

June 8, 2021

CPUC Energy Division
505 Van Ness Avenue
San Francisco, California 94102

Re: Comments of the California Energy Storage Alliance Regarding Advanced DER & Demand Flexibility Management Workshop

Dear Sir or Madam:

In accordance with the instructions from the California Public Utilities Commission (“Commission”) Energy Division (“ED”) inviting stakeholders to submit informal written comments, the California Energy Storage Alliance (“CESA”) hereby submits these informal comments regarding the Advanced DER & Demand Flexibility Management Workshop (“Workshop”), held on May 25, 2021. These comments are also being timely served to the service list associated with Rulemaking (“R.”) 12-06-013.

I. INTRODUCTION & BACKGROUND.

CESA has long been a proponent and advocate for the expanded and advanced utilization of distributed energy resources (“DERs”), particularly from stationary and mobile energy storage resources, to support customer needs and provide grid services. From the incorporation and refinement of behind-the-meter (“BTM”) energy storage procurement targets and multiple-use applications (“MUAs”) in the Energy Storage rulemakings (R.10-12-007, R.15-03-011) to the advocacy for greater dynamic rate options (e.g., Petition for Rulemaking [“PFR”] 18-11-004 on real-time pricing), CESA believes that customer-sited DERs represent a tremendous opportunity for the state to advance the state’s decarbonization goals and meet the key reliability needs if given the appropriate price signals, enabled to participate via an increasingly plug-and-play infrastructure, and allowed and compensated for the full utilization of its capabilities, such as for exports in the case of BTM energy storage and vehicle-to-grid (“V2G”) resources.

CESA thus commends the Commission’s ED staff for hosting an exploratory workshop on May 25, 2021 to discuss ideas for advanced DER and flexible load management, leveraging new system-wide retail rate reforms, and load-modifying demand response (“DR”) proposals. Building off the recently proposed Load Management Standards (“LMS”) amendments from the California Energy Commission (“CEC”), CESA understands the core premise of the proposals as identifying large-scale deployment strategies to realize DR potential. Whereas current approaches were framed by ED staff as complex, inefficient, and difficult to scale, a unified, universal, and dynamic economic (“UNIDE”) signal on an opt-in basis could create a single point of focus, thereby enabling the scale to enable greater DER participation and avoiding the complexities and challenges of

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California Independent System Operator (“CAISO”) market integration. To this end, ED staff explained that they will prepare a formal UNIDE Staff Proposal before the end of June 2021 and recommend a rulemaking be opened around a formal UNIDE Staff Proposal. The rulemaking would also need to sort out the implications on the Commission’s past bifurcation decision.

CESA generally supports a rulemaking to further explore the UNIDE Staff Proposal, along with broader consideration of various issues around real-time and dynamic pricing options. As raised in P.18-11-004, a consolidated or single rulemaking would better address the universal issues around establishing real-time and dynamic pricing options, including cost recovery concerns and infrastructure needs such as infrastructure utility billing systems and automated price signals – common issues that have been cited in past considerations of these options in the investor-owned utility (“IOU”) General Rate Case (“GRC”) filings. Especially in light of the CEC’s LMS amendments, the time is ripe to explore these issues, as well as the potential for advanced features, such as transactive energy concepts.

However, while supportive of such a rulemaking, CESA is concerned about the framing of the UNIDE Staff Proposal as a singular vision for DER utilization and management. Specifically, in support of the UNIDE concept, ED staff framed the current status quo of DER market integration as inefficient and complex. CESA, on the other hand, views this framing as dismissing the need to address current market integration issues. In this way, CESA is unsure if the Commission staff views the different “visions” or “futures” of DER utilization and management as compatible, and if the state must select one future over another in order to justify the investments needed to support one pathway. At this time, CESA believes that the Commission should not foreclose or favor one pathway over another, especially as the UNIDE concept has multiple issues that need to be worked out and, even if worked out, may not be implemented or usable in the near term. Therefore, CESA’s comments can be summarized as follows:

- The UNIDE concept is worthy of further exploration but has several outstanding questions that should be addressed in the forthcoming Staff Proposal.
- The UNIDE concept should be considered in parallel with DER market-integrated and market-informed pathways in a new rulemaking.

II. DISCUSSION.

In these comments, CESA requests that the ED staff include certain additional considerations and details in the forthcoming Staff Proposal, including how exports will be reflected in UNIDE and the various infrastructure investments or other “platform” needs that may be needed to support the UNIDE model. Furthermore, CESA offers procedural recommendations to include both the market-integrated and event-based market-informed model for further development in the recommended new rulemaking.

1. The UNIDE concept is worthy of further exploration but has several outstanding questions that should be addressed in the forthcoming Staff Proposal.

CESA looks forward to reviewing the forthcoming UNIDE Staff Proposal. The presentations by ED staff were helpful in understanding UNIDE as a concept, but CESA has several outstanding questions regarding the pros and cons of UNIDE over other DER pathways, as well as the various implementation considerations to enable its use. For example, a vast majority of internet-connected end-uses and unconnected end-uses are unable to access load flexibility signals, and the utility billing system may prevent such large changes. In particular, utility billing and measurement systems have been cited frequently for being unable to enable sub-metered baseline measurement and settlement for storage-backed DR resources, such that sub-metering is not allowed or recognized in retail DR programs. It would thus be helpful to understand how infrastructure investments needed to support the UNIDE pathway could also potentially support the CAISO market integration pathway, thereby enabling the investment to support multiple DER use cases and improving the cost-benefit ratio of the investments needed.

Additionally, CESA recommends that the Staff Proposal detail how the UNIDE price would value load reductions and exports similarly. This issue was touched upon during the May 25, 2021 workshop, but CESA is unclear on whether and how exports could be valued using the UNIDE price.¹ Export valuation and compensation has been a persistent issue within the DR framework, where, if the UNIDE Staff Proposal is able to overcome this issue, there would be significant potential benefit to fully utilizing the load reduction *and* export capability of export-capable energy storage and V2G resources.

The simplest approach for how the UNIDE price would value load reduction and exports at the same rate would be to institute a Net Energy Metering (“NEM”) framework for exported energy, whether from solar, a battery or an electric vehicle (EV). However, under current law and policy, NEM is only available to rooftop solar and storage paired with solar, subject to certain restrictions. Additional steps and possibly Legislative changes to the NEM statute could be needed in order to expand NEM to standalone storage and EVs. Moreover, the CPUC is currently considering changes to the larger NEM framework in Rulemaking (“R.”) 20-08-020. A rulemaking to develop the UNIDE framework would thus need to be closely coordinated with R.20-08-020 to ensure the policies do not conflict with one another.

¹ In concept, CESA believes that the UNIDE price with locational granularity could properly value exports if the UNIDE price reflects the cost to serve all load, not just the onsite customer load. However, if rate recovery considerations are incorporated in the UNIDE price, for example, it is not immediately obvious that the UNIDE price would accurately reflect the price or value for exports. As CESA understands it, staff was proposing to compensate exports at the retail rate similar to how NEM exports are treated today.

2. The UNIDE concept should be considered in parallel with DER market-integrated and market-informed pathways in a new rulemaking.

The UNIDE concept was framed by ED staff as having long-term benefits by, among other things, avoiding CAISO market integration. However, integration of BTM resources into wholesale markets is mandated by entities above and beyond Commission jurisdiction, including Order Nos. 745 and 2222 from the Federal Energy Regulatory Commission (“FERC”) and through the Proxy Demand Resource (PDR) tariff and Distributed Energy Resource Provider (DERP) model offered by the CAISO. These pathways exist today and are likely to persist even if and when the UNIDE framework is enacted.

Therefore, with still many unanswered questions and details that need to be worked out in UNIDE, CESA recommends that the staff-recommended rulemaking consider not only the UNIDE concept in its scope but also focus on barriers and policy issues related to the DER market-integrated and market-informed pathways in parallel tracks, potentially within the same rulemaking. Otherwise, with a singular focus on the UNIDE concept, which likely will not come to fruition for many years, CESA believes that DERs will be sorely underutilized in the near term without addressing current market integration issues.

The market-integrated pathway remains a viable near-term roadmap for greater DER participation, with certain fixes made to Resource Adequacy (“RA”) valuation for bidirectional non-generator resources (“NGRs”) without baselining requirements and with the recognition and/or development of export counting methodologies within the DR framework. As the ED staff is likely aware, CESA and many other DER stakeholders have been advocating for RA valuation for BTM standalone energy storage and BTM hybrid solar-plus-storage resources, which are currently load-limited within the DR construct and not recognized with a qualifying capacity (“QC”) independent of baseline methodologies to be utilized as an NGR. These issues stem from the lack of uniform policies and/or established approaches for deliverability studies, incrementality assessments, and metering and visibility, as raised in Joint Parties’ proposals and comments in R.19-11-009. In resolving many of these issues, the scale of DER participation and full utilization of DER potential can be achieved, which is one of the intended goals of the proposed UNIDE concept.²

However, as evident from the recent Proposed Decision (“PD”) in R.19-11-009, the cross-agency and cross-jurisdictional issues involved in DER market integration have made it challenging to address the wide range of issues in any one issue-specific or resource-specific proceeding. Often, arguments of certain issues being out of scope have been used to defer on the consideration of DER market integration issues, which would involve a holistic and comprehensive consideration in a single proceeding. This is where a single DER and load management proceeding would provide significant benefit if scoped to allow for these

² Even within the UNIDE concept, aggregators and intermediaries will likely play a role to abstract the complexity of granular price signals (e.g., resulting in DER aggregators offering fixed-price subscription plans), such that the UNIDE concept and DER market integration may not be too different in the relative merits as pathways for customer and DER participation.

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cross-cutting issues, not only to consider the UNIDE concept in one track but also to consider DER market integration issues in another track.

Furthermore, CESA also contends with staff's characterization of UNIDE being the only non-market-integrated pathway for DER management and utilization. While UNIDE would reduce the complexities of performance measurement and offer a consistent 24x7 signal, there are also benefits near-term in advancing a market-informed pathway with event-based triggers aligned with RA needs that could count toward reducing RA requirements. In many ways, this could simplify the price signal needed by focusing on generation needs only rather than the UNIDE signal, which would require price functions for all costs, including distribution and transmission capacity. Such trigger-based market-informed pathways were initially explored at the November 24, 2020 workshop in R.19-11-009 and warrants further consideration in its own track in the staff-recommended new rulemaking.

III. CONCLUSION.

CESA appreciates the opportunity to submit these comments regarding the workshop and looks forward to collaborating with the Commission and stakeholders in this proceeding.

Respectfully submitted,



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