BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Revisit Net Energy Metering Tariffs Pursuant to Decision D.16-01-044, and to Address Other Issues Related to Net Energy Metering

Rulemaking 20-08-020
(Filed August 27, 2020)

CLEAN COALITION PROPOSED SUCCESSOR TO THE CURRENT NET ENERGY METERING TARIFF

/s/ BEN SCHWARTZ
Ben Schwartz
Policy Manager
Clean Coalition
1800 Garden Street
Santa Barbara, CA 93101
Phone: 626-232-7573
ben@clean-coalition.org

March 15, 2021
CLEAN COALITION PROPOSED SUCCESSOR TO THE CURRENT NET ENERGY METERING TARIFF

I. INTRODUCTION


II. DESCRIPTION OF PARTY

The Clean Coalition is a nonprofit organization whose mission is to accelerate the transition to renewable energy and a modern grid through technical, policy, and project development expertise. The Clean Coalition drives policy innovation to remove barriers to procurement and interconnection of distributed energy resources (“DER”) — such as local renewables, demand response, and energy storage — and we establish market mechanisms that realize the full potential of integrating these solutions for optimized economic, environmental, and resilience benefits. The Clean Coalition also collaborates with utilities, municipalities, property owners, and other stakeholders to create near-term deployment opportunities that prove the unparalleled benefits of local renewables and other DER.

III. COMMENTS

1. Summary
The development of a successor tariff must encompass all the complexities of the current NEM tariff and its programs, fixing and improving them wherever possible. NEM has a broad range of implications for California’s clean energy goals. This proceeding must address new billing structures, methods to transition to a successor tariff, ways to promote the sustainable growth of renewable resources — particularly in disadvantaged communities (“DAC”) — and the role of customers grandfathered into previous tariffs. The Clean Coalition is confident that the various party proposals submitted will cover each of the aforementioned topics in great detail. We will not complicate the proceeding by adding specific suggestions on the basic structure of the successor tariff. Instead, the proposal we are submitting focuses on a series of important related topics that will fit well with other party proposals. Since NEM is such a broad tariff and includes a number of accompanying programs, honing in on granular details should add to the discussion, ensuring the most efficient allocation of time and the creation of the most effective successor tariff.

- **A Feed-In Tariff (“FIT”) is the most effective method to compensate large NEM systems, particularly those above 1 MW.**

The Clean Coalition offers the example of the Los Angeles Department of Water and Power (“LADWP”) FIT+ Pilot Program to demonstrate the way in which a FIT can commercial and industrial interests use NEM, unlock a previously underutilized market segment. The FIT+ program uses a flat rate combined with Time of Delivery (“TOD”) and seasonal multipliers, compensating behind-the-meter (“BTM”) solar and energy storage (that can be located on either side of the customer meter).

- **Transmission Access Charges (“TAC”) should not be included as a non-bypassable charge in the NEM Successor Tariff.**

In the current NEM tariff, customers are exempt from paying TAC, an important feature that must be included in the Successor Tariff. Assessing TAC to NEM systems would further extend a market distortion, unfairly and artificially suppressing the value of DER by adding a cost of 3¢/kWh. Combined with what will likely be a lower-than-retail rate of compensation in the final version of the Successor Tariff, charging BTM systems for using the transmission system —
when the energy generated never leaves the distribution grid — would be an egregious error and would destroy the economics of many good projects. The cost burden from the inclusion of TAC would fall much more heavily on disadvantaged communities (“DAC”) than non-DAC because wealthier ratepayers are capable of waiting a greater length of time for a return on investment.

- **All facilities involved in NEM-A should receive exemptions from demand charges.**

The NEM Successor Tariff should guarantee that all meters, including the non-primary meters get the full credit for the energy they export, (e.g., the value of energy and demand charges). Currently, only the primary meter acting as the aggregator receives exemptions from demand charges in NEM-A. Ideally, each of the meters participating in an aggregation should be exempt from demand charges. Under an amended NEM-A program, facilities would be compensated with TOD multipliers, solely valuing the energy exported to the grid. Since the Net Generation Output Meter (“NGOM”) creates a time stamp when energy is exported, the credits could either be distributed by the aggregator or spill over to each subsequent meter when the previous one reaches net zero.

- **The successor tariff should value resilience for paired storage.**

Renewable resources with paired storage, in addition to providing timely energy, offer a layer of resilience that is crucial in an era of Public Safety Power Shutoffs (“PSPS”), wildfires, and rolling outages. The Successor Tariff should include an incentive to deploy storage.

- **Overgeneration in preparation for electrification.**

Each of the issues discussed above is relevant under Public Utilities Code (“PUC”) § 2827.1.b subsection 1, 4, 5, or 7. These subsections refer to the sustainable growth of distributed generation, interconnecting large systems, over 1 MW, and the associated charges. For example, a FIT program will apply to systems sized greater than 1 MW, though that need not be the lower threshold for a resource to qualify; the LADWP FIT+ program allows resource 500 kW or larger to participate. Exemptions for TAC, exemptions from standby charges for facilities participating in NEM-A, and incentives for resilience all apply under PUC § 2827.1.b(7), which governs

---

1 § 2827.1.b(5)
differences from normal fixed charges. Finally, including a reasonable allowance for a facility to size a NEM in excess of a present load to prepare for electrification is permitted under PUC § 2827.1.b(1). A Successor Tariff that is inflexible to the needs of the ratepayers who are subject to it would undermine statewide climate policies promoting electrification and inhibit the sustainable growth of distributed generation.

2. Proposal Structure

a. Developing a FIT for large NEM systems

PUC § 2827.1 intended that NEM would also apply to systems with a nameplate capacity of over 1 MW, provided that the project does not “have a significant impact on the distribution grid.” The Clean Coalition believes that this market segment — particularly facilities in the commercial and industrial sector — has been underutilized but has the potential for growth if the correct program is included in the Successor Tariff. The ideal mechanism for compensation is a FIT, patterned after the LADWP FIT+ Pilot Program. The FIT+ compensates standalone BTM solar or BTM solar+storage (interconnected on either side of the meter) for energy exported to the grid with TOD multipliers (that also account for the time of year).

\[ § 2827.1.b(5) \]
Energy at critical peaks is worth 2x the amount as energy during non-peak hours during the Winter/Spring and 3x during the Summer/Fall. Because of the TOD pricing structure, qualifying facilities are incentivized to add energy storage, which benefits the broader distribution grid, adds a layer of resilience, and avoids transmission costs. However, as is the case with NEM, there is a strict requirement that energy from the grid may not be used to charge the storage devices. The current NEM model limits larger facilities, in part because interconnection of energy storage is limited to BTM; shifting to a FIT model maintains the integrity of NEM and the statutory requirements related to minimal distribution upgrades, while offering participants increased design flexibility. Front-of-meter (“FOM”) energy storage also offers unique benefits to the distribution grid, including the potential to increase the hosting capacity of a feeder. The Clean Coalition is developing a FOM merchant energy storage project (with PG&E and the California Energy Commission (“CEC”) in the Mission District of San Francisco that is paired with already-existing BTM solar on a low-income housing project.
Once deployed, the project, called the Valencia Gardens Energy Storage ("VGES"), will increase the hosting capacity of the local feeder by 25%, a feat that would greatly benefit the grid if replicated throughout California via the NEM Successor Tariff. A FIT model ensures that the owner of the energy storage is contractually obligated to provide the stated grid benefits, guaranteeing value to the ratepayers, should the Commission allow storage on both sides of the customer meter to participate in the FIT. In the LADWP FIT+ Program, customers that enroll are required to sign an exclusivity clause, meaning they are unable to sell energy to anyone besides LADWP, a feature that is easily transferable to the NEM Successor Tariff.

To ensure there is no over-compensation, the FIT+ program provides that, “In no event may the total contract price exceed a $250 per MWh average on an annualized basis,” which can be modified to ensure that a qualifying facility is not compensated at an unreasonable rate. A similar requirement can be included in the NEM Successor Tariff to guarantee accurate rates of compensation.

B. Transmission Access Charges should not be included as a non-bypassable charge in the NEM Successor Tariff.

---

3 LADWP FIT+ Pilot Program at 19
It is essential for the future of distributed generation that the NEM Successor Tariff extend the decision in NEM 2.0 to exempt TAC from the list of non-bypassable charges. The way that TAC are currently assessed represents a cost shift that punishes DER with a charge averaging close to 3¢/kWh, making centralized generation appear much more cost effective than it really is. If assessed to NEM projects, TAC would almost completely nullify the wholesale rate used for compensating excess NEM credits.

Existing transmission costs, assessed as TAC and currently averaging 2¢/kWh, should be added to the cost of remote generation that requires use of the transmission grid to get energy from where it is generated to where it is used, which is almost always on the distribution grid where people live and work. Future transmission investments, currently averaging 2.5¢/kWh in the evenings, can be avoided via dispatchable local generation, and that value should reduce the evaluated cost of local generation. When correctly considering ratepayer impacts of transmission costs, dispatchable local generation provides an average of 4.5¢/kWh of better value to ratepayers than is currently assumed in the majority of instances.

As demonstrated by the figure above, there is simply no reason that BTM generation should be charged for using the transmission system. The current NEM Tariff (NEM 2.0) does not include TAC in the list of non-bypassable charges, which would make it all the more dangerous if the Successor Tariff (NEM 3.0) reversed that decision, further perpetuating the TAC cost-shift by increasing all NBCs by 3¢/kWh. In combination with a compensation rate for energy that is being lowered, raising NBCs with the inclusion of TAC would have a disastrous impact on the sustainable growth of renewable resources. After all, increased project costs lengthen the time before capital expenditures are recouped, delaying the amount of time before NEM bill savings have a meaningful effect. The result is that DAC — whose electricity bills make up a greater
portion of their monthly income — will be hit harder than wealthier communities.

C. All facilities involved in NEM-A should receive exemptions from demand charges.

With a changing rate for the compensation of energy, NEM-A projects should be exempt from demand charges, providing equity to all participants and simplifying the compensation process to focus on the true value of energy. Currently, only the primary meter is exempt from demand charges, with the other participating meters only receiving the value of energy. More customers would utilize NEM-A if all the meters were exempt from demand charges and projects were compensated at the true value of energy. The change would allow the aggregator to distribute credits equitably or charge correctly after credits were applied, starting at the primary meter and overflowing to each subsequent meter when the previous one filled up.

D. The successor tariff should value resilience for paired storage.

The Clean Coalition believes that the NEM Successor Tariff should incentivize paired storage, which provides the greatest number of grid benefits, through an up-front payment for resilience. With the addition of existing subsidies like SGIP, this would help maximize the benefits NEM customers provide the grid and increase the deployment of renewable resources, especially in DAC.

E. The Successor Tariff should allow for overgeneration in preparation for electrification.

The current NEM tariff requires the sizing of systems to match the load (or expected load). Due to the increased demand for net zero infrastructure and electrified transportation, expected loads will sharply increase. Because it is unrealistic that facilities will deploy renewable resources multiple times as loads increase, it is reasonable that the NEM Successor Tariff include a pathway to allow for overgeneration for facilities that will contractually agree that it is for the purposes of meeting an increased load due to electrification.

IV. CONCLUSION

The Clean Coalition appreciates the opportunity to submit this proposal.

/s/ BEN SCHWARTZ