# 2021 Capacity Bidding Program (CBP)





# Safety





#### Earthquake

Know the safest places to duck, cover, and hold, such as under sturdy desks and tables.



- ✓ Update emergency contacts at your organization.
- ✓ Create or update your personal emergency preparedness plan at your organization.



Know your exits, escape routes, and evacuation plan. If safe to do so, use your compliant fire extinguisher. Exit the house and call 911



#### Medical Emergency

Know who can perform first aid and CPR. Call 911 if you're alone or share your location with the call leader to send help.



- ✓ I'm cared for
- ✓ People have my back and I have theirs.
- ✓ It's safe to take risks.
- ✓ New ideas are welcome.
- ✓ I practice self-care.



- ✓ Practice 30/30 (every 30) minutes, move & stretch for 30 seconds).
- ✓ Schedule a virtual ergonomic evaluation if possible



- ✓ Maintain at least 6' distance where possible.
- ✓ Wear your mask.
- Wash hands frequently.
- ✓ Visit the state COVID-19 site for the latest updates and tips.



### **PG&E DEMAND RESPONSE TEAM**



Program Manager Nicolette Sowa nicolette.sowa@pge.com 541-337-1600 DR Operations Jonathan Lew jonathan.lew@pge.com 00

DR Operations Randy Avalos randall.avalos@pge.com DR Manager Jomo Thorne jomo.thorne@pge.com 415-370-1029

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# 2021 CHANGES

#### ► Tier 2 AL (Approved 3/8/21)

- Nominations <100kW allowed</li>
  - Prescribed, 1-4 hour option
- ▶ 5-in-10 residential baseline
- Nomination window 1<sup>st</sup>-15<sup>th</sup> of the month prior
- Bid window 3 days prior
- Program notification time 4pm-5pm day-ahead
- Tariff Clarifications:
  - De-enrollment process
  - Baseline exclusions of events

#### Reliability OIR (PD 3/5/21)

- Increase max events per month from 5-6; events per month take precedence over max hours per month (30)
- Other proposed changes not approved in PD:
  - Bid cap for Elect (\$650)
  - Increased October capacity incentive
  - Weekend option
- Final Decision expected by 4/5/21



## APPLICABILITY

- CBP is integrated into the California Independent System Operators (CAISO) as a Proxy Demand Resource (PDR).
- CBP PDR's must comply with the current CAISO Tariff requirements on market participation.
- CBP is open to both Residential and Non-Residential Aggregators and Customers.



# ELIGIBILITY

- CBP is only a Day-Ahead program.
- Customers currently enrolled in a Third Party Demand Response Provider (DRP) program, or in a Utility DR Program with a different Aggregator, are not eligible.
- Customers receiving electric power from a DA or CCA are eligible.

#### ► Non-Residential Customers:

- May qualify to self-aggregate
- Can dual participate only in the OBMC program

#### ▶ Residential Customers:

- May only enroll through an Aggregator
- Can not participate in any other DR programs

Enrollment:	Enrollment:	Enrollment	Locatio	n: LSE-ID	Location:	SA ID	UUID	Customer	IneligibleReason	Additional Info
Created Date	Start Date 🔽	Status	Submitted to	CAIS	- Status					
3/16/2021	4/1/2021 E	ligible	3/17/21	PGE-FS	Pending	XXXXXXXXXXX	XXXXXXXXXX	NAME - STREET - CIT	γ	
3/17/2021	4/1/2021 E	ligible	3/18/21	EBCE-WB-S	Pending	XXXXXXXXXX	XXXXXXXXXX	NAME - STREET - CIT	Ŷ	
3/26/2021	4/1/2021 I	neligible				XXXXXXXXXX	XXXXXXXXXX	NAME - STREET - CIT	Y NO CC&B	New SA ID: XXXXXXXXXXX
3/26/2021	5/1/2021 N	lew	4	/1/2021 PGE-FS	Submitted	XXXXXXXXXX	XXXXXXXXXX	NAME - STREET - CIT	Y Internal issue, will be resolved before 4/15	
3/31/2021	5/1/2021 I	neligible	4	/1/2021 MEA-WB-S	Rejected	XXXXXXXXXX	XXXXXXXXXX	NAME - STREET - CIT	Y Location is active with DRP	

## WEEKLY ENROLLMENT STATUS REPORT



# **OPTIONS AND PRODUCTS**

#### ►<u>All Options</u>

- Aggregator nominates a monthly capacity amount.
- Aggregators are required to submit bids 3 days before trade day.
- Bid price can be different day to day, week to week, or month to month, but must be the same for every hour within the day.

#### ▶ Prescribed

- PG&E sets CAISO market bid price and dispatch strategy within specified operating hours.
- ▶ 1-4 or 2-6 hour products only



## **OPTIONS AND PRODUCTS**

▶ continued

#### ► Elect Option

- Aggregator selects its own CAISO market bid price within the specified operating hours.
- Bids must meet the Net Benefit Test <= Bid Price <= Market Cap Price
- ▶ 1-4, 2-6, or 1-8 hour product options

#### ► Elect+ Option

- Aggregator can participate in the CAISO market for additional hours
- Aggregator must participate in Elect Option
- Outside hours must be contiguous with the program Operation Hours, and have the same nominated price and MW value
- ▶ 1-4, 2-6, or 1-24 hour product options



# **OPTIONS AND PRODUCTS**

#### ► Additional Info

- Aggregators are required at time of nomination to select a program option for each SA.
- Aggregators have the option to change program options monthly at time of nomination for each SA.
- Program Operating Hours: 1pm 9pm
- Economic Events are capped at 6 events or 30 hours per month, whichever occurs first, and three consecutive events.\*



Capacity nominations must be completed by the 15th of the month prior to 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.

Resource aggregations of 10 MW and above require telemetry.

• Aggregators are responsible for coordinating with the CAISO and any applicable fees to meet the telemetry requirements.

Aggregators' nomination options are required to specify by SAID:

• Program Option ( Prescribed, Elect , or Elect +)

•Event Duration Products (1-4 hour, 2-6 hour, 1-8 hour, or 1-24 hour)

## **CAPACITY NOMINATIONS**



#### ►Continued

- Capacity Nominations are at a Sub-LAP level.
- Aggregations of SAs must be at least 25kW.
  - Any aggregations nominated for <100kW will be combined by PG&E with other nominations <100kW with the same product (Prescribed, 1-4 hours) if possible, to meet the PDR requirements in the CAISO market, which includes 100 kW or more of load curtailment for each unique combination of:
    - Product
    - Sub-LAP
- Aggregators can combine non-residential and residential customers in their capacity nominations.\*

## **CAPACITY NOMINATIONS**



Capacity payments will be invoiced separately from the energy payment.



E

No change for the capacity pricing.



The capacity prices by month are the same prices across all 3 program options.



No change for the capacity payment and penalty table.

## **CAPACITY PAYMENT**



If no CBP Events are called during the operating month, the monthly energy payment is zero.

Monthly energy payments will be invoiced separately from the capacity payments.

The energy payment that each Aggregator may receive is based on performance for events equal to the underlying CAISO wholesale market PDR award.

• For nominations <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.

In alignment with CAISO settlement timeframes, energy payments due under the CBP will be processed 55+ business days after the end of the operating month.

## **ENERGY PAYMENT**



#### METERING AND COMMUNICATION REQUIREMENTS

- In accordance with CAISO requirements, at least 45 calendar days of historic interval meter data using metering equipment must be submitted to CAISO for each SA, prior to that SA participating in CBP.
- The meter data must be Revenue Quality Meter Data (RQMD).



## **PROGRAM TESTING**



PG&E will have the option to call up to one (1) CBP Test Event per month for resources that do not receive a market award by the 20th day of the operating month.



The CBP Test Event will be called to demonstrate capacity with respect to the CBP Nomination. It will not exceed 2 hours.



Aggregators will receive capacity payments and penalties for CBP Test Events, and events will count towards the monthly product dispatch limits.



Aggregators will not receive energy payments for load reductions during CBP Test Events since energy payments are only passed through to Aggregators from CAISO market awards.



## PROGRAM TRIGGER AND NOTIFICATION

#### ▶ Prescribed Trigger

- The CAISO DA market price > \$95/MWh
- PG&E receives a market award or dispatch instruction from the CAISO for a PDR that's part of CBP
- PG&E forecast that capacity may not be adequate
- Forecasted temperature for a Sub-LAP exceeds the temperature threshold for the Sub-LAP

#### Elect and Elect+ Trigger

 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

#### ► Notifications

 Affected Aggregators will be notified no later than 5pm, or as soon as reasonably possible, the calendar day before a CBP Event



# ACCESS TO CUSTOMER USAGE DATA

- CBP specific customer usage data and reports are provided via APX.
  - Complete the "Authorization to Receive Customer Information or Act on a Customer's Behalf" (Form 79-1095) and/or Notice to Add Or Delete Customers Participating in the Capacity Bidding Program (Form 79-1075) endorsed by Customer.



► Aggregator bidding strategies and prices shall be considered confidential information.

► PG&E shall protect this confidential information from public disclosure, and shall not disclose such confidential information to unauthorized third parties, except for PG&E's employees, agents, counsel, accountants, advisors, individual customers who authorize the release of their customer information pursuant to an approved process (such as Electric Rule 24), utility contractors, or Commission contractors who have a need to know such information and have agreed to keep such information confidential and except as provided otherwise.

► PG&E will provide the Commission with confidential Aggregator information under Commission procedures for identifying and claiming confidential treatment.

► Release of confidential Aggregator information to utility and Commission contractors will be subject to such parties' agreement to protect the information from unauthorized use of public disclosure on terms consistent with PG&E and the Commission's rules and state law.

## CONFIDENTIALITY



#### **QUESTIONS???**





APX MarketSuite® Demand Response System Training For PG&E Programs



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## **APX DR Program Contacts**

Name	Role	Phone Number	Email Address
Midson Hay	APX Program Manager	408-597-4308	mhay@apx.com, DR@apx.com
Nino Mijares	APX Operations Manager	408-517-2129, Option 2	nmijares@apx.com, DR@apx.com
Carl Schlemmer	APX DR Manager	408-517-2134	cschlemmer@apx.com, DR@apx.com
Jonathan Lew	PG&E Operations	N/A	jonathan.lew@pge.com
Randy Avalos	PG&E Operations	N/A	randall.avalos@pge.com
Nicolette Sowa	PG&E Program Manager	541-337-1600	nicolette.sowa@pge.com



## System Information

- Supported Browsers: Chrome, Edge,
  - Unsupported Browsers: IE10 and below, Safari
- Notification Information:
  - From address changes. "@apx.com" will remain the same.
    - e.g., helpdesk@apx.com <23947514\_1517278394@apx.com>
  - Email server that should be whitelisted:
    - apx.com
    - notify.apx.com
    - notify.mir3.com
    - notify2.mir3.com
    - notify20.mir3.com
    - notify200.mir3.com
  - Phone number/Caller ID: 888-896-8640
  - SMS Short Code: 24639





## MarketSuite DR Help Center

User guides to using MarketSuite DR System <a href="https://marketsuitedr.zendesk.com/hc/en-us">https://marketsuitedr.zendesk.com/hc/en-us</a>



#### **CBP** Overview

- CBP Residential
  - Enrollment process differs slightly from regular CBP
    - If residential customers sign agreement then aggregators can go through normal process
    - For CBP Residential, if the customer does not sign the agreement then they adds to the program will have to go through PG&E.
- CBP products
  - All product times are now 1PM-9PM to align with CAISO's peak hours
- Nominations
  - Window First 15 business days of the month prior to the operating month
  - Nomination Portfolio Product/Location
- Enrollment Enhancements
  - Batch upload functionality
  - Online customer approval
  - Enrollment timing will be based on successful PG&E CAISO PDR registration
- Settlements
  - Capacity payments remain the same
  - Energy payments will be a pass-thru from CAISO
    - Except for nominations less than 100kw
- CAISO Bidding
  - Aggregators select their own CAISO market bid price for specified operating hours (only for Elect options)
  - Aggregators required to submit 3 days before the operating date (only for Elect options)
  - PG&E submits bids to CAISO

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### 2021 APX DR System Review





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### DR Systems URL

- APX DR URL <u>https://marketsuitedr.apx.com</u>
  - Supported browsers are Microsoft Edge or Google Chrome





## DR Systems – Aggregator Functionality

- Self-Registration
- Manage Notification Contacts
- Submit Online Enrollments
- Manage Monthly Nominations
- Submit Bids
- View and Download Program Reports





## **DR Systems Registration**

- Self-Registration
  - 1. Go to <a href="https://marketsuitedr.apx.com">https://marketsuitedr.apx.com</a>
  - 2. Click "Self-Register"
  - 3. Fill out the registration form
  - 4. Click "Create User"
  - 5. When you receive a confirmation email, click the link in the email to confirm the registration and for an APX account manager to review
  - 6. After your account has been reviewed an account activation email will be sent to the user when activated.

\*Users can be provided with read-only rights. E.g. viewing enrollments

\*\*Aggregators should let APX know when personnel leave so their username can be deactivated.



## Managing Notification Contacts

- In the Selection Criteria in the Contacts drop-down contains all active Notification Contacts and allows the user to Add New Contact
- At least one method of contact must be entered and at least one program must be selected. E.g. E-mail, Text Msg Number, or Phone number must be entered
- Clicking the "Test" button sends a test message to all the communication methods of contact listed for the contact

😨 Demand Response 😈	Home 🗗	Enrollment 🗗	Notification Contacts	: 🗗   Nominati	ion 🗗	Reports 🗗	
Selection Criteria	Company: APXDEMO	Contact: Midson Hay					
Participant APXDEMO V				Contact I	nfo		
Contacts Add New Contact			Form	fields with * mus	st be con	npleted	
Midson Hay Apply		* First Name:	Midson				
		* Last Name:	Hay				
		Title:	DR Administrator				
		Email:	mhay@apx.com				
		Phone Number:	408-597-4308				
		Mobile Number:					
	Te	ext Msg Number:					
		Fax Number:					
				Program Cor	ntact	Resource Contact	Associated Resources
	* Notificati	ion Preferences:	BIP-PG&E				0 +
			CBP-PG&E	$\checkmark$			• +
				Save	lete	Test	



# Online Enrollments

#### Add and Remove form creation, submission, and review process integrated into APX DR system.





# Creating a New Add/Update/Delete Form

Step 1: Go to Applications > Demand

Response > Enrollment



Step 2: Click on the "New Forms" tab on the left pane



Step 3: Select the form type applicable to





### Form Details



- Link to print form with completed data
- Alias assigned by Aggregator to organize Forms
- "\*" indicates fields required for submission
- Link to upload data via csv (no headers)
- " \* " indicates required fields for each Service Agreement. Note: Service Agreement number
- Displays Status of individual Service Agreement after form has been approved
- Links used to Add, Remove, or Delete service accounts from the form
- Click Browse... to select signed Form file to upload. Once selected, Click Save or Submit to attach the file. Note, you cannot remove a file after submitting the Form
- Aggregator Comments captures comments to be shared with PG&E. Reviewer Comments captures PG&E comments or instructions for the aggregator if Form has been returned to aggregator for editing and resubmission
- The Buttons listed on the bottom of the Add Form indicate available actions and next steps. The buttons only become enabled when all required data have been entered

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## **Online Customer Approval**

- Online approval module that facilitates end-use customers' review and approval of PG&E enrollment forms (i.e., Add, Delete, and Update forms) submitted by Aggregators.
  - Email notifications sent to end-use customers providing instructions for accessing, reviewing and approving enrollment forms. The link will expire after 3 days and can be re-sent by the aggregator.
  - Customer submits approval or rejection of the enrollment form via the online portal.
  - Email notifications sent to the end-use customers providing confirmation of their approval or rejection.
  - "Aggregator Enrollment Forms" report available to the Aggregators to review the status of the customer online approvals.

Market Participant: Customer Name Of Reco APXDEMO MHWalmart	ord: Status: Days In Status: Draft	Number Of Service 3	Accounts: Form Type: PG&E CBP Add	Print Paper Copy	×
NOTICE TO ADD CUSTOMERS F	PARTICIPATING IN THE	CAPACITY BIDI	DING PROGRAM		~
Add Form Alias Batch Demo					
[+] Add Form Text and Instructions					
Customer and Aggregator Informa	tion				
Customer		Aggre	egator		
* Name of Record:	MHWalmart		Name of Aggregator:	APXDEMO	
* Name of Authorized Representative:	Midson Hay	1*	Name of Authorized Representative:	Chris Pratt	
* Title of Authorized Representative:	DR Admin		* Title of Authorized Representative:	DR Admin	
* Mailing Address:	2001 Gateway Place		* Mailing Address:	123 Chris Pratt Way	
* Phone Number:	4085974308		* Phone Number:	55555555	
* Email Address:	mhay@apx.com		* Email Address:	chrispratt@thisischrisprattsemail.com	

#### Add Form Service Agreement

Fill out the required information below to request enrollment of Service Agreements as part of your CBP Portfolio. All Service Agreements listed below are not guaranteed enrollment and will be subject to review by PG&E. Please see the printed copy of this add form for more details of the terms and conditions. Please note: you should be entering the Service Agreement number of the customers you are requesting to add to your portfolio. The number is a numeric number between 8 and 10 digits long.

Se	ervice Agree	ement Details	Add Details fro	m CSV File	9				Tot	al Service Ag	reement	s: 3	
1	Agreement #	Account Name	*Address	*City	*Zip Code	*Prohibited Res.	Num Res.	Res. Cap (kW)	Tot. Cap (kW)	Meter ID	Status	Action	
						-Select- V						Add	
1	234567893	Paramount Citrus	123 Orange ave	San Jose	95110	No				123456782	New	Remove	
1	234567892	Sunkist Farms	123 Sunkist Grove	San Jose	95110	No				123456781	New	Remove	
1	234567891	Archer Farms	123 Archer Street	San Jose	95110	No				123456780	New	Remove	
													•
		•	Save Su	bmit	Cancel Add	Request Delete	Initiate	Online Custom	er Approval				

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• When the customer opens the link it will open the enrollment form and they will be able approve or reject the form. Once an action is taken, they will receive confirmation.



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

(\*) 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.

Page 5 of 5 Form 79-1075 Advice 4991-E-C July 2018

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Automated Document - Preliminary Statement Part A

Customer Authorization

I, Midson Hay	•, on 03/11/2019	
0 -	→ ribed in the enrollment form above. erms described in the enrollment form above.	Submission successful. Please print this form for your records.
Reason for Disagreement	Select Reason for Disagreement	
Disagreement Details		
	Submit	

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## Online Customer Approval (continued)

- When initiating an online approval you will be prompted to confirm this action
- If the link expires the link can be re-sent.
- When the customer approves the form, the signed form will show on the approved enrollment. \*

Service Agree	ement Der	Message from	webpage					×	Тс	tal Service Ag	greemen	ts: 3	
*Agreement #	Account I			Approval Pro				Cap (kW	V) Tot. Cap (kW	) Meter ID	Status		
1234567893	Paramoun			will provide the second s						123456782	New	Add Remove	
1234567892	Citrus Sunkist Fa	continue:			_					123456781		Remove	
		1/3 80		ate more mess		ОК	Cancel						
1234567891	Archer Fan	ms Street	Jose	95110	No					123456780	New	Remove	
													~
		Save	Submit	Cancel Add	l Request	Delete	Initiate O	nline Custo	mer Approval				
Signed Form N	Manageme	ent											
No Form Attached	-										Brow	/se	
Comments													
Comments Aggregator	Comment	t <b>s</b> Revi	ewer Comme	ents	_		_	_	_	_			
	Comment	t <b>s</b> Revi	ewer Comme	ents		_	-	-	_	-	_	٦	
	Comment	ts Revi	ewer Comme	ents	_	-	-					٦	
	Comment	ts Revi	ewer Comme	ents								1	2
	Comment	is Revi		ents ncel Add Requ	uest Res	end Online	e Customer A	Approval					~
	Comment	is Revi			uest	end Online	e Customer A	\pproval					~
Aggregator		,			uest Res	send Online	e Customer A	Approval					>
Aggregator	Managem (	ent	Ca	ncel Add Requ	uest Res	send Online	e Customer A	\pproval	_	_	Brow	/50	
Aggregator	Managem (	ent	Ca	ncel Add Requ	uest Res	send Online	e Customer A	\pproval	_	_	Brow	/Se	,
Aggregator	Managem Form stomer_App	ent over_CBPPGE	Ca on 3/10/2019 5	ncel Add Requ	uest Res	end Online	e Customer J	\pproval			Brow	/Se	
Aggregator	Managem Form stomer_App	ent over_CBPPGE	Ca	ncel Add Requ	uest Res	send Online	e Customer /	\pproval			Brow	/S@	,
Aggregator	Managem Form stomer_App	ent over_CBPPGE	Ca on 3/10/2019 5	ncel Add Requ	uest Res	send Online	e Customer A	\pproval			Brow	/50	
Aggregator	Managem Form stomer_App	ent over_CBPPGE	Ca on 3/10/2019 5	ncel Add Requ	uest Res	send Online	e Customer A	\pproval			Brow	/S@	
Aggregator	Managem Form stomer_App	ent over_CBPPGE	Ca on 3/10/2019 5	ncel Add Requ	uest Res	send Online	e Customer A	\pproval			Brow	/Se	
Aggregator	Managem Form stomer_App	ent over_CBPPGE	Ca on 3/10/2019 5	ncel Add Requ	uest Res	send Online	e Customer A	\pproval			Brow	/50	

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\*An approved enrollment does not mean the SA's are eligible.

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## Enrollment Batch Upload

The Enrollment Form Batch Upload functionality allows aggregators to create and/or update one or more enrollment forms simultaneously using a CSV file upload. The batch upload functionality supports all actions allowed via the User Interface(UI) except for uploading a signed document. Aggregators will need to manually upload signed documents or utilize the online approval process to complete/submit enrollment forms.

\* APX also supports enrollment through API. The link below has information regarding the API.

https://pmdsmaggregatorapi.apx.com/swagger-ui.html#/

#### Steps

- 1. Download the "Aggregator Enrollment Forms" report as a CSV template
- 2. Update and save the CSV template with new enrollment information
- 3. Upload the CSV template into MarketSuite to batch create/update enrollment forms



# Enrollment Batch Upload (continued)

1. Download the "Aggregator Enrollment Forms" report as a CSV template

Find Reports	4 14 4 1				orts 🗗			
		of 1 🕨 🕅	4 F	ind   Next 🖳	<b>۶-</b>			Export to Excel
Report					CSV	1		
Aggregator Enrollment Forms	Form_Name	Form_Alias	Customer_Name 🛊	Form_Sta	Excel 2003	tus_Update 🛊	Notifications_Generated_At	Customer_Notification_Sta
Provides customer approval status details for PG&E aggregator submitted enrollment forms and serves	PG&E CBP Ad	APXDEMO	MHTarget	Approv	Excel	19 10:18:00 PM	3/11/2019 9:59:51 PM	Success
as the template for batch uploading enrollment forms								
(-) Participant 🏠 🏫 🏫 Select All   Clear								
APXDEMO								
(-) Form Type Find: 🏠 🏠 Select All   Clear								
✓ PG&E BIP Add								
✓ PG&E BIP Delete								
✓ PG&E BIP Update								
✓ PG&E CBP Add								
✓ PG&E CBP Delete								
(-) Form Status Find: 💠 🏠 Select All   Clear								
✓ Draft								
Pending Review								
<ul> <li>✓ Pending Customer Review</li> <li>✓ Resubmission Required</li> </ul>								
Resubmission Required     Approved								
A Whingen								
Updated After 02/26/2019								
Run Report								
Kun Keport								

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# Enrollment Batch Upload (continued)

#### 2. Update and save the CSV template with new enrollment information

	AutoSave 💽 🗄 🏷 🕇	(			Aggreg	ator Enrollr	nent Forms	- APX DEM	10 - Excel	l I	li i l			Midson	Hay 🖻	-	٥	$\times$
F	File Home Insert	Page Layout Formulas	Data	Review	View	Help	,∕⊂ Se	arch							🖻 Share	₽ Con	nments	:
C	5 🔻 i 🗙 🗸	<i>f</i> <sub>≪</sub> MHWalmart																~
1	А	В	С	D	E	F	G	н	1	J	К	L	M	N	0	Р	Q	
1	form_name	form_alias	customer_	form_stat	Last_Statu	notificati	customer	customer_	customer_	customer_	form_id	Form_Act	i customer	customer	customer	customer	customer	ag
2	PG&E CBP Add	APXDEMO	MHTarget	Draft	*****						5188	Save	Midson H	DR Admin	2001 Gate	4.1E+09	mhay@a	p AP
3	PG&E CBP Add	Batch Demo	MHWalma	art								Save	Midson H	DR Admin	2001 Gate	4.1E+09	mhay@a	p AP
4	PG&E CBP Add	Batch Demo	MHWalma	art								Save	Midson H	DR Admin	2001 Gate	4.1E+09	mhay@a	p AP
5	PG&E CBP Add	Batch Demo	MHWalm	rt								Save	Midson H	DR Admin	2001 Gate	4.1E+09	mhay@a	p AP
6																		

 Details regarding business rules and required columns are in the MarketSuite Help Center <u>https://marketsuitedr.zendesk.com/hc/en-us/articles/360043749994-Batch-</u> <u>Upload-of-Enrollment-Forms</u>



# Enrollment Batch Upload (continued)

#### 3. Upload the CSV template into MarketSuite to batch upload/update enrollment forms

• Select **File Upload** from the **Applications** menu to access the File Upload UI. If you do not see the **File Upload** selection in the menu, please contact your APX program administration to add the appropriate rights to your login profile.

	Applications	Administration	Support
🚯 Demand Response 🧧 🛛 Hon	File Upload		s 쥰   Nomination 쥰   Reports 쥰
	🕙 Demand Resp	onse 🕨 🕨	
Participant Curtailment Status	File Explorer		
C			

The File Upload UI will be displayed with the upload parameters displayed across the top of the UI.
 Select CBP-PG&E as the Region for all PG&E form types. Select Demand Response as the Category and PGE Enrollment Forms as the File Type. The Begin Date is assigned to the file to allow you to find/view it again when pressing the Find Uploaded Files button. Otherwise the date selected is insignificant.

Region:	CBP-PG&E	Category:	Demand Response	~	Begin Date:	11/13/2018
Account:	Aggregator Inc.	<ul> <li>File Type:</li> </ul>	PGE Enrollment Forms	~	File Path:	C:\Users\cschlemmer\Desktop\Te Browse
	Find Uploaded Files		Upload File			



### Managing Forms



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# Managing Forms (continued)

Form Statuses

- Draft Aggregator must complete and submit to PG&E for approval. (Editable)
- Pending Review PG&E to review submitted form. (Cannot Edit)
- **Resubmission Required** Indicates PG&E found an issue with the form that requires the aggregator to update the form and resubmit. (Editable)
- **Rejected** Indicates the form has been rejected and will not be review any further. (Cannot Edit)
- **Cancelled** Indicates the form submission was cancelled by the aggregator. (Cannot Edit)
- **Approved**\* Indicates the form has been approved. (Cannot Edit)
  - Approval of an Add Form does not indicate SA eligibility. The next step is an eligibility review of each SA.
  - When an Add approved, SAs will appear in the Aggregator Enrollment Requests report.
  - When a Delete form is approved, all SAs on the form will be marked for expiration with the later of today's date or the last day for which the SAs were nominated.

\*For CBP-Res once the form is submitted it the form status will be automatically "Approved" and the service agreement will go through eligibility determination.





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# Monitoring Service Agreement Registration

- Add Forms and the Aggregator Enrollment Request report display SA Eligibility status up to point of determination.
  - Termination at a later date will not be reflected on the Add Form.
- Once an SA is determined to be Eligible by PG&E, it will be added to the aggregator's portfolio and available for nomination.
- The Aggregator Enrollment Request report is a snapshot at the time of enrollment and will become "stale".







## Portfolio Management

Service Agreement data will be available to Aggregators through the Registered Meters report. Data includes

- LSE
- Location
- Max kW
- Alternate Name
- Store Number
- Account ID
- Old SA/Reference ID
- Channel
- Meter Site Service Address
- Meter Site City
- Meter Site Zip
- Rate Schedule
- Comments
- Etc.

Demand Response	Home S   Participants	S Resources	S Enrolment d	9 Notification Conta	cts 🔗 Nomination 🔗	Curtailment S Reports	5			_	_			
ind Reports	4 4 1 of 1	▶ H - 4		Find   Next										Export to Exc
port egistered Meter	Registered Mete													
rovides a list of meters registered in the Demand esponse system for a specific Demand Response rogram	Report Timestamp :		1:14 PM (GMT) Program :	Participant : ID	Participant :	Meter Site Name :	Reference : ID	Channel 🕯	Service : Account	Max KW :	Prohibited : Resource	Num Prohibited : Resources	Prohibited Resource Cap Breakdown (kW)	Total Nameplate Capacity (kW)
			C8P-PG&E	12361	Aggregator Inc.	\$1000111-10-00-100			12345612346	100	Not applicable			
			C8P-PG&E	12361	Aggregator Inc.	1001110-007	1111133333		1111165665	100	No	٥		
CONFORE														





## **DR Batch Nomination**

#### Nomination Verification Report

This report service two purposes: (1) verifying the current month's nominations and (2) serving as a template for the batch upload process. To download the report:

- 1. Go to Reports and select Nomination Verification
- 2. Once the selection criteria fields are selected, click the Run Report Button to populate the data pane
- 3. Download the Nomination Verification Report in **CSV (comma delimited)** format.



# DR Batch Nomination (continued)

#### **Batch Nomination Upload**

- 1. Service account data are pre-populated and do not need to be updated
- Users must fill out the last 5 columns of the report: Product, Baseline Option, Nominate, Monthly Portfolio Nomination MW, Tech Potential kW (Tracks expected reductions by SA)
  - Baseline Options: "10/10 Baseline: No Adjustment", "10/10 Baseline: Day Of Adjustment (40% Cap)", "5/10 Residential Baseline: Day of Adjustment"
  - Columns are pre-populated if service account was nominated in the previous month
  - Must enter "Yes" for Nominate column
  - Monthly Portfolio Nomination must be the same for all portfolios, SUM of the portfolio.
- 3. Save the file as type CSV (comma delimited)

S		Т		U		V	W	
product	•	baseline_option	¥	nominate	Ŧ	monthly_portfolio_nomination_mw 💌	tech_potential_kw	•
Elect DA 1-8 (11AM-7PM)		10/10 Baseline: No Adjustment		yes		3		3
Elect DA 1-8 (1PM-9PM)		10/10 Baseline: Day Of Adjustment (40% Cap	)	yes		4		4

https://marketsuitedr.zendesk.com/hc/en-us/articles/360044249153-SCE-and-PG-E-Utility-Program-Nominations





# DR Batch Nomination (continued)

#### Portfolio Nominations by Product and Location

Program	<u>Location</u>	<u>Product</u>	Load Type	<u>LSE</u>	SA ID	Nominat ed MW	Tech Potential kW	_per_month	hours_per_	max_event_ days_in_se quence	External_id
CBP-PGE	SLAP_PGCC -APND	Prescribed DA 1-4 (1PM- 9PM)	Direct Access Load	Company A	123	.5	400				GroupA
CBP-PGE	SLAP_PGCC -APND	Prescribed DA 1-4 (1PM- 9PM)	Bundled	Company C	XY Z	.5	150				GroupA
CBP-PGE	SLAP_PGCC -APND	Prescribed DA 1-4 (1PM- 9PM)	Direct Access Load	Company A	789	1.0	120				GroupB
CBP-PGE	SLAP_PGCC -APND	Prescribed DA 1-4 (1PM- 9PM)	Direct Access Load	Company B	EF G	1.0	800				GroupB
CBP-PGE	SLAP_PGSI- APND	Elect Plus DA 1-24 (1AM- 9PM)	Bundled	Company C	MN O	2.9	2800	15	60	5	
CBP-PGE	SLAP_PGSI- APND	Elect Plus DA 1-24 (1AM- 9PM)	Bundled	Company C	456	2.9	250	15	60	5	

\*Three new columns to allow aggregators to set the maximum events and hours per month and maximum consecutive events at a resource/nomination level (not less than program defaults).



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## **DR Batch Nomination Upload**

- 1. Review the Nomination Verification report
- 2. Identify service agreements to nominate to specific products
- 3. Identify nominated MW value for each portfolio
- 4. Upload the report to the Import tab on the Nominations Application

<u></u>	Response	
Selection Criteria Program	APX-TESTPROGRAM	Once the required fields are entered in the spreadsheet exported from the <b>Nomination Verification Report</b> and is saved to a location on your
Trade Month Select Meter File	Aug, 2011 👻	computer, go to the <b>Nomination</b> application, click the <b>Import</b> to upload nominations.
C:\fakepath\Nominati	on Verification for Suit Browse	



# Batch Nomination Upload (continued)

After nominations are uploaded successfully, the **Nomination Import Summary** summarizes results of the upload. If there are issues with the upload, an error message is displayed and user is required to update the file and reupload.

Program: Participant CBP-PG&E	Trade Month: Mar, 2020	File: C:\fakepath\No	mination Verification	on_20200317_MH_SANDBOX.c
Import Summary				
Product	lan ga ga ti San g	Meters	MW	
Elect DA 1-4 (1PM-9PM)	UKN -No MPP	1	0.10000000	
Elect DA 2-6 (1PM-9PM)	-UKN -No MPP	1	0.20000000	
Elect DA 2-6 (1PM-9PM)	UKN -No MPP	1	0.30000000	

Note: Batch Nomination upload overwrites all previous nominations entered in for that nomination month





## CAISO Bidding

- APX to capture aggregator bids for Elect and Elect +.
- Bidding Requirements
  - Bids for resource must be the same for entire day
  - Must bid for all program hours.
  - Additional Elect + bid hours must be contiguous
  - Bidding must be for the same MW as nominated
  - Bid price must be between the net benefit test (NBT) minimum and CAISO price ceiling (\$1000)
  - NBT: <u>http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=17B7B402-09C4-47B7-9EB3-ADA77F7C2085</u>
- Steps to bid
  - 1. Download the "PGE Monthly Portfolio Bidding Template" report as a csv
  - 2. Enter in desired price and date ranges (daily if desired)
  - 3. Upload the template into MarketSuite
  - 4. Verify bids using the "PGE Portfolio Bidding".
    - a) DRMI is submitting based on what is in APX. Status is updated by DRMI after submission to CAISO.



#### CAISO Bidding (continued)

Demand Response Home 🗗 | Enrollment 🗗 | Notification Contacts 🗗 | Nomination 🗗 Reports 🗇 Find Reports ▶ 🔍 -1 of 1 🕨 🕅 Export to Excel Report ity Portfolio Bidding Template PGE Monthly Portfolio Bidding Template Month 🚖 Program 🛊 Participant ID Participant : Location 🚖 Product : Load\_Type 🛊 1. Download the "PGE Monthly a listing resources available for bidding and serves as the bidding file upload template. CBP-PG&E SLAP PGEB-APND 2018-08 12213 APXDEMO Elect DA 2-6 (1PM-9PM) Bundled Load Portfolio Bidding Template" report as a Elect DA 2-6 (1PM-9PM) 2018-08 CBP-PG&E 12213 APXDEMO SLAP\_PGF1-APND Bundled Load 2018-08 CBP-PG&E 12213 APXDEMO SLAP\_PGKN-APND Elect DA 2-6 (1PM-9PM) Bundled Load CSV. CBP-PG&E SLAP\_PGNP-APND 2018-08 12213 APXDEMO Elect DA 2-6 (1PM-9PM) Bundled Load 2018-08 CBP-PG&E 12213 APXDEMO SLAP\_PGSB-APND Elect DA 2-6 (1PM-9PM) Direct Access Load Program CBP-PG&E V 2018-08 CBP-PG&E 12213 SLAP\_PGSF-APND Elect DA 2-6 (1PM-9PM) Direct Access Load APXDEMO 2018-08 CBP-PG&E 12213 APXDEMO SLAP\_PGSI-APND Elect DA 2-6 (1PM-9PM) Direct Access Load [-] Participant 🏫 ☆ 🚖 Select All | Clear APXDEMO Month Aug, 2018 ~ Run Report

#### 2. Update bids via the CSV template

,	AutoSave	• • • • • •	日 り・ C・			PGE M	onthly Portfolio Bidding	Temp	late - Excel			Mids	on Hay	F	
F	ile	Home	Insert Pag	e Layout	Formulas Da	ata Review View	Help 🔎 Searc	h					🖻 Sha	ire 🖓	□ Com
124				f <sub>x</sub>		r.	c.							N	0
1		B	C Participant ID	D	E	Product	G Load Type	H	Dispatch ID	MW	K Begin Date	End Date	M HE_Start	N HE End	O
		-										-		_	
		CBP-PG&E			SLAP_PGCC-APND	Elect DA 1-4 (11AM-7PM)		LSE1	PGCC_1_PDRP09	0.1		8/15/2018 00:00			
3	2018-08	8 CBP-PG&E	12345	APXDEMO	SLAP_PGCC-APND	Elect DA 1-4 (11AM-7PM)	Direct Access Load	LSE1	PGCC_1_PDRP09	0.1	8/16/2018 00:00	8/31/2018 00:00	12	19	150
4	2018-08	CBP-PG&E	12345	APXDEMO	SLAP_PGEB-APND	Elect DA 1-4 (11AM-7PM)	Customer Choice Aggreg	LSE3	PGCC_1_PDRP11	0.29	8/1/2018 00:00	8/31/2018 00:00	12	19	100
5	2018-08	CBP-PG&E	12345	APXDEMO	SLAP_PGEB-APND	Elect DA 1-4 (11AM-7PM)	Direct Access Load	LSE5	PGCC_1_PDRP07	0.1	8/1/2018 00:00	8/31/2018 00:00	12	19	150
6															
-															-

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### CAISO Bidding (continued)

3. Upload bids into MarketSuite

	Applications Administration Support	Midson Hay - APX Inc (PreProduction)
File Upload		
Region: CBP-PG&E	Category: Demand Response 🔽 Begin Date: 03/12/2019 🗐	
Account: APXDEMO V	File Type: Aggregator Resource Bids V File Path: X:\mhay\CBPPGE APX DEMO\A	
Find Uploaded Files	Upload File	
lessages:		
ploaded Files:		
	File Name	Upload Time Status

4. Verify bids using the "PGE Portfolio Bidding".

Find Reports	4   4 4 1 of 32	> >1 + -	Find   Next 🛃 •							b
Report	Monthly Portfo	lio Bidding								1000
PGE Portfolio Bidding V	wonuny Foruo									
Provides a list of aggregator-submitted bids and their status with the CAISO by date.	Program: Date Range:	CBPPGE 9/1/2018 - 9/30/20	018							
	Participant ;	Location :	Product ;	LSE :	Dispatch_ID :	Date :	HE ;	MW :	Price	Bid_Status 🔹
	Transition.	102947	Prescribed DA 2-6 (11AM-7PM)	Paulo Santi Banto	102947	9/19/2018	1	0.000	0.00	APXCreated
	1000010	102948	Prescribed DA 2-6 (11AM-7PM)	Parity Service Income	102948	9/19/2018	1	0.000	0.00	APXCreated
rogram CBP.PG&E V	1008110	102949	Prencibed DA 2-6 (11AM-7PM)	Wark Grange Automatic	102949	9/19/2016	1	0.000	0.00	APXCreated
	1000010	102950	Elect DA 1-4 (11AM-7PM)	Pault: San & Berry	102950	9/19/2018	1	0.000	0.00	APXCreated
- Participant	1008012	102951	Elect DA 1-4 (11AM-7PM)	Walt Diverge Hubblety	102961	9/19/2016	1	0.000	0.00	APXCreated
nd: 👘 😭 😭 Select All   Clear	1000010	102952	Elect Plus DA 1-24 (1PM-9PM)	Parity See & Second	102952	9/19/2018	1	0.200	150.00	AFXCreated
	1008110	98673	Elect Plan DA 1-24 (1PM-9PM)	(Sections), Business	98073	9/19/2018	1	0.150	100.00	APXCreated
Aggregator Inc.	100811-	102947	Prescribed DA 2-6 (11AM-7PM)	Parific ion à timm	102947	9/19/2018	2	0.000	0.00	APXCreated
	1008010	102948	Prescribed DA 2-6 (11AM-7PM)	Paulto line & Berlin	902948	9/19/2018	2	0.000	0.00	APXCreated
	1008112	102949	Prescribed DA 2-6 (11AM-7PM)	Warth Diverge Hadhalds	102949	9/19/2018	2	0.000	0.00	APXCreated
7 ×	1004010	102950	Elect EA 1-4 (11AM-7PM)	Paulte fan bifternit	102950	9/19/2018	2	0.000	0.00	APXCreated
	100810	102951	Elect DA 1-4 (11AM-7PM)	Martin Grange Huthards	102951	9/19/2018	2	0.000	0.00	APXCreated
egin Date 09/01/2018	1008000	102952	Elect Plus DA 1-24 (1PM-9PM)	Paulti Sal & Secold	102962	9/19/2018	2	0.500	150.00	APXCreated
	1008010	98073	Elect Plus DA 1-24 (1PM-9PM)	these towngo thereine	95073	9/19/2018	2	0.150	100.00	APXCreated
nd Date 09/30/2018	100810	102947	Prescribed DA 2-6 (11AM-7PM)	Parity Sec. 8 (Second	102947	9/19/2018	3	0.000	0.00	APXCreated
	100803	102948	Prescribed DA 2-6 (11AM-7PM)	Parific Gan & Smorth	102948	9(19/2018	э	0.000	0.00	APXCreated
Run Report	10000101	102949	Prescribed DA 2-8 (11AM-7PM)	Warts Grange Hubbarty:	102949	9(19/2016	3	0.000	0.00	APXCreated
	Conception of the local division of the loca	102950	Elect DA 1-4 (11AM-7PM)	Parity Last & Rectify	102960	9/19/2018	3	0.000	0.00	APXCreated





## **Pre-Event Notification**

• PG&E can send out pre-event notifications. PG&E is not obligated to send out these notifications, which will be sent out per their discretion.

PG&E CBP Pre-Event Notification					
helpdesk@apx.com	←     ←     ····       7/22/2019				
Greetings,					
This is an important message from PG&E. Please be aware that Event Trigger thresholds may be met in the PG&E territory this week. There is a potential chance that Demand Response Events will be initiated starting today, 07/22/2019. For more details please contact PG&E's Demand Response Program Manager.					





### **Event Dispatch**

From: helpdesk@apx.com <helpdesk@apx.com> Sent: Wednesday, February 3, 2021 12:51 PM Subject: Pacific Gas & Electric CBP Event Called for 07/31/2020

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Urgent Instruction: Pacific Gas & Electric CBP Day Ahead Load Reduction event for 07/31/2020 has been initiated.

Program	Curtailment Type	Location	Product	Dispatch ID	Total MW	Curtailed Hrs.	Total Hrs.
Pacific Gas & Electric CBP	Event	SLAP_PGNP-APND	Elect DA 1-4 (1PM-9PM)	PGNP_2_PDRP12	0.1000	From 1900-2000	1

For additional dispatch information please contact APX at 408-517-2135 or visit https://marketsuitedr.apx.com/







### Reports

- Aggregator Enrollment Forms
- Aggregator Enrollment Requests
- Meter Readings
  - $\circ$  Can elect to see data for all SAs or just nominated SAs (see image)  $\cdot$
  - $\circ$  Should include estimated meter data within 2-3 days for most SAs
- Monthly Meter Nomination
- Monthly Portfolio Nomination
  - Verify nominations are correct
- MPP Events
  - New Report Identifying MPP events for SAs in your portfolio
- Nomination Verification
  - Used as the template for batch uploading nominations
- Notification Contacts
- Participant Curtailment History
- Program Curtailment History
- Settlement Statement Detail
- Settlement Statement Summary
- Service Account Performance
- ISO Prices





## Monthly Settlement Process

#### **Meter Nominations**

Monthly portfolio MW nominations are tracked by system Portfolio designated by product and location

#### **Events**

• DR system stores event details, e.g., product, date, hours, etc.

#### Meter and Program Reporting

• PG&E provides meter data to the DR system (estimated data should be available for most meters within 2-3 days)

• APX to notify aggregators when settlement quality data is available

• MPP Events report identifies dual participation

#### **Settlement Calculations**

- Baselines calculated using meter and dual participation data
- •SA performance calculated using event day data, baseline adjustment and dual participation data

#### Settlement Calculations Review and Validation

• APX to notify aggregators when calculations are ready for review and are published and are available to Aggregators and PG&E via DR system

• Aggregator to review and confirm settlement results with APX within 10 days from receipt of invoice

#### Settlement Submission and Payment

• APX to submit Settlement Invoice on Aggregator's behalf to PG&E

• PG&E/Aggregator to pay invoice after approval.



## **CBP** Settlement Invoices

- 1. Applications > Demand Response > Reports
- 2. Select the "Settlement Statement Summary" report from the drop down and select the following criteria
  - **a.** Program CBP-PG&E
  - Participant Defaulted your own
  - c. Location Select All
  - d. Product Select All
  - e. Load Type Select All
  - f. Month Select invoice month
  - g. Hit "Run Report"

3. The reports can be downloaded using the "Export to Excel" button or the Save icon.





## **BIP Settlement Invoices**

Step 1 - Click Applications and File Explorer	APX MARKETSUITE     Applications     Administration     Support       Operand Response     Image: Demand Response     Image: Demand Response     Image: Demand Response     Image: Demand Response       Image: Demand Response     Image: Demand Response     Image: Demand Response     Image: Demand Response     Image: Demand Response       Image: Demand Response     Image: Demand Response     Image: Demand Response     Image: Demand Response     Image: Demand Response       Image: Demand Response     Image: Demand Response     Image: Demand Response     Image: Demand Response     Image: Demand Response						
	APX MARKETSUITE" Applications Administration Support Carl Scherme						
	File Explorer     Files       Image: File State     Image: Image						
	Region 1 Files matching criteria: Demand Response, Operating Date 3/13/2013 - 3/13/2013						
Step 2 – Complete	Market Participant Name Source Date Interval Type Create/Modify Date						
selection criteria	Arme Aggregator     Date     Operating Date     Operating Date     Distright To Date <t< th=""></t<>						





- Have New Users Self-Register in APX Demand Response System
- 2. Review and update notification contacts
- 3. Run notification tests
- 4. Enroll resources in programs
- 5. Make Monthly Nominations
  - CBP Nomination window opens for the first 15 calendar days of the month.





## Questions?





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