kenney
Vice President, Regulatory Affairs

Submitted
Effective
Resolution

November 15, 2018
December 15, 2018

**PG&E Gas and Electric
Advice Submittal List
General Order 96-B, Section IV**

AT&T
Albion Power Company

Alta Power Group, LLC
Anderson & Poole

Atlas ReFuel
BART

Barkovich & Yap, Inc.
California Cotton Ginners & Growers Assn
California Energy Commission

California Hub for Energy Efficiency
Financing

California Alternative Energy and
Advanced Transportation Financing
Authority
California Public Utilities Commission
Calpine

Cameron-Daniel, P.C.
Casner, Steve
Cenergy Power
Center for Biological Diversity

Chevron Pipeline and Power
City of Palo Alto

City of San Jose
Clean Power Research
Coast Economic Consulting
Commercial Energy
Crossborder Energy
Crown Road Energy, LLC
Davis Wright Tremaine LLP
Day Carter Murphy

Dept of General Services
Don Pickett & Associates, Inc.
Douglass & Liddell

East Bay Community Energy Ellison
Schneider & Harris LLP Energy
Management Service
Engineers and Scientists of California

GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz &
Ritchie

Green Power Institute
Hanna & Morton
ICF

IGS Energy
International Power Technology
Intestate Gas Services, Inc.
Kelly Group
Ken Bohn Consulting
Keyes & Fox LLP
Leviton Manufacturing Co., Inc.

Los Angeles County Integrated
Waste Management Task Force
MRW & Associates
Manatt Phelps Phillips
Marin Energy Authority
McKenzie & Associates

Modesto Irrigation District
NLine Energy, Inc.
NRG Solar

Office of Ratepayer Advocates
OnGrid Solar
Pacific Gas and Electric Company
Peninsula Clean Energy

Pioneer Community Energy

Redwood Coast Energy Authority
Regulatory & Cogeneration Service, Inc.
SCD Energy Solutions
San Diego Gas & Electric Company

SPURR
San Francisco Water Power and Sewer
Sempra Utilities

Sierra Telephone Company, Inc.
Southern California Edison Company
Southern California Gas Company
Spark Energy
Sun Light & Power
Sunshine Design
Tecogen, Inc.
TerraVerde Renewable Partners
Tiger Natural Gas, Inc.

TransCanada
Utility Cost Management
Utility Power Solutions
Water and Energy Consulting Wellhead
Electric Company
Western Manufactured Housing
Communities Association (WMA)
Yep Energy