



**New Hampshire Public Utilities Commission
Docket No. DE 16-576**

Development of New Alternative Net Metering Tariffs and/or Other Regulatory Mechanisms and Tariffs for Customer-Generators

Joint Settlement Proposal from the Energy Future Coalition

Executive Summary

There is growing recognition among many stakeholders that the electric grid is evolving, and as the penetration of solar and other distributed energy resources (“DER”) increases, there needs to be better and more optimized alignment of the locational and temporal value solar and other distributed resources provide to the grid. The Energy Future Coalition (“the Coalition”), composed of Acadia Center, The Alliance for Solar Choice, Borrego Solar, Conservation Law Foundation, Energy Freedom Coalition of America, LLC, New Hampshire Sustainable Energy Association, ReVision Energy, Granite State Hydropower Association, Sunraise Investments LLC, Solar Endeavors, LLC, and Revolution Energy, LLC, has developed this Joint Settlement Proposal (“Proposal”) that provides the state with a path for aligning compensation of distributed energy resources (DER) with the value they provide to the grid.

Significant momentum has been gained during this proceeding but there is still a paucity of data regarding the value that DER provide to New Hampshire ratepayers. Moreover, there is scant experience in New Hampshire with alternative tariffs outlined in the pre-filed testimony of various parties, nor do utilities or DER providers have systems in place to administer the proposals. This Proposal seeks a phased in approach with gradual compensation reductions, enhanced data collection and pilot studies that enables a transition to a technology agnostic program with smarter pricing signals. It allows utilities timely recovery of costs associated with data collection, billing and metering system upgrades, and pilot programs.

Topic	Small Projects (< 100 kW)	Large Projects (>100 kW)
Start Date	The net metering cap is eliminated as of September 1, 2017. New tariff will impact only those customer generators placed in the interconnection queue beginning on September 1, 2017 If utilities are unable to bill or meter new customer generators by September 1, 2017, those customers will continue to take service under the current program design until the utility billing systems are capable of accommodating the new program design. Utilities should provide 30 days’ notice prior transitioning customers to the new program.	Same

Application Fee	No change. Utilities may file for an application fee based on demonstrated costs (Per DE 15-271)	Same
Customer Charge for Eligible Customer Generators	No change at this time, however in the future Utilities may file for a supplemental charge only if total customer-related costs for DER customers are higher than for non-DER customers in the same rate class. The supplemental charges would cover demonstrated incremental customer-related costs (i.e., for metering, billing, and service drop) that are specific to DER customers, and the costs should be tracked in separate utility accounts.	Same
Rate Design (for imported kW & kWh)	No change (use prevailing rates; as may be amended from time to time). With the exception of a supplemental customer charge to collect incremental, customer-related NEM costs, a net metering customer should have access to the same rates that would be available if the customer was not a customer-generator and should not be subject to any separately enumerated charges	Same
Lost Revenue Recovery	PUC approval of lost revenue recovery	Same
Stranded Cost charge System Benefit charge ECT Storm Recovery Adjustment	Customer generators are billed on imported kWh and do not receive credit for exported kWh	Same
Commodity billing component for exported kWh	Exports credited at the Retail Supply Rate	Exports credited at retail supply rate. Customer generators with on-site annual volumetric load must equate to 20% of the DER production, otherwise they must register as a group host Customer generators currently registered as group hosts may switch to new tariff if they meet the 20% on site load requirement

Distribution billing component for exported kwh	<p>“Phase 1” Projects placed in the queue on or after:</p> <ul style="list-style-type: none"> - September 1, 2017: 75% of the volumetric distribution charge. - January 1, 2019: 50% of the volumetric distribution charge. <p>“Phase 2” Projects placed in the queue on or after:</p> <ul style="list-style-type: none"> - January 1, 2021: Distribution export values tied to Commission-sponsored independent Value of DER study. 	Projects placed into the queue on or after January 1, 2021: Distribution export values tied to Commission-sponsored independent Value of DER study.
Transmission billing component for exported kwh	100% of volumetric Transmission charge of rate class	No change to standard rate; opt-in program to allow RNS and LNS Transmission credit, based on actual avoided marginal costs. In other words, a credit for the reduced distribution load share and resulting variable transmission charges from what they would have been had the customer not reduced their demand.
RECs	<p>Customer generator owns RECs. No utility obligation to buy.</p> <p>Utilities agree to work with parties on solicitation for a 3rd party administrator / aggregator.</p> <p>Utilities can facilitate customer education on topic and promote program.</p> <p>Utilities may aggregate or purchase RECs from customer generators for a fixed fee.</p>	Same
Metering and Netting	<p>Customer generators impacted by the new tariff: implement two-channel metering in order to apply non-bypassable charges to metered imported energy.</p> <p>All other volumetric based charges for Phase 1 customers will be netted monthly in kWh prior to applying monetary charges. Phase 2 customer generators placed in the queue on or after January 1, 2021 would be subject to monetary billing for volumetric charges and would be credited for exports at the Value of DER.</p>	No change from current rules
Credits (\$ or KWH)	<p>Transition on September 1, 2017 from kWh crediting to on-bill monetary credit at the applicable rates.</p> <p>Customer can convert bill credit to cash on move out or once per year (each April, provided credit > \$100)</p>	Customer can convert bill credit to cash on move out or once per year (each April, provided credit > \$100)
Banking	No need to bank kWh, roll over monetary credit	Same

Grandfathering	<p>All customers placed in the queue before January 1, 2021 will be grandfathered until December 31, 2040.</p> <p>All projects placed in the queue on or after January 1, 2021 will be grandfathered for 20 years.</p> <p>Customers can move to a future alternative program or rate plan on request.</p>	Same
Phase 1 pilots - creation to be guided by a task force and filed for approval with the Commission	<p>Parties agree that following the pilots a proceeding will be opened with the commission focused on evaluating and implementing the results</p> <p>All potential Pilots will have a statistically valid number of participants</p> <ol style="list-style-type: none"> 1) OCA's "low to moderate income" adder pilot (min. of 100 customers per utility) 2) Residential voluntary TOU pilot 3) Residential voluntary "Smart Home Energy Rate" pilot that tests other rate designs such as real-time pricing, critical peak pricing, demand charges or other structures that enable customers to adopt a variety of technologies to manage their electricity consumption. 4) Non-wires alternative pilot 	Eligible to participate in non-residential specific pilots.
Data Collection & Studies	<ol style="list-style-type: none"> 1) DER Location Valuation study 2) Evaluation of avoided distribution capacity costs 3) Further review of appropriate compensation for avoided RNS cost allocation 4) Marginal Cost of Service study by Eversource to be completed prior to V-DER study completion 5) Timely cost recovery of all study efforts <p>Stakeholder working groups should be created to develop data collection and study plans for Commission approval.</p>	Same

Transition to Phase 2	<p>Within 60 days of the Commission order, a stakeholder working group will be created to develop specifics for the pilots and studies that will ultimately be approved by the Commission. The studies should seek to begin enrolling customers in 2018 and report back to the Commission every 180 days about the pilot's progress.</p> <p>A stakeholder working group should also define the parameters and data requirements of an independent, Commission-sponsored Value of DER study. The study should be conducted by January 1, 2020 and will be used inform the distribution export rate that goes into effect January 1, 2021.</p> <p>The utilities should also develop optional Time-of-Use and "Smart Energy Home" rates that DER customers can sign up for beginning January 1, 2021.</p> <p>The V-DER study should be updated every three years in order to account for changes in values and more precise data and analysis.</p>	Same
Metering	No requirement for Revenue-grade Production Meters owned by utilities or otherwise	Same, optional in order to receive T-credit

Note

This model is only to demonstrate the relative impacts of distributed generation systems up to 100 kW

Instructions

All green cells are inputs that can be changed by the user

General Assumptions

For the sake of simplicity, kW is assumed to equal kVa

For the sake of simplicity, solar is assumed to not impact demand charges

For the sake of simplicity, demand is assumed consistent from month-to-month

Eversource-specific Assumptions

For the sake of simplicity, if demand is greater than 10 kW, then the customer is assumed to be on three-phase service

For the sake of simplicity, if demand is less than or equal to 10 kW, then the customer is assumed to be on single-phase service

Unitil-specific Assumptions

For the sake of simplicity, if demand is greater than 500 kW, then the customer is assumed to be on primary voltage

For the sake of simplicity, if demand is less than or equal to 500 kW, then the customer is assumed to be on secondary voltage