January 13, 2022

Malaga County Water District

Re: Addition to the Agenda of the Board of Directors Special Meeting of January 13, 2022

The following supplement to the agenda of the regular meeting of the Board of Directors on January 13, 2022 is submitted for consideration:

<u>Recommended action:</u> To include the additional item to the agenda.

Motion by: _____; Second by: _____.

4. Old Business:

d. Sitelogiq. A discussion about solar services for the district.

Recommended action: For discussion and potential action.

Motion by: _____; Second by: _____.



NEM 3.0 Update for MUSH Market

January 3, 2022

Summary

The California Public Utilities Commission (CPUC) released its <u>Proposed Decision</u> (Decision) for its newest Net Energy Metering (NEM 3.0) tariff on December 13th, 2021. The proposal will bring dramatic changes to Net Energy Metering program that will significantly reduce the value of solar PV energy. The Decision could be approved as soon as January 27, 2022, with the new NEM 3.0 tariff becoming effective approximately four months later. This NEM 3.0 tariff will only apply to the customers of the three regulated utilities, Pacific Gas & Electric (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDGE).

NEM 3.0 will result in a steep reduction in the value of energy produced by municipal, university, school, hospital (MUSH) and commercial solar PV systems in California, on the order of 15 to 50 percent. Those impacted will include current solar PV systems grandfathered under NEM 1.0 or 2.0 who would see their grandfathering decreased from 20 to 15 years, transitioning them to NEM 3.0 sooner than anticipated. This would greatly affect the economics of those legacy systems since their systems still have plenty of life and many may still be paying off loans and power purchase agreements (PPAs). The Decision would also affect customers who want to expand their systems, which would bump them to NEM 3.0.

Due to the loss of value associated with NEM 3.0, any planned or anticipated California solar project should do everything possible to be grandfathered under the current NEM 2.0 rules. The following must be done to <u>safely</u> grandfather a solar project under NEM 2.0:

- 1. By January 27, 2022 Choose a solar design and submit an interconnection application
- 2. By May 27, 2022 Execute a construction or financing (i.e. Power Purchase Agreement) contract with your preferred contractor.

The NEM 3.0 proceeding is not a foregone conclusion. While the Decision was released on December 13, that started a minimum 30-day public comment period. Due to CPUC Commission meeting schedule, the earliest the Decision could be adopted by the CPUC would be January 27, 2022. This leaves 47 days for the public to comment on the proceeding and the CPUC to make changes to the DECISION or for one of the commissioners to introduce an Alternate Proposed Decision. We encourage you to make your voice heard by submitting letters to the CPUC.



Impacts of NEM 3.0 on Solar PV Energy Value

Depending on the customer's existing rates, usage pattern, location, and the final NEM 3.0 rate structure, the customer could see a mild to dramatic loss to the solar PV energy value. The impact is greatly influenced based on the amount of solar energy the customer would export back to the utility and the time of day and season that export is taking place. This will be especially hurtful to schools and universities that are not in session during the summer months when the solar is producing the greatest amount of energy. SitelogIQ completed some modeling for a typical commercial, municipal, or hospital customer assuming a 90% annual offset of their energy load with operations during the summer months. As shown in the graph below, those customers would see a loss in solar energy value of 15% - 30%



* Represented sample of systems installed in SDG&E, PG&E, and SCE. Results may vary.

K-14 Schools and Universities, under the similar design conditions, would see a much greater loss in the value of solar energy with losses of 25% - 50%.





* Represented sample of systems installed in SDG&E, PG&E, and SCE. Results may vary.

The Decision states that the CPUC is trying to incentivize solar-plus-storage systems by reducing the value of solar energy exported to the grid. This means solar-only systems will have to be much smaller to maximize the value of solar negating any cost efficiencies of scale and/or higher installed costs. Unfortunately, the Decision does not propose any incentives or tariff changes that would improve the economics of installing energy storage systems. Therefore, it is unclear how NEM 3.0 will incentivize solar-plus-storage.



* Represented sample of systems installed in SDG&E, PG&E, and SCE. Results may vary.



The impact is much more pronounced in school and university installation due to the reduced demand in the summer.



* Represented sample of systems installed in SDG&E, PG&E, and SCE. Results may vary.

The steep reduction in solar energy value will make it much more challenging for smaller PV systems to provide positive financial returns. Especially in school and university installations.

Proposed NEM 3.0 Tariff Structure

It should be noted that the Decision now wants to refer to this new tariff as the "Net Billing" tariff, rather than the term NEM 3.0 that we used throughout this document. This new term helps paint a clearer picture as to how the successive tariff will be applied.

The CPUC proposes to decouple the retail rate of electricity from the value of exported solar energy by instead using the Avoided Cost Calculator (ACC) to determine the compensation to customers for all exported solar energy. The ACC rate can be described as cost for the utilities to otherwise generate or procure the electricity at any given time. In practice, the ACC rate varies by hour, by month, by climate zone, by utility, and whether it is a weekend or holiday versus a weekday. While this could result in thousands of different compensation rates with large ranges of values, the Decision proposes to lock in the calculated ACC rate at the time of installation for the first 5 years. After this time, the ACC rate will be calculated and applied in January of each year. It should be noted that the average ACC rate proposed for 2022 is expected to range between \$0.05/kWh - \$0.06/kWh depending on the variables discussed above. This results in a 50% - 80% reduction in the value of exported solar energy as compared to NEM 2.0.



Timeline and Grandfathering

The Proposed Decision was released on December 13, 2021, with the final vote on the Decision scheduled for January 27, 2022. The new tariff will take affect approximately four months after the final vote.

If a customer is planning a NEM solar project in PG&E, SCE, or SDG&E territory in the next two years or so, we advise they submit an interconnection application prior to January 27, 2022 to secure NEM 2.0 for the project. The customer must also have a signed installation, lease, or PPA project contract by the sunset date of NEM 2.0 (currently May 27, 2022) to guarantee this grandfathering. The customer should have up to two years to complete the construction of the system. This leaves little time for customers to act.

The Decision also changed the length of time both new and existing NEM 1.0 and NEM 2.0 projects could be grandfathered. The length of time has been reduced from 20 years down to 15 years from the date of initial operation. This could affect the economics of many of the solar installations that we have installed for customers the last 15 years.

Questions and Answers

Q: How can I guarantee my system gets grandfathered on NEM 2.0?

A: Work with SitelogIQ to submit an interconnection application before January 27, 2022 and enter a contract to install the system by May 27, 2022.

Q: Do I need to use the same contractor for both the interconnection application and installation contract?

A: While the Decision did not specifically require the same contractor be used for both the interconnection application and installation contract, it is recommended that the customer do so. The Utilities have been requiring customers to submit new interconnection applications when there are significant changes to the system components or design. Since contractors use different equipment and designs, it is recommended to recommended to use the same contractor. If you must use different contractors, we recommend that you apply for a larger system size in the interconnection application. You can always reduce the system size with having to re-apply. But you cannot increase it.

Q: What can I do to prevent or fight against NEM 3.0 from getting approved?

A: You can get involved with a pro-solar advocacy group or submit a written letter or public comment on the CPUC website. Below are some links.

CPCU Public Comments : <u>https://www.cpuc.ca.gov/nemrevisit</u>



The main pro-solar advocacy groups are the <u>Solar Energy Industries Association</u> (SEIA), state operations such as the <u>California Solar + Storage Association</u> (CalSSA), the <u>Smart Electric Power Alliance</u> (SEPA), <u>Vote Solar</u>, <u>Citizens for Responsible Energy</u> <u>Solutions</u>, and the <u>Environmental Law and Policy Center</u>, among others.

References

- 1. "NEM 3.0 Update No. 4" published by Sage Energy Consulting, December 16, 2021, <u>https://www.sagerenew.com/nem</u>
- 2. CPUC proposed decision, <u>https://www.cpuc.ca.gov/nemrevisit</u>