



# Demand Side Grid Support Program

*2025 Season Kickoff: Option 2 Providers*

May 2, 2025

# Agenda



- 1 Introduction
- 2 Eligibility & Enrollment
- 3 Dispatch Report Requirement [NEW]
- 4 Bidding Requirements and Option 2 Offer Methodology
- 5 Demonstrated Capacity & Incentive Methodology
- 6 Claim Process Overview
- 7 Q&A

# INTRODUCTION

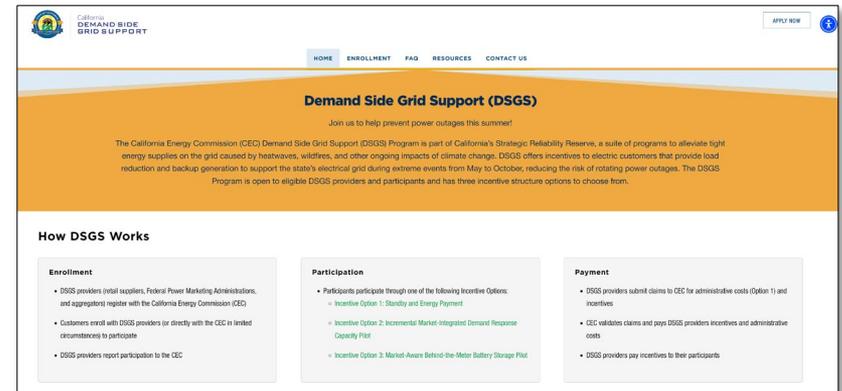
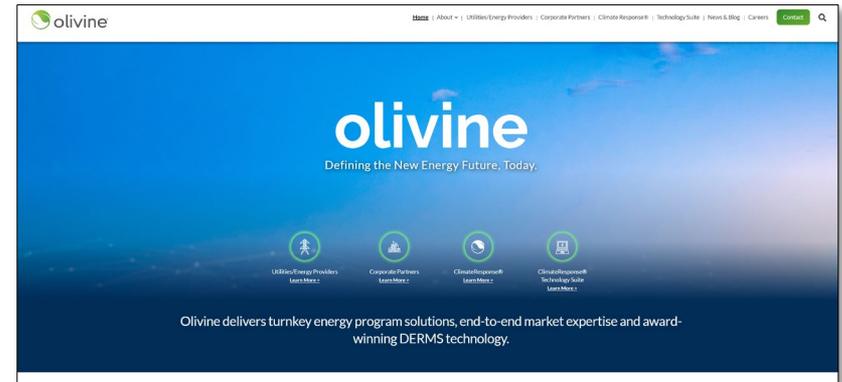
# Olivine Introduction & Role in DSGS

## 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](http://www.olivineinc.com)

## Role in DSGS

- Implementing DSGS on behalf of CEC
- Responsible for providing program management and infrastructure to support enrollment, communications, reporting and performance monitoring



# DSGS Option 2 Overview

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- Market-Integrated Demand Response **Incremental** Capacity Pilot for providers with Proxy Demand Resources (PDRs) in CAISO market.
- Distinct from all other DSGS options – No event dispatch signals, and data comes from CAISO.
- Basic idea: A mechanism for market DR to earn capacity payment if they are consistently able to offer more load reduction than their RA commitment.
- Providers only earn incentive if the aggregate demonstrated capacity (across all the participating resources) exceeds the max aggregate Resource Adequacy commitment. This is the definition of “incremental.”
- Resources without an RA commitment can participate. Incremental capacity is calculated across all participating resources, which could include RA and non-RA resources.

## Key resources:

- [Provider resources and templates](#)
- [Report uploader link](#)
- [2025 DSGS Guidelines](#) (4<sup>th</sup> Edition) including a version with strikethrough
- Program support: [dsgs-support@olivineinc.com](mailto:dsgs-support@olivineinc.com)

# Overview of Key Changes to Option 2 Guidelines for 2025

Category	Changes for 2025
Eligibility	No major changes. Clarification that PDRs must be registered to the Provider including them in an Option 2 enrollment.
General	Wording changes and minor clarifications.
Reporting	New monthly dispatch report is required to be submitted to CEC within 10 business days after the last day of the dispatch month.
Bidding requirements	Clarification about max bid price for DAM bids, not just RTM bids
Dispatch requirements	Additional requirement of one eligible 3-hour consecutive dispatch in the season for an aggregation to count. This requirement was waived for 2024, <b>but not 2025.</b>
Capacity calculation and Incentive amounts	No changes.

# ELIGIBILITY & ENROLLMENT

## Option 2 Eligibility

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- DR providers (third party DR aggregators and POU) are eligible if they are operating within the California ISO balancing authority with at least one proxy demand resource (PDR) registered
- Providers can only enroll *PDRs* in Option 2, not other types of resources
- Enrolled PDRs must be registered to the DR provider that is submitting them
- No minimum capacity or minimum number of resources
- RA and non-RA obligated PDRs are eligible

# Participant Enrollment Report

- Same report as 2024 (available on website)
- Participation reports must be submitted website uploader (select "Enrollment Participation Report" from <https://dsgs.olivineinc.com/upload/>) no later than **3 business days** before the first day of each month.
- If a Resource ID is not included in a participation report, that Resource may not be included in capacity calculations for that month.
- Every Resource ID must be included in a Participation Report prior to an event to be included in performance calculations for that event.
- Key fields:
  - Availability selection (Every Day or Weekdays only)
  - Estimated incremental capacity (for reporting purposes)

Field Name	Description
Business or Entity Name	(required) The name of the DRP or POU participating in the program
DRP ID	(required) The CAISO DRP ID associated with the resources participating in the program
CAISO Resource ID	(required) California ISO Resource ID(s) for all resources under the aggregator enrolled in DSGS
Availability Selection	(required) The selection of availability requirement for each Resource ID. Note that this selection must be the same in each month for each Resource ID.  Possible values: Every Day, Non-Holiday Weekdays
Number of Locations	(required) The number of end-use service accounts participating in the CAISO resource. If this number changes throughout the reporting month, provide the number of locations at the start of the month.
Customer Type	(required) Customer class, sector, or load type of customers for each Resource ID  Possible values: Com/Ind, Ag , Res, Mixed
Estimated Incremental Capacity	(required) Estimated incremental capacity not shown on any supply plan or other resource adequacy commitment in kW

# DISPATCH REPORT REQUIREMENT [NEW]

# Monthly dispatch report

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From the guidelines:

## 2. Option 2 Dispatch Reports

Option 2 providers must submit to the CEC a monthly report summarizing the total expected energy (MWh) by Resource ID for each day and hour. Dispatch reports are due to the CEC 10 business days after the last day of the month in which dispatches occurred. If no eligible dispatches occurred in the previous month, the report should indicate that no dispatches occurred in the past month.

- Olivine will provide a template by mid-May to all providers and add it to the website. Uploading will also be through the website.

# BIDDING REQUIREMENTS AND OPTION 2 OFFER METHODOLOGY

# Availability selection and program windows

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- For PDRs enrolled with Every Day availability selection, the program hours are:
  - 4 PM – 10 PM every day from May 1 to Oct 31
- For PDRs enrolled with Weekday (non-holiday) availability selection, the program hours are:
  - 4 PM – 10 PM every *weekday* from May 1 to Oct 31 (except for Memorial Day, 4<sup>th</sup> of July, and Labor Day)
- Note: Every Day availability is associated with **25% higher** incentive for incremental capacity

# Day-ahead bidding requirements

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- To be eligible for a non-zero BNLI (bid-normalized load impact) value for a given hour in the availability window, PDRs must bid in the following way each day:
- PDRs with RA obligation:
  - RA availability rules apply
  - Month of **May**: 4 consecutive hours between 5 PM – 10 PM
  - Other program months: 4 consecutive hours between 4 PM and 9PM
- PDRs without RA obligation:
  - 3 consecutive hours between 4 PM and 10 PM

## Additional rules:

- 2025 Guidelines clarify that there is a \$600/MWh bid price cap for the DAM bids to count for this requirement: there must be at least one bid segment at or below \$600
- No minimum MW for this requirement
- DAM bids don't factor directly into the DSGS Offer. Instead, they are required to avoid a BNLI of zero reducing the overall capacity. Specifically, if the consecutive bid requirement isn't met:
  - For PDRs with RA obligation: The consecutive 4 program hours with the highest DA LMP (sublap level) are assigned a zero
  - For PDRs without RA obligation: The consecutive 3 program hours with the highest DA LMP (sublap level) are assigned a zero

# DSGS Offer is based on eligible RTM bids

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## Definition from the guidelines:

- **Offer:** The offer value is the real-time bid quantity at a price no greater than \$600/MWh plus self-schedules (MW) in the real-time market during each hour. The offer value for aggregation  $a$  (consisting of  $n$  Resource IDs  $r$ , where  $n \geq 1$ ) in each interval (date  $d$ , hour  $h$ ) is defined as:

$$Offer_{a,d,h} = \sum_{r=1}^n RTM\_BID\_QUANTITY_{r,d,h} + RTM\_SELFCHEDMW_{r,d,h}$$

## Key points:

- Offer is a sum of two components:
  - The maximum MW from the RTM bid curve at or below \$600 / MWh
  - All RTM self-schedules, including those automatically created from DAM awards or partial awards
- Additional rule: Offer values of zero will be excluded from analysis unless the sub-LAP DAM LMP  $\geq$  \$600

# DEMONSTRATED CAPACITY & INCENTIVE METHODOLOGY

# Bid-normalized Load Impact (BNLI)

BNLI is the direct input into the capacity calculation.

Definition from the guidelines:

## 2. Individual Settled Load Impacts Are Calculated and Adjusted Relative to Bids

Hourly load impacts determined by California ISO settlement are adjusted relative to the amount offered, and dispatched according to the following definition of bid-normalized load impacts (BNLI) on date  $d$  and hour  $h$ :

$$BNLI_{a,d,h} = \text{Max} \left( \text{Offer}_{a,d,h} \left( \frac{\text{Min}(DREM_{a,d,h}, TEE_{a,d,h})}{TEE_{a,d,h}} \right), DREM_{a,d,h} \right)$$

Adjusted Offer (max  
adjustment factor = 1)

Market  
performance

(TEE = Total Expected Energy (market award); DREM = Demand Response Energy Measurement which is the delivered energy value)

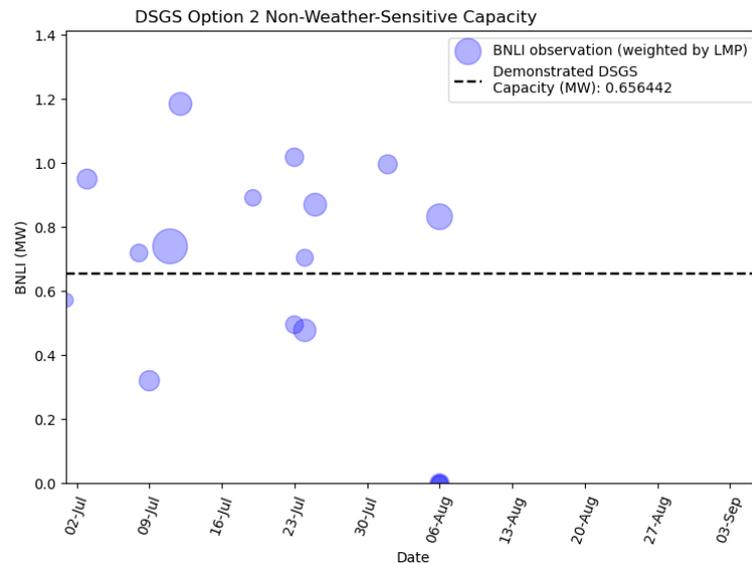
Additional rules:

- BNLI gets an “N/A” (omitted from impacting capacity calculation) if:
  - TEE is insufficient (less than 20% of the offer). This includes if TEE = 0
  - Offer = 0 and DA LMP < \$600
  
- DAM bid requirements still apply. If they weren’t met, 3 or 4 BNLI values per day will be set to zero and will reduce capacity (see “Day-ahead bidding requirements” slide)

# Demonstrated Capacity (non-weather sensitive option)

- Demonstrated capacity is calculated annually for each resource/aggregation
- If provider selected non-weather sensitive option, demonstrated capacity is the weighted average of *eligible* hourly BNLI values in availability window
- Weighted by price (DA LMPs at sublap)
- This is the simplest option and best choice if higher performance on hotter days is not certain

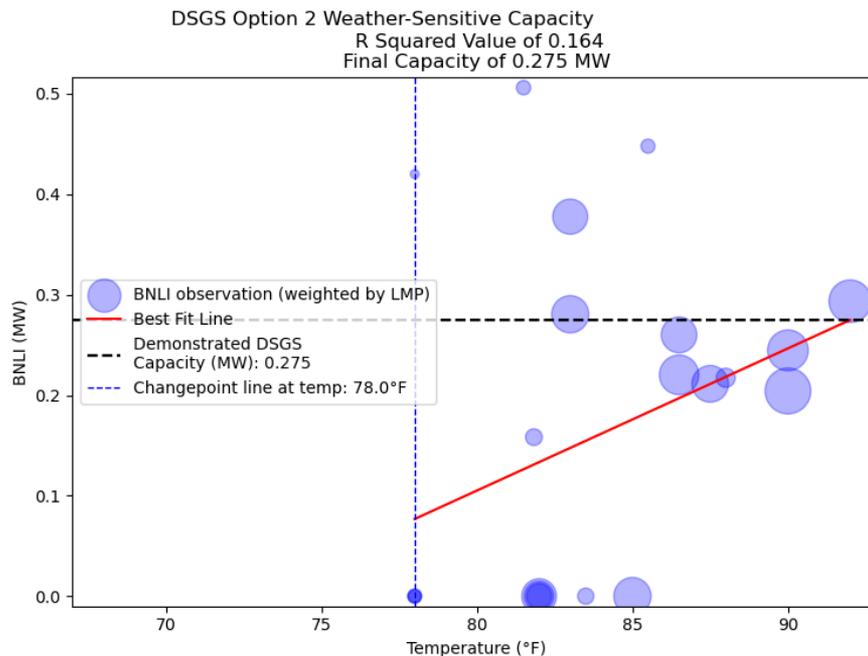
*Example visualization of annual capacity from weighted averaged of BNLI for a single PDR*



# Demonstrated Capacity (weather sensitive option)

- Demonstrated capacity is calculated annually for each resource/aggregation
- If provider selected weather sensitive option, they are saying that they expect BNLI to be higher on the hottest days of the season (of the days with eligible BNLI values)
- Capacity is calculated based on the best fit line of a weighted regression between BNLI and average temperature
- Average temperature is calculated based on zip-code makeup of registration
- Data points for regression are shifted based on changepoint selection process (highest R<sup>2</sup> value is selected)
- Negative slopes are allowed; capacity is floored at zero
- Regression is weighted least-squares with LMP as the weights

*Example visualization of annual capacity from a temperature regression for a single PDR*



# Seasonal dispatch requirements

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- Demonstrated capacity is calculated annually for each resource/aggregation
- However, this capacity is only applied to the provider total for the entire season if:
  - The aggregation has at least one dispatch resulting in a BNLI value in July, August, and September, and
  - The aggregation has at least one BNLI value per participating month *on average*, and
  - **New in 2025:** The aggregation has at least one dispatch resulting in 3 consecutive hours with a BNLI value
- Otherwise, annual capacity is still calculated but only applied to months with >0 eligible BNLI values

# Incremental Capacity and Incentives

- The DSGS incremental DR capacity prices vary by month and availability requirement.
- Additional 30 percent bonus applied through 2026.
- Incremental capacity for the provider is calculated monthly.
  - Annual capacity for each resource is applied to each month if it participated and met the load impact requirements (see previous slide).
  - This is summed across *all* resources for the provider. Then, the RA baseline is subtracted to calculate *incremental capacity*.
  - The month with the **highest total** RA capacity showing is considered the reference RA obligation
- Incentives for each month = max (0, provider-total Incremental capacity for the month)

**Incremental Capacity Incentive Prices by Month and Availability Requirement (\$/MW)**

Month	Every Day	Non-Holiday Weekdays
May	\$9,000	\$7,200
June	\$9,300	\$7,440
July	\$16,800	\$13,440
August	\$18,000	\$14,400
September	\$19,200	\$15,360
October	\$10,500	\$8,400

# CLAIM PROCESS OVERVIEW

# Claim Submission

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- End of year final claim submission:
  - Option 2 Providers must submit Claim Package by February 27, 2026 for all aggregations they have enrolled in DSGS.
  - Same template as 2024
  - Final calculations can't proceed until **T+70B** final settlement data and all other required data is received from CAISO
  - Olivine and CEC are working on methods to streamline data validation and calculation time
- Interim calculation request:
  - Guidelines state this is an option for Option 2
  - CEC and Olivine are working on assessing the feasibility of a plan to be able to request sufficient CAISO data using preliminary (T+9B) market settlement data
  - This would allow interim calculation and disbursement for May – August incremental capacity much earlier
  - Feasibility has not been determined yet, but stay tuned

# Q&A



For more information,  
please contact:

DSGS Support  
[dsgs-support@olivineinc.com](mailto:dsgs-support@olivineinc.com)  
(866) 208-6352

THANK YOU!