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CALSSA Comments on DSGS Draft Guidelines

Additional submitted attachment is included below.

July 29, 2022

California Energy Commission
Docket Unit, MS-4
715 P Street
Sacramento, CA 95814

Re: Docket No. 22-RENEW-01, Comments on Demand Side Grid Support Program proposed draft guidelines

I. Introduction

The Demand Side Grid Support (DSGS) Program was created by Assembly Bill (AB) 205 (Ting, Chapter 61, Statutes of 2022), as part of the Strategic Reliability Reserve. The program is meant to incentivize dispatchable load reduction and backup generation operations to call on during grid-stressing extreme events, to provide emergency supply and load reduction.

The California Solar & Storage Association (CALSSA) represents a broad array of companies engaged in providing distributed energy resource (DER) services, including but not limited to distributed solar and energy storage providers, DER aggregators, energy efficiency and demand response providers, electric vehicle charging hardware and software providers, and other technology solution providers at the grid edge. CALSSA appreciates the opportunity to provide input into the development of the DSGS Program.

CALSSA offers several suggestions for California Energy Commission (CEC) consideration in developing final guidelines. Our top-priority recommendations are as follows.

- Add minimum dispatch and standby hours to the Energy Payment Only and Standby and Energy Payment Structures. Without this change, the likelihood of participation is substantially decreased.
- Clarify that energy exported to the grid from behind-the-meter storage devices can be compensated through the program. Unless exported energy is included in the program, the available capacity to serve reliability needs will be greatly reduced.
- Further develop the Capacity Payment and Bid Structure option, considering alternatives to wholesale market participation. Bidding into the market poses various obstacles to program participation.

CALSSA commends the CEC for its swift work to develop draft guidelines for this recently created program, and for its interest in incorporating innovative program elements. While we

see the need for some changes to the guidelines to clarify and improve program design, we are optimistic that the DSGS program can both provide substantial contributions to grid reliability and offer useful demonstrations of program design elements that could be adopted more broadly to better unlock the potential of solar-paired storage as an essential reliability resource.

II. Comments on the Draft Guidelines

A. Scope of the DSGS Program

CALSSA is concerned that the scope of the DSGS program may be too limited to inspire significant participation. While we recognize that the statutory language places limitations on the scope, we encourage the CEC to interpret the statutory language as broadly as possible to expand the potential for participation, including to expand eligibility beyond publicly owned utilities (POUs) and electric service providers.

One possible avenue to consider might be to enable aggregators to participate directly through the CEC rather than through individual DSGS providers. While an aggregator may not have enough customers within a single POU's territory, an aggregator may be able to combine resources across territories. The CEC might consider whether there are practical ways to implement such an approach, within balancing authority areas (BAAs) or spanning beyond a single BAA.

B. Duration of the DSGS Program

Neither AB 205 nor the draft guidelines identify the duration of the DSGS program. The guidelines should establish a program term of at least 5 years, and ideally 10 years. This would better enable participation by customers and aggregators by providing some certainty of value to justify an initial investment of resources.

C. Eligibility and Participation

1. The guidelines for participant eligibility should be clarified and should not exclude customers eligible to participate in net energy metering.

a. Clarify the role of aggregators

The draft guidelines (Chapter 2, A.2) define eligible participants as including "Customers or aggregators of a DSGS provider…." Because aggregators are not affiliated with DSGS providers like customers are, this language should be changed to clarify aggregators' role, such as: "Customers, or aggregators of customers, of a DSGS provider…."

Beyond this sentence stating that aggregators may participate in the program, the draft guidelines say almost nothing more about the role of aggregators, leaving open questions about how aggregators might participate in the program.

For example, the Glossary defines "Aggregator" as "an entity that collectively bids the load reductions of many smaller customers into the balancing authority markets." This

definition could preclude aggregators from participating in Option 1 (Energy Payment Only Structure) and Option 2 (Standby and Energy Payment Structure), since these options do not involve bidding into the market. For clarity, the definition of aggregators in the Glossary should be changed to "An entity that dispatches behind-the-meter load reduction or battery storage discharge of multiple customers for the benefit of a load-serving entity or balancing authority."

It is also unclear from the draft guidelines whether there are any rules around how much of the payments from DSGS providers should go to aggregators versus customers, and whether the administrative costs paid to the DSGS providers could include payments to aggregators. While some of these issues might be resolved between DSGS providers and aggregators, the best course of action is to include greater clarity on the role of aggregators and compensation methods in the program guidelines.

b. Eliminate the reference to net energy metering

The guidelines state that customers and aggregators are eligible if they are not "Eligible to participate in demand response, net energy metering, or emergency load reduction programs offered by entities under the jurisdiction of the California Public Utilities Commission." That language should be changed to "Eligible to participate in demand response or emergency load reduction programs offered by entities under the jurisdiction of the California Public Utilities Commission." There are several reasons for this change.

First, the reference to net energy metering is a departure from the statutory language of AB 205, which provides, "Eligible recipients shall include all energy customers in the state, except those that are eligible to participate in demand response or emergency load reduction programs offered by entities under the jurisdiction of the Public Utilities Commission" (Public Resources Code section 25792(b)). The reference to net energy metering is not required by the statute and is not necessary to limit eligibility in compliance with the statute.

Second, excluding customers on the basis that they are eligible to participate in net energy metering is not consistent with California Public Utilities decisions and would be more restrictive than rules that Commission has established for programs with dispatchable resources. Net energy metering does not compensate customers for load reduction like a demand response or emergency load reduction program does.

Third, including net energy metering in the description of ineligible customers creates grammatical ambiguity because the participial phrase "offered by entities under the jurisdiction of the Public Utilities Commission" can be read to modify only the element after "or," i.e., "emergency load reduction programs." This would greatly expand the limitation on eligibility.

2. The guidelines should be clarified to state that participation of energy storage resources may include energy exported to the grid.

The draft guidelines are silent as to whether energy storage participation is limited to load drop or can include dispatch of stored energy beyond onsite load. They should be modified to expressly allow for energy exports to the grid to be compensated through the DSGS program.

The language and intent of AB 205 support allowing for exports. First, Public Resources Code section 25792(d) states that participants will provide "load reduction or backup generation service, or both." This language shows the Legislature intended to encompass more than load reduction in this program. Energy storage paired with a behind-the-meter (BTM) solar system generates energy, and the program should account for that by not limiting its DSGS participation to only load reduction.

The Legislature's intent is also shown in subdivision (b) of the statute, requiring participation in the DSGS program by entities with generation assets pursuant to Article 2, the Distributed Electricity Backup Assets Program. As set out in Public Resources Code section 25791(b), those assets include energy-exporting resources, including energy storage, fuel cells, and other zero- or low-emission technologies in addition to carbon-fuel-burning power generators.

Energy storage bridges between supply and demand resources. While it can provide energy supply to the grid through exports, it can still reasonably be included in the overarching category of demand-side resources, and exported energy can be treated as an element of incremental load reduction (ILR). This is the approach that the California Public Utilities Commission (CPUC) has taken in the Emergency Load Reduction Program (ELRP), which provides that exported energy may be counted in ILR.[1]

Many battery systems sized to provide backup power to homes and businesses have capacity significantly in excess of typical instantaneous demand. These batteries typically operate daily for time-of-use management or other purposes, but still have significant energy they could contribute to grid reliability if allowed to export. Tapping into this unused energy during grid emergencies is exactly the type of benefit for which ELRP and DSGS were created.

If a DSGS provider does not have an avenue for resources to export (like Rule 21 export agreements in investor-owned utility territories), the CEC should work with utilities to develop a pathway for resources to be able to export and receive credit during emergency events.

The guidelines should provide that battery storage performance can be settled at the device level, as was done in the CPUC's ELRP guidelines.[2]

D. Incentive Structure Options

1. Minimum dispatch hours should be included for Option 1 (Energy Payment Only Structure).

Similar to the Energy Payment Only structure laid out in Option 1, the CPUC's ELRP program offers participating customers an energy-only payment of $2/kWh during CAISO

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[1] California Public Utilities Commission, D.21-12-015, Dec. 6, 2021, Attachment 2, pp. 14-16, available at https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M428/K821/428821668.PDF.

[2] *Ibid.*, p. 15.

emergency events. A critical difference, however, is that ELRP includes 20 minimum dispatch hours per season. These minimum dispatch hours are critical to securing the participation of customers and aggregators. In the absence of minimum dispatch hours, a customer considering putting the time and effort into enrolling in the program will have no way to gauge what level of compensation they might expect from the program, and DSGS providers will have no value offering on which to sell the program to customers. Indeed, looking at CAISO's "Alert, Warning, Emergency" Grid History Report,[3] there are a number of years in the past decade without any events that would have trigger a payment under the Energy Payment Only Structure.

2. Minimum standby and dispatch hours should be included for Option 2 (Standby and Energy Payment Structure).

Like the Energy Payment Only Structure, the Standby and Energy Payment Structure offers no assurance of any compensation for participants. A standby payment will be made only for periods when a balancing area authority issues an EEA Watch or EEA 1, and there is no certainty that those alerts will be issued in a given year. Minimum standby and dispatch hours should be added for this option to encourage participation by customers and aggregators.

3. Option 3 (Capacity Payment and Bid Structure) should be clarified and modified.

a. Reconsider requiring participation in the CAISO market as a long-term refinement

As currently proposed, the Capacity Payment and Bid Structure presents an obstacle to participation by energy storage resources. As explained above, many BTM batteries do not have significant additional capacity to provide for grid reliability unless the program credits exports to the grid. It appears that requiring resources to participate in the CAISO wholesale market will entail participation through the Proxy Demand Resource (PDR) tariff, which does not credit exports, making this structure infeasible for many BTM storage resources. PDR also requires a minimum load size of 100 kW, which may create a constraint on participation and reduce contributions to the program's reliability goals.

That said, participation in wholesale markets is a use case that BTM batteries can excel at, given their ability to be precisely dispatched in a way that minimizes customer disruption. Participation of these resources in wholesale markets has been hampered to date, however, by the inability to be credited for energy exported to the grid under PDR, which in turn significantly reduces their ability to receive RA capacity credit. The DSGS program presents an opportunity to address this issue—for example, by allowing exported energy to count toward the program's capacity payment, even if it is not counted for settlement in the CAISO market. Another approach could be to establish market-price-based dispatch triggers without requiring

[3] Summary of Restricted Maintenance Operations, Alert, Warning, Emergency, and Flex Alert Notices Issued from 1998 to April 2022, http://www.caiso.com/Documents/Grid-Emergencies-History-Report-1998-Present.pdf.

bidding into the market directly. Avoiding complexities of market participation could help this program be a successful analogue to the CPUC's ELRP, which does not require CAISO market integration.

We recognize that implementing a solution like those described above would take more time and consideration than what is available to get a program up and running this summer. Thus, in Section III below, we encourage the CEC to pursue an ongoing process to refine the DSGS program for future years.

b. Clarify that aggregators may bid load

On page 7, the draft guidelines state that to be eligible for Option 3, "the DSGS provider must bid into the ISO day-ahead market…." This creates some ambiguity as to whether aggregators are allowed to participate in the market on behalf of the DSGS provider. Thus, this sentence should be amended to read, "the DSGS provider or an aggregator of the provider's customers must bid into the ISO day-ahead market…."

E. Resource Dispatch

Chapter 4 of the draft guidelines sets out resource availability requirements. These include a maximum number of required dispatch hours—60 hours per year for Options 1 and 2, and 20 hours per month and 60 hours per year for Option 3. It is unclear whether these are meant as absolute limits on the number of hours that resources can be dispatched for compensation through the program, or if the guidelines allow additional dispatches above these limits but simply does not require them. This should be clarified. It would be preferable not to establish a maximum number of dispatches that creates a ceiling on potential compensation low enough to discourage participation.

The draft guidelines also establish a maximum of 1 start per day. A limit on starts is prudent for carbon-emitting generators, but is not warranted for renewable and zero-carbon resources such as energy storage. Also, it should be clarified that the 1-start limit applies only on days that resources are dispatched.

F. Program Payments

The guidelines should clarify that participants will be paid after each program month, including for capacity payments, before DSGS providers submit claims for reimbursement of incentives and administrative costs. While the draft guidelines provide for reimbursement claims to be made within 15 business days after the end of each month, implying that payment would be made to participants before those claims are submitted, greater certainty would be useful for potential participants.

III. Long-Term Refinements to the DSGS Program

Many of the concepts presented in the draft guidelines represent smart policy ideas that deserve more consideration and refinement. For example, the Capacity Payment and Bid Structure would likely garner significant interest from battery storage developers if issues

around wholesale market participation were resolved, such as the inability to count exported energy toward settlement in CAISO's PDR tariff. It is likely that a solution to this issue could be achieved, but this would benefit from further stakeholder engagement such as through workshops. For this reason, CALSSA agrees with the CEC's planned phased approach, as described in the workshop on July 25, to use lessons learned from the 2022 participation year and on an ongoing basis to revise the guidelines and increase the program's effectiveness. The CEC should establish a process that includes input from participants and those who have opted not to participate, to further refine and improve the DSGS program for future years.

IV. Conclusion

California currently faces great energy reliability challenges, and the Legislature and state energy agencies are focusing substantial attention and effort on addressing these challenges while continuing to move as quickly as possible toward a clean energy future. The DSGS can play an important role toward meeting these objectives. CALSSA appreciates the CEC's work to create an effective and efficient program that will enable more load-serving entities and DER providers to participate in our collective efforts to transition toward a zero-carbon energy system that provides reliable and sustainable energy service.

Sincerely,

Kate Unger
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California Solar & Storage Association