

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

Order Instituting Rulemaking on the Commission's Own Motion to improve distribution level interconnection rules and regulations for certain classes of electric generators and electric storage resources.

Rulemaking 11-09-011
(Filed September 22, 2011)

**COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE ON THE
PROPOSED DECISION MODIFYING RULE 21**

Jin Noh
Policy Director

Grace Pratt
Policy Analyst

CALIFORNIA ENERGY STORAGE ALLIANCE
2150 Allston Way, Suite 400
Berkeley, California 94704
Telephone: (510) 665-7811
Email: cesa_regulatory@storagealliance.org

May 26, 2022

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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 *Proposed Decision Modifying Rule 21* (“PD”), issued by Administrative Law Judge (“ALJ”) Kelly A. Hymes on May 6, 2022.

I. INTRODUCTION.

Overall, CESA continues to believe that Rule 21 is the appropriate interconnection tariff to govern Net Energy Metering (“NEM”) projects participating in a retail tariff that is under the jurisdiction of the Commission. In April 2021, ALJ Hymes issued a Ruling to resolve potential reliability issues raised by the CAISO surrounding NEM systems connecting to the transmission system, specifically resources larger than 1 MW. In response to those concerns and the record developed, this PD proposes to have NEM systems interconnecting to the transmission system interconnect via the California Independent System Operator’s (“CAISO”) Open Access Transmission Tariff (“OATT”), pushing projects that intend to participate in a retail tariff for a retail purpose to an interconnection process that has been designed for wholesale market participants and is under the jurisdiction of the Federal Energy Regulatory Commission (“FERC”).

Additionally, as highlighted by CESA in comments, interconnecting via OATT will add incremental time and costs for most projects, putting customers interconnecting to the transmission system through a more costly and time-intensive process compared to distribution customers.¹

The PD states that removing NEM resources' ability to interconnect to the transmission system via Rule 21 is necessary given that the Commission has no reason to believe that a solution allowing for transmission-connected NEM projects to interconnect via Rule 21 exists at this time.² This assertion, particularly that no solution or foundations for a solution have been suggested, flies in the face of the record in the proceeding. Specifically, CAISO themselves have proposed specific items that they would need to maintain interconnection via Rule 21,³ and CESA and other parties have filed comments that identified potential solutions for improved forecasting, telemetry data sharing, operational points of contact, and more that could address CAISO's concerns without forcing all transmission-connected NEM projects onto the CAISO tariff.⁴ CESA further recommended and continues to recommend, that Commission establish a working group, working within a defined timeframe, to further interrogate these issues to determine if there is a viable alternative to address the CAISO's concerns.

CESA believes it is premature, on the basis of the record to date, and in light of the technical nature of these issues, to simply conclude that no viable solutions exist. Notably, at the workshop

¹ See CESA Comments on *E-Mail Ruling Directing Party Comments* at 6-8.

² PD at 21.

³ See CAISO Response to *ALJ's Ruling Reopening Record to Consider the Modification of Decision 12-09-018 And Rule 21* at 6-7.

⁴ CESA Reply Comments on *E-Mail Ruling Directing Party Comments* at 2-4.

See also, California Solar and Storage Association ("CALSSA") Reply Comments on *ALJ's Ruling Reopening Record to Consider the Modification of Decision 12-09-018 And Rule 21* at 1-2, "The distribution utilities should inform CAISO of transmission-level Rule 21 applications, provide CAISO with site design information and engineering analysis results for those projects, and ensure that telemetry data for those projects reaches CAISO in useful timing and format."

and in comments, multiple parties emphasized the importance of maintaining a Rule 21 transmission interconnection pathway, and CAISO stated that they believed that a Rule 21 pathway was possible or even preferred⁵ until comments were submitted in February 2022 stating that CAISO preferred all resources to interconnect via the OATT.⁶ During the workshop, stakeholders discussed whether existing utility telemetry data would meet CAISO requirements, but no conclusion was made. In subsequent comments on the November Ruling, CAISO stated that they require 4-second, or instantaneous, telemetry information to maintain system reliability, with this telemetry data seeming to be the most important information CAISO currently lacks, along with a point of contact for these systems.⁷ Though agreeing on the problem to solve, stakeholders have not had the opportunity to thoroughly discuss how to incorporate these telemetry needs into specific Rule 21 language given the highly technical nature of these requirements.

Contrary to the PD's assertions, CESA believes that progress has been made towards finding an approach to modify Rule 21 to address CAISO's concerns but that additional work is needed to explore these issues and potential solutions further. Keeping a Rule 21 pathway will ensure that customers connected to the transmission system can participate in NEM by keeping

⁵ See CAISO Response to *ALJ's Ruling Reopening Record to Consider the Modification of Decision 12-09-018 And Rule 21* at 5, "It is not the CAISO's intent to require every resource to interconnect and participate under the CAISO tariff. The CAISO believes that there are a number of simple, straightforward solutions that will allow resources to continue to interconnect under Rule 21 and participate under NEM tariffs reliably."

⁶ See CAISO Comments on *ALJ's Ruling Seeking Comment Regarding Workshop Slides and Additional Data* at 3-4, "The CAISO recommends the Commission either (1) close this loophole by prohibiting transmission-level interconnections under Rule 21 or reinstating a capacity cap, or (2) amend Rule 21 to address the sizable impacts such resources have on the transmission grid and the wholesale markets. The CAISO recommends option (1), but previously detailed the initial measures it believes the Commission should take if it elects not to prohibit transmission-level interconnections or reinstate the capacity cap."

⁷ See CAISO Comments on *Email Ruling Directing Party Comments* at 4-5, "Without instantaneous telemetry, the CAISO does not have situational awareness of the resources causing, mitigating, or exacerbating reliability events. This situation could be exacerbated by a rapid growth of transmission-connected NEM resources"

the interconnection process jurisdictional to the Commission. As discussed below, customers are often required to take service at the transmission level owing to their circumstances and should not have their practical opportunity to participate in NEM foreclosed.

To this end, CESA continues to recommend the creation of a working group, with a defined schedule and deliverable (e.g., working group report) to be filed and served to address technical changes that need to be made to Rule 21 to address the specific issues. This working group process should be created and initiated in lieu of eliminating the Rule 21 Section B.1 exemption for transmission-connected NEM systems

If the Commission is intent on making NEM projects interconnect to transmission via the OATT, CESA is nonetheless disappointed by the lack of implementation details in the PD. To this end, CESA makes the following comments:

- If the Commission changes interconnection requirements for transmission-connected NEM projects, the decision should clarify treatment of projects currently in the queue, with accommodation given to mature projects.
- The ability of projects to interconnect to the transmission system and participate in the NEM tariff should be affirmed in this decision.
- Additional implementation details should be outlined in the decision, including needed changes to the NEM tariff and updates to CAISO interconnection tools and documentation.

At the same time, CESA appreciates and agrees with the Commission's determination to not subject non-exporting systems to the CAISO OATT, maintaining the eligibility of non-exporting projects to interconnect under Rule 21.

II. A WORKING GROUP SHOULD BE CREATED TO IDENTIFY SOLUTIONS TO ADDRESS CAISO’S CONCERNS IN LIEU OF ELIMINATING THE RULE 21 SECTION B.1 EXEMPTION FOR TRANSMISSION-CONNECTED NEM SYSTEMS.

CESA continues to recommend the creation of a working group, with a defined schedule and deliverable (*e.g.*, working group report) to be filed and served to address technical changes that need to be made to Rule 21, instead of moving all customers to the CAISO OATT at this time. This working group could be subsumed in some ways within the workshop process directing the discussion on load masking issues for non-exporting systems. Short of a dedicated working group, the Commission should still allow stakeholders to “work offline” and come back to the Commission with a concrete solution by a certain date (*e.g.*, within 90 days of the issuance of the final decision). Stakeholders such as CESA and its member companies who develop the projects at issue in this PD would be willing to put in the time and resources (and even lead/facilitate) to work with the CAISO and investor-owned utilities (“IOUs”) to propose concrete Rule 21 tariff revisions to address the identified reliability concerns, and where consensus cannot be reached, lay out the key differences upon which the Commission can make a reasonableness determination. Ideally, an Energy Division-led working group process would ensure the greatest progress toward developing a solution and best ensure CAISO and IOU staff attendance and cooperation, but if staff time and resources are constrained, CESA would be willing to lead these efforts.

III. IF THE COMMISSION CHANGES INTERCONNECTION REQUIREMENTS FOR TRANSMISSION-CONNECTED NEM PROJECTS, THE DECISION SHOULD CLARIFY TREATMENT OF PROJECTS CURRENTLY IN THE QUEUE, WITH ACCOMMODATION GIVEN TO MATURE PROJECTS.

As highlighted in the PD, there are roughly 28 NEM projects, all in PG&E territory, that have submitted interconnection applications and are in the process of interconnecting to the

transmission system.⁸ While the status of this specific set of projects will shift over time, with some projects completing interconnection and others joining the queue, the PD acknowledges that there are currently NEM projects in the Rule 21 queue seeking interconnection to the transmission system.

To the degree the Commission moves forward with eliminating the Rule 21 Section B.1 exemption or otherwise changes the interconnection requirements that transmission-connected NEM projects are subject to, the Commission will need to clarify the scope of projects impacted. CESA recommends that any project that has submitted an interconnection application at the time of issuance of the PD should maintain their ability to interconnect via Rule 21 pursuant to the rules as they currently stand, recognizing that the customers and developers pursuing these projects had a reasonable expectation that these projects would be subject to the status quo Rule 21 requirements and invested resources accordingly.

At a minimum, any project with a signed Rule 21 Generator Interconnection Agreement (“GIA”) within some forward-looking time of the issuance date of a final decision (*e.g.*, 90 days) should be allowed to complete the Rule 21 interconnection process without delay and receive permission to operate. Projects with a signed GIA are mature and have already invested months or even years in going through the Rule 21 study process and other evaluations. Having a signed GIA is a standard milestone of project maturity that is already used for existing programs, such as PG&E’s Option S limited rate option⁹ and soon, PG&E’s Option R limited rate option.¹⁰

⁸ PD at 18.

⁹ See PG&E Option S details at: https://www.pge.com/en_US/for-our-business-partners/interconnection-renewables/larger-self-generation-programs/option-s.page?ctx=large-business

¹⁰ See PG&E Advice Letter 6532-E-A, https://www.pge.com/tariffs/assets/pdf/adviceletter/ELEC_6532-E-A.pdf, at 5.

Regardless of any particular cutoff, the PD must be modified to clarify the treatment of existing transmission-connected projects in the Rule 21 queue to avoid confusion for those customers that are actively going through the interconnection process. It would be inappropriate to apply new rules to mature projects that have proceeded in good faith under the rules that have been in place for years.

IV. THE ABILITY OF PROJECTS TO INTERCONNECT TO THE TRANSMISSION SYSTEM AND PARTICIPATE IN THE NEM TARIFF SHOULD BE AFFIRMED IN THIS DECISION.

Throughout the building of the record on the issue of exporting NEM systems interconnecting to the transmission system, no party disputed that customers should maintain their ability to access the NEM tariff if they install NEM-eligible systems and choose to participate in the tariff. However, nowhere in the decision is it affirmed that customers will be able to interconnect eligible BTM systems to the transmission system and participate in NEM. This is an important principle to maintain to guide any implementation of moving interconnection from Rule 21 to the CAISO OATT, as many implementation details are missing from the PD.

It is important to maintain the ability of NEM systems to interconnect to the transmission system to allow for fair access of the NEM tariff for all customers. In the PD, Finding of Fact (“FOF”) 18 states, “The record contains few examples of why a customer would prefer to interconnect through the transmission grid versus the distribution grid.” While a customer may not *prefer* to interconnect to the transmission grid, *per se*, there are customers with existing electric service through the transmission system. Sites may have begun service on the transmission system because of their onsite load requirements (*e.g.*, high voltage), geographic location, or other technical features of the site. In all cases, the initial customer initiating electric service at the site would have worked with their local utility to determine how to interconnect load in a manner that

meets the customer's needs, is safe, and minimizes costs. If a site is currently interconnected to the transmission system, changing that would require a formal change of service and payment for upgrades needed to change the service from transmission to distribution. Additionally, many sites still need high voltage electric service for load, so moving to the distribution system would create additional work to accommodate these needs. In short, and contrary to what is implied by the PD, whether to interconnect at the distribution or transmission level is not something a customer can easily change or choose with impunity.

Many customers installing an exporting NEM system are at sites with existing electric service. Therefore, customers with service at the transmission level should maintain their ability to access to the NEM tariff similar to distribution-interconnected customers. Public Utilities Code ("PUC") § 2827 establishes eligible customer-generators as "a residential customer, small commercial customer as defined in subdivision (h) of Section 331, or commercial, industrial, or agricultural customer of an electric utility" that installs a NEM-eligible generation and/or storage facility "intended primarily to offset part or all of the customer's own electrical requirements."¹¹ The ability of customers to interconnect systems to the transmission system and participate in NEM should be affirmed in the PD, regardless of what interconnection tariff they are ultimately required to use.

V. ADDITIONAL IMPLEMENTATION DETAILS SHOULD BE OUTLINED IN THE DECISION, INCLUDING NEEDED CHANGES TO THE NEM TARIFF AND UPDATES TO CAISO INTERCONNECTION TOOLS AND DOCUMENTATION.

Should the Commission move forward with eliminating the Rule 21 section B.1 exemption for transmission-connected NEM projects, additional implementation details beyond those provided in the PD will be needed. While the PD states that the ability for exporting NEM systems

¹¹ PUC § 2827(a)(4)(A).

to interconnect to the transmission system via Rule 21 will be removed, there is no further guidance to the IOUs or CAISO on implementing needed changes in tariffs and internal systems to accommodate interconnection of these resources via the OATT.

For example, each IOU's NEM2 tariff references Rule 21 as the applicable rule governing interconnection for NEM systems throughout the schedule. Additionally, Pacific Gas and Electric ("PG&E") and Southern California Edison ("SCE") delineate applicable Interconnection Agreements and associated forms for different types of NEM customers based on the size of the system and specific NEM tariff that is being applied (*e.g.*, NEM Aggregation, NEM Multiple Tariff).¹² At a minimum, each IOU would have to review its NEM tariff and make applicable changes to either remove the Rule 21 reference or add a reference to the CAISO OATT where applicable. On top of this, each IOU would likely need to create a new application form for the customer to share proof of an interconnection application submitted to the OATT or completed interconnection agreement.

For CAISO, additional steps will need to be taken to facilitate interconnection of NEM resources via OATT given that the process is designed for market participating resources. For example, resources looking to participate in the CAISO market submit and interconnection application via the Resource Interconnection Management System ("RIMS") and simultaneously initiate CAISO's New Resource Implementation ("NRI") process to synchronize the resources

¹² See PG&E's Electric Schedule NEM2, Special Conditions 3 at p.13-14. Available at:

https://www.pge.com/tariffs/assets/pdf/tariffbook/ELEC_SCHEDULES_NEM2.pdf.

See also, SCE's Schedule NEM-ST, Special Conditions 2 at p.12. Available at:

<https://edisonintl.sharepoint.com/teams/Public/TM2/Shared%20Documents/Forms/AllItems.aspx?id=%2Fteams%2FPublic%2FTM2%2FShared%20Documents%2FPublic%2FRegulatory%2FTariff%2DSCE%20Tariff%20Books%2FElectric%2FSchedules%2FOther%20Rates%2FELECTRIC%5FSCHEDULES%5FNEM%2DST%2Epdf&parent=%2Fteams%2FPublic%2FTM2%2FShared%20Documents%2FPublic%2FRegulatory%2FTariff%2DSCE%20Tariff%20Books%2FElectric%2FSchedules%2FOther%20Rates&p=true&ga=1>

with its market models. NRI needs to be completed before a Commercial Operation Date (“COD”) is set to finish the interconnection process. However, NRI bucket three pertains to market operation, including sharing information on the chosen scheduling coordinator (“SC”), letter of intent to become a market participating intermittent resource, and additional forms surrounding market participation. Given that NEM resources will not participate in the wholesale market, a modified interconnection process will have to be specified, with accompanying pathways on the RIMS platform and documentation to help guide customers and developers through this interconnection process.

In order to ensure that the implementation considerations highlighted above, as well as other considerations not mentioned here, are not overlooked, the PD should include additional direction. With respect to the NEM tariff, the Commission can directly order needed modifications from the IOUs to be submitted via Tier 2 Advice Letter. For needed changes to CAISO portals and documentation, CESA urges the Commission, perhaps in collaboration with CAISO staff, to provide additional direction on the timeline by which updates will be made to accommodate NEM systems. This will allow customers and developers to adequately plan their interconnection applications and documentation.

Finally, the PD should be modified to allow all projects, regardless of their current level of maturity, to continue to move through the Rule 21 interconnection process until all of the needed implementation details are finalized and implemented by the IOUs and the CAISO.

VI. CONCLUSION.

CESA appreciates the opportunity to submit these comments on the PD and looks forward to collaborating with the Commission and stakeholders in this proceeding. We are very concerned that in eliminating the existing Rule 21 section B.1 exemption, the PD is too quick in its dismissal

of alternative approaches to address the concerns CAISO raised with regard to transmission-connected NEM systems. Rather than this rush to judgement, we ask that the PD be modified to establish a working group to interrogate these issues further with the goal of providing a set of more fully vetted options in a timely manner for the Commission's consideration.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Jin Noh', written in a cursive style.

Jin Noh
Policy Director
CALIFORNIA ENERGY STORAGE ALLIANCE

May 26, 2022