



## MEMORANDUM

**TO:** LGSEC Members

**FROM:** Jody London, Regulatory Consultant

**SUBJECT:** Status Update on CPUC Net Energy Metering Proceeding (R.14-07-002)

**DATE:** August 14, 2015

This memo provides a summary of proposals submitted August 3 for the next iteration of the Net Energy Metering (“NEM”) tariff, and recommends issues the LGSEC should address in responses due September 1. The Legislature in AB 237 directed the California Public Utilities Commission (“CPUC”) to develop a new NEM tariff, which must be in place by mid-2017. I will be working with the Distributed Generation Committee on the response; please let me know if you’d like to be part of that effort.

### Overview of Proposals

Earlier this year, the CPUC completed work on a “[public tool](#)” that is supposed to help parties look at options for the new NEM tariff. The tool is quite complex, with 18 scenarios, numerous spreadsheets for each scenario, and hundreds of inputs. Parties were invited to submit proposals on how to modify the public tool on August 1. The CPUC will take comments and reply comments on those proposals before issuing a Proposed Decision, probably this fall, for the final NEM successor tariff.

There are two main approaches from parties for the next generation NEM tariff. The San Francisco Chronicle published a very helpful [summary of the debate](#) earlier this month. One approach is the utilities, who believe that customers with solar panels are not paying enough to maintain the electricity grid. The utilities want to introduce monthly system-access fees, a monthly grid-use charge, a time-of-use rate for electricity that NEM customers buy from the utility, and a 4 cent/kwh price for electricity that NEM customers export to the grid from their solar installations. Currently, NEM customers are able to use the electricity they generate, and sell any excess to the utility at the current retail rate. Those sales are credited back to the customers annually. The utility approach, with reduced compensation and additional charges, would alter the economic case for customers to install solar. The utilities argue they need the additional charges so that customers are carrying their fair share of system costs, and those without solar are not subsidizing those who have installed it.

The other approach is from the rooftop solar community, which wants to maintain the current NEM tariff as much as possible. The California Solar Energy Industry Association (“CalSEIA”), collaborating with the Sierra Club, the Solar Energy Industry Association (“SEIA”) and VoteSolar emphasize that the federal investment tax credit (“ITC”) is supposed to sunset in the near future, and changing the NEM tariff could have deleterious effects on the distributed solar market while it is still developing (they note that rooftop solar is at 5% penetration currently). These parties want the current tariff to continue as a tariff, and not shift to a contract between the utility and the customer, which they argue is more cumbersome to access.

These parties describe non-energy benefits that should be included in the CPUC’s analysis. Because I know they will be of interest to you, I’m listing them here:

- Carbon emission reduction benefit of \$36 per ton of CO<sub>2</sub>eq, based on the findings of the federal Interagency Working Group on Social Cost of Carbon.
- Particulate matter emission reduction benefit of \$183.91/lb, based on the U.S. EPA’s “Emission Factors and AP 42, Compilation of Air Pollutant Emission Factors.”
- NO<sub>x</sub> emission reduction benefit of \$23.69/lb stemming from the contribution of NO<sub>x</sub> to formation of both ozone and PM-2.5, based on an analysis from U.S. EPA published in June 2014.
- Avoided water use benefit of \$0.0007/kWh of reduced thermal generation, using research from the CEC and E3 to measure the future increase in the cost of water availability.
- Reliability and resiliency benefit of \$0.022/kWh of distributed generation output, recognizing that preventing outages is valuable to commerce, that energy storage will become an important tool in preventing outages, and that a strong solar market is essential to the development of energy storage.
- Land use benefit of \$0.002/kWh of distributed generation output, based on research from the National Renewable Energy Laboratory and the U.S. Department of Agriculture on the value of land used by utility-scale solar plants.

The Sierra Club supports shifting the actual NEM tariff to be based on time-of-use, rather than a flat rate.

CalSEIA also suggests that in the multi-family sector, properties with multiple buildings on them should be allowed to offset consumption in one building against consumption in another on that site. Similarly, the California Farm Bureau Federation supports a specific NEM rate for agriculture that allows aggregation across multiple parcels of property and accounts operated by the same entity. The Federal Executive Agencies argue that separate installations on a single premise such as a military facility should be able to be designated as separate eligible customer-generators under the NEM successor tariff/contract, regardless of whether such installations are associated with a single customer account or are located behind a single utility delivery point.

The Natural Resources Defense Council (“NRDC”) favors keeping NEM as a tariff rather than a contract, as this provides administrative advantages. NRDC urges the CPUC to avoid fixed charges, which it believes are not in keeping with the objectives of the Loading Order. NRDC supports NEM customers contributing to public purpose programs based on gross total consumption of electricity. NRDC also proposes to modify the residential NEM tariff to include a seasonal demand-differentiated charge combined with a seasonal time-of-use rate, noting that both elements are in place today for other rate classes and residential customer opt-in programs

Ratepayer groups are concerned about cost shifting. The Office of Ratepayer Advocates (“ORA”) notes that costs for PV solar technology have not been passed on to ratepayers. Also, the NEM tariff is based on electricity costs instead of solar costs. ORA proposes continuing the current tariff at the full retail rate, and adding an extra fee for customers who interconnect after the utility reaches its 5 percent cap or July 2017, whichever comes first. This fee should be based on the installed capacity cost of the generating unit. Revenues from the fee would be credited to residential electric customers. Under ORA’s proposal, the fee would increase as NEM capacity increases for each utility.

The Utility Reform Network (“TURN”) suggests a tariff that would charge NEM customers for total gross consumption under current retail rates, then provide them bill credits for electricity they generate based on the value of the generation to the utility and customers who do not have solar. TURN also suggests a distributed generation adder that would be collected through rates.

The California Environmental Justice Alliance calls for creating an Environmental Justice Net Energy Metering Tariff (“EJ-NEM”). This tariff would allow customers in disadvantaged communities to receive a bill credit under a 20-year contract that is set at the average residential retail rate. The group believes this is necessary because the current NEM program compensates many low income customers who generate their own electricity at a significantly lower rate, due to these customers receiving a bill credit at the retail rate paid by the individual customer. CEJA also proposes a virtual EJ-NEM for customers who can’t site an installation on their roof, for whatever reason.

Similarly, Everyday Energy, a company that provides renewable energy options to low-income affordable housing properties located throughout California, proposes revising the options in the Staff Proposal to reach low-income residential markets in disadvantaged communities that have not been adequately served by the California Solar Initiative. In particular, they note that the vast majority of low-income multifamily tax credit properties are located outside of disadvantaged communities as defined in the staff white paper, and suggest revising the criteria to reflect this and induce great participation. Everyday Energy suggests maintaining low-income Virtual Net Metering tariffs (“VNM”) and expanding VNM to market-rate housing within targeted disadvantaged communities. They also recommend allowing PV systems to be

sized to serve the full aggregated annual load of all benefitting customer accounts, and developing new program options that can better address split incentives and the loss of the investment tax credit.

### Recommended LGSEC Advocacy Points

Below are my recommendations for comments the LGSEC will submit on September 1. These are of course suggestions, and I welcome your ideas.

As a foundational matter, we will want to point out that local government climate action plans and other policies increasingly include distributed generation. Local governments can bring to bear a range of tools to encourage investment in distributed generation, including Property Assessed Clean Energy programs, policies, zoning. The CPUC must be mindful of the ambitious goals set by Governor Brown, which local governments take very seriously. We concur with the non-energy benefits suggested by CalSEIA, et al.

The tool is complex. We appreciate that the CPUC is trying to provide information upfront to parties as a way to look at the tool. And yet, the tool itself is so complex that only a few parties with significant resources had the capacity to perform the analysis. This limits the information the CPUC is receiving and diminishes the breadth of debate and discussion. Before the Commission adopts anything, it should develop a much simpler model, one that perhaps looks at the impact of the different proposals received on August 1, and take that on the road and/or set up an online site where the public can look at what the different options would mean for them. This would have to be a much simpler model. If the goal for California is to significantly increase the amount of renewable energy, we have to figure out how to make these issues accessible to many more people.

The LGSEC is interested in seeing more people who live in multi-family residences have access to solar power. We encourage the CPUC to explore the suggestions from CEJA and Everyday Energy. We appreciate the data from Everyday Energy about many low-income multi-family housing units being located in areas not currently considered "disadvantaged."

As utility customers ourselves, local governments have installed, and continue to install, distributed generation on our own facilities. We undertake these investments of public funds with due diligence, recognizing the long-term nature of the investment and the payback. We are therefore interested in a customer-friendly tariff that pencils out. The multiple fees proposed by the utilities, as well as the lower compensation rate, would make solar a less attractive investment of public funds.

Similarly, we are concerned that the utility proposals, and those from ORA, would render solar a less attractive investment for our constituents. Particularly for residential customers, who

will also be paying a minimum bill every month under the new rates approved by the CPUC last month, this could have a detrimental effect on individual solar installations.

Please contact me with any questions or comments.