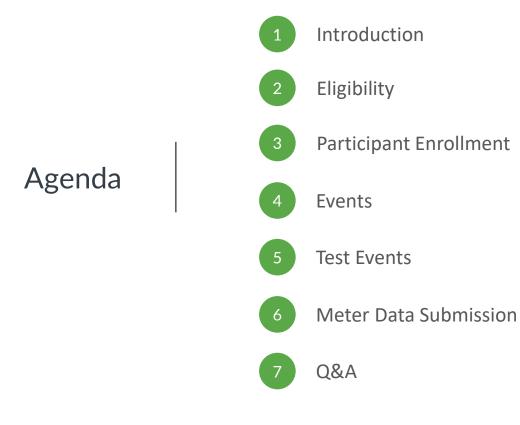


Demand Side Grid Support Program

2025 Season Kickoff: Option 3 Providers

April 18, 2025

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INTRODUCTION

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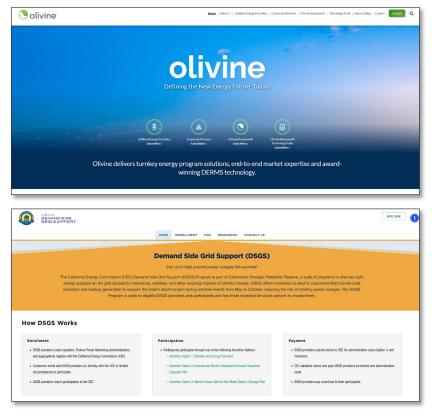
Olivine Introduction & Role in DSGS

About Olivine, Inc.

- California-based company focused on helping the state meet its renewable energy and GHG reduction goals
- Learn more at www.olivineinc.com

Role in DSGS

- Implementing DSGS on behalf of CEC
- Responsible for providing program management and infrastructure to support enrollment, dispatch, reporting and settlement.



Summer 2024 Program Enrollment and Activity

Over 35,000 participants and nearly 250 MW were enrolled in 2025.

| | Option 3 |
|-----------------------|-----------------------|
| Providers Enrolled | 14 |
| Participants Enrolled | 37,627 |
| Capacity Enrolled | 248 MW |
| Events | 26 hours over 16 days |

Overview of Key Changes to Option 3 Guidelines

| Section | Key Changes for 2024 |
|----------------------|--|
| Eligibility | Updates the minimum aggregation size requirements for storage virtual power plants (VPPs). Increases the maximum allowable discharge to 2 MW. Allows for dual participation as a California ISO proxy DR or reliability DR resource for the export-only portion of resource's discharge. Clarifies participation rules for providers operating VPPs on behalf of partner companies. |
| Reporting | Establishes monthly meter data reporting requirement |
| Program Availability | • Establishes a voluntary energy incentive (\$1.00/kWh) for participation in EEA events. |
| Test Events | Requires aggregators to pre-register test events. If multiple test-events are conducted per month, only the most recent test event counts. |
| Claim Deadline | • November 30, 2025 |

ELIGIBILITY

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Provider Eligibility Changes

To be eligible, Aggregators must aggregate either:

- a) A total minimum nameplate power rating of <u>400</u> kW across all utility service territories and resource durations,
- b) At least one aggregation with a total minimum nameplate power rating of 200 kW, or
- c) <u>At least three aggregations with a total minimum nameplate power rating of 100 kW each.</u>

Example scenario:

A provider with the following would be **ineligible** under these updates (< 400 kW):

- 50 kW 2hr resource + 70 kW 4hr resource in PG&E
- 110 kW 2hr resource in SDG&E
- 110 kW 2hr resource in SCE

To become **eligible**, the provider would need to:

- Increase the total nameplate power in **one** of their PG&E aggregation to 100 kW
- Increase capacity in any one aggregation so that the total nameplate power rating of all resources is 400 kW
- Increase capacity in any one aggregation to 200 kW

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Partner Eligibility Changes

In order for multiple partner companies under one aggregator to be <u>measured and</u> <u>compensated separately</u>, the DSGS provider must:

- Submit separate Provider Enrollment Application for each partner's aggregation
- Identify the partner for each participating aggregation in the enrolled participation reports

Each partner must meet all other aggregator requirements such as the minimum aggregate nameplate power.



Participant Eligibility Changes

To be eligible, each site participating:

- Should provide no more than <u>2,000</u> kW discharge during any hour of a program event.
 - A customer site may participate with a stationary battery system capable of discharging greater than or equal to 2,000 kW but any discharge greater than 2,000 kW during a given event hour will not be offered incentives.
- May not be participating in a California ISO proxy demand resource (PDR) or reliability demand response resource (RDRR) unless:
 - The participant's customer energy baseline reflects total gross consumption (that is, consumption independent of any energy produced or consumed by behind-the-meter battery storage) consistent with California ISO tariff Section 4.13.4 or
 - <u>The participant is enrolled with an export-only DSGS resource (only the discharge exported to the grid is eligible). (See Chapter 5, Section E for details on this calculation)</u>

PARTICIPANT ENROLLMENT

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Changes to Participant Enrollment for 2025

- Minor changes to data fields required in the Monthly Participant Enrollment Report
- Monthly Participant Enrollment Report will be used for claims, instead of Final Report
- Aggregation-level Estimated Capacity (kW) no longer needed
- New Provider Portal will replace spreadsheets for Monthly Participant Enrollment Reports

Provider Portal Registration Process

New Provider Portal will allow import and automatic validation of Monthly Participant Enrollment Reports and Monthly Meter Data.

Portal Registration Instructions

- 1. DSGS will email a user-registration invitation to your primary and secondary point(s) of contact.
- 2. The invitation will provide a link for you to create a password.
- 3. Once password is created, users can log in and can submit files.
- 4. You may request additional users by emailing DSGS Support.

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Participant Enrollment Report Submission Process

Olivine will send a Technical Guide on Monday (4/21) with instructions on data formatting and submission.

Submission Process Overview:

- 1. Prepare files as detailed in the Technical Guide.
- 2. Log into the Provider Portal.
- 3. Navigate to "Submit Data File" and select file.
- 4. Select "Validate" to receive feedback.
- 5. Select "Submit" once file has been validated.

| Home | | | |
|------------------|--|--|--|
| Submit Data | Submit Data File | | |
| File Selection | Select File - You can drap and drop a file anywhere in this window. PCE-DSCS_OPTION_3-JID-202505.tsv 1600 Remove Validate Submit | | |
| | mitted Successfully! cessed by the administrator at a later time. | | |
| Log Messages | | | |
| Level | Message | | |
| | No records to view | | |
| | | | |
| 🛛 Clear 🖪 Export | | | |
| | Conviciable 2010-2025 Clasing | | |

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Key Changes to Participant Enrollment Report Format

The 2025 Monthly Report includes changes to field names for clarity, and adds a few new fields.

| Field | Description |
|---|--|
| Batteries Installed Count | The number of batteries installed at each site |
| Apply Zero Baseline? | Indicate if the device should be eligible for a zero-baseline value. A response of True indicates the device should receive a zero-baseline value. |
| Estimated Full Duration Discharge (kWh) | A per-device estimate of discharge (kWh) over the full Nominated_Duration |

Participant Enrollment Report Next Steps

Next Steps:

- 1. Olivine will post a Technical Guide for file submission and notify providers (4/21)
- 2. Olivine will send Portal User Registration invitation (4/21)
- 3. Create a password to complete your registration
- 4. Submit Participant Enrollment Report 3 business days before the first day of each month (April 28)

Reminders:

• If a site is not included in a participation report, that site will not be included in performance calculations for that month.



DSGS Option 3 Monthly Participation Enrollment File Data Format

1 Objective

The objective of this document is to define the information that is required to be submitted by DSGS Option 3 Providers in Monthly Participant Enrollment Reports ("Monthly Report").

2 File Format

Monthly Reports must be submitted in Tab-Separate Values (TSV) file format. In TSV format, individual fields (columns) are separated by tab characters. Provider will submit one file per UDC.

3 File Naming

Participation Files will be named in the following format:

{UDC}-{ProgramName}-{ProviderID}-{YYYYMM}.tsv

| File Name Element | Description |
|-------------------|--|
| UDC | The UDC will be one of "PGE", "SCE", "SDGE", "LADWP". Note, please exclude "&" from the UDC. |
| ProgramName | For Option 3, the program name must be "DSGS_Option_3". |
| ProviderID | The Provider ID must be a three-digit code given to each provider that uniquely identifies the provider's company. |
| YYYYMM | The YYYYDD fields represent the year and the month being submitted. For example, for creating a file for May participation for 2025, the YYYYMM would be 202505. |

Note that we are requesting duplicate information in the file name and file body for validation purposes to ensure the right file is being submitted. Also note file extensions must be tab separated (sv).

An Example Option 3 File name would be: PGE-DSGS_OPTION_3-ABC-202505.tsv, where the submitted aggregations are within the PGE Utility region, "ABC" is the providers unique code, and the participation is being set for May 2025.

EVENTS

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Option 3 Event Types

There are now three types of Option 3 Events:

| Event Type | Event Trigger | Participation |
|-------------------------------|----------------------------------|---|
| Day-Ahead Price-Triggered | Hourly LMP <u>></u> \$200/MWh | Included in Demonstrated Capacity Payment |
| (NEW) Day-Ahead EEA-Triggered | EEA Watch or above | Included in Demonstrated Capacity Payment |
| (NEW) Day-of EEA-Triggered | EEA Watch or above | Optional Energy Incentive, not included in Demonstrated Capacity Payment |

Day-Ahead Events

- Day-Ahead Price-Triggered Events occur when the day ahead locational marginal price (LMP) for the VPP's host UDC is
 \$200/MWh.
- Day-Ahead EEA-Triggered Events are triggered by CAISO-Issued Energy Emergency Alerts (EEA).
- The same logic for hour selection will apply to both event types: the <u>consecutive hours</u> (between 4 PM and 9 PM) with the highest mean LMP will be considered event hours.

| | | Time | Locational Marginal Price (\$/MWh) |
|-----------------------|----------------------|-------------|---------------------------------------|
| | | 4 PM - 5 PM | \$185 |
| | | 5 PM - 6 PM | \$195 |
| | Event Hour | 6 PM - 7 PM | \$205 |
| | Lvent noui | 7 PM - 8 PM | \$199 |
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Example: 2-Hour Resource

Day-of EEA-Triggered Events

- Day-of EEA Events are triggered by CAISO-Issued Energy Emergency Alerts (EEA).
- The event starting hour will be the later of:
 - A. The CAISO Notice Issued Time rounded to the nearest hour
 - B. The EEA Start Time listed on the event notice rounded to the nearest hour
 - C. 4:00 PM

| DSGS Start Time | 5:00 PM | DSGS Start Time | 5:00 PM | DSGS Start Time | 4:00 PM |
|--------------------|---------|--------------------|---------|--------------------|---------|
| EEA Start Time | 4:00 PM | Event Start Time | 5:00 PM | Event Start Time | 3:00 PM |
| Notice Issued Time | 4:35 PM | Notice Issued Time | 4:22 PM | Notice Issued Time | 2:00 PM |
| Example A | | Example B | | Example C | |



Example: Overlapping Day-Ahead and Day-of Events

If there is an existing day-ahead event and a day-of EEA trigger is called, previously communicated hours will be extended up to the full resource duration. Below is an example for a 2-hour Resource.

| | Time | Locational Marginal Price (\$/MWh) |
|-------------------------|-------------|---------------------------------------|
| | 4 PM - 5 PM | \$185 |
| | 5 PM - 6 PM | \$195 |
| Price Triggered Hour | 6 PM - 7 PM | \$205 |
| | 7 PM - 8 PM | \$191 |
| | 8 PM - 9 PM | \$185 |

Day-Ahead Event Called for 6-7 PM

Day-of EEA Called for 4-9 PM

| Time | Locational Marginal Price (\$/MWh) |
|-------------|---------------------------------------|
| 4 PM - 5 PM | \$185 |
| 5 PM - 6 PM | \$195 |
| 6 PM - 7 PM | \$205 |
| 7 PM - 8 PM | \$191 |
| 8 PM - 9 PM | \$185 |

FFA Fvent Hour

*Note: 5-6 PM is an energy event

Option 3 Event Process

| <u>CAISO</u> | <u>CEC / Olivine</u> | <u>Providers</u> |
|--|--|---|
| Day Ahead LMP or EEA | DSGS Event Notification | Discharge Batteries During Event Hours |
| 1:00 PM CAISO Day-Ahead locational marginal prices are made public. If a day-ahead EEA is issued, Olivine will send notification once LMPs are available. | Olivine will create the correct event notification based on hourly prices for each UDC and Duration. Notifications will be sent to Provider event notification contacts and/or through API integration. | • Providers dispatch their customer's devices according to event dispatch instructions. |

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TEST EVENTS

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Test Event Requirements

- All aggregations must be dispatched for at least one <u>full-duration</u> event per month from May to October.
- In the absence of a <u>full-duration</u> day-ahead event, providers must call at least one test event for each aggregation per month.
- Only the last test event for a given month will count towards demonstrated capacity. If a full-duration event gets called in a month, *no* test events will count towards demonstrated capacity.
- It is generally better to conduct test events later in the month, because any full-duration events called after the test event would nullify the test event.
- Test event hours must be determined using the same logic for program events on the chosen test event day. The hours must align with the **highest mean consecutive priced hours** for the DLAP. The correct hours for test events could vary by DLAP (ie. PGE, SCE, SDGE)

Extending Partial-Duration Events

- A provider may extend a partial-duration (e.g. 1-hour) event with test hour(s) to satisfy the required for a full duration event. The day-ahead event hours and test hours are included in the capacity calculation.
- The Day-Ahead Event logic for hour selection will apply to these events: the <u>consecutive hours</u> with the highest mean LMP must be selected for the test event hour(s).

| | | Time | Locational Marginal Price (\$/MWh) |
|------------|-------------|-------------|---------------------------------------|
| | | 4 PM - 5 PM | \$185 |
| | | 5 PM - 6 PM | \$195 |
| Event Hour | | 6 PM - 7 PM | \$205 |
| | 7 PM - 8 PM | \$180 | |
| olivine | ©2025 b | 8 PM - 9 PM | \$178 |

Example: 1-Hour Event

Example: Extended Test Event

| Time | Locational Marginal Price (\$/MWh) | |
|-------------|---------------------------------------|-----------|
| 4 PM - 5 PM | \$185 | |
| 5 PM - 6 PM | \$195 | |
| 6 PM - 7 PM | \$205 | Test Hour |
| 7 PM - 8 PM | \$180 | |
| 8 PM - 9 PM | \$178 | |

Test Event Reporting

- New: Providers must communicate test event date/times to DSGS Program Team by 3:00 P.M. on the day *prior* to the test event day.
- Olivine will review and confirm that the test event hours meet the requirements.
- Test event information must be provided as an email with a simple data file attached. Full instructions will be provided in a separate document by 5/1. Sample format:

| ProviderID | UDC | Duration | EventStart | EventEnd |
|------------|------|----------|-----------------|-----------------|
| SRN | PGE | 2 | 5/30/2025 18:00 | 5/30/2025 20:00 |
| SRN | PGE | 4 | 5/30/2025 17:00 | 5/30/2025 21:00 |
| SRN | SCE | 2 | 5/30/2025 18:00 | 5/30/2025 20:00 |
| SRN | SDGE | 2 | 5/30/2025 18:00 | 5/30/2025 20:00 |

METER DATA SUBMISSION

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Meter data submission overview

Monthly submission requirement

- Providers must submit submeter/inverter data within 15 business days after the end of each month for each site enrolled.
- Example: Data for the month of May 2025 must be submitted by the 15th business day of June (6/23/2025).
- This Monthly meter data will be used for claim calculations.

Operational Requirements

- Meter data files will be uploaded each month through the Provider Portal.
- The Portal will perform validation on the data format and will provide specific messages indicating changes required.
- Olivine will post a Technical Guide with instructions on meter data format (and example files) and notify Providers by 5/1.
- Format is slightly different than 2024.
- Meter data must be split into separate files by UDC.

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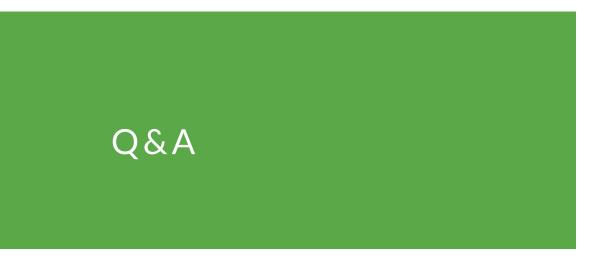
NEXT STEPS

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Next Steps & Reminders

Next Steps:

- 1. Olivine will post a Technical Guide for Participant Enrollment Report file submission and notify providers (4/21).
- 2. Olivine will send Portal User Registration invitation (4/21).
- 3. Submit Participant Enrollment Report 3 business days before the first day of each month (April 28).
- 4. Olivine will send Test Event Pre-Registration instructions by 5/1.
- 5. Olivine will send Meter Data file submission instructions by 5/1.
- 6. Providers will submit Meter Data files for May by June 23.







For more information, please contact:

DSGS Support dsgs-support@olivineinc.com (866) 208-6352

THANK YOU!