Comments of the Joint DER Parties on the DER Action Plan 2.0
October 8, 2021

I. Introduction

The Joint DER Parties[1] are comprised of the California Solar and Storage Association, Sunrun Inc., Enel X North America, Inc., California Energy Storage Alliance, EDF Renewables/PowerFlex, Vote Solar, Sunpower, and the Solar Energy Industries Association. The Joint DER Parties support Action Elements that are results-oriented, such as access to real-time pricing in each investor-owned utility (IOU) territory by 2023 and providing multiple real-time and dynamic rate options to all customer classes by 2024 (Vision Element 1A, Action Element 3). Some Action Elements as proposed focus on conducting analysis and/or producing reports, such as the Action Elements in Vision Element 3C, "Multiple Use Applications" (MUA). We propose wherever feasible revising these goals so they result in policy changes—for instance, implementing or revising priority policy issues to enable MUA rather than analyzing them only.

We urge the Commission to leverage work that is ongoing or already completed that can support the Action Elements in the Action Plan, rather than restarting analyses and processes that have already occurred. Examples include, but are not limited to, the stakeholder report on MUA implementation filed in Rulemaking (R.) 15-03-011 in 2018, reports on transmission distribution interface, and an upcoming working group report authorized in Decision (D.) 21-06-029 which will address real and perceived barriers to achieving full capacity value for behind-the-meter (BTM) energy storage. This prior work has resulted in numerous recommendations and actions the California Public Utilities Commission (CPUC) can take to overcome existing policy barriers to value stacking with distributed energy resources (DERs).

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[1] The Joint DER Parties have authorized Sunrun Inc. to submit these comments on their behalf.

II. Track One: Load Flexibility and Rates

Throughout Track One, the draft Action Plan refers to load flexibility as the objective for creating dynamic rate structures. There is no reason to limit the objective to load reduction. It should also include energy exported to the grid from BTM batteries and other resources.

To the extent we can achieve reliable grid-support activity through rate structures rather than through programs that are administratively complex, we should encourage that outcome. Influencing customer activity through rates is simpler than measuring ex ante expected performance and ex post achieved performance. Carefully managed programs are likely also needed, but as the Commission develops dynamic rate structures attention should be given to no regrets approaches to encouraging grid support in ways that complex programs would not be able to achieve.

Rather than labeling this track "Load Flexibility," the Commission should use a more general term such as "Customer Energy Flexibility" or "Customer Energy Management." Another approach would be to make clear that "load flexibility" by definition includes conditions when customer load is negative. This appears to be included currently in Action Element 2 in Vision Element 1G, which states that rates that enable "DERs to provide system benefits should be widely available to customers" by 2024. The Commission should make clear throughout Track One that this includes customer exports from battery discharge.

III. Track Two: Grid Infrastructure

A. Communication Across the T&D Interface

We recommend modifying the list of action elements under Vision Element 2A to include a standalone element focused on enhancing visibility and communication between aggregators, utility distribution companies (UDCs), load serving entities (LSEs), and the

California Independent System Operator (CAISO) at the transmission-distribution (T&D) interface. Enhanced visibility and communications is crucial to the wholesale market integration and dispatch of distribution interconnected resources, and was previously explored in detail by the CAISO and the state's three major IOUs in an effort that culminated in detailed recommendations submitted to the CPUC in 2017.[2] This effort was followed by the origination of a working group led by the CAISO that continues to meet and explore this topic.

Specifically, the Joint DER Parties recommend that the following should be added as Action Element No. 2:

> In 2022, enable data transfer/communications interface between distribution system operators and the CAISO, to communicate real time distribution system conditions.

B. Direct Measurement of DER Activity

Under Vision Element 2C, we recommend the addition of a new Action Element 5 to consider and address a persistent issue faced by DERs that are capable of direct measurement in their provision of grid services, via sub-metering at the device level instead of at the premise. Submetering and direct measurement approaches are consistent with the Meter Generator Output (MGO) methodology that has been established for the CAISO Proxy Demand Resource (PDR) model, but has yet to be extended for retail demand response (DR) programs or for aggregation contracts. Calls to enable direct measurement approaches have been rejected or deferred by the Commission and utilities in A.17-01-012, et al., R.15-03-011, and most recently in R.20-11-003, citing the need to develop rules and associated infrastructure, as well as concerns regarding various accuracy issues (*e.g.*, timing, magnitude, recording). To unlock the full potential of

[2] *See Coordination of Transmission and Distribution Operations in a High Distributed Energy Resource Electric Grid*, Prepared By Staff of CAISO, Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas and Electric Company (SDG&E) with Support From Gridworks (June 2017), *available at* http://gridworks.org/wp-content/uploads/2017/01/Gridworks_CoordinationTransmission.pdf.

DERs such as BTM energy storage and bidirectional electric vehicle (EV) / EV supply equipment (EVSE) resources, we thus recommend Action Element 5 as follows to investigate submetering and direct measurement approaches and make the appropriate rule changes and/or associated infrastructure investments if deemed necessary:

5. In 2022, initiate the development of rules and proposals to enable sub-metering and direct measurement approaches for the measurement and settlement of DER dispatch and performance, and before the end of 2022, direct the development of any associated infrastructure needed while establishing interim approaches to immediately enable sub-metering and direct measurement.

C. Smart Buildout

Action Element 1 of Vision Element 2D states that CPUC staff should conduct a study "to estimate the scope of distribution grid buildout" from electrification and to "identify opportunities to mitigate costs." This two-step process is unnecessarily confined to a "distribution deferral" mindset. Rather than planning for system expansion according to status quo planning approaches and then as a second step identifying ways to trim the cost, the Commission should start from the perspective of identifying all the ways that optimized DERs can meet our electricity system needs.

This study should look at electrical needs and how to meet them with DERs, rather than studying how to replace non-DER grid buildout with batches of DERs. It should start with long-term possibilities for the grid of the future and work backward from there. It should focus on long-term needs from transportation and building electrification scenarios more than incremental needs that would traditionally be met with lumps of capacity expansion.

Accordingly, we recommend that this Action Element be revised as follows:

1. By 2023, CPUC staff completes a comprehensive, data-driven study to estimate long-term needs resulting from electrification of transportation and buildings, and how those needs can be met with DERs.

D. Best Practices for Utilities

Action Element 4 in Vision Element 2C calls for "a gap analysis to identify any standards or best practices that need to be developed to facilitate development of DERs that will be interoperable with the evolving distribution grid." The Commission should make clear that such an analysis will include exploration of standards for the electric grid and best practices for utilities, not just standards and best practices for the DERs themselves. The Commission has already dedicated considerable attention to standards for inverter functionality and DER communications, but has given relatively scant attention to standardized capabilities for utility communication and has not scrutinized utility interpretation of standards for grid infrastructure in the context of high adoption of DERs.

We recommend that this Action Element be revised as follows:

4. <u>By 2023, utilities conduct a gap analysis to identify any standards or best practices that need to be developed for the electric grid, utilities, and DERs, to facilitate development of DERs that will be interoperable with the evolving distribution grid.</u>

IV. Track Three: Market Integration

A. Vision Elements

Proposed Vision Element 3D provides that "Rule 21 interconnection tariffs are reviewed to address barriers and resolve questions of whether, and if so how, BTM DERs can export to the wholesale grid, and the CPUC, CAISO, and CEC resolve questions of whether and how exporting DERs should receive compensation and participate in wholesale markets." Rather than delineating this item as a Vision Element, it should be repurposed as two separate Action Elements under Vision Element 3A, which addresses Resource Adequacy (RA) DER participation in wholesale markets. The two proposed Action Elements to be included under Vision Element 3A are as follows:

By 2022, Rule 21 interconnection tariffs are reviewed to determine modifications to enable use for wholesale market participation for exporting behind the meter (BTM) DERs.

By 2022, the CPUC establishes a qualifying capacity value for BTM DERs, inclusive of export, and in collaboration with the CEC and CAISO, determines how this value and participation in wholesale markets should be reflected in planning and operations.

Our recommendation above for an element on communication across the T&D interface (under Vision Element 2A) eliminates the need for the Rule 21 portion of Vision Element 3D. With moving the exported energy portion of Vision Element 3D into Vision Element 3A, Vision Element 3D can be eliminated.

Further, we note that the framing of Vision Element 3E is inconsistent with Vision Element 3A. While Vision Element 3A clearly envisions RA DERs participating in wholesale markets, to overall grid benefit, Vision Element 3E asks whether RA DERs should participate in markets. We are past that point, in terms of both state and federal policy and, as such, Vision Element 3E should be eliminated. The existing action element under Vision Element 3E should be included under Vision Element 3A and revised as shown below in Section IV.B herein.

Finally, Action Elements 3-7 listed under Vision Element 3A are specific to energy storage procurement; they are not linked to Resource Adequacy DER participation in wholesale markets, which is the focus of the Vision Element. The subject of energy storage procurement warrants its own Vision Element. We propose the following Vision Element 3B:

Bulk energy storage procurement practices and requirements are refined and remaining barriers addressed, enabling storage to play an even greater role in system reliability and seamless provision of wholesale market services.

Action Elements 3-7 under Vision Element 3A can then be listed under the new Vision Element 3B.

B. Action Elements

Under Vision Element 3A, we recommend the following modifications and additions to action elements, to make this vision element more actionable and meaningful.

Vision Element 3A – Action Elements:

1. By 2022, the CPUC establishes a qualifying capacity value for BTM DERs, inclusive of export, and in collaboration with the CEC and CAISO, determines how this value and participation in wholesale markets should be reflected in planning and operations.
2. By 2022, CPUC identifies and reviews CPUC-jurisdictional program rules and tariffs to address barriers to participation of ~~and resolve questions of whether, and if so, how~~ exporting BTM DERs ~~can more effectively participate~~ in wholesale markets and qualify for Resource Adequacy (RA).
3. By 2022, and in consultation with CAISO, the CEC, and distribution utilities under CPUC oversight, RA rules, demand forecasting methods, and CAISO market rules are reviewed to address barriers ~~and resolve questions of whether, and if so, how~~ to Distributed Energy Resource Aggregations and exporting BTM DERs ~~can more effectively~~ participating in wholesale markets and qualifying for RA.
4. By 2022, the CAISO, CEC, and CPUC develop a joint agency roadmap to resolve any cross-jurisdictional issues associated with exporting BTM and FTM DERs providing resource adequacy beyond existing demand response models, as well as enabling participation in the CAISO wholesale market.
5. By 2022, Rule 21 interconnection tariffs are reviewed to determine modifications to enable use for wholesale market participation for exporting behind the meter (BTM) DERs.
6. By 2022, the CPUC in consultation with the CAISO reviews the DG deliverability methodology and makes adjustments to account for the physical delivery of energy from DERs to local loads.
7. Market rules ~~and market access tariffs~~ are structured to facilitate BTM and FTM DERs to efficiently and fairly participate in wholesale markets, and to fulfill all requirements of that participation, including the DERA participation model.

As noted above, we recommend that Action Items 3-7 in the current draft DER Action Plan 2.0 be under their own, dedicated, new Vision Element 3B. We do not recommend changes to those Action Items.

Vision Element 3C, Action Element 2—identification of key DER services and prioritization for those services based on reliability implications—is redundant to work that has already occurred. The CPUC identified, in collaboration with the CAISO, key DER services and prioritization several years ago. The CPUC adopted those services and their prioritization in January 2018. A multi-stakeholder working group made extensive recommendations as to the Multiple Use Application rules more than three years ago. This issue has languished at the CPUC since then. Reinventing the wheel, as Action Element 2 in this section proposes to do, is not needed. What is needed is for the CPUC and CAISO to identify any additional work that must be done to enable value stacking, starting with review of and action with respect to the recommendations of the MUA working group. Additionally, these steps should be taken more quickly than contemplated in the draft action elements. Accordingly, we make the following recommended modifications, for the Action Elements under Vision Element 3C:

1. By 2022~~3~~, the CPUC should determine in a proceeding, in consultation with the CAISO, the priority MUA policy issues that should be resolved to further the MUA framework.
2. By 20224, the CPUC and CAISO should ~~identify key DER services and prioritization for those services based on reliability implications. The CPUC should identify~~ make any modifications or amendments to the MUA services and rules needed to enable DER value stacking.
3. By 2023, in a new or existing proceeding, the CPUC shall develop processes and policies to further enable multiple use applications, starting with recommendations submitted to the CPUC in August 2018 in R.15-03-011 by a comprehensive stakeholder working group, focused on MUA implementation. This work should start with refining incrementality rules and making those rules universal across grid services and domains.

V. Conclusion

The Joint DER Parties appreciate the opportunity to submit these comments on the DER Action Plan 2.0, and urge the Commission to adopt the recommendations herein.

Respectfully submitted,

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