

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

Order Instituting Rulemaking to Investigate
and Design Clean Energy Financing Options
for Electricity and Natural Gas Customers.

Rulemaking 20-08-022
(Filed August 27, 2020)

**COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE ON THE
ORDER INSTITUTING RULEMAKING TO REVISIT NET ENERGY METERING
TARIFFS PURSUANT TO DECISION 16-01-044, AND TO ADDRESS OTHER ISSUES
RELATED TO NET ENERGY METERING**

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In accordance with the Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), the California Energy Storage Alliance (“CESA”) hereby submits these comments on the *Order Instituting Rulemaking Order Instituting Rulemaking to Revisit Net Energy Metering Tariffs Pursuant to Decision 16-01-044, and to Address Other Issues Related to Net Energy Metering* (“OIR”), issued by the Joint Commissioners on August 27, 2020.

I. INTRODUCTION.

CESA supports the Commission’s issuance of this OIR to revisit the existing Net Energy Metering (“NEM”) tariff as adopted in Decision (“D.”) 16-01-044 and to continue to address the various issues being addressed in Rulemaking (“R.”) 14-07-002. In order to better align with the objectives of ensuring that customer-sited renewable generation continues to grow sustainably, is equitably accessible to customers in disadvantaged communities (“DACs”), and balances costs and benefits of the renewable electrical generation facility, energy storage will play an important role in any modifications to the NEM tariff. As an advocate and expert on energy storage, CESA thus looks forward to being an active participant in this proceeding.

II. BACKGROUND & INTEREST IN PROCEEDING.

CESA is a 501c(6) membership-based advocacy group committed to advancing the role of energy storage in the electric power sector through policy development, education, outreach, and research. With over 95 companies represented in the energy storage ecosystem, CESA has a direct interest in the proceeding in shaping the principles, policies, and elements/options of the next iteration of the NEM tariff. CESA has been an active participant in the predecessor rulemaking, R.14-07-002, as well as in a number of other related proceedings that would be impacted by the determinations made in R.20-08-020, such as the Self-Generation Incentive Program (“SGIP”) (R.20-05-012), Resource Adequacy (“RA”) (R.19-11-009), Integrated Resource Planning (“IRP”) (R.20-05-003), among others.

III. PRELIMINARY SCOPING MEMO.

CESA supports the broad scope of issues at this stage to identify guiding principles, program elements, and possible options for the NEM successor tariff.¹ While the scope of this proceeding is broad and general at this time, CESA recommends that the Commission include the following specific issues for consideration in this proceeding.

A. This rulemaking should evaluate policies, procedures, and rules that enable oversizing of and/or excess export from energy storage paired with NEM-eligible generation while adhering to NEM integrity.

Upon deeming storage eligible for the NEM tariff as an addition or enhancement to the NEM generator, D.14-05-033 placed limitations on the size of these paired energy storage systems greater than 10 kW to have: maximum output power no larger than 150% of the NEM generator’s maximum output capacity; discharge capacity not to exceed the

¹ OIR at 8.

NEM generator’s maximum capacity; and maximum energy discharged not to exceed 12.5 hours of storage per kW. To ensure NEM integrity, the Commission also metering requirements or, pursuant to D.19-01-030, alternatives using firmware and software controls (*i.e.*, power-control-based options). While they were reasonably adopted at the time, CESA recommends that the Commission revisit these policies and rules in light of evolving grid conditions, technological capabilities, and emerging policy priorities.

For example, the Commission is increasingly prioritizing customer resiliency in the face of increasing risk of wildfires and public safety power shutoffs (“PSPS”). This priority is reflected in the Commission adopting D.19-09-027 and D.20-01-021 in R.12-11-005 that created new SGIP budget categories and adders for resiliency-focused energy storage projects. As a result, sizing limitations based on inverter size for Equity Resiliency projects and general projects claiming the resiliency adder were removed to help with appropriate sizing to customer onsite needs.² Similarly, in R.19-09-009, the Microgrids Track 1 Decision, D.20-06-017, the Commission “modernized” the NEM tariff to remove storage sizing limits to better position NEM-paired storage systems to support customer resiliency as a near-term strategy for the 2020 wildfire season.³ While adopted as a temporary solution, wildfire mitigation and resiliency needs do not appear likely to abate in coming years that the Commission may wish to revisit this storage sizing limitation at large and, at the same time, create accounting structures and billing mechanisms with the use of metering and/or inverter-based measurement systems to ensure NEM integrity, such that

² D.20-01-021 at Finding of Fact (“FOF”) 57, Conclusion of Law (“COL”) 26, and Ordering Paragraph (“OP”) 30.

³ D.20-06-017 at 41, FOF 25, COL 22-23, and OP 6.

NEM credits are only attributed to NEM-eligible generation, not to any excess generation beyond customer load limits or to storage generation produced from grid charging.

Another reason to consider this issue is the Commission’s active consideration of exporting capacity for behind-the-meter (“BTM”) hybrid solar-plus-storage in the RA proceeding, R.19-11-009. In the RA Track 3A Scoping Memo,⁴ the Commission will consider the joint agency steps necessary to establish a net qualifying capacity (“NQC”) value for such resources. In D.20-06-017, the Commission expressed its interest “in the possibility of increasing value for BTM hybrid resources,” which was stated in the RA context but could also be applied in the NEM context by creating the accounting structures and billing mechanisms to not only allow reasonable oversizing but also to enable incrementality assessments for NEM credits versus RA capacity compensation.

Overall, the ability to reasonably oversize energy storage systems will create new opportunities for customers to provide additional value beyond serving its own load. A new NEM tariff with the appropriate accounting structures, billing mechanisms, and measurement devices would facilitate and encourage the development of NEM-paired storage resources to be optimized for both system and customer benefit, not just for customer benefit – thus aligning with the Commission’s goals to sustainably grow customer-sited generation as well as to balance costs and benefits. Beyond RA, addressing this issue could support NEM projects in providing a number of other grid services as well.

⁴ *Assigned Commissioner’s Amended Track 3.A and 3.B Scoping Memo and Ruling* issued in R.19-11-009 on July 7, 2020 at 4.

B. This rulemaking should consider concepts to enable storage that is not paired physically but paired contractually to be eligible for NEM credits.

To advance the next evolution of the NEM tariff, CESA urges the Commission to not only limit the role of storage to physical co-location and integration but also to innovative new mechanisms that pair storage contractually for NEM-eligible credits. Standalone storage located at a different site could be contractually linked and, based on the charging and generation profile of the separate solar and storage resource, attributed NEM-eligible generation using the new accounting structures and billing mechanisms developed over the course over this proceeding and/or by leveraging existing mechanisms in place to support, for example, Renewable Energy Self-Service Bill Credit Transfer (“RES-BCT”) program options – whereby government entities without the potential for renewable generation at their customer sites can nevertheless benefit from renewable energy generation projects at different locations and receive credits for excess energy exported and not consumed by the generating account to the electric grid. Whether due to physical constraints, project development costs, economies of scale, and/or location-specific benefits, storage may in some cases be more effectively sited at locations separate from the NEM-eligible generation. With contractual or tariff requirements to coordinate NEM generation to be deliver at times of need in line with retail rate structures, CESA believes that this would more flexibly enable cost-effective outcomes in certain cases. In addition, such “virtual” storage pairing mechanisms could potentially enable community solar programs recently adopted in R.14-07-002 to transition to time-of-use (“TOU”) or more advanced rate structures while providing additional value to the grid, as opposed to one that only supports standalone solar configurations.

Examples of such virtual storage pairing mechanisms via contracts or tariff requirements are in place in other jurisdictions that can inform the Commission’s policy development in this proceeding. The Massachusetts Department of Energy Resources (“DOER”) adopted final regulations in March 2020 on the Clean Peak Energy Standard (“CPES”) that seeks to ensure a certain and growing percentage of kWh sales in the seasonal peak load hours to come from certified clean resources. In addition to qualifying physically co-located energy storage systems to generate Clean Peak Energy Certificates, the CPES guidelines also enable storage systems that are “co-located” by contractual pairing with a qualified Renewable Portfolio Standard (“RPS”) resource to generate these certificates. Such energy storage systems must “demonstrate eligibility through an enforceable, legal tie to clean energy generation.”⁵ As a tariff, California’s NEM mechanism is not currently conducive to having such case-by-case demonstrations to be made, so the Commission would need to consider how measurement and enforcement schemes could be developed that allow for greater scalability of this virtual pairing model. Furthermore, Sacramento Municipal Utility District (“SMUD”) also recently launched the Energy StorageShares Program in January 2019 that would allow participating commercial customers to “buy into” the benefits from an energy storage resource without having to host or purchase a battery system at the customer site and to be “credited” for demand charge reductions based on the virtual storage project’s operations.⁶ This is not a directly applicable model, but it highlights how such virtual pairing and crediting/accounting could

⁵ *Clean Peak Resource Eligibility Guideline* at 4. <https://www.mass.gov/doc/clean-peak-resource-eligibility-guidelines/download>

⁶ “SMUD receives State Leadership in Clean Energy Award for its innovative StorageShares program.” SMUD News Release on June 18, 2020. <https://www.smud.org/en/Corporate/About-us/News-and-Media/2020/2020/SMUD-receives-State-Leadership-in-Clean-Energy-Award-for-its-innovative-StorageShares-program>

be done without physical pairing or siting at the benefitting customer account. These mechanisms should be considered in this proceeding.

CESA advocates for these additional program or tariff options because they support the identified NEM goals to sustainably grow customer-sited generation while balancing costs and benefits. Virtual storage pairing mechanisms can support more optimal paired storage siting in certain cases, enable more cost-effective investments in customer-sited or community solar where such development may be challenging or uneconomic, and still ensure NEM integrity that only provides NEM credits for NEM-eligible generation through contractual or tariff obligations and accounting/billing structures, similar to ones that were established in Massachusetts or Sacramento.

IV. CATEGORIZATION, HEARINGS, AND SCHEDULE.

CESA supports the proposed schedule and categorization of this proceeding.

V. NOTICES.

Services of all notices and communications in this proceeding should be directed to the following CESA representative:

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VI. **CONCLUSION.**

CESA appreciates the opportunity to these comments on the OIR and looks forward to working with the Commission and other stakeholders in this proceeding.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Alex J. Morris".

Alex J. Morris
Executive Director
CALIFORNIA ENERGY STORAGE ALLIANCE

Date: October 5, 2020