

NEM Successor Tariff/Contract Proposals
Initial Summary
August 4, 2015

As part of the implementation of AB327 (Perea 2013) parties to the NEM Successor Tariff/Contract rulemaking (R14-07-002) submitted NEM successor proposals yesterday, August 3, 2015. Sixteen parties submitted proposals, including three solar party proposals from SEIA, CalSEIA, and the Alliance for Solar Choice (TASC).

AB327 included a number of electric sector policy changes including recently-concluded residential rate reform and the development of investor-owned utility distributed resource plans (DRPs). In exchange for a permanent removal of the investor-owned utilities' net-metering cap, the Public Utilities Commission was ordered to create a net-metering successor tariff or contract. The proceeding developing the contract must be completed by December 31st 2015 and the new tariff or contract will go into effect in each utility service territory once a utility reaches 5% of aggregated customer peak demand or July 1st, 2017, whichever comes first. Statute requires that the successor contract or tariff adopted by the Commission meets the following conditions:

- 1) Ensure that customer-sited renewable distributed generation continues to grow sustainably ("sustainable growth");
- 2) Ensure that the successor tariff is based on the costs and benefits of the renewable electrical generation facility; and
- 3) Ensure that the total benefits of the tariff to all customers and the electrical system are approximately equal to the total costs

In addition to a NEM successor, the Commission was directed to come up with alternative mechanisms for increasing distributed renewable energy generation in disadvantaged communities.

In the proposals submitted yesterday parties outlined proposed successor tariffs and measured them against the aforementioned standards set by AB327. Each party used the "Public Tool", a large and complex excel-based model, to model their proposal over the period 2017-2025. The Public Tool allowed for a range of policy scenarios, rate designs, market projections, and other user-defined assumptions. Based on these assumptions and the successor tariff, the Public Tool yields a number of outputs including a projection of PV system deployment and cost-benefit analyses tests from the Standard Practices Manual, including the Societal Cost Test (which includes a range of societal and environmental benefits), the Total Resource Cost Test (which weighs costs and benefits across all ratepayers), and the Ratepayer Impact Measure (which weights costs and benefits specifically for ratepayers not participating in a program, in this case NEM or its successor).

The table appended to this memo provides an initial summary of the proposals by non-solar parties in comparison to SIEA's proposal. This analysis summarizes: 1) the NEM successor proposal of each party including a summary of the proposed tariff/contract design, 2) the party's proposed standard for achieving "sustainable growth" under the successor tariff/contract and the deployment they model under their proposal, and 3) their proposed standard for ensuring that costs and benefits to ratepayers are "approximately equal". For this analysis we're excluding summaries of proposals for disadvantaged communities and thus parties that only submitted proposals on that portion of the rulemaking. Also excluded from this summary is the California Farm Bureau Federation's comments which only addressed Net Energy Metering Aggregation.

Party	Summary of the Party's proposal	How the party defines "sustainable growth" and the deployment the party projects under its proposed tariff/contract over the 2017-2025 period	How the party proposes that the tariff/contract ensure costs and benefits to all ratepayers are approximately equal and how the party's proposal fairs against this metric
Solar Energy Industries Association	SEIA's proposal is to continue NEM at the full retail rate	SEIA defines a conservative measure for sustainable growth of at least the same year-over-year increase in capacity as the previous year. SEIA's modeling projects 8,000 MW using the Public Tool and argues that this figure is low for meeting the sustainable growth definition and thus highlights the risk of transitioning to untested tariffs or contracts	SEIA argues that the Total Resource Cost test is the appropriate measure given the plain meaning of the statute's requirement that "costs and benefits to <i>all</i> ratepayers are approximately equal". However, SEIA does model its proposal against a number of cost-benefit tests, including the Ratepayer Impact Measure on which it scores in excess of 1.0 (i.e., costs and benefits for non-NEM customers are equal)
Federal Executive Agencies (FEA)	FEA proposes a continuation of net energy metering at the full retail rate with no new standby charges, fixed charges, or nonbypassable charges . FEA focuses much of its filing proposal on issues related to systems over 1MW.	FEA states that deployment will "more than double" from 4,000MW in 2017 to 10,000MW in 2025 though its hard to fully understand their projections based on the summary tables they provide.	FEA supports the TRC as the core test for analyzing cost/benefit of NEM, but that RIM should be used as a complementary test to "ensure that accompanying rate impacts are not too severe". FEA's modeling yields a TRC slightly above 1 and a RIM score of approximately .5

<p>Natural Resources Defense Council (NRDC)</p>	<p>NRDC proposes a modification of the current NEM program, with a seasonal demand-differentiated charge combined with seasonal time-of-use rates. NRDC is opposed to fixed charges, but supports a demand charge to cover T&D infrastructure costs. Their proposal would set the demand charge based on an average of the two-highest 15-minute capacity periods over a billing period and with a flat fee based on the size of the system.</p>	<p>NRDC's modeling shows 11,700MW to 13,200 MW</p>	<p>In previous comments, NRDC had argued that the Total Resource Cost test was the appropriate measure for assessing the costs and benefits of a successor tariff/contract, but now they're arguing that all tests in the Standard Practices Manual should be used.</p>
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<p>Office of the Ratepayer Advocate</p>	<p>The Office of the Ratepayer Advocate (ORA) argues that NEM is flawed because 1) it doesn't pass on solar cost savings to ratepayers as solar costs decline and 2) provides a "perverse" incentive since NEM compensation increases as rates rise. As a result they continue NEM at the full retail rate but impose an Installed Capacity Fee (ICF) based on the installed capacity of the system. The ICF is phased in with increasing fees as capacity installations achieve specific milestones. Specifically the ICF begins after the utilities reach their 5% NEM cap or July 1st 2017, with a \$2/kw/month charge. Once penetration levels reach 6% of utility's aggregate customer peak demand the charge will rise to \$5/kw/month. At a penetration level of 7% of aggregate customer peak demand the fee will rise to \$10/kw/month. Customers are locked in to their charges at their initial ICF rate for 10 years and then they transition to the current ICF at the end of the 10 year period. The revenues generated by the ICF would be credited back to all ratepayers through the utilities' general rate cases.</p>	<p>ORA argues that they don't need to test their proposal against the standard because the ICF is based on DG penetration. ORA models between 11,000 and 16,000 MW of installations.</p>	<p>Utilities' avoided costs are the primary benefits of NEM systems and the cost of the renewable generator plus the utilities' costs to administer the program are the primary costs. ORA says RIM is the appropriate measure, but its model yields low RIM scores (<.5) for its initial \$2/kw/month fee.</p>
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<p>Pacific Gas & Electric</p>	<p>Under PG&E's proposal, residential and small commercial NEM customers pay a demand charge coupled with lower TOU rates. Larger C&I customers don't need new rate designs since they pay a demand charge already. Exports will be compensated at the energy component of the customer's applicable rate. Customers will continue to be able to offset consumption through self generation at the retail rate. Consumption and generation will be netted monthly with excess generation compensated at a wholesale-plus-REC rate. Customers will pay newly established interconnection application fees and costs of any required engineering studies (\$100 for <30KW, \$1600 for >30KW) and interconnection facility costs. Under PG&E's proposal, the CPUC reviews the successor tariff starting in 2019 (or sooner) on a "regular basis".</p>	<p>PG&E claims their proposal results in sustainable growth of 5,000 to 6,000 MW of new capacity</p>	<p>PG&E argues that it's proposal does not meet the standard as all RIM scores fall below 0.8. But they feel this is "cost shift" is acceptable so long as the Commission revisits the NEM successor on an ongoing basis.</p>
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<p>San Diego Gas & Electric</p>	<p>Under SDG&E's proposal, customers are offered two tariffs: 1) a class-differentiated unbundled rate (the "Default Unbundled Rate Option") and, 2) a "Sun Credits" rate for customers that elect to sell all NEM generation to the utility. The Default Unbundled Rate Option includes: 1) a system access fee (\$/month) for the recovery of "curb-to-meter" infrastructure and customer services, as well as public purpose charges, 2) a Grid Use Charge (based on non-coincident peak demand) to recover capacity-related distribution costs, 3) TOU rates for energy consumed, 4) wholesale rate compensation for exports. The "Sun Credits" option is similar is a "buy all, sell all " structure though electricity exports are credited rather than "sold" to the utility. Compensation for electricity production would be equal to the retail system average commodity rate and would be measured through a separate meter.</p>	<p>SDG&E argues that "sustainable growth" is not determined by a certain amount of deployment but by whether the growth of distributed generation is consistent with the sustainability of the electricity system.</p>	<p>SDG&E uses Cost of Service as its cost-benefit measure.</p>
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Sierra Club	Sierra Club's proposal is the existing NEM tariff married to time-of-use. However, the question of how TOU rates are designed is raised as an important consideration as some TOU designs may fail to yield sustainable growth. Sierra Club also suggests that some TOU rates (such as those with "super peaks") may be appropriate as tariff options for customers with solar and other DER technologies.	Sierra Club's modeling of their proposal 16000-18000MW over the 2017-2025 period and they suggest that is "robust" growth meeting the definition of sustainable growth.	Sierra Club argues that the statute's requirement that costs are approximately equal to benefits means that all benefits accruing to ratepayers (economic, environmental and societal) should be included and that, in turn, emphasis should be placed on the Societal Cost Test and Total Resource Cost test
Southern California Edison	Under Edison's proposal, customers consume energy generated on site and pay for imports at the applicable tariff. Customers are compensated for exports at an Export Compensation Rate (ECR) of \$0.08/kwh, of which \$0.01 is assumed to be compensation for RECs counting towards SCE's RPS compliance obligations. Customers cover fixed costs associated with serving them via a monthly charge, the Grid Access Charge. the GAC is based on fixed T&D costs associated with customers and non-bypassable charges associated with the energy displaced by the DG system. ECR and GAC will be reassessed in concert with General Rate Cases and will be vintaged with customers locked in for 20 year periods.	Edison rejects that "sustainable growth" means that annual DG installations continue to grow, and contends that "sustainable growth" means that DG's growth doesn't undermine the sustainability of the electricity system. Their modeling of their successor tariff results in between 1700 and 2800MW of new capacity in SCE's service territory between 2017 and 2025.	Edison recommends the Commission periodically recalibrate the tariff to ensure a RIM score of 1.0

<p>The Utility Reform Network (TURN)</p>	<p>TURN proposes a "Value of Distributed Energy (VODE)" tariff. Customers would be charged and compensated via a two-part retail tariff: 1) charges for gross consumption based on an applicable tariff, 2) credits for generation for "the value to utility and non-generating customers". The proposal includes no fixed charge or demand charge, both of which TURN opposes. The proposal calls for creation of Distributed Generation Adder (DGA): a proxy for additional value needed to ensure that DG continues to grow sustainably. Value-based and DGA compensation would be fixed for first 10 years of system operation. Like the current NEM program, customers will be able to carry forward excess generation credits for up to 12 months.</p>	<p>TURN defines a broad range (5,000-12,000MW) as an acceptable range for sustainable growth, but leaves the question of what exactly sustainable growth is to the Commission to determine. Under TURN's proposal this determination of "sustainable growth" by the Commission which will in turn determine the Distributed Generation Adder (DGA) amount. However, TURN argues that the DGA should meet following cost-benefit criteria: 1) a Participant Cost Test over 1.0 and 2) a Ratepayer Impact Measure score at or above 0.9. TURN suggests a declining block-like structure where the Commission reassesses the DGA amount after a certain amount of generation is deployed.</p>	<p>TURN assumes that the structure of their tariff is built off the principle of ratepayer indifference and therefore meets the standard of ensuring that costs and benefits are approximately equal for all ratepayers.</p>
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