

2020 Capacity Bidding Program (CBP)



Nicolette Sowa

Safety



Call
911



Meet &
Guide
Emergency
Personnel



CPR



Earthquake

- Drop
- Cover
- Hold



AED



Evacuation Plan



Active Shooter

- Get Out / Call Out
- Hide Out
- Take Out



PG&E Demand Response Team



Program Manager

Nicolette Sowa

nicolette.sowa@pge.com

541-337-1600



Operations

Jonathan Lew

jonathan.lew@pge.com



Operations

Mauro Scardina

mauro.scardina@pge.com



DR Manager

Jomo Thorne

jomo.thorne@pge.com

415-370-1029



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 in the OBMC program

Residential Customers:

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



Options and Products

All Options

- Aggregator nominates a monthly capacity amount.
- Aggregators are required to submit bids 7 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 product



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 \leq Bid Price \leq Market Cap PriceElect + Option
- 1-4, 2-6, or 1-8 hour product

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 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 30 hours per month.

Capacity Nominations

- Capacity nominations must be completed within the first 5 business days 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 required to specify by SAs:
 - 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 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 Payment

- Capacity payments will be invoiced separately from the energy payment.
- 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.



Energy 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.
- 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.



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 4pm 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.



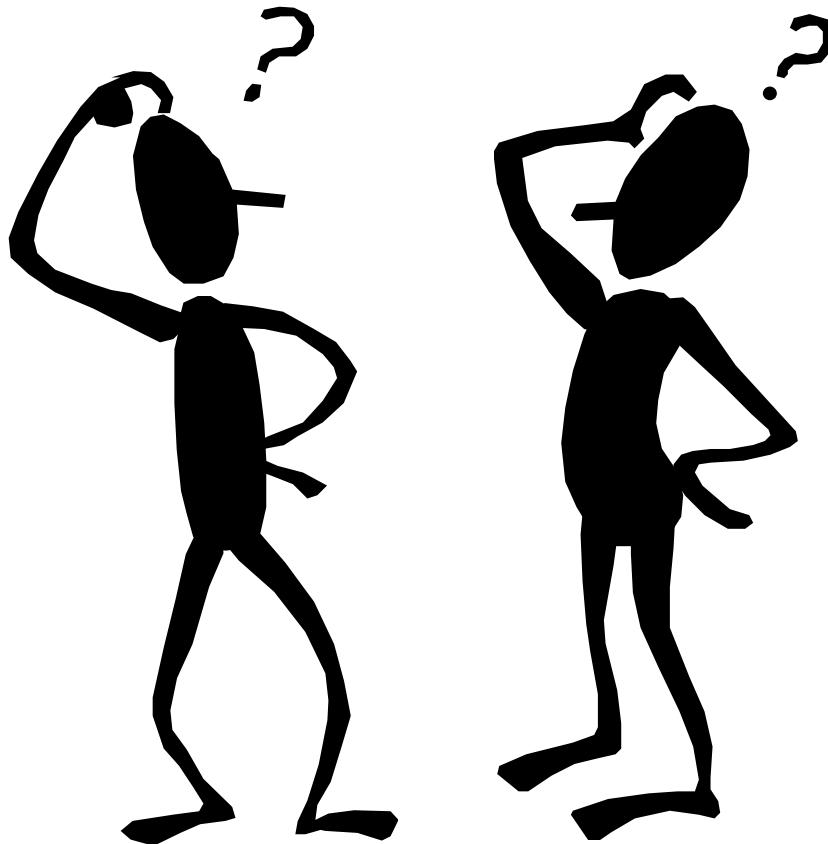
Confidentiality

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.



Questions???





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



APX DR Program Contacts

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



System Information

- **Supported Browsers: Chrome, IE11, Edge, Firefox**
 - 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:
 - 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

<https://marketsuitedr.zendesk.com/hc/en-us>

MarketSuite Demand Response Help Center

Search

User Guides FAQs Announcements

Multi-Factor Authentication

Multi-Factor Authentication
[See All Articles](#)

Enrollment

Batch Upload of Enrollment Forms
[See All Articles](#)

Nominations

SCE and PG&E Utility Program Nominations
[See All Articles](#)

Resource Bidding

PG&E CBP Bidding
[See All Articles](#)



CBP Overview

- **New CBP Residential**
 - Enrollment process differs slightly from regular CBP
- **New CBP products**
 - All product times are now 1PM-9PM to align with CAISO's peak hours
- **Nominations**
 - Window – First 5 business days of the month prior to the operating month
 - Nomination Portfolio – Product/Location
 - No longer requires LSE to form a CAISO resource
- **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
- **CAISO Bidding**
 - Aggregators select their own CAISO market bid price for specified operating hours
 - Aggregators required to submit 7 days before the operating date
 - PG&E submits bids to CAISO



2020 APX DR System Review

Registration

- Participant
- Roles
- Contacts

Electronic Enrollment

- Add Forms
- Remove Forms

Nomination

- SAs
- Megawatts
- Products

CAISO Bidding

- Elect Option
- Elect + Option

Capacity Settlement

- Meter Data
- Baseline
- Settlement

Report

- Statements
- Meter Data
- History

Aggregators are required to submit their bids 7 days before trade day.



DR Systems URL

- APX DR URL - <https://marketsuitedr.apx.com>
 - Supported browsers are Internet Explorer (IE11+) or Google Chrome

The screenshot shows the APX Marketsuite DR Login page and two 'Curtailment Status' tables for different dates.

APX Marketsuite DR Login:

User Name:
Password:
Log In
Forgot Password | Self-Register | Help
View Legal Agreement

Curtailment Status for 2/22/2019:

Program	Location	Product	MW	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21
Southern California Edison CBP	SLAP_SCEC	DO 1-6 Hour	0.30											
Southern California Edison CBP	SLAP_SCEN	DO 1-6 Hour	0.10											
Southern California Edison CBP	SLAP_SCEW	DO 1-6 Hour	0.25											
Southern California Edison CBP	SLAP_SCNW	DO 1-6 Hour	0.75											

Curtailment Status for 2/25/2019:

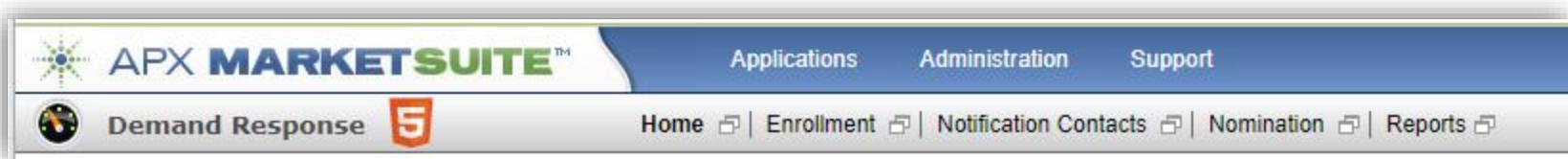
Program	Location	Product	MW	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21
Southern California Edison CBP	SLAP_SCEC	DO 1-6 Hour	0.30											
Southern California Edison CBP	SLAP_SCEN	DO 1-6 Hour	0.10											
Southern California Edison CBP	SLAP_SCEW	DO 1-6 Hour	0.25											
Southern California Edison CBP	SLAP_SCNW	DO 1-6 Hour	0.75											

© 2019 APX Power Markets, Inc. | Privacy Policy | General Terms of Use | DR Terms of Use



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 <https://marketsuitedr.apx.com>
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

Screenshot of the Demand Response application interface for managing notification contacts.

Selection Criteria:

- Participant: APXDEMO
- Contacts: A dropdown menu showing "Select", "Add New Contact", and "Midson Hay". The "Midson Hay" option is highlighted with a red box.

Contact Info:

Form fields with * must be completed

* First Name:	Midson
* Last Name:	Hay
Title:	DR Administrator
Email:	mhay@apx.com
Phone Number:	408-597-4308
Mobile Number:	
Text Msg Number:	
Fax Number:	

Program Contact:

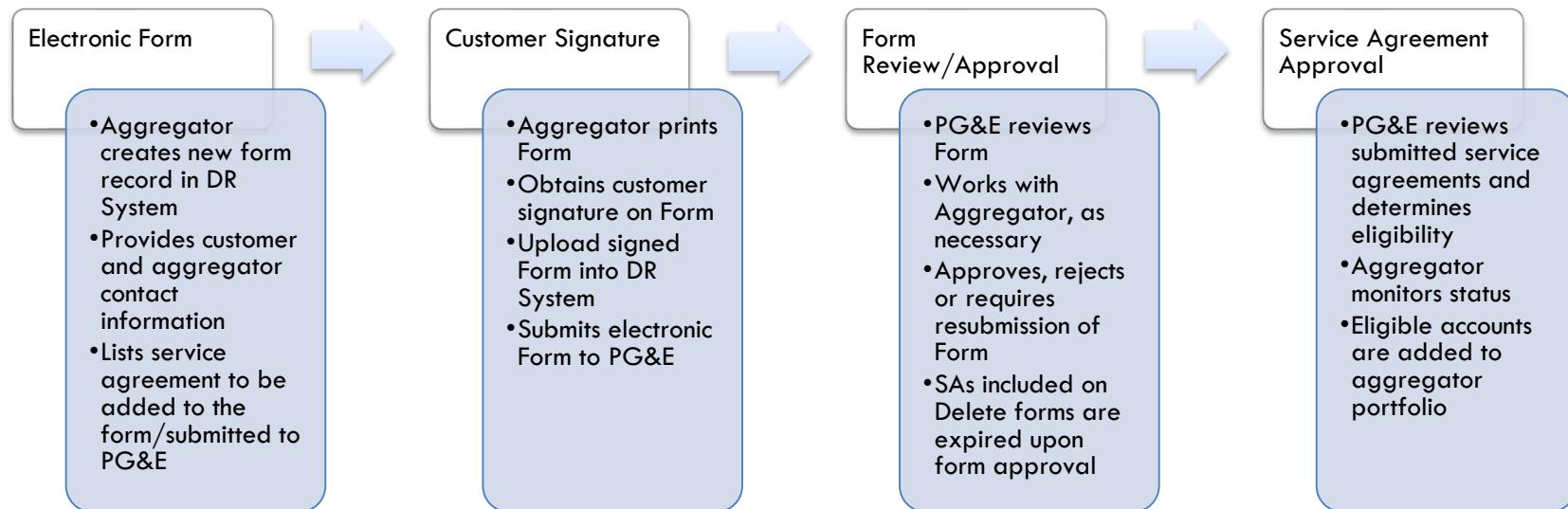
	Program Contact	Resource Contact	Associated Resources
* Notification Preferences:	<input type="checkbox"/> BIP-PG&E	<input type="checkbox"/>	0 +
	<input checked="" type="checkbox"/> CBP-PG&E	<input type="checkbox"/>	0 +

Buttons: Save, Delete, Test (highlighted with a red box).



Online Enrollments

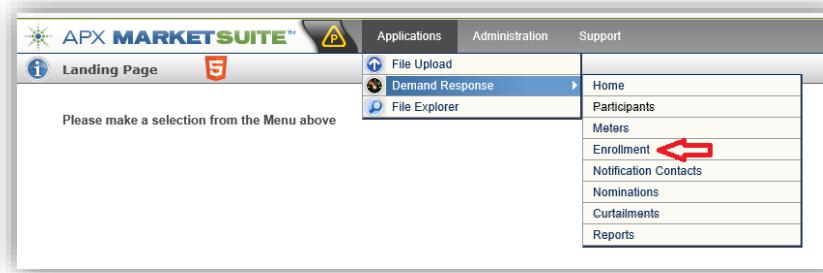
Add and Remove form creation, submission, and review process integrated into APX DR system.





Creating a New Add/Update/Delete Form

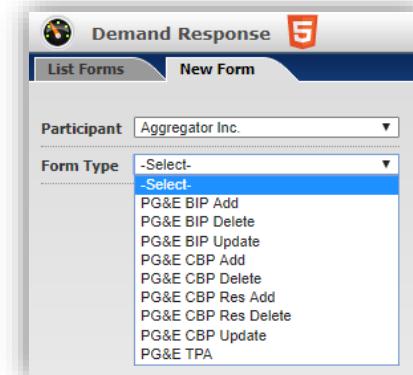
Step 1: Go to Applications > Demand Response > Enrollment



Step 2: Click on the “New Forms” tab on the left pane



Step 3: Select the form type applicable to you





Form Details

Market Participant: Customer Name Of Record: Status: Days In Status: Number Of Service Accounts: Form Type:
Aggregator Inc. **Draft** **0** **PG&E CBP Add**

[Print Paper Copy](#)

NOTICE TO ADD CUSTOMERS PARTICIPATING IN THE CAPACITY BIDDING PROGRAM

Add Form Alias

[\[+\] Add Form Text and Instructions](#)

Customer and Aggregator Information

Customer

* Name of Record: <input type="text"/>
* Name of Authorized Representative: <input type="text"/>
* Title of Authorized Representative: <input type="text"/>
* Mailing Address: <input type="text"/>
* Phone Number: <input type="text"/>
* Email Address: <input type="text"/>

Aggregator

Name of Aggregator: Aggregator Inc.
* Name of Authorized Representative: <input type="text"/>
* Title of Authorized Representative: <input type="text"/>
* Mailing Address: <input type="text"/>
* Phone Number: <input type="text"/>
* Email Address: <input type="text"/>

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.

Service Agreement Details [Add Details from CSV File](#)

*Agreement #	Account Name	*Address	*City	*Zip Code	*Prohibited Res.	Num Res.	Res. Cap (kW)	Tot. Cap (kW)	Meter ID	Status	Action
<input type="text"/>	Add										

Total Service Agreements: 0

Signed Form Management

No Form Attached

[Browse...](#)

Comments

Aggregator Comments **Reviewer Comments** **Private Reviewer Notes**

[Save](#) [Submit](#)

- 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



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: APXDEMO	Customer Name Of Record: MHWalmart	Status: Draft	Days In Status: 3	Number Of Service Accounts: 3	Form Type: PG&E CBP Add	Print Paper Copy					
NOTICE TO ADD CUSTOMERS PARTICIPATING IN THE CAPACITY BIDDING PROGRAM						X					
Add Form Alias Batch Demo											
[+] Add Form Text and Instructions											
Customer and Aggregator Information											
Customer			Aggregator								
* Name of Record: MHWalmart			Name of Aggregator: APXDEMO								
* Name of Authorized Representative: Midson Hay			* 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: 555555555								
* Email Address: mhay@apx.com			* Email Address: chrispratt@thisischrispratt@email.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.											
Service Agreement Details						Add Details from CSV File			Total Service Agreements: 3		
*Agreement #	Account Name	*Address	*City	*Zip Code	*Prohibited Res.	Num Res.	Res. Cap (kW)	Tot. Cap (kW)	Meter ID	Status	Action
					-Select-						Add
1234567893	Paramount Citrus	123 Orange ave	San Jose	95110	No				123456782	New	Remove
1234567892	Sunkist Farms	123 Sunkist Grove	San Jose	95110	No				123456781	New	Remove
1234567891	Archer Farms	123 Archer Street	San Jose	95110	No				123456780	New	Remove
Save Submit Cancel Add Request Delete Initiate Online Customer Approval											



Customer Approval (continued)

- 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.

Automated Document – Preliminary Statement Part A

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

Customer Authorization

I, Midson Hay *, on 03/11/2019

agree to the terms described in the enrollment form above.
 DO NOT agree to the terms described in the enrollment form above.

Reason for Disagreement

Select Reason for Disagreement

Disagreement Details

Submit

✓ Submission successful. Please print this form for your records.



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 Agreement Details

*Agreement #	Account #
1234567893	Paramount Citrus
1234567892	Sunkist F...
1234567891	Archer Farms

Message from webpage

You are initiating the Online Approval Process. An email will be sent to the customer email provided. It will provide the customer with access to the Form details and allow them to review and approve the form. Do you want to continue?

Don't let this page create more messages

OK **Cancel**

Total Service Agreements: 3

Cap (kW)	Tot. Cap (kW)	Meter ID	Status	Action
123456782	New		Add	
123456781	New		Remove	
123456780	New		Remove	

Initiate Online Customer Approval

Signed Form Management

No Form Attached

Comments

Aggregator Comments **Reviewer Comments**

Cancel Add Request **Resend Online Customer Approval**

Signed Form Management

View Signed Form

Uploaded by Customer_Approver_CBPPGE on 3/10/2019 5:00:00 PM

Browse...

Comments

Aggregator Comments **Reviewer Comments**

Cancel Add Request **Resend Online Customer Approval**

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



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

Screenshot of the Demand Response software interface showing the “Aggregator Enrollment Forms” report.

Report: Aggregator Enrollment Forms

Provides customer approval status details for PG&E aggregator submitted enrollment forms and serves as the template for batch uploading enrollment forms.

Participant: APXDEMO

Form Type:

- PG&E BIP Add
- PG&E BIP Delete
- PG&E BIP Update
- PG&E CBP Add
- PG&E CBP Delete

Form Status:

- Draft
- Pending Review
- Pending Customer Review
- Resubmission Required
- Approved

Updated After: 02/26/2019

Run Report

CSV

Form_Name	Form_Alias	Customer_Name	Form_Status	Last_Update	Notifications_Generated_At	Customer_Notification_Status
PG&E CBP Add	APXDEMO	MHTarget	Approved	19 10:18:00 PM	3/11/2019 9:59:51 PM	Success

Export to Excel



Enrollment Batch Upload (continued)

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

Aggregator Enrollment Forms - APX DEMO - Excel

Midson Hay

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	form_name	form_alias	customer_form_stat	Last_Status	notification	customer_customer	customer_customer	customer_customer	customer_customer	customer_customer	form_id	Form_Acti	customer_customer	customer_customer	customer_customer	customer_customer	customer_customer
2	PG&E CBP Add	APXDEMO	MHTarget	Draft	#####						5188	Save	Midson H	DR Admin	2001	Gate	4.1E+09
3	PG&E CBP Add	Batch Demo	MHWalmart									Save	Midson H	DR Admin	2001	Gate	4.1E+09
4	PG&E CBP Add	Batch Demo	MHWalmart									Save	Midson H	DR Admin	2001	Gate	4.1E+09
5	PG&E CBP Add	Batch Demo	MHWalmart									Save	Midson H	DR Admin	2001	Gate	4.1E+09
6																	

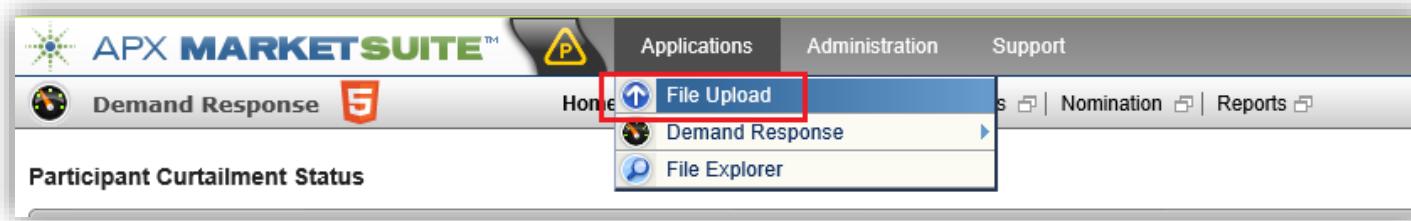
- Details regarding business rules and required columns are in the MarketSuite Help Center
<https://marketsuitedr.zendesk.com/hc/en-us/articles/360043749994-Batch-Upload-of-Enrollment-Forms>



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.



- 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.	File Type:	PGE Enrollment Forms	File Path:	C:\Users\cschlemmer\Desktop\Te
<input type="button" value="Find Uploaded Files"/>			<input type="button" value="Upload File"/>		



Managing Forms

APX MARKET SUITE™

Applications Administration Support | Test Tester - Energy Connect (QA) | Logout

Demand Response 5

Home | Enrollment | Notification Contacts | Nomination | Reports

List Forms New Form

Enrollment

This screen provides a list of all your Enrollment Forms within the system. Begin filling out new forms by selecting the New Form tab and following prompts.

[-] Participant Select All | Clear
 Acme Aggregator

[-] Form Type Select All | Clear
 PG&E AMP Add
 PG&E AMP Delete
 PG&E CBP Add
 PG&E CBP Delete
 PG&E TPA

[-] Status Select All | Clear
 Approved
 Cancelled
 Draft
 Pending Review
 Rejected
 Resubmission Required

Search Apply

Type Participant Customer Name Form Alias Status Days in Status Last Status Change SAs Signed Form Submitted Date

PG&E AMP Delete	Acme Aggregator	Bryant Manufacturing	Bryant	PendingReview	2	3/14/2015	1		3/14/2015
PG&E AMP Delete	Acme Aggregator	Cold Storage Inc.	Building 2 Delete	Approved	5	3/11/2015	1		3/6/2015
PG&E CBP Add	Acme Aggregator	Writessville Inc	CBP ADD	Approved	5	3/11/2015	124		3/11/2015
PG&E AMP Add	Acme Aggregator	Bogut Township	TEst	Draft	5	3/11/2015	124		
PG&E CBP Add	Acme Aggregator	Smith and Company Inc.	Custom 123Abc	Approved	6	3/10/2015	124		3/10/2015
PG&E CBP Add	Acme Aggregator	Curv Industries		Approved	10	3/6/2015	2		3/6/2015
PG&E TPA	Acme Aggregator	Box Store 24	Box Store 24 TPA	Cancelled	10	3/6/2015	1		3/6/2015

Link opens the Add Form record

Icon indicates uploaded Form. Click to view.

Filter by form type

Filter by form status

Search Forms by customer name, authorized representative, service account, etc.



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 reviewed 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 is 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.*



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.

*Note “Registered Meters” report will be re-named to “Aggregator Portfolio Report”



DR Batch Nomination

Nomination Verification Report

This report serves 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
2. 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)”
 - 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	T	U	V	W
product	baseline_option	nominate	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	Location	Product	Load Type	LSE	SA ID	Nominated MW	Tech Potential kW	max_events_per_month	max_event_hours_per_month	max_event_days_in_sequence	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	XYZ	.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	MNO	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).



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

Once the required fields are entered in the spreadsheet exported from the **Nomination Verification Report** and is saved to a location on your computer, go to the **Nomination** application, click the **Import** to upload nominations.



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 re-upload.

Program: CBP-PG&E	Participant:	Trade Month: Mar, 2020	File: C:\fakepath\Nomination Verification_20200317_MH_SANDBOX.csv
Import Summary			
Product	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: <http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=17B7B402-09C4-47B7-9EB3-ADA77F7C2085>
- **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)

1. Download the “PGE Monthly Portfolio Bidding Template” report as a CSV.

Screenshot of the Demand Response interface showing the “PGE Monthly Portfolio Bidding Template” report. The report lists bidding data for August 2018, categorized by Month, Program, Participant_ID, Participant, Location, Product, and Load_Type.

Month	Program	Participant_ID	Participant	Location	Product	Load_Type
2018-08	CBP-PG&E	12213	APXDEMO	SLAP_PGEB-APND	Elect DA 2-6 (1PM-9PM)	Bundled Load
2018-08	CBP-PG&E	12213	APXDEMO	SLAP_PGFI-APND	Elect DA 2-6 (1PM-9PM)	Bundled Load
2018-08	CBP-PG&E	12213	APXDEMO	SLAP_PGKN-APND	Elect DA 2-6 (1PM-9PM)	Bundled Load
2018-08	CBP-PG&E	12213	APXDEMO	SLAP_PGNP-APND	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
2018-08	CBP-PG&E	12213	APXDEMO	SLAP_PGSF-APND	Elect DA 2-6 (1PM-9PM)	Direct Access Load
2018-08	CBP-PG&E	12213	APXDEMO	SLAP_PGSI-APND	Elect DA 2-6 (1PM-9PM)	Direct Access Load

2. Update bids via the CSV template

Screenshot of the Microsoft Excel spreadsheet titled “PGE Monthly Portfolio Bidding Template - Excel”. The spreadsheet contains the bidding data from the previous screenshot, with columns for Month, Program, Participant_ID, Participant, Location, Product, Load_Type, LSE, Dispatch_ID, MW, Begin_Date, End_Date, HE_Start, HE_End, and Price.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Month	Program	Participant_ID	Participant	Location	Product	Load_Type	LSE	Dispatch_ID	MW	Begin_Date	End_Date	HE_Start	HE_End	Price
2	2018-08	CBP-PG&E	12345	APXDEMO	SLAP_PGCC-APND	Elect DA 1-4 (11AM-7PM)	Direct Access Load	LSE1	PGCC_1_PDRP09	0.1	8/1/2018 00:00	8/15/2018 00:00	12	19	100
3	2018-08	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															
7															



CAISO Bidding (continued)

3. Upload bids into MarketSuite

APX MARKETSUITE Applications Administration Support Midson Hay - APX Inc (PreProduction) Logout

File Upload

Region: CBP-PG&E Category: Demand Response Begin Date: 03/12/2019

Account: APXDEMO File Type: Aggregator Resource Bids File Path: X:\mhay\CBPPGE APX DEMO\

Find Uploaded Files Upload File

Messages:

Uploaded Files:

File Name	Upload Time	Status

4. Verify bids using the “PGE Portfolio Bidding”.

Demand Response Find Reports Report CBP Portfolio Bidding Provides a list of aggregator-submitted bids and their status with the CAISO by date.

Program: CBP-PG&E Date Range: 01/01/2018 - 09/30/2018

Participant: Find: Select All | Clear Aggregator Inc. Begin Date: 09/01/2018 End Date: 09/30/2018 Run Report

Monthly Portfolio Bidding

Participant	Location	Product	LSE	Dispatch_ID	Date	HE	MW	Price	Bid_Status
102947	Prescribed DA 2-6 (11AM-7PM)	PAFC-Gen & Storage	102947	9/19/2018	1	0.000	0.00	APXCreated	
102948	Prescribed DA 2-6 (11AM-7PM)	PAFC-Gen & Storage	102948	9/19/2018	1	0.000	0.00	APXCreated	
102949	Prescribed DA 2-6 (11AM-7PM)	PAFC-Gen & Storage	102949	9/19/2018	1	0.000	0.00	APXCreated	
102950	Elect DA 1-4 (11AM-7PM)	PAFC-Gen & Storage	102950	9/19/2018	1	0.000	0.00	APXCreated	
102951	Elect DA 1-4 (11AM-7PM)	PAFC-Gen & Storage	102951	9/19/2018	1	0.000	0.00	APXCreated	
102952	Elect Plus DA 1-24 (1PM-9PM)	PAFC-Gen & Storage	102952	9/19/2018	1	0.200	150.00	APXCreated	
98673	Elect Plus DA 1-24 (1PM-9PM)	PAFC-Gen & Storage	98673	9/19/2018	1	0.150	100.00	APXCreated	
102947	Prescribed DA 2-6 (11AM-7PM)	PAFC-Gen & Storage	102947	9/19/2018	2	0.000	0.00	APXCreated	
102948	Prescribed DA 2-6 (11AM-7PM)	PAFC-Gen & Storage	102948	9/19/2018	2	0.000	0.00	APXCreated	
102949	Prescribed DA 2-6 (11AM-7PM)	PAFC-Gen & Storage	102949	9/19/2018	2	0.000	0.00	APXCreated	
102950	Elect DA 1-4 (11AM-7PM)	PAFC-Gen & Storage	102950	9/19/2018	2	0.000	0.00	APXCreated	
102951	Elect DA 1-4 (11AM-7PM)	PAFC-Gen & Storage	102951	9/19/2018	2	0.000	0.00	APXCreated	
102952	Elect Plus DA 1-24 (1PM-9PM)	PAFC-Gen & Storage	102952	9/19/2018	2	0.200	150.00	APXCreated	
98673	Elect Plus DA 1-24 (1PM-9PM)	PAFC-Gen & Storage	98673	9/19/2018	2	0.150	100.00	APXCreated	
102947	Prescribed DA 2-6 (11AM-7PM)	PAFC-Gen & Storage	102947	9/19/2018	3	0.000	0.00	APXCreated	
102948	Prescribed DA 2-6 (11AM-7PM)	PAFC-Gen & Storage	102948	9/19/2018	3	0.000	0.00	APXCreated	
102949	Prescribed DA 2-6 (11AM-7PM)	PAFC-Gen & Storage	102949	9/19/2018	3	0.000	0.00	APXCreated	
102950	Elect DA 1-4 (11AM-7PM)	PAFC-Gen & Storage	102950	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

 To

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, August 14, 2019 14:37

Subject: Pacific Gas & Electric CBP Event Called for 08/15/2019

Urgent Instruction: Pacific Gas & Electric CBP Day Ahead Load Reduction event for 08/15/2019 has been initiated.

Program	Curtailment Type	Location	Product	Dispatch ID	Total MW	Curtailed Hrs.	Total Hrs.
Pacific Gas & Electric CBP	Event	SLAP_PGP2-APND	Prescribed DA 1-4 Hour	PGP2_32_PDRP1	1.2000	From 1600-1900	3

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
 - Can elect to see data for all SAs or just nominated SAs (see image)
 - 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

Demand Response

Find Reports

Program: CBP-PG&E

Participant: APXDEMO

Location: AutoDR_DLAP, DLAP_PGAE, Greater Bay Area, Greater Fresno, Humboldt

Product: Prescribed DA 1-4 (11AM-7PM), Prescribed DA 2-6 (11AM-7PM), DA 4-8 Hour, Elect DA 1-4 (11AM-7PM), Elect DA 1-4 (1PM-9PM)

Load Type: Bundled Load, Customer Choice Aggregation, Direct Access Load

Month: Oct. 2018

Show Meters:

Run Report



Monthly Settlement Process





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
- b. 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.

APX MARKETSUITE™

Landing Page

Please make a selection from the Menu above

Applications Administration Support

File Upload Demand Response File Explorer

Home Participants Meters Enrollment Notification Contacts Nominations Curtailments Reports

Demand Response

Find Reports

Report: Settlement Statement Summary

Provides summary of Settlement Statement Summary by Month

Program: CBP-PG&E

Participant: APX

Location: Select All

Product: Select All

Load Type: Select All

Month: May, 2019

Run Report

Pacific Gas and Electric Company

Demand Response Operations

CBP-PG&E

Contact: 925-459-8095

Invoice Month: May, 2019

Aggregator: [REDACTED]

Vendor ID: [REDACTED]

Invoice Date: June 7, 2019

Elect DA 1-4 (11AM-7PM)

Location	LSE	Event Hours	Nominated Capacity (kW)	Total Capacity Payment (\$)
SLAP_PGSB-APND	Constellation NewEnergy, Inc			
SLAP_PGSB-APND	Silicon Valley Clean Energy			
Total				
Total Amount Due to				

Export to Excel

© 2019 APX Power Markets, Inc. | Privacy Policy | General Terms of Use | DR Terms of Use



BIP Settlement Invoices

Step 1 - Click
Applications and File
Explorer

The screenshot shows the APX MARKETSUITE interface. The top navigation bar includes links for Applications, Administration, and Support, with 'File Explorer' highlighted by a yellow circle and arrow. Below the navigation is a 'Find Files' search interface with fields for Region (CBPPGE), Market Participant (Acme Aggregator), Date (Operating Date), and Category (Demand Response). The main area displays a table of files matching the criteria, showing one entry: 'Monthly Settlement Invoice' from ISO DSM, operating on 03/13/2013, with a daily interval type and a creation/modification date of 3/13/2013 10:19:06 PM.

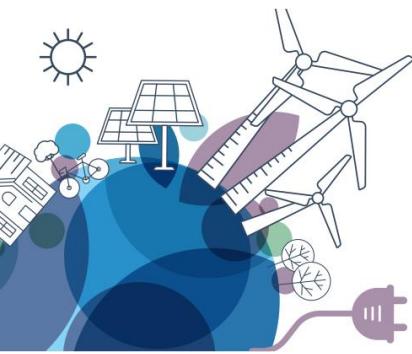
	Name	Source	Operating Date	Interval Type	Create/Modify Date
<input type="checkbox"/>	Monthly Settlement Invoice	ISO DSM	03/13/2013	Daily	3/13/2013 10:19:06 PM

*2020 Enhancement: BIP invoicing will be a report within MarketSuite like CBP



Next Steps

1. 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
 - Nomination window opens for the first 5 Business days of the month.



Questions?

