

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

Order Instituting Rulemaking Regarding Policies,
Procedures and Rules for the California Solar
Initiative, the Self-Generation Incentive Program And
Other Distributed Generation Issues.

Rulemaking 12-11-005
(Filed November 8, 2012)

**COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE
ON ASSIGNED COMMISSION'S RULING REGARDING THE ESTABLISHMENT
OF A NET ENERGY METERING TRANSITION PERIOD**

Donald C. Liddell
DOUGLASS & LIDDELL
2928 2nd Avenue
San Diego, California 92103
Telephone: (619) 993-9096
Facsimile: (619) 296-4662
Email: liddell@energyattorney.com

Counsel for the
CALIFORNIA ENERGY STORAGE ALLIANCE

December 13, 2013

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies,
Procedures and Rules for the California Solar
Initiative, the Self-Generation Incentive Program And
Other Distributed Generation Issues.

Rulemaking 12-11-005
(Filed November 8, 2012)

**COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE
ON ASSIGNED COMMISSION’S RULING REGARDING THE ESTABLISHMENT
OF A NET ENERGY METERING TRANSITION PERIOD**

The California Energy Storage Alliance (“CESA”)¹ hereby submits these comments pursuant to the *Assigned Commission’s Ruling Regarding the Establishment of Net Energy Metering, Transition Period*, issued on November 27 2013 (“ACR”).

I. INTRODUCTION.

Net Energy Metering (“NEM”) tariffs are integral to the financing, development, and operation of many renewable resources, particularly behind the meter solar PV. With the California Energy Commission’s (“CEC’s”) recent determinations in its Renewables Portfolio

¹ The California Energy Storage Alliance consists of 1 Energy Systems, A123 Energy Solutions, AES Energy Storage, Alton Energy, American Vanadium, AU Optronics, Beacon Power, Bosch Energy Storage Solutions, Bright Energy Storage, BrightSource Energy, CALMAC, Chevron Energy Solutions, Christenson Electric Inc., Clean Energy Systems Inc., CODA Energy, Deeya Energy, DN Tanks, Duke Energy, Eagle Crest Energy, EaglePicher, East Penn Manufacturing Co., Ecoult, Energy Cache, EnerSys, EnerVault, FAFCO Thermal Storage Systems, FIAMM Group, FIAMM Energy Storage Solutions, Flextronics, Foresight Renewable Systems, GE Energy Storage, Green Charge Networks, Greensmith Energy Management Systems, Growing Energy Labs, Gridtential Energy, Halotechnics, Hecate Energy LLC, Hydrogenics, Ice Energy, Innovation Core SEI, Invenergy, K&L Gates LLP, KYOCERA Solar, LightSail Energy, LG Chem Ltd., NextEra Energy Resources, NRG Energy, OCI Company Ltd., OutBack Power Technologies, Panasonic, Paramount Energy West, Parker Hannifin, PDE Total Energy Solutions, Powertree Services, Primus Power, RedFlow Technologies, RES Americas, S&C Electric Co., Saft America, Samsung SDI, Sharp Labs of America, Silent Power, SolarCity, Sovereign Energy Storage LLC, Stem, Stoel Rives LLP, Sumitomo Corporation of America, TAS Energy, Tri-Technic, UniEnergy Technologies, Xtreme Power, and Wellhead Electric Co. The views expressed in these Comments are those of CESA, and do not necessarily reflect the views of all of the individual CESA member companies. <http://storagealliance.org>

Standard Eligibility Guidebook (“RPS Guidebook”)² that clarify circumstances when an energy storage device is an “addition or enhancement” to a renewable generation facility, NEM tariffs are also increasingly being applied to energy storage resources. Developers of renewable generation and paired energy storage require certainty of costs, revenues, and tariffs to effectively plan and finance their development. Accordingly, CESA recommends that the NEM tariff that applies to an energy storage system be based on whatever regime applies to the renewable facility to which it is an addition or enhancement, as defined by the RPS Guidebook. Because, in these circumstances, the energy storage device is in effect a component of the renewable generating facility, consistent treatment is reasonable from a common sense perspective, as well as for purposes of reducing administrative complexity and enhancing customer understanding. Assuming this approach is taken to determine what NEM regime applies to energy storage systems that are additions or enhancements pursuant the RPS Guidebook, CESA also supports the position of various parties, including the Solar Energy Industries Association, the Vote Solar Initiative, and the Alliance for Solar Choice regarding how grandfathering should be applied to NEM-eligible systems and the term of grandfathering, specifically that all systems deployed by the earlier of the NEM cap being reached or July 1, 2017, should be grandfathered under the current NEM rules for the life of the renewable generating system. This will promote certainty in costs and revenues for financing purposes, which will spur development and installation of NEM-eligible generation resources. This will also provide further certainty for the financing of the energy storage device and its paired NEM-eligible resources, and will provide fair treatment for each of the components, additions, and enhancements.

² *Renewables Portfolio Standard Eligibility Guidebook, 7th Edition, Section G,*(p. 64); <http://www.energy.ca.gov/2013publications/CEC-300-2013-005/CEC-300-2013-005-ED7-CMF.pdf>

II. THE COMMISSION SHOULD BASE NET ENERGY METERING TARIFF EXTENSION ON THE SYSTEM LIFE OF THE ELIGIBLE RESOURCE.

Certainty in costs and revenues for NEM-eligible facilities is integral to their financing and development. Many financing schemes for these facilities are executed over extended timeframes, and rely on accurate and confident cost projections to be executed cost-effectively or at all. Accordingly, CESA urges the Commission to provide an extension of NEM tariffs for resources interconnecting before the NEM cap is reached or July 1, 2017, for the life of the NEM-eligible renewable facility or “system life”. Basing NEM tariff extensions on other characteristics (*i.e.* warranty life of specific components) will inject uncertainty and additional complexity into future finances for such resources, with significant consequences for financing, project viability, and development. Basing NEM tariff extensions on other characteristics would also create significant administrative complexity and variability in how different systems and customers are treated given variability in elements such as contract term or system warranties.

However, should the Commission determine that system life is not a reasonable basis for determining the grandfathering period, CESA believes that a period of time that is consistent with contract terms of the NEM facility that prevail in the market should be used, given the fundamental importance of ensuring that customer investments, and their reasonable expectations regarding those investments, are not undermined. A significant diminution of these benefits would have substantial impacts and potentially undo much of the progress that has been made to date in making distributed generation accessible to a broader cross-section of customers to the degree it puts at risk the certainty of the revenue streams on which financing depends. Given the substantial role that third-party owned systems play in the distributed generation market, particularly in the case of solar, any grandfathering period needs to be set to ensure that

the value of the contracts on which customer decisions and financing were predicated are not adversely impacted.

III. TARIFF EXTENSIONS SHOULD APPLY TO THE ENTIRE RENEWABLE FACILITY INCLUDING ANY ADDITIONS OR ENHANCEMENTS OF SUCH FACILITY.

CESA urges the Commission to apply any NEM tariff extensions as those that apply to the primary, NEM-eligible resource to all components of the system, including any additions or enhancements to the NEM-eligible resource, as defined in the RPS Guidebook, including paired energy storage resources. This will simplify NEM implementation and will provide further certainty of costs, revenues, and tariffs for all resources, especially considering that the operation and finances of paired resources are interdependent. Further, this would provide fair treatment for all components, additions, and enhancements, including paired energy storage resources.

IV. RESPONSES TO SPECIFIC QUESTIONS POSED IN THE ACR

CESA provides the following responses to the questions posed in the ACR. These are primarily enhancements and clarifications to sections II and III above.

1) How long should customers who take service under a NEM tariff prior to the earlier of July 1, 2017, or the attainment of their respective utility's NEM, be guaranteed to receive the NEM tariff currently in place? Is this proposed transition period related to a reasonable expected payback period, expected system life, or some other factor?

Customers who take service under a NEM tariff should be guaranteed to receive the benefits of the NEM tariff currently in place for the system life of the NEM-eligible resource. This approach is unambiguously supported by the Governor as reflected in his signing message for Assembly Bill 327 which states:

“As the CPUC considers rules regarding grandfathering of net metering customers, I expect the Commission to ensure that customers who took service under net metering prior to reaching the statutory net metering cap on or before

July 1, 2017, are protected under those rules for the expected life of their systems.”

This approach is appropriate and reasonable because it achieves two key objectives. First, it ensures that customers will be able to realize the benefits they had a reasonable expectation of receiving when they purchased or entered into a contract for the services provided by a NEM facility. Second, because expected system life is likely to be a more uniform number across customers as compared to contractual term, system warranty length, or other factors, it ensures consistent treatment across systems and customers, reducing administrative complexity and enhancing customer understanding. It is important to recognize that financing structures for NEM-eligible resources are reliant on certainty of costs and revenues, including those from related tariffs. Certainty directly leads to the opening up of financing opportunities and gives resource developers the necessary confidence to undertake projects. Indeed, over 75% of new solar PV projects rely on outside financing (as opposed to being funded purely by customer investment), and financing for more nascent technologies such as energy storage is highly influenced by confidence in cost and revenue projections.

For these reasons, CESA supports a NEM guarantee timeline based on the system life of the primary NEM generating facility/technology. However, to the extent the Commission does not pursue this approach, then as an alternative, the grandfathering term should be based on a reasonable estimate of the contract terms that prevail in the market for distributed generation. In the context of customer side solar energy solutions, CESA’s understanding is that the contractual terms are often on the order of 20 years or longer, featuring options to extend an agreement to as long as 30 years. Rather than varying the grandfathering term across systems based on how they are financed and paid for, a single uniform grandfathering period that is sufficiently expansive to ensure that the reasonable expectations of customers and investors that provide financing are not

undermined would be an acceptable approach. Thus a 25 to 30 year grandfathering period seems reasonable for all systems until the NEM cap is reached or July 1, 2017.

Additionally, customers on existing NEM tariffs should have the option of moving to a new NEM equivalent without penalty. The grandfathering of existing NEM tariffs is beneficial because of the confidence it gives financiers and developers; however, it is also being instituted specifically because of uncertainty regarding future tariffs. Customers who choose to enter NEM tariffs before the NEM cap is reached or July 1, 2017 should not be penalized relative to those who enter after that date if subsequent tariffs are more favorable.

2) Should calculation of the reasonable expected life of a system based on the warranty of 10 years as required by California Publ. Util. Code §387.5(d)(4), or should other factors, such as the Original Equipment Manufacturer’s warranty, be taken into account?

As stated above, CESA recommends that system life be based on the expected system life of NEM facilities, which can reasonably be in the 25-30 year timeframe.

3) Should the reasonable expected life of a system begin on the date of interconnection or some other project milestone?

Reasonable system life should begin on the date of interconnection.

4) What is a “reasonable expected payback period?” Does a reasonable expected payback period for customer-owned systems differ by customer sectors such as residential, commercial, or school and other governmental websites? Does the expected payback period vary with system size or other factors?

Consistent treatment across customer segments and systems is a key objective that should be met by the grandfathering provisions. As the question implies, this is likely to vary not only by segment but by individual customer. As a result, an administratively determined “reasonable payback period” will result in rough justice given different customers’ investment expectations. CESA submits that the only thing that can be stated with certainty is that customers that choose to pursue solar under the current NEM regime have elected to make that investment given their

reasonable expectations of the benefits those systems provide under the existing framework. It is impossible to know if those customers would have made the same decision if the state, after the fact, administratively limits their access to the current regime on which those decisions were predicated. For these reasons, CESA does not believe the Commission can establish a “reasonable expected payback period” nor should such an approach serve as the basis for the term of the grandfathering provisions.

5) Should the addition of solar panels or other modifications to an existing renewable electrical generation facility that increase its generating capacity occurring on or after July 1, 2017, be eligible for the NEM transition program? If not, how should such modifications be treated?

CESA has no comment on modifications that increase generating capacity occurring on or after July 1, 2017. However, CESA urges the Commission to base any NEM tariff extension timeline on its decided methodology for the primary NEM-eligible generating facility only. The characteristics of any other components, additions, or enhancements, including but not limited to paired energy storage devices meeting the RPS Guidebook definition of an “addition or enhancement,” should not be used to calculate the NEM extension for either the generating facility or its components. Paired energy storage resources meeting the RPS Guidebook definition of an “addition or enhancement” to NEM-eligible generating resources are therefore a component of the overall NEM-eligible generator. The replacement or upgrade of paired energy storage devices should therefore be treated the same as the replacement of any other component of the generator - and, accordingly, not impact the tariff extension for the NEM generator, the paired energy storage resource, or the storage resource’s replacement. For example, typical string inverters for photovoltaic systems are provided with a 10-12 year life, while the useful life of the overall PV system is approximately 30 years. So any solar PV revenue forecast

incorporates an inverter swap at year 12 as part of the cost. Storage in this sense is no different than a string inverter and should be treated accordingly.

V. CONCLUSION.

CESA thanks the Commission for the opportunity to submit these comments on the ACR.

Respectfully submitted,



Donald C. Liddell
DOUGLASS & LIDDELL

Counsel for the
CALIFORNIA ENERGY STORAGE ALLIANCE

December 13, 2013