

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



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Order Instituting Rulemaking to Oversee
the Resource Adequacy Program, Consider
Program Refinements, and Establish
Forward Resource Adequacy Procurement
Obligations.

Rulemaking 19-11-009
(Filed November 7, 2019)

**OPENING COMMENTS OF SUNRUN INC., TESLA, INC., CENTER FOR ENERGY
EFFICIENCY AND RENEWABLE TECHNOLOGIES, CALIFORNIA SOLAR &
STORAGE ASSOCIATION, VOTE SOLAR, AND ENEL X NORTH AMERICA, INC.
ON PROPOSED DECISION ADOPTING LOCAL CAPACITY OBLIGATIONS FOR
2022-2024, FLEXIBLE CAPACITY OBLIGATIONS FOR 2022, AND REFINEMENTS
TO THE RESOURCE ADEQUACY PROGRAM**

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Pursuant to Rule 14.3 of the Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), Sunrun Inc. (“Sunrun”), Tesla, Inc. (“Tesla”), Center for Energy Efficiency and Renewable Technologies (“CEERT”)¹, California Solar & Storage Association (“CALSSA”), Vote Solar, and Enel X North America, Inc. (“Enel”)² (collectively, the “Joint Solar/Storage Parties”)³ submit these opening comments on Administrative Law Judge Chiv’s *Proposed Decision Adopting Local Capacity Obligations for*

¹ Note CEERT joins these Opening Comments on the Proposed Decision, which address Section 6.4.2 of the PD pertaining to “Behind-the-Meter Hybrid Resources.” CEERT has also filed separate comments on the Proposed Decision, which address separate issues relating to Staff’s proposed implementation of D.20-06-031 adopting a qualifying capacity methodology for hybrid and co-located resources receiving the Investment Tax Credit.

² Note Enel joins these Opening Comments on the Proposed Decision, which address Section 6.4.2 of the PD pertaining to “Behind-the-Meter Hybrid Resources.” Enel has also joined the Opening Comments of California Efficiency + Demand Management Council et al. on the Proposed Decision, which address separate issues arising from the PD’s Section 6.1, “Maximum Cumulative Capacity Buckets,” and Section 6.2, “Supply-Side Demand Response.”

³ The Joint Solar/Storage Parties have authorized Sunrun Inc. to file these comments on their behalf.

2022-2024, Flexible Capacity Obligations for 2022, and Refinements to the Resource Adequacy Program (“Proposed Decision” or “PD”).⁴

The Joint Solar/Storage Parties submitted a proposal in Track 4 of this Rulemaking on January 28, 2021 (“Joint Proposal”).⁵ That proposal described two pathways for exporting behind-the-meter (“BTM”) storage resources to provide resource adequacy (“RA”) capacity—one market-integrated pathway, consistent with current policy, and one market-informed pathway. The Proposed Decision rejects the Joint Proposal, and while it makes general reference to the Commission’s dedication to resolving barriers to wholesale market integration, it offers no clear path forward or next steps toward establishing a capacity value for BTM hybrids and storage. The PD therefore reinforces the current limitations on the use of these resources, and impedes the Commission’s goals of enhancing grid reliability and reducing system costs.

It is clear, in reading the PD, that the Joint Proposal’s contents are either misunderstood, or have simply been ignored. The Joint Solar/Storage Parties have filed in this docket and its predecessor several times, and significant work has occurred to identify most of the barriers to the market-integrated pathway in several Commission and California Independent System Operator (“CAISO”) sponsored fora. The Joint Solar/Storage Parties were clear in our preference for a market-informed pathway, given the challenges currently posed by the market-integrated path. The Joint Solar/Storage Parties then made specific recommendations for addressing those barriers, including the establishment of a working group. Indeed, the majority of topics that must be addressed and resolved to enable market integration of BTM hybrids and storage are squarely within the jurisdiction of the Commission. The PD ignores all of this and refers stakeholders to two tangential efforts—one for emergency load reductions, and another for a future-facing real-time pricing framework.⁶

The PD should recognize that incorporating exporting BTM storage and hybrids in the RA framework is urgently needed to ensure near-term reliability in the face of extreme weather events, and to reach procurement needs such as the 11.5 GW of replacement power for retiring

⁴ R.19-11-009, *Proposed Decision Adopting Local Capacity Obligations for 2022-2024, Flexible Capacity Obligations for 2022, and Refinements to the Resource Adequacy Program* (May 21, 2021) (“Proposed Decision”).

⁵ R.19-11-009, *Track 4 Proposal of Sunrun Inc., California Energy Storage Alliance, California Solar & Storage Association, Tesla, Inc., Center for Energy Efficiency and Renewable Technologies, Vote Solar, and Enel X North America, Inc.* (January 28, 2021) (“Joint Proposal”).

⁶ Proposed Decision, p. 54.

thermal plants (pending in an Integrated Resource Planning proposed decision).⁷ Distributed energy resources (“DERs”) projects can be expeditiously developed and bid into RA solicitations. In comparison, utility-scale or in-front-of-meter (“IFM”) projects have longer development timelines and can often face significant delays moving through the CAISO generator interconnection queue and getting the requisite transmission upgrades constructed.⁸

The vision promoted at the May 25, 2021 Energy Division workshop, if pursued by the Commission, will take several years to implement and to then produce a beneficial DER response. And, the Emergency Load Reduction Program (“ELRP”) pilot adopted in D.21-03-056 suffers from the same shortcomings as forcing DERs into curtailment demand response (“DR”) frameworks: it leaves a significant portion of potential DER capacity, contribution to reliability, and ratepayer value on the table, by relegating DER exports to an emergency-only role. Both of these offerings can complement, but not replace, a supply-side pathway for exporting BTM DERs.

As discussed below, the PD inappropriately declines to act on the Joint Proposal, referencing the lack of progress made on the barriers identified in D.20-06-031.⁹ D.20-06-031 clearly directed the joint agency work necessary to establish qualifying capacity (“QC”) values for hybrid BTM resources. Despite this clear directive, none of the work necessary to address the identified barriers has been explicitly scoped into or taken on in relevant proceedings, such as the instant proceeding, the Rule 21 proceeding, or the DR proceeding. In order to address this deficiency and break the stalemate on these critical issues, the PD must be revised to provide a procedural path forward on establishing QC values for hybrid BTM resources. This procedural

⁷ See R.20-05-003, *Proposed Decision Requiring Procurement to Address Mid-Term Reliability (2023-2026)* (May 21, 2021).

⁸ For example, some recent transmission upgrade projects have been cited for construction delays for various reasons. See *Generation Interconnection PG&E Update*, PG&E (April 15, 2021), available at <http://www.caiso.com/Documents/PG-EPresentation-GeneratorInterconnectionTransmissionUpgrades-Apr15-2021.pdf>. Going forward, with record amounts of buildout expected through 2045, per SB 100 study reports, and record amounts of interconnection applications and MW requested, as evidenced by Queue Cluster 14, the CAISO interconnection process is already coming to terms with study delays to manage the “supercluster.” These delays may persist in future queues given the buildout needed to support the state’s decarbonization and reliability goals. See, e.g., *CAISO Supercluster Interconnection Procedures: Issue Paper & Draft Final Proposal* (May 14, 2021), available at <http://www.caiso.com/Documents/IssuePaper-DraftFinalProposal-SuperclusterInterconnectionProcedures.pdf>.

⁹ Proposed Decision, p. 53.

avenue should be accomplished along the same timelines, and in similar or parallel fora, as some of the related work that the PD orders.

I. The PD Fails to Take on Any of the Work Towards Establishing a QC Value for BTM Resources that was Clearly Directed by D.20-06-031.

D.20-06-031 listed eight issues that must be addressed prior to treating BTM resources similarly to IFM resources, and noted that these issues “require consideration and coordination in multiple Commission proceedings and CAISO stakeholder initiatives.”¹⁰ Specifically, those issues are:

(1) forward determination of capacity associated with renewable production, consumption, charging, and export, (2) RA requirements associated with customers providing capacity, (3) wholesale market participation including metering, dispatch control, and communication with CAISO, (4) cost for energy associated with consumption, charging, and export, (5) changes such that net energy metering (NEM) and self-generation incentive program (SGIP) resources are compensated for capacity, while discounting for their NEM and SGIP compensation as necessary to ensure that the resources do not receive compensation beyond their value, (6) load forecasting and adjustment for BTM resources, (7) interaction of such resources with existing BTM resources such as proxy DR, and (8) deliverability determination.¹¹

Finally, and most importantly, D.20-06-031 specifically stated the Commission’s intent to “plan the joint agency steps necessary to establish NQC values for hybrid BTM storage/solar resources *with the goal of counting these resources in the RA program.*”¹²

Despite this decision setting a clear goal and procedural path forward for establishing QC values for these resources, to the Joint Solar/Storage Parties’ knowledge, this list of eight issues has not been examined by Commission staff beyond the November 2020 workshop. Further, the Joint Solar/Storage Parties are not aware of any joint agency planning process, or any process at the Commission itself, to establish QC values for BTM solar/storage resources.

The PD discusses one of the challenges identified in D.20-06-031, also described in the Joint Proposal, which is that Rule 21 currently does not contain deliverability provisions¹³—a limitation that makes sense given that Rule 21 explicitly states that it may not be used for market integration. Interestingly, the PD points to this as a barrier, while failing to acknowledge that Rule 21 is in *this* Commission’s jurisdiction *entirely* to resolve.

¹⁰ D.20-06-031, p. 33.

¹¹ *Id.*, p. 32.

¹² *Id.*, p. 33 (emphasis added).

¹³ Proposed Decision, p. 53.

The Joint Solar/Storage Parties explicitly acknowledged that modifications are needed to Rule 21, recommending in the Joint Proposal that the Commission:

scope a new issue into the Rule 21 proceeding to amend the tariff to provide for coordination with the CAISO to consider network reliability related to RA participation by DERs. The Joint Parties further recommend that the CPUC convene a series of technical workshops with the CAISO and distribution utilities to determine any modifications needed to Rule 21 to enable wholesale market participation . . . [and] the Commission should ensure that the CAISO has the information it needs to maximize the efficiency of its deliverability considerations so that it can allow DERs to enter the market without unnecessary delays.¹⁴

Yet, despite efforts to include this issue in the Rule 21 proceeding to make progress toward one of the eight issues, the Commission declined to scope deliverability issues into R.17-07-007.¹⁵

The Commission must thus understand the challenge of making *any* progress on the eight identified issues when the Commission consistently both declines to address any of these barriers in a piecemeal fashion in the appropriate proceedings, and declines to address all of them together in one proceeding, such as the instant proceeding.

Along with not offering any path to resolve any of the eight identified issues, the PD notes:

a capacity value should be determined after the underlying issues are addressed and after the Commission has determined that BTM resources will be providing incremental, reliable capacity benefits. The Commission cannot assess the capacity value of a product that has not yet been defined. BTM and IFOM resources do not have the same requirements or behavior and, therefore, should not necessarily be counted equivalently.¹⁶

To clarify, the Joint Solar/Storage Parties never assumed nor proposed that BTM and IFM storage resources have the exact same behavior. At this stage, the primary purpose of setting a QC value is to allow for progress on the additional steps that will then need to be completed before the resource can actually be realized. That clear positioning is ignored by the PD, which does not include any discussion of how or whether the barriers listed in D.20-06-031, and discussed at the November 24, 2020 joint agency workshop, will be addressed. Thus, the Proposed Decision puts this important issue back on a seemingly never-ending ferris wheel of regulatory rhetoric, with no accompanying action.

¹⁴ Joint Proposal, p. 17.

¹⁵ See R.17-07-007, *Assigned Commissioner's Second Amended Scoping Memo and Ruling for Phase II of Proceeding*, p. 7 (May 12, 2021).

¹⁶ Proposed Decision, p. 54.

Importantly, it is only the Commission that can stop this loop. The Commission should commit to taking concrete steps toward its stated “goal of counting these resources in the RA program[,]”¹⁷ starting by actually examining the topics that this Commission, on a vote of 5-0, set forth as barriers in D.20-06-031. This process has not occurred, and the PD provides no incremental progress toward this goal.

Additionally, the PD fails to address the Joint Solar/Storage Parties’ comments regarding the drawbacks of the current Proxy Demand Response (“PDR”) model, which artificially limits DER discharge by tying it to onsite customer load. The PD characterizes the Joint Proposal as seeking “opportunities for DR to receive capacity credit for exports to the grid from BTM storage[,]”¹⁸ and disregards the thrust of our discussion, which identifies this limitation as a key shortcoming of the model. As discussed in the Joint Proposal, BTM hybrid resources have additional capacity beyond customer load. By moving beyond treating BTM hybrid resources as load modification or DR, “significant stranded export value could be unlocked from existing systems to provide critically needed capacity for future grid emergencies and to support the replacement of retiring generation capacity.”¹⁹ Furthermore, enabling exports to be treated equally with load reduction would allow DER aggregators to offer more capacity with higher confidence in performance. The Commission’s apparent disinclination to create a capacity valuation for exports from BTM storage and hybrid systems harms grid reliability.

II. The Work Cited as Next Steps in the PD is Not the Work Required by D.20-06-031.

Notwithstanding the PD’s failure to take on any of the barriers to establishing a QC value for BTM resources, the PD states that “the Commission is committed to addressing the challenges outlined above and exploring options to better leverage the capabilities of BTM distributed energy resources.”²⁰ The PD points to two potential avenues for further progress toward these goals. First, it notes the establishment of the ELRP in D.21-03-056, which “will test a model to compensate BTM storage for exported energy under emergency conditions.”²¹ Second, it notes a workshop held on May 25, 2021, wherein the Commission’s Energy Division

¹⁷ D.20-06-031, p. 33.

¹⁸ Proposed Decision, p. 50.

¹⁹ Joint Proposal, p. 6.

²⁰ Proposed Decision, p. 54.

²¹ *Id.*

and the California Energy Commission (“CEC”) presented and discussed a possible future Commission rulemaking to develop and pilot optional real time hourly pricing rates for customers.²²

While both of these efforts avoid the current challenges of market integration, neither offers the solution that D.20-06-031 clearly requires,²³ and for which the Joint Solar/Storage Parties have clearly advocated: a joint agency effort to alleviate clearly identified barriers to wholesale market participation for exporting BTM hybrids and storage.

Indeed, stakeholders in R.20-11-003 have noted concern that the ELRP does not offer any reservation or capacity payment. As mentioned in the Joint Proposal, specific to ELRP, “these and other related efforts do not supplant the need to provide a long-term sustainable virtual power plant (‘VPP’) market with consistent rules and processes that govern how these BTM hybrid solar and storage resources provide reliable capacity services.”²⁴ Compensating BTM exports solely through the ELRP framework relegates these resources to an “emergency only” role and—similar to the main problem statement associated with forcing DERs into curtailment DR frameworks—leaves a lot of their potential value, and contribution to *ongoing* reliability during non-emergency operations, on the table.

As for the May 25, 2021 workshop, the PD notes both that the Energy Division has been developing a proposal that “lays out a path for scalable, low-cost deployment strategies to leverage load flexibility to meet grid needs[,]”²⁵ and that the workshop itself will “include discussions on how to best incentivize BTM resources, such as energy storage, electric vehicles and other DERs.”²⁶ While the discussion at the workshop was certainly interesting, there is much potential for complication and delay in developing the fully functional transactive energy framework that the workshop envisions. And, importantly, this framework does not get BTM resources any closer to providing reliable, dispatchable capacity.

Therefore, while the Proposed Decision purports to provide certain “next steps” to address the Joint Solar/Storage Parties’ issues, these steps will not drive meaningful progress toward the goals clearly articulated in D.20-06-031.²⁷

²² *Id.*

²³ D.20-06-031, p. 33.

²⁴ Joint Proposal, p. 2.

²⁵ Proposed Decision, p. 54.

²⁶ *Id.*, p. 55.

²⁷ *See* D.20-06-031, p. 33.

III. The Proposed Decision Must Be Modified to Establish a Path Forward for Addressing the Barriers Identified in D.20-06-031 and Setting a QC Value for BTM Resources.

The Joint Solar/Storage Parties appreciate that there is much before the Commission in this and related dockets. These comments propose both that the Commission: (a) recognize its prior directives geared toward establishing QC values for BTM resources and counting these resources in the RA program, and (b) take concrete action on these directives by establishing a viable procedural path forward to resolve what the PD effectively deems as preconditions to setting a QC value for exporting BTM storage and hybrids.

First, the PD should be amended to create a working group to work toward resolution of the barriers identified in D.20-06-031 within a prescribed timeframe. The results of this working group should be considered later in this proceeding, alongside Track 3B2 issues. To minimize Energy Division staff time, the working group could be chaired by members of the Joint Solar/Storage Parties, and perhaps jointly with load-serving entities and/or Energy Division staff. The working group would be responsible for scheduling and noticing meetings, and producing a report detailing recommendations to address outstanding issues within the Commission's jurisdiction.

A number of the issues that will be examined by this working group were addressed several years ago by a working group focused on actualizing multiple use applications for energy storage resources in Commission Rulemaking 15-03-011²⁸ and by the Transmission-Distribution Interface Working Group.²⁹ To avoid reinventing the wheel, the working group ordered by this decision should use the documents and conclusions from these prior working groups as a starting point, and refresh that work as appropriate.

It is the Joint Solar/Storage Parties' understanding that the Commission is contemplating issuing a new rulemaking focused on continuing work on multiple-use applications, among other issues. Thus the working group recommended herein would submit its report and

²⁸ R.15-03-011, *Compliance Report of Southern California Edison Company (U 338-E), Pacific Gas and Electric Company (U 39-E) and San Diego Gas & Electric Company (U 902-E) on Behalf of the Multiple-Use Application Working Group* (August 9, 2018).

²⁹ For example, an informal working group facilitated by Gridworks produced such a report in 2017, but to the Joint Solar/Storage Parties' knowledge, no formal working group process was established by the Commission. See *Coordination of Transmission and Distribution Operations in a High Distributed Energy Resource Electric Grid*, Gridworks, CAISO, PG&E, SCE, and SDG&E (June 2017), available at http://gridworks.org/wp-content/uploads/2017/01/Gridworks_CoordinationTransmission.pdf.

recommendations to this proceeding or its successor, to the interconnection and DR rulemakings, and to any future rulemakings on multiple-use applications and related issues. The working group would also submit its report to the record of any future rulemaking on real-time pricing and load modifying DR, should such a rulemaking be initiated by the Commission.

Second, as for the work of establishing a QC value for BTM storage and hybrids with export, the Commission should amend the PD to refer that work to the CEC, consistent with the PD's directives for supply-side DR QC methodologies and issues. The PD should be revised to require that the CEC develop updated load impacts for supply-side DR resources in its 2021 Integrated Energy Policy Report process, and submit a proposal to the Commission in March 2022, for consideration for the 2023 RA compliance year.

IV. Conclusion

The Joint Solar/Storage Parties urge the Commission to modify the Proposed Decision as recommended herein and in Appendix A hereto.

Respectfully submitted June 10, 2021,

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Appendix A

Proposed Modifications to Findings of Fact, Conclusions of Law, and Ordering Paragraphs

Findings of Fact

12. The Commission has not made progress in addressing the issues identified in D.20-06-031 related to establishing a qualifying capacity value for behind-the-meter hybrid and storage resources.

13. Past working groups have done significant work in outlining solutions to the issues identified in D.20-06-031.

Conclusions of Law

7. The proposed CEC-led working group process to develop recommendations for a new DR QC methodology should be adopted. The working group should also be tasked with developing recommendations for a QC methodology for BTM storage and hybrid resources inclusive of export.

13. A stakeholder working group should be created to identify solutions to the barriers to distributed energy resource participation in resource adequacy – including, but not limited to, the eight issues identified in D.20-06-031.

Orders

XX. Stakeholders are directed to form a working group, comprised of load-serving entities, the California Independent System Operator, distributed energy resources providers, and other directly interested parties, and to produce a detailed report regarding solutions to the eight issues identified in D.20-06-031 as barriers to establishing a QC value for BTM resources, as well as any other relevant issues. This working group is directed to submit that report to the demand response, resource adequacy, and interconnection proceedings no later than February 1, 2022.