Submit comment on Discussion paper and Mar 03 discussion

Initiative: Demand and distributed energy market integration

April 2, 2025

The Sacramento Municipal Utility District (SMUD) provides these comments on the CAISO's Demand and Distributed Energy Market Integration (DDEMI) initiative following the recent workshop on March 3rd. SMUD is an active participant in the CAISO's day ahead and real time markets over the interties. In addition, SMUD participates in the Western Energy Imbalance Market (EIM) through the Balancing Authority of Northern California and plans to enter the Extended Day Ahead Market (EDAM) in 2027. Accordingly, SMUD has a direct interest in this initiative from both a market and reliability perspective.

One specific theme in our comments we want to highlight is the current limitations with the existing model which prevents full participation of other BAAs through WEIM and EDAM. We encourage the CAISO explore implementation of a more robust DR/DER participation model that allows for fair and consistent treatment of WEIM/EDAM resources.

1. Please provide your organization's feedback on the approach to the Working Group's goals, process, evolution of the Discussion paper, and Stakeholder Recommendations (pg. 2-5) in the DDEMI Discussion Paper. Any suggestions to improve the Working Group process or deliverables? *

SMUD appreciates the opportunity to comment and participate in this stakeholder process. The topics outlined in the discussion paper directly impact our participation in the WEIM and future participation in EDAM. We look forward to further discussing the topics and understanding all stakeholder's unique perspectives, existing demand response programs, and how various system operation responses impact these programs within each individual BAA, the WEIM, and EDAM. SMUD believes these foundational discussions and understandings are essential to creating correct problem statements and formal policy discussions.

2. Please provide your organization's feedback on the overarching themes/areas and the associated scope items for problem statement formulation. Are there any additional themes/areas or individual scope items which should be explored further? *

As scope items and problems statement develop, they should reflect the unique perspectives and operational considerations of all stakeholders, including external CAISO stakeholders. The CAISO must consider how other stakeholders plan to use DR/DER programs in the CAISO's markets and if/how the current participation model allows participants to achieve or hinders DR/DER program goals while simultaneously understanding how/if there are reliability impacts to CAISO or WEIM/EDAM areas and customers.

As WEIM and EDAM grow, WEIM/EDAM participants need the ability to have DR/DER resources modeled differently than they are currently. SMUD encourages the CAISO to develop a participation

model that allows for fair and consistent treatment of resources that can flex load on distribution level systems while placing accountability on the BAA system that is responsible for managing it.

3. Please provide your feedback on any specific topics that require further information/reference in order to facilitate substantive stakeholder conversation.

As a WEIM participant and future EDAM participant, it is important for stakeholders and the CAISO to understand the different perspectives and challenges that face WEIM/EDAM participants versus internal CAISO stakeholders. For example, simply focusing on how M&V and Performance Evaluation Methodology (PEM) options capture diverse technologies neglects the underpinning issue for other WEIM entities, which SMUD expands upon in Section 4.

For other working group topics, the CAISO has shared a variety of RTO/ISO perspectives to help guide policy design considerations for the CAISO market. This knowledge sharing is beneficial, and SMUD encourages CAISO to explore and share diverse RTO/ISO perspectives on issues and topics as applicable in this working group.

4. What feedback do you have on the challenges shared by Stakeholder presentations regarding service level load measurement & validation needed for control groups? Do the M&V and Performance Evaluation Methodology (PEM) options available today address the needs of diverse technologies? Are there additional technical challenges (e.g., technology-specific curtailment, control group validation, energy storage baselines) that should be considered in the working group?

This topic needs further discussion on the differences between internal CAISO and WEIM/EDAM participants. The current M&V and PEM options were created with the assumption that the entire CAISO market bares the risk if DR energy does not materialize, even for WEIM entities. However, if SMUD energy is scheduled and does not materialize, the impact is to SMUD in so much that SMUD's Area Control Error (ACE) is affected. Therefore, SMUD manages any DR energy imbalance internally to ensure reliability of our system. The current process has SMUD utilizing the market tool, BAAOP, to represent to the CAISO how the shortage is managed through a manual dispatch or load bias, which results in less transparency and diminishes forecast accuracy. Ultimately, SMUD covers the cost of potential DR/DER variances through inadvertent interchange, imbalance charges, load biasing, and manual dispatch settlement charges. It's important to also consider that BAAs external to the CAISO may have differing DR/DER regional characteristics from those within CAISO's BA and may reasonably warrant different PEM approaches. A CAISO-centric PEM applied to an external BAA may contradict that BAA's own M&V approach and could introduce unnecessary added complexity with little, if any added benefit. Consequently, SMUD believes this topic and approach necessitates different policies based on the BAA participant.

5. What topic(s) would your organization be interested in presenting (what is the problem/issue seeking to be addressed)? Which stakeholders would it impact?

None at this time.