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Advanced Energy United Comments on proposed DSGS Guidelines, 4th Edition

Additional submitted attachment is included below.

October 30, 2024

California Energy Commission
1516 Ninth Street
Sacramento California 95814
Re: Docket 22-RENEW-01 – Demand Side Grid Support

Comments of Advanced Energy United
on Proposed DSGS Program Guidelines
Fourth Edition

Introduction

Advanced Energy United ("United") is a national business association representing roughly 100 companies across the advanced energy sector, including many within the DER space including distributed solar and energy storage developers, microgrid developers, energy efficiency and demand response providers, electric vehicle charging hardware and software providers, DER aggregators, and other technology solution providers at the grid edge.

United appreciates the opportunity to provide comments on the Proposed Draft Demand Side Grid Support ("DSGS") Program Guidelines, Fourth Edition. The proposed Guidelines continue the California Energy Commission's ("CEC") leadership in pioneering and innovative program design to tap into the potential of distributed energy resources to assist in relieving grid stress. In these comments, United requests both broad guidance regarding the DSGS program as a whole and makes specific requests for revisions to proposed provisions in Options 3 and 4.

1. Over-arching comments

a. Budget uncertainty

United joined many commenters in the October 18 workshop requesting further clarification of available budget for the 2025 DSGS program season. This clarity should resolve two outstanding questions:

- Available appropriated budget after consideration of 2024 program expenditures. This should include both administrative expenses and incentive payments. During the October 18 workshop, staff verbally reported an estimate of roughly $26 million in 2024 incentive payments. It was unclear whether additional CEC or third party program administration costs are expected in 2024. In total, this suggests that roughly $88 million remains in currently appropriated funds, but confirmation is urgently requested.

- Additional appropriation from FY 2024-25. During the October 18 workshop, staff reported that CEC has not yet decided how to allocate the $75 million appropriated to the DSGS and DEBA programs in FY 2024-25. This remains an urgent concern for United member companies as it represents both budget certainty for the size of the program that can be accommodated in the 2025 season, as well as being an important signifier of the commitment to the DSGS program going forward. United therefore requests that the CEC provide clarity and commitment to this allocation as soon as possible, and no later than contemporaneous to the publishing of the final Guidelines.

b. Learnings from, and glidepath beyond, DSGS

The CEC should be rightfully proud of the accomplishments of DSGS to date, and of the continuing innovation as represented by the proposed Guidelines. As CEC recently noted in its October 15 news release, DSGS has reached impressive recruitment of resources including over 265,000 customers and 515 MW of capacity, including "one of the largest storage virtual power plants in the world with a capacity exceeding 200 MW."[1] Most importantly, the program helped avoid a grid emergency on four separate occasions in 2024, providing enormous value to customers statewide while engaging DR-capable residents and businesses directly in energy management through customer incentives.

In the process, DSGS is pioneering innovative program design, and gaining valuable experience, in load impact measurement, device-level telemetry, dispatch and response, and customer enrollment and participation. This experience is directly relevant to the broader ecosystem of California demand response and virtual power plant programs and resource adequacy. Since its inception and throughout its programmatic development[2], DSGS has been recognized as an important proving

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[1] "California's Demand Side Grid Support Program Grows to 500 Megawatts of Capacity," California Energy Commission News Release, October 15, 2024,

[2] For example, the July 25, 2022 DSGS Program Staff Workshop Presentation listed among the Policy Objectives: "Pilot incentive structures that: Increase visibility into resource capacity (ability to plan)"

ground for resources and designs that can and should allow for the evolution of both LSE-run programs and market-integrated VPP programs.

At the same time, DSGS is currently a time-limited program, with legislative authorization only through 2026. The resources, customers, and aggregators mobilized by the DSGS program should not be lost to the grid when the program sunsets.

For these reasons, it is incumbent on CEC to plan for extracting the lessons learned from DSGS and applying them to appropriate programs at CEC, the CPUC, and CAISO. CEC should begin now on preparing a report, within the existing Reliability Reserve Incentive Programs docket, to distill lessons learned and propose a roadmap for applying those lessons in appropriate programs and dockets across government and LSEs.

Program participants seek clarity about where we go from here. Waiting until the conclusion of the DSGS program after 2026 would be too late.

2. Comments on Revisions to Option 3

Below, we discuss two changes to the Option 3 program that have raised concern among United's members. More generally, we respectfully suggest that the substantial revisions are not necessary or well supported, and may be more disruptive than helpful to the program.

Given the success and importance of Option 3 both within DSGS and to the broader statewide grid support and load flexibility goals, it is counterproductive to introduce significant program changes that are not well supported by compelling policy or implementation concerns. Program changes introduce complexity and costs for both aggregators and participants that can negatively affect business cases and participation willingness. And it is not clear from the proposed Guidelines and the October 18 workshop what significant problem these changes are intended to address. For these reasons, United requests that CEC staff reconsider whether these revisions are necessary and worth the negative impacts.

a. Minimum aggregation size

The proposed increase in minimum aggregation sizes has the potential to be a barrier of entry to some aggregators and/or resource types. In addition, requiring the same 500 kW minimum aggregation size for each partner company participating under one aggregator is a barrier to aggregators working with partner companies with new resources or technologies and thus fewer assets. Presumably, it is in both the technical and policy interests of the DSGS program for experienced aggregators to work with technology providers that may have fewer assets in deployment in order to assist in bringing these assets to the program under one umbrella. An example would be a vehicle OEM with hundreds of vehicles in service in a UDC, but just dozens – amounting to less than 500 kW of capacity - willing to be deployed in the near term in DSGS. Under an experienced aggregator, these vehicles can participate with minimal additional administrative burden to the CEC, while the OEM and its customers gain experience and confidence in being deployed as a VPP.

Without the ability to enroll resources that fall under the proposed 500 kW requirement, valuable capacity could go untapped, leaving these resources stranded. To avoid restricting market participation to only those that meet stringent sizing criteria, the CEC should actively encourage all customers to join the program. This inclusive approach would significantly enhance the program's overall impact and effectiveness. As mentioned, the concern that has led CEC to propose increasing minimum aggregation size is not clear. To the extent that it is intended to streamline program administration and increase bang for the buck, then the important quantity is the capacity managed by each aggregator, not each partner company.

United therefore recommends that the Guidelines maintain the minimum aggregation size at 100 kW. In addition or separately, the minimum aggregation size should not apply to every aggregator partner company but rather to each aggregator.

b. Separate storage asset types

For the first time, the proposed Guidelines would require that each aggregation consist of a single type of storage asset, including distinguishing between inverter-metered and export-only, and residential and non-residential storage or EVSE systems.

This requirement, in combination with the previous new requirement increasing the minimum aggregation size, further presents barriers to participation by aggregations of smaller assets, even under the same aggregator. It is not clear that it is necessary to exclude these assets, when there is a reduced administrative cost, and CEC should remove this restriction or alternatively ensure the 500kW minimum does not apply to these subdivisions by asset type.

c. Apply non-zero baseline to all batteries

United also questions the rationale and necessity for applying a presumptive baseline to all batteries. Again, it is unclear what the problem that this change seeks to address, how this proposal was arrived at, whether this proposal will address the problem, and whether any improvement is worth the cost to aggregators and customers. The cost to program participants is significant – beyond the direct reduction in incentive value, the additional complexity can have impacts on customer recruitment and retention.

Adding a baseline to new storage resources especially Net Billing Tariff (NBT) batteries could significantly reduce the overall customer value proposition. By participating in the DSGS program, NBT battery customers are facing negative bill impact when prioritizing their batteries to dispatch for DSGS events. These customers require at least the full compensation level to incentivize their enrollment in the program and recover the negative bill impact. Instead, a universal baseline would discourage both enrollment and re-prioritization of battery dispatch. NBT customers would have little interest in continuing their enrollment in the program in 2025 and will likely lead to a sharp drop in program enrollment.

United suggests this proposed program change is unnecessary and detrimental and should be rejected.

d. Performance reporting requirement

The proposed requirement for monthly data reporting just three days after each month is excessively burdensome and lacks a clear rationale for such a rapid turnaround. While it's important to improve visibility into program performance for timely budget oversight and reporting, a more reasonable deadline of 15 to 20 days would be beneficial. This extended timeline would afford aggregators the opportunity to accurately assess their system performance, ensure data quality, and conduct any necessary analyses, while still ensuring program administrators receive vital data within an adequate timeframe.

3. Comments on Option 4

United joins other commenters in commending the CEC staff and leadership for developing the proposed Option 4. This proposal addresses a consistent request by parties throughout the DSGS program to provide options for the large number of smart thermostat and water heater devices already in Californian homes and businesses.

However, we question several program details that place unique and stringent requirements on Option 4 that are not present in other program options. These additional restrictions do not appear necessary to address any unique risks or lesser value of Option 4 assets. Instead of promoting participation and helping to ensure the success of Option 4, the following items appear to unnecessarily complicate and restrict Option 4 participation.

a. Penalty-based structure

The proposed Guidelines for the first time propose a penalty within the incentive structure for Option 4. The penalty amount is severe and will have a significant impact on customer and aggregator participation.

The rationale for the penalty has not been communicated to stakeholders, and more importantly it's not at all clear how the proposed penalty would address the perceived problem, including:

- What is the scale of anticipated non-performance by Option 4 assets?
- How would the proposed penalty affect non-performance?
- What is the optimal penalty amount to discourage non-performance?
- What scale of performance will this specific penalty expect to promote?

Presumably, CEC staff have not yet performed this specific analysis, but rather propose the penalty structure in order to proactively address anticipated risk of non-performance and to gather data. But the proposed penalty also carries risk: that the penalty discourages participation and ultimately undermines overall program success.

It may be just as likely that too severe a penalty leads to an anemic and ultimately unsuccessful program as it is that underperformance undermines program success. After all, without a penalty the program is purely pay-for-performance. Underperformance is not unfairly compensated. Foregone program revenue while incurring participation costs already provides a disincentive for nonperformance by aggregators and customers.

During the first year of this new and innovative program track, it is especially important that program rules are carefully tailored to provide a solid and rigorous yet inviting overall structure. The proposed penalty appears neither carefully tailored nor inviting, and will serve as a deterrent to both participants and aggregators. We respectfully suggest that during the first year of Option 4, that CEC implement a pure pay-for-performance structure and evaluate over the 2025 season any issues of underperformance and explore potential remedies.

b. Capacity Incentive Payments

The total capacity payments available under Option 4 appear significantly limited. United notes that the capacity incentive payments in Option 4 are substantially lower than the capacity incentives available under Options 2 and 3. It is not clear why this is. Especially given that Option 4 also introduces a penalty structure not included in Options 2 and 3, the risk-adjusted incentives available are even lower.

In addition, Option 4 is not eligible for the 30% bonus in years 2025 and 2026. This 30% bonus was originally instituted specifically to address early year ramp-ups for the other nascent DSGS programs. Given that Option 4 would similarly be brand new in 2025, the 30% bonus is particularly important and welcome. Without this bonus, given the low baseline incentive levels, total compensation for Option 4 would be less than half of the incentive level for Option 3 resources.

Finally, the 10% day-of trigger bonus has also not been made available to Option 4. Again, logic would suggest that the rationale for this bonus also applies to any day-of dispatch of Option 4 resources and it is curious why it is omitted.

United suggests that the current incentive and bonus levels for Option 4 are inadequate and illogical, and we request that incentives and bonuses should simply mirror the similar Options 2 and 3.

c. Event hours and performance

The determination of event hours and event participation are also unique to Option 4 in ways that further reduce compensation, increase risk, and are detrimental to participation and performance. First, unlike in both Options 2 and 3, Option 4 resources do not have an element of choice in the duration of events, but instead must respond for at least four hours meeting the EEA and price triggers. However the first hour (during which thermostat resources typically perform best) is discounted by 50%. Further, it appears that Option 4 resources may be dispatched if an EEA is declared on the same day, potentially with as little as 15 minutes notice. Yet this same-day dispatch would not be compensated with the 10% bonus incentive offered to option 3 resources.

Thus these requirements further reduce the compensation and increase the risk on Option 4, while as discussed previously, Option 4 resources are already dis-compensated with lower base capacity incentives, absence of bonuses, and a penalty structure. CEC should review these multiple layers of dis-incentive and eliminate penalties and increase compensations to be more commensurate with options 2 and 3.

d. Supply-side DR enrollment

United understands and largely shares the CEC's interest in expanding market-integrated DR capacity, and we are intrigued by the opportunity to leverage DSGS Option 4 to increase awareness and attractiveness of supply-side DR options to customers. However, we are also wary of the risk to customer experience that could do more harm than good to these worthy purposes.

The repeated experience of diverse DR and DER service providers, reported to the CEC across many venues, is that every demand on customers' time, attention, or other resources reduces their willingness to proceed with program enrollment or continuation. Put simply, every friction reduces participation.

United suggests that the goals of expanding supply-side awareness can be accomplished without undue friction by revising the proposed Guidelines to ensure that supply-side DR referrals minimize legalese and program-specific language in line with the comments separately filed by Generac.

Conclusion

United appreciates the opportunity to submit these comments on the proposed Guidelines, Fourth Edition. CEC is continuing to innovate on an already groundbreaking and successful program. While we applaud the effort and ingenuity obvious in this proposal, we offer several overarching considerations:

- Provide as much budget certainty as possible, as soon as possible
- Initiate a plan to distill lessons learned from DSGS about needs and capabilities of different resources, and map to appropriate programs and proceedings that can fruitfully incorporate lessons to provide future programmatic homes for DSGS participants
- Eliminate unnecessary program changes from Option 3 to preserve and build upon this program's success
- Review the unique requirements of Option 4 and either eliminate the several layers of dis-incentive or increase base incentives and bonuses to compensate for increased risks and requirements under Option 4.

/s/ Brian Turner

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