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Document Title:	SMUD Comments Re Distributed Energy Resources for Reliability Draft Solicitation Concept
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SMUD Comments Re Distributed Energy Resources for Reliability Draft Solicitation Concept

SMUD Comments Re: Distributed Energy Resources for Reliability Draft Solicitation Concept - 22-RENEW-01

Additional submitted attachment is included below.

STATE OF CALIFORNIA BEFORE THE CALIFORNIA ENERGY COMMISSION

In the matter of:) Docket No. 22-RENEW-01
Distributed Electricity Backup) SMUD Comments Re:
Assets Program) Distributed Energy Resources for
-) Reliability Draft Solicitation Concept
)
) March 15, 2024
)

Comments of SACRAMENTO MUNICIPAL UTILITY DISTRICT on the Distributed Energy Resources for Reliability Draft Solicitation Concept

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide input on the California Energy Commission's (CEC) Distributed Energy Resources for Reliability Draft Solicitation Concept¹ (Draft Solicitation) for the Distributed Electricity Backup Assets (DEBA) program and the March 5, 2024 CEC staff workshop.² SMUD's 2030 Zero Carbon Plan³ establishes the goal of removing all greenhouse gas emissions from SMUD's electricity supply by 2030 while ensuring reliability, maintaining affordable electricity rates, and increasing equity within the communities it serves. External funding and partnerships are key strategies to enable achievement of this goal, and SMUD is actively pursuing state and federal grant opportunities to advance clean energy resources for reliability.

SMUD recommendations regarding the DEBA program Draft Solicitation include:

- Maintaining the proposed awards, match requirements, and minimum capacity requirements.
- Prioritizing funding the highest scoring projects and refrain from establishing an accelerated application pathway.
- Removing the June 1, 2025, deployment milestone for multi-phase projects and provide a mechanism for projects to make up award adjustments.
- Expanding the eligible costs for Group 1 and Group 2 projects to include, as applicable, incentives paid to aggregators or customers and administrative costs.
- Clarifying that all resources in an aggregation should be located within the same publicly owned electric utility (POU) service area.

^{1 &}quot;Draft Solicitation Concept – Distributed Energy Resources for Reliability," revised February 27, 2024. Soliictihttps://efiling.energy.ca.gov/GetDocument.aspx?tn=254712&DocumentContentId=90336 2 https://www.energy.ca.gov/event/workshop/2024-03/public-workshop-distributed-electricity-backup-assets-deba-program

³ SMUD's 2030 Zero Carbon Plan is available at https://www.smud.org/-/media/Documents/Corporate/Environmental-Leadership/ZeroCarbon/2030-Zero-Carbon-Plan-Technical-Report.ashx

- Including battery storage within Group 3 projects.
- Clarifying performance pathways to ensure that DEBA-funded projects effectively contribute to the reliability of their host POU and balancing authority area (BAA).

Specific responses to Draft Solicitation questions are provided below.

Solicitation Requirements

- 1. Are the minimum and maximum award amount funding levels and match requirements appropriate for each Group?
 - SMUD believes the proposed award amounts and match requirements for Groups 1 and 2 are appropriate for the project size and technologies targeted in each group. SMUD also strongly supports the Draft Solicitation's recognition that DEBA funding may contribute as a match for other federal and state funding opportunities.
- 2. Is the proposed timeline in the solicitation, including application submission windows, reasonable to accommodate project proposals for project group?
 - SMUD supports the proposed timeline for applications and awards as presented in the Draft Solicitation. SMUD disagrees with comments made at the March 5, 2024, staff workshop suggesting the CEC add an accelerated submission and approval process for projects that are also applying for federal Grid Resilience and Innovation Partnerships (GRIP) funding in Topic Area 2. Given that the CEC plans to release the final DEBA solicitation in April, an accelerated application process ahead of the May deadline for GRIP Topic Area 2 is neither practical nor fair.
 - The CEC should prioritize DEBA funding for projects that score highest and are best positioned to deliver incremental new capacity to support near- and mid-term grid reliability not projects that can submit the fastest applications. Moreover, the application deadline for GRIP Topic Areas 1 and 3 is April 17; creating a separate, rushed DEBA process solely to accommodate the May Topic Area 2 deadline may unfairly prioritize DEBA funds for Topic Area 2 projects over those that applied for other GRIP Topic Areas or were unable to pursue this funding opportunity.
- 3. Is it reasonable to allow project proposals that do not have all sites or customers pre-identified at the time of application? Are there any concerns with this approach?
 - SMUD believes the proposed approach is reasonable. The Draft Solicitation allows projects without pre-identified sites and customers to apply. It also specifies that projects with pre-identified sites will score higher. Given the minimum capacity requirements targeted in the Draft Solicitation, and the potentially large number of sites needed to achieve these capacity targets, it may not be feasible to identify all proposed site locations prior to application submission. However, the proposed scoring criteria can be used to assess the relative readiness of sites with uncertain projects. For example, project proposals that include partner commitments, even if

individual addresses are not yet known, should score higher than projects without specific locations or commitments.

4. To mitigate the risks of funding multiphase projects, staff have proposed minimum deployment targets for multiphase projects under "Project Readiness" (25% by June 1, 2025, 50% by June 1, 2026, and 100% by June 1, 2027). Are these proposed deployment targets reasonable? What measures should the CEC take in the event of a deployment shortfall?

SMUD recommends removing the proposed deployment target of June 1, 2025, for multiphase projects. Given the CEC does not anticipate approving DEBA awards until the September 2024 business meeting at earliest, the June 1, 2025, deadline is very aggressive and may not be reasonable for the minimum capacities being considered. It may also push projects towards the minimum capacity threshold rather than pursuing larger portfolios, given the challenges of hitting the first-year target with such a late start. SMUD believes that meeting this deadline would likely be infeasible for many projects, as the lead time between the award and first deployment target does not allow adequate time for procurement, contract negotiations, and resource interconnections. The June 2025 deadline could similarly preclude participation from larger projects that have not yet started land acquisitions or permitting processes. Instead, the CEC should reflect its preference for applications that have at least 25% of committed capacity online by June 1, 2025, within its scoring criteria.

The Draft Solicitation also proposes adjusting awards based on demonstrated capacity in order to encourage applicants to submit realistic deployment schedules. While SMUD understands the CEC's intent, even "realistic" projects can be delayed by circumstances beyond the applicant's control, and the proposed approach of reducing awards by twice the relative shortfall amount is overly punitive. The proposed approach could compromise the overall financials of a scaled-up program and trigger program exits, resulting in less capacity for meeting the CEC overall objectives. SMUD recommends against doubling the shortfall amount when adjusting awards. However, If the CEC maintains this approach, SMUD recommends the CEC include a mechanism that allows the applicant to recoup the balance of award reductions due to capacity deployment shortfalls as long as all committed project capacity is online by June 2027.

- 5. Is the proposed payment structure, with 50% of the award disbursed during project development, and 50% disbursed annually based on successful performance, adequate to ensure successful performance by DEBA assets, including during emergencies?
 - Consistent with the response to Question 4, SMUD recommends the CEC allow applicants to claim the balance of award reductions attributable to deployment shortfalls, provided that all committed project capacity is online by June 2027.
- 6. This GFO proposes to amend the DEBA Program Guidelines, First Edition, to grant eligibility under Group 1 to projects connecting to the transmission grid behind-the meter at a load center not receiving distribution service. Please comment on whether this use case is of interest and, if possible, describe potential proposed projects and the reliability benefit they would offer.

No response at this time.

Project Requirements

- 7. Are the Project Group definitions and requirements clear and adequate to sufficiently target DER technologies and projects capable of supporting statewide grid reliability?
 - The CEC should modify the eligible project costs for Group 1 and 2 to include, as applicable, incentives paid to third-party aggregators and customers for the purchase and deployment of virtual power plant (VPP) or distributed energy resource (DER) technologies, participation incentives, and administrative costs. Group 1 DER installations and Group 2 VPPs that aggregate customer-owned DERs or batteries may incur the same types of costs as the Group 3 Load Flex Aggregation projects, even if the specific device technologies may differ.
- 8. Are the minimum project capacity requirements for each Group reasonable or should they be adjusted?
 - SMUD believes the minimum proposed capacity requirements are reasonable and achievable. Prioritizing large capacity deployments advances the Draft Solicitation's objective of increasing capacity to support grid reliability. It also encourages aggregation of smaller resources into larger projects, limiting administrative impacts.
 - However, SMUD recommends clarifying that all resources included in an aggregation must be located within the same POU service area. Performance pathways may necessarily differ based on the individual utility territory and balancing authority area (BAA) in which projects are located. For example, the "market-integrated" performance pathway was designed for the California Independent System Operator (ISO) balancing authority area; dispatch criteria in non-ISO BAs will differ from California ISO market dispatch. Similarly, the highest net peak hours for daily dispatch may vary by POU and BAA. To minimize complexity and ensure

that all DEBA resources are effectively improving grid reliability, aggregations should be limited to locations within individual POU service areas.

- 9. Are there any additional eligible technologies that should be included, or any currently eligible technologies that should be excluded?
 - SMUD recommends inclusion of battery storage in Group 3 (load flexibility aggregation programs). SMUD expects there will be opportunities for complementary operation, increased performance certainty, and potentially common control strategies at the site level that may create added value to allowing battery storage to participate within load flexibility aggregations. Further, complexities emerging with electric vehicles may blur the lines between load flexibility and storage applications given V1G, V2G, and storage integration into fleet load management strategies.
- 10. Are the proposed performance pathways sufficient and flexible enough to accommodate the variety of eligible technologies and project groups targeted by this solicitation?

SMUD appreciates the availability of multiple performance pathways within the Draft Solicitation and supports the inclusion of the daily dispatch option. SMUD also appreciates that the Draft Solicitation seeks to build in flexibility for projects located outside the California ISO footprint. SMUD recommends the following updates to better clarify how the performance pathways apply to projects located in non-ISO POU service areas:

<u>Market-integrated:</u> The Draft Solicitation specifies that resources must dispatch "in response to the applicable California BA market instructions" and also notes that resources in non-California ISO territories must "be available for dispatch subject to the rules of the BA". Since not all California BAs operate wholesale markets, SMUD recommends clarifying that resources dispatch in response to the applicable POU and BA *dispatch* instructions rather than *market* instructions.

Market-aware: The Draft Solicitation states that performance must be "demonstrated through responses to a 'market-aware' California ISO price signal or events called by a California BA or non-ISO POU." To avoid ambiguity and ensure resources are contributing to the reliability of their host utility and BA, SMUD recommends specifying that only resources located within the California ISO must respond to California ISO price signals or energy emergency alerts (EEAs), and only resources located in other California BAAs must respond to events called by the host BA or POU. SMUD also requests the CEC clarify how the market-integrated and market-aware pathways differ for resources located in non-California ISO BAAs.

<u>Hourly dynamic pricing</u>: The Draft Solicitation specifies that customer sites must be enrolled in an hourly dynamic pricing rate or tariff that reflects hourly marginal costs based on current wholesale energy prices and other grid capacity utilization levels.

SMUD recommends clarifying that hourly dynamic pricing includes dynamic price signals that are incorporated into programs and billing, and a dynamic tariff is not required. Requiring dynamic tariffs that reflect hourly marginal costs based on current wholesale energy prices will limit POU participation in the program as many do not offer this pricing through tariffs at this hourly granularity. We recommend that POUs have the flexibility to develop pricing mechanisms that appropriately reflect their unique energy profile needs.

The Draft Solicitation also specifies that, for purposes of the capacity demonstration, the "top one hundred hours with the highest LMP or EEA event hours" will be used, with LMPs based on the applicable ISO pricing nodes. SMUD recommends clarifying that, for projects outside the ISO, the top hours with the highest applicable dynamic price signal or EEA events will be selected. POUs outside of the California ISO do not operate LMP markets.

<u>Daily dispatch</u>: As in the hourly dynamic pricing pathway, the Draft Solicitation specifies that the top 100 hours with the highest LMP or EEA event hours will be selected for purposes of capacity demonstration. For the same reasons as above, SMUD recommends clarifying that, for projects outside the ISO, top hours will be selected based on the highest net load or EEA event hours.

- 11. What data should be required from DEBA Program participants for measurement and verification purposes as well as other public reports and initiatives?

 No response at this time.
- 12. Are the metering and telemetry requirements for projects sufficient for measurement and verification purposes and determining performance of DEBA funded projects?

SMUD has a long history of Evaluation, Measurement, and Verification (EM&V) of its distributed energy resources and behind-the-meter load flexibility programs. The availability of reliable and consistent device telemetry data for participants and non-participants across OEMs has been a constraint to experimental design and the identification of an ideal counterfactual baseline for certain technologies. For Group 3 projects, SMUD suggests Section 6, part C of the Evaluation Criteria include an itemization of available telemetry data to assess participant impact and define a counterfactual baseline so that the constraint can be addressed proactively in contracting and negotiations with aggregators and other stakeholders.

Miscellaneous

13. What are the key performance indicators (KPIs) or metrics that should be used to evaluate and score VPP and Load Flex Aggregation projects and assess whether they will be reliable DEBA assets?

No response at this time.

14. Are the proposed evaluation criteria, including preference points criteria, reasonable and sufficient to achieve the aims of funding DER projects that best bolster grid reliability in the state?

No response at this time.

15. Are the provisions for supporting projects that either benefit or are located in DACs sufficient? What other application components could facilitate greater participation from projects located in or benefiting DACs?

No response at this time.

16. What are the potential pathways for DEBA-funded projects across different Balancing Authorities and LRAs to continue to provide reliability value after the conclusion of the DEBA program?

There are multiple potential mechanisms for DEBA-funded resources to provide reliability value following the completion of the DEBA project term, although the specific pathways may vary based on resource characteristics as well as the applicable rules of the host POU and BAA. To the extent the DEBA resources provide a reliable and responsive pool of assets to utilize as part of the POU's portfolio, the POU will be able to rely on those resources in the future. For example, SMUD currently offers a behind-the-meter battery virtual power plant program that is dispatched under SMUD's control and serves as a load-modifier, reducing resource adequacy needs. SMUD is also piloting and evaluating load flexibility programs to assess customer response and program effectiveness. The results of SMUD's pilots and the DEBA program will help inform how behind-the-meter distributed resources can best be utilized for resource adequacy and/or grid emergencies.

17. Are there any other recommended improvements or necessary clarifications for the CEC to consider for this draft solicitation concept document?

No response at this time.

Conclusion

SMUD appreciates the opportunity to provide input on the Draft Solicitation and looks forward to continuing to work with CEC staff on the DEBA program.

/s/

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