DOCKET NO. DE 16-576

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

Non-Wires Alternatives – Joint Comments of the Electric Utilities

Responding to a November 9, 2017 recommendation of the Commission Staff in the instant docket, the New Hampshire Public Utilities Commission ("Commission"), on November 17, 2017, requested that parties to the docket submit comments to assist the Commission in providing "clarification of certain relevant issues before the continuation of efforts to develop non-wires alternative (NWA) pilot programs, as directed pursuant to Order No. 26,029 (June 23, 2017)." November 17, 2017 Letter at 1. The Commission's request contained seven questions on which it was seeking input. The comments below represent the joint response of Public Service Company of New Hampshire d/b/a Eversource Energy, Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities, and Unitil Energy Systems, Inc. (Unitil) (together "the Joint Utilities") to each of the Commission's questions.

1. Should the NWA pilot programs be limited to distributed generation (DG) projects or should the pilot programs also be open to other distributed energy resources (DERs), such as demand response, energy efficiency measures, or battery storage, either on a standalone basis or in concert with DG installations??

In the Joint Utilities' opinion, the pilot programs should be limited to DG projects. The legislation that led to the instant docket, House Bill 1116 in 2016, required the Commission to undertake a broad examination of many facets of net metering and the Commission has done so. However, the language of the bill was also specific that the Commission's examination should focus on tariffs and other regulatory mechanisms related to the net metering of "customergenerators". Specifically, the portion of HB 1116 directing this proceeding, codified as RSA 362-A:9, XVI, provides that:

No later than 3 weeks after the effective date of this paragraph, the commission shall initiate a proceeding to develop new alternative net metering tariffs, which may include other regulatory mechanisms and tariffs for customer-generators, and determine whether and to what extent such tariffs should be limited in their availability within each electric distribution utility's service territory.

Thus, the Commission's review and the work that came from it was to focus on issues relating to net metering tariffs for resources that meet the definition of "customer-generator," which means:

"Eligible customer-generator" or "customer-generator" means an electric utility customer who owns, operates, or purchases power from an **electrical generating** **facility either powered by renewable energy** or which employs a heat led combined heat and power system, with a total peak generating capacity of up to and including one megawatt, that is located behind a retail meter on the customer's premises, is interconnected and operates in parallel with the electric grid, and is used to offset the customer's own electricity requirements. Incremental generation added to an existing generation facility, which does not itself qualify for net metering, shall qualify if such incremental generation meets the qualifications of this paragraph and is metered separately from the non-qualifying facility.

RSA 362-A:1-a, II-b (emphasis added). Notably, demand response and energy efficiency measures are not included in the definition. They are not generators, and are not eligible to be net metered. With respect to energy storage, its ability to qualify is unclear, but unlikely. When a storage battery is in discharge mode, it is a source of electric energy, but it is only discharging energy that was generated by some other source. A battery does not generate power and is thus not an "electrical generating facility." Though a battery storage system paired with a renewable generating source could, arguably, qualify, the fact remains that battery storage is, itself, not included in the relevant definition. Thus, to the extent any pilot arises from this proceeding, it should be related to the items and issues under consideration in the proceeding. The Commission's order in this docket appears to recognize this same issue when it refers specifically to DG, rather than DER, in approving the pilot.

With respect to the NWA pilot, any pilot that includes just DG (i.e. which excludes storage, DR, and EE) is unlikely to yield cost-effective and meaningful insights into the ability of DG to avoid or defer traditional utility investments. The ability of DG to have any beneficial impact on substation and circuit capacity-based projects is based on whether the DG resource can be relied upon to be operating during the hour or hours in which the capacity limitation is experienced, regardless of when that limitation may occur. Any resource that uses an intermittent source of fuel, and particularly one dependent upon favorable weather conditions (e.g. solar and wind without storage, hydro without pondage, etc.), should not be considered a prudent alternative to a firm capacity expansion.

2. If the NWA pilot programs are open to other DERs in addition to DG, will the pilots provide sufficient "experience and data demonstrating the effects of DG on potentially stressed components of the utility distribution system at specific locations", per the June 23rd Order?

As stated in response to the first question, given the parameters of this proceeding, other DERs should not be part of any pilot in this docket. However, assuming that the Commission determines they should be included, the answer to this question is "no" the pilots likely will not.

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By way of example, assume that a pilot is successful in deferring a utility capital project by soliciting and implementing a portfolio that includes solar, storage, DR and EE measures. In this example, the only DG that is part of the solution is the solar generation. It is unclear how the information from such a pilot could be used to examine the effectiveness of the solar DG resource within that portfolio as isolated from the other resources.

With proper metering, and some after-the-fact analysis, the solar resource's contribution to demand reduction during the peak hour (or hours) could be determined. However, the same exercise could be performed on a hypothetical basis without the need for the expense and delay of a complete pilot project, nor the coordination of the one or more DER developers, the utility, the Commission Staff, other others who may look to participate in the pilot. There are thousands of solar PV projects across NH, and many (perhaps most) have some form of data interval monitoring and/or metering that was included with the installation and is monitored either by the project developer, the project owner, or both. It would be a more efficient use of time and resources to gather such data from a sample of projects and use it in an investigation of this issue.

3. If the answer to question 2 above is negative or uncertain, should NWA pilot programs be undertaken in this docket?

No. For the reasons stated above, a full DER NWA pilot is unwarranted in this proceeding.

4. If the answer to question 3 above is negative, should NWA pilot programs instead be deferred for potential implementation in other contexts, such as utility integrated resource planning dockets or grid modernization initiatives?

Yes. The Joint Utilities believe that the Grid Mod docket (IR 15-296), or some follow on proceeding to that one, is the appropriate place to investigate the NWA concept.

5. If NWA pilot programs are not undertaken in this docket, should studies be conducted to determine the potential benefits of DG deployment as a means of avoiding or deferring distribution system capital projects in specific locations?

Yes. The Joint Utilities' expect that the evaluations being contemplated as part of the Value of DER working group, also undertaken as a result of the Commission's June 23 Order, will ultimately include an assessment of DG/DER ability to effectively resolve a distribution system capacity limitation or otherwise provide a valuable service to the distribution system. The Joint Utilities believe an analytical approach to this issue is a cost-effective and meaningful way to approach this valuation debate.

6. If NWA pilot programs are not undertaken in this docket, should maps or other presentations be prepared showing locations where DG installations potentially would be beneficial as a means of avoiding or deferring distribution system capital projects?

The concept of "hosting capacity maps" and/or "beneficial location maps" should also be considered as part of the Grid Mod docket, or a follow on proceeding. These and other techniques that advance the deployment of customer-sited equipment and, ultimately, lead to a more advanced grid, are among the purposes of the Grid Mod docket.

7. If NWA pilot programs are not undertaken in this docket, should some other methodology not identified above be used to determine the potential benefits of DG deployment as a means of avoiding or deferring distribution system capital projects?

See comments above. Additionally, there are potentially numerous methods for determining the potential benefits of DG or DER deployment, and there need not be a specific method created or enforced in this proceeding. The Joint Utilities do not believe that another specific method for determining the benefits of DG needs to be implemented in this case.

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