

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

Order Instituting Rulemaking to Consider
Streamlining Interconnection of Distributed
Energy Resources and Improvements to
Rule 21.

Rulemaking 17-07-007
(Filed July 13, 2017)

**COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE ON THE E-
MAIL RULING DIRECTING COMMENTS ON PROPOSED SCOPE AND SCHEDULE
FOR PHASE II**

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In accordance with Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), the California Energy Storage Alliance (“CESA”) hereby submits these comments on the *E-mail Ruling Directing Comments on Proposed Scope and Schedule for Phase II* (“Ruling”), issued by Administrative Law Judge (“ALJ”) Kelly A. Hymes on April 8, 2021.

I. INTRODUCTION.

In the Ruling, the ALJ proposes to initiate Phase II of this proceeding to address a number of cost allocation issues as it relates to proposals that were adopted in previous Commission decisions and/or considered in the various working groups. Specifically, the proposed scope includes the costs, benefits, and various infrastructure needs to adopt and/or implement the following proposals:

- Proposal 1.A adopted in Decision (“D.”) 19-03-013 to modify the Screen Q exemption size threshold
- Proposal 8.1 deferred in D.20-09-035 to post an indication of potential Screen L results on Integration Capacity Analysis (“ICA”) maps

- Proposal 8.i.a deferred in D.20-09-035 to relocate Screen I to the Rule 21 technical framework overview whereby all non-exporting projects above 30 kVA would be reviewed under all screens
- Utilities' Issue 9 counterproposal adopted in D.20-09-035 regarding the Limited Generation Profile
- Issue 11 concept proposal for a Lightning Review Process for non-exporting storage projects deferred in D.20-09-035, subject to further detail and cost-benefit analysis in Phase II of this proceeding
- Issue 22 interconnection portal improvement proposals directed by D.20-09-035 for further detail on costs and cost recovery approaches in Phase II testimony of this proceeding
- Proposal 23.f adopted in D.20-09-035 to enable simple tracking of vehicle-to-grid ("V2G") projects in interconnection portals

Upon review of the Ruling, CESA generally supports the ALJ's proposed scope and schedule for Phase II of the proceeding. Ensuring that the above proposals are justified based on net benefits and costs and have the associated infrastructure and cost recovery mechanisms in place will be important to its success in supporting streamlined distributed energy resource ("DER") interconnection and reasonableness in cost to ratepayers. In particular, CESA is supportive of the Commission's follow-up consideration of the Issue 11 Lightning Review Process proposal and the Issue 23.f proposal to accommodate V2G project tracking in Rule 21 interconnection portals.

Our comments in response to the Ruling focus on expanding the consideration of the infrastructure and costs necessary to implement the utilities' Issue 9 counterproposal. Specifically, the consideration of infrastructure to realize needed generation reductions to implement the Limited Generation Profile should more expansively consider how any added infrastructure can support other use cases as a benefit, such as in-front-of-the-meter ("IFOM") energy storage resources that charge from the grid. Furthermore, CESA adds two additional issues for consideration in Phase II of this proceeding:

- Revisions or alternatives to the current distribution upgrades cost-sharing process should be considered in Phase II of this proceeding.
- Infrastructure upgrades, cost-allocation mechanisms, and other issues related to behind-the-meter (“BTM”) hybrid and energy storage Resource Adequacy (“RA”) capacity should be addressed in Phase II of this proceeding.

With these two additional issues for consideration and resolution in Phase II of this proceeding, CESA looks forward to continued participation and collaboration with the Commission and other stakeholders.

II. INFRASTRUCTURE IDENTIFIED, CONSIDERED, AND IMPLEMENTED TO SUPPORT LIMITED GENERATION PROFILES SHOULD ALSO BE EVALUATED FOR OTHER USE CASES THAT CAN BE SUPPORTED.

As the Commission considers a range of cost-allocation-related issues as part of Phase II of this proceeding, CESA recommends that the costs and benefits of any needed infrastructure investments be evaluated for all of the known use cases that can be supported. Beyond the specific adopted Rule 21 proposal from D.19-03-013 and D.20-09-035, there may be other DER interconnection and operational use cases that can benefit from the same investment, leading to greater value delivered to ratepayers for any investments made and costs incurred. Like in other industries, infrastructure typically represents the type of investments that can deliver broader benefits beyond the narrow use case or purpose for which the investment was initially conceived or intended. With such broader framing of infrastructure investments, the costs can be better justified by the multitude of benefits delivered.

For example, distribution-connected IFOM energy storage resources that charge from the grid can be better informed of the specific periods of the day to charge from the grid when excess loading capacity is available on particular circuits, feeders, or lines on the utility distribution grid. However, in CESA’s and our members’ experience, the granularity of the “charging schedules”

available to distribution-connected IFOM energy storage resources are limited, leading to conservative assumptions to the level of charging that is made known as available. To better coordinate distribution-connected IFOM energy storage charging with distribution grid loading levels, infrastructure investments are likely needed to support such granular charging schedules that more efficiently utilize the built distribution infrastructure.

To this end, CESA sees significant potential and benefit of any infrastructure investments identified as being needed to support the Issue 9 proposal to implement Limited Generation Profiles on a monthly basis and in a 288-hour format. Whereas the proposal is focused on using hosting capacity (“ICA”) data to establish the generation-related limitations to take advantage of the available hosting capacity at the point of interconnection, CESA believes that the same infrastructure used to accommodate Limited Generation Profiles and operationalize these limitations and modifications over time can similarly support loading capacity as well. To enable flexible and efficient IFOM energy storage charging, loading capacity data can be provided and profiles (or charging schedules) can be developed on a granular basis, thus providing an incremental and added benefit for the same infrastructure investment. Energy storage has the advantage of being highly dispatchable and flexible, making concerns about responsiveness to changing loading conditions to be more readily addressed in real time. Notably, in Rulemaking (“R.”) 14-08-013, the Commission affirmed this “inverse ICA” use case, stating that “D.17-09-026 established that ICA values, including Uniform Load, must be adequately representative to inform a DER developer’s project design and siting for use in the interconnection process.”¹ There may be other use cases where infrastructure investments can deliver additional and supplementary

¹ *Administrative Law Judge’s Ruling on Joint Parties’ Motion for an Order Requiring Refinements to the Integration Capacity Analysis* issued on January 27, 2021 in R.14-08-013, *et al.* at 14.
<https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M361/K810/361810169.PDF>

benefits (e.g., support of siting electric vehicle chargers), which should be included in the evaluation of infrastructure costs as part of Phase II of this proceeding, to the degree that such use cases and benefit values are known and can be quantified.

In general, for any of the proposals and issues considered in Phase II, CESA encourages the Commission to more expansively assess whether there may be a multitude of benefits that can be supported and justified for any infrastructure investments, beyond the Rule 21 interconnection proposals at hand. With a more comprehensive viewpoint, the Commission will better assess the reasonableness of any investments needed.

III. REVISIONS OR ALTERNATIVES TO THE CURRENT DISTRIBUTION UPGRADES COST-SHARING PROCESS SHOULD BE CONSIDERED IN PHASE II OF THIS PROCEEDING.

To be consistent with a recent Proposed Decision (“PD”) addressing remaining Phase I issues,² the Commission should add the issue of revisions to the distribution upgrades cost-sharing process to the Phase II scope. While the PD determines that potential cost-shifting impacts and impacts to projects jurisdictional to the Federal Energy Regulatory Commission (“FERC”) must be first identified, quantified, and addressed prior to any follow-up consideration of potential revisions or reforms, the Phase II Scoping Memo should explicitly include these items in the scope so that the Commission can readily solicit and contemplate proposals upon completion of the reporting and analysis of existing cost and cost-shifting impacts.³

Furthermore, proposals for Issue 13, which pertains to this very issue, were deferred for adoption because there was no “formal proposal” and because of the “lack of specifics.”⁴ Upon

² *Proposed Decision Addressing Remaining Phase I Issues* issued on April 7, 2021 in R.17-07-007 at 23. <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M375/K483/375483827.PDF>

³ *Ibid* at 22-23.

⁴ *Ibid* at 21.

review of the aforementioned reports and data, the Commission should provide an opportunity for interested parties to submit formal and detailed proposals for consideration in Phase II, which is relevant to this scope of various cost-allocation and infrastructure cost-related issues. Any party proposal will likely involve certain process and possibly some infrastructure changes that need to be assessed for cost and benefit impacts to ratepayers, utilities, and market participants. Rather than “dropping” Issue 13 from follow-up consideration and discussion, CESA urges the Commission to include these issues in the Phase II scope to allow for the Commission and parties to respond to the reports and data with actionable solutions.

IV. INFRASTRUCTURE UPGRADES, COST-ALLOCATION MECHANISMS, AND OTHER ISSUES RELATED TO BEHIND-THE-METER HYBRID AND ENERGY STORAGE RESOURCE ADEQUACY CAPACITY SHOULD BE ADDRESSED IN PHASE II OF THIS PROCEEDING.

As discussed in the Ruling, the October 2, 2017 Scoping Memo explained that Phase II would focus on issues that arise in connection with upgrade practices in distributed resource planning. The Ruling also identifies a preliminary scope of issues based on the potential costs and cost recovery mechanisms associated with the various Rule 21 Working Group proposals adopted over the course of this proceeding. However, while the scope can be most readily drawn from the various adopted and/or conceptual proposals considered within the Rule 21 proceeding, there may be other issues that warrant further consideration in Phase II that directly relate to interconnection processes and infrastructure upgrades.

Specifically, especially in light of FERC Order No. 2222 and the active consideration of BTM hybrid and standalone energy storage capacity in the RA proceeding (R.19-11-009), CESA recommends that the Commission also include issues related to the potential infrastructure upgrades, communication and visibility requirements, and deliverability-triggered upgrades and cost allocation for BTM hybrid and energy storage projects seeking deliverability status under

Rule 21 to provide RA capacity. In Decision (“D.”) 20-06-031,⁵ the Commission expressed interest in BTM hybrid resources to provide RA capacity and increase their value, with eight issues that must be addressed first, including deliverability determinations – an issue that falls in the purview of this Rule 21 proceeding. Typically, deliverability of wholesale generators is assessed in an interconnection study process to ensure the facility’s ability to deliver its energy to load during different system conditions (*i.e.*, peak load conditions), including when other generators’ output create congestion conditions, and involves cost responsibility and allocation processes for any regional or local network upgrades required to support deliverability of the generator.⁶ Achieving deliverability status is critical for interconnection customers at the California Independent System Operator (“CAISO”) controlled grid is critically important to qualifying as RA resources. In the same vein, a similar study process and cost allocation and sharing process will need to be developed in Rule 21 to enable BTM hybrid and energy storage resources to qualify to provide RA capacity. Additionally, there may need to be infrastructure upgrades required to meet the metering, dispatch control, and/or communication requirements for these BTM resources, as delineated in D.20-06-031,⁷ to qualify for RA capacity and provide the operational visibility and control to the CAISO and/or the distribution utility, similar to that of IFOM RA resources.

Importantly, Phase II of this proceeding is the appropriate venue to address these matters since FERC explicitly declined to exercise jurisdiction over the interconnection of DERs seeking to participate in wholesale markets as part of an aggregation, deferring to state and local authorities to make these determinations and establishing a “first use” principle that distinguishes between

⁵ See D.20-06-031 at 32-33.

⁶ See, *e.g.*, Appendix A of the CAISO Tariff.

⁷ D.20-06-031 at 32.

single site and aggregated DER participation in wholesale transactions.⁸ Assertions to the contrary that such issues are not within the purview of Rule 21 lacks merit and is inconsistent with determinations made by FERC in Order No. 2222. To this end, addressing these issues in Phase II of R.17-07-007 is not only appropriate but also necessary, given that no other Commission proceeding (*e.g.*, R.19-11-009) is positioned to address these matters. Coordination across these Commission proceedings are needed, such that Phase II should not be confined to the infrastructure investment and cost allocation issues directly related to proposals adopted or contemplated narrowly within R.17-07-007.

V. **CONCLUSION.**

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

Respectfully submitted,



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⁸ FERC Order No. 2222 at 96-97, 172 FERC ¶ 61,247 (September 17, 2020).