

PG&E Excess Supply Pilot Frequently Asked Questions (FAQ)

What is the Pilot?

The Excess-Supply Pilot (XSP) is a PG&E Pilot focused on testing the capabilities of demand-side resources to increase load as a service to the grid during the times of over generation on transmission and/or distribution lines or in cases of negative prices. Consistent with CPUC policy, the Pilot does not intend that Participants simply use more energy; instead, it is intended that Participants will utilize XSP events to shift energy usage. The Load Decrease option was introduced as part of the August 2018 XSP rule updates, enabling participants to be dispatched for load decrease events. If the resource meets the CAISO requirements, such resources will be wholesale market integrated as a CAISO PDR.

General Program Information:

Who Can Participate?

Subject to an enrollment cap, the Pilot is open to any individual customers or aggregators within PG&E service territory who can meet the requirements. The Pilot is open to both bundled and direct access customers.

How long will the Pilot last?

The XSP is currently scheduled to run through December 2020.

Will the Pilot transition into a formal program?

The intention of the Pilot is to test out certain aspects of utilizing DR to mitigate excess supply conditions. It is not known at this time whether this will transition into a formal program.

What are the participation requirements?

It is expected that each participant will enroll a single resource composed of a single aggregation with one or more locations. Each resource must:

- Include customers from a single Sub-LAP
- Preferably, be served by a single Load-Serving Entity (LSE)
- Be able to achieve the Pilot capacity requirements of 30 kW, for 2 hours over a participant-defined 5-hour period.

Can we enroll a larger set of customers and then nominate only a portion of the total possible capacity?

Yes, although this may entail unwanted impacts since all enrolled customer locations are measured when calculating baselines and measuring performance during awards.

What is a Sub-LAP?

Sub-LAP is short-hand for a Sub-Load Aggregation Point. Although PG&E service territory is divided into 15 distinct Sub-LAP regions, a single CAISO market resources cannot include locations from different Sub-LAPs. Olivine assists participants in determining the correct Sub-LAP for a customer location during enrollment.

What is a Load-Serving Entity (LSE)?

The LSE is the entity responsible for procuring electricity for their customers. This is either Pacific Gas & Electric, the customer's Community Choice Aggregator (CCA), or an Energy Service Provider (ESP). The LSE is important because individual CAISO Demand Response resources cannot include customer locations served by different LSEs.

Does it matter who my LSE is?

Customers of any LSE can participate; however, keep in mind that individual CAISO Demand Response Resources that are participating in load decrease and meet the minimum CAISO requirements to be wholesale market integrated cannot include customer locations served by different LSEs. The LSEs themselves must also fulfill certain requirements set by the CAISO in order for their customers to participate in the market. These involve the LSE registering in the CAISO Demand Response Registration System, although most if not all LSEs have done so at this time. If for some reason the LSE is not registered at the CAISO, then Olivine may require additional time to bring your customers online.

How much capacity can I enroll?

The general intention is to distribute capacity to encourage a diverse group of participants, with each enrolling a single PDR. Allocations will take into account the needs of the Pilot, and the unique specifics of the participant's resource.

What is the Load Decrease Option?

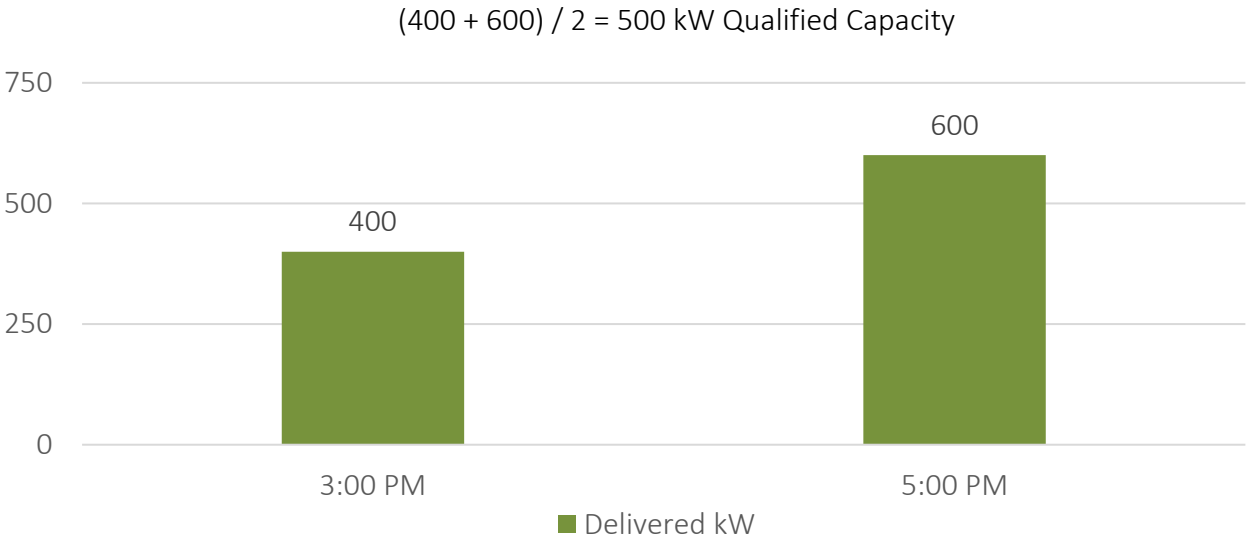
Participants have the option to also respond to load decrease events. XSP resources that also elect to participate in load decrease are required to be able to achieve a minimum of 30 kW load decrease for up to 4 hours between 4 PM and 9 PM. Upon the publication of the day-ahead market clearing prices, resources whose bids clear are granted an award and subsequent dispatch. There is an additional \$2/kW-month capacity incentive for participating in Load Decrease. If the resource meets the CAISO requirements, such resources will be wholesale market integrated as a CAISO PDR and market payments and charges will be passed through to the Participant.



Nomination & Bidding:

What is Qualified Capacity?

Resources may undergo a test for two contiguous hours to determine their *Qualified Capacity (QC)* before becoming operational. To determine this value, the total average energy delivered over the period will be subtracted from the baseline:



For participants who also elect to participate in load decrease, a separate Load Decrease QC value is determined through an additional four-hour period test to measure average energy reduction against the PDR baseline.

Can I change my Qualified Capacity?

Participants may request a change in their Qualified Capacity up to the maximum controllable load as specified when registering service accounts. If the request is approved by the Pilot Administrator, it may be granted provisionally until the resource demonstrates its ability to perform at the requested Qualified Capacity. If the demonstration is successful, this will also become the nomination for that month.

How much can I nominate?

Once tested, participants make a monthly nomination between 30 kW and their Qualified Capacity. The monthly nomination is the basis for capacity payments.

When are nominations for the following month due?

Nominations are made monthly and must be provided to Olivine by noon on the 3rd to last business day of the month. Olivine may send reminders to complete the monthly nomination, however it remains the sole responsibility of the participants to do so. If no nomination is received by the deadline, the previous nomination value will be used.

What are the ongoing pilot requirements?

After having the qualified capacity value and nomination, participants must nominate monthly to earn a monthly capacity payment, noting that the capacity payment depends on the election as well as event performance.

The resources committed to this Pilot must nominate a monthly capacity value into the pilot as well as 5 hours per day during which this capacity value can be dispatched. The nomination can be changed every calendar month.

- Nomination must include 5 contiguous hours of availability per day between the hours of 8AM-4PM.
- There are 2 availability options
 - 7 Days a Week
 - 5 Days a Week (Weekdays)
- Optionally, load decrease availability requirements are 4-9PM.
- Events will not occur on program holidays

Can I be awarded non-contiguous hours?

No. All awards will be either 1 hour or 2 contiguous hours in duration.

How is load increase measured?

Load increase is calculated using a baseline methodology. The baseline itself is computed following the baseline methodology set forth by CAISO in the Proxy Demand Resource (PDR) product¹. The baseline is a “10 in 10” calculation, taking the average of the most recent 10 non-event days subject to a 20% morning-of adjustment. The resulting load increase measurement is the difference between the load during the event and the baseline. For participants participating in load decrease, the same baseline methodology is used.

What is the relationship between Qualified Capacity and nominations?

The *Qualified Capacity* is a tested kW value that has been demonstrated as achievable by the resource. The *nomination* is a capacity commitment to the program, at or below the Qualified Capacity.

Capacity Payments

What are the program requirements to be eligible for capacity payments?

Participants must have a qualified capacity and monthly nomination.

There are no penalties associated with ineligibility for capacity payments.

¹ For more, see CAISO's PDR Full Market Module:

<http://www.caiso.com/informed/Pages/StakeholderProcesses/CompletedClosedStakeholderInitiatives/DemandResponse-ProxyDemandResource.aspx>

Are there energy payments in the XSP?

No. It is the intention of the XSP to promote energy shifting to achieve the desired effect, and it is up to the Participant to absorb, mitigate or avoid any increase in retail (energy and/or demand) to the end customers.

How are the capacity payments calculated?

Hourly performance is calculated as the hourly delivery divided by the nomination quantity. A simple average of the hourly performance over the month is the raw performance and the table below informs the adjusted performance.

Raw Performance	Adjusted Performance
100% < x	100%
20% < x ≤ 100%	x%
x ≤ 20%	0%

The adjusted performance will then be multiplied by the Participants nomination value and the capacity price to determine the monthly settlement value.

The capacity price depends on the number of days in the election:

# of days	\$/kW-month	\$/kW-month
	Increase	Decrease
5	\$6	\$2
7	\$8	\$2

How many events can I expect per month?

Unlike some other programs and pilots, XSP resources will be dispatched every month. The expected number of events per month varies by the number of days nominated:

# of days	Events Days	Event Hours
5	8	16
7	10	20