

STATE OF NEW HAMPSHIRE

Inter-Department Communication

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DATE: February 16, 2018

AT (OFFICE): NHPUC



FROM: Thomas C. Frantz, Director, Electric Division
Karen P. Cramton, Director, Sustainable Energy Division

SUBJECT: DE 16-576, Development of New Alternative Net Metering Tariffs
Reconsideration of Non-Wires Alternative Pilot Programs

TO: Commissioners
Debra A. Howland, Executive Director

cc: David K. Wiesner, Staff Attorney

In Order No. 26,029 issued on June 23, 2017 (June 23rd Order), the Commission directed that four types of pilot programs be developed and implemented, including non-wires alternative (NWA) pilot programs anticipated to

provide valuable experience and data demonstrating the effects of [distributed generation (DG)] on potentially-stressed components of the utility distribution system at specific locations. Such pilots should also provide insight into the incentive levels needed by DG developers to site their projects where they would have the greatest potentially positive impacts.

June 23rd Order at 63-64. The Commission directed that the NWA and other pilot programs be developed and filed after review and discussion with interested stakeholders through a working group process. *Id.* at 65.

On November 9, 2017, Commission Staff (Staff) filed a letter reporting that stakeholders had agreed during a working group session that the Commission should be asked to solicit comments from parties and then provide clarification of certain relevant issues before the continuation of efforts to develop NWA pilot programs. Staff recommended that the Commission request written comments from the parties with respect to a number of specific questions. The Commission issued a secretarial letter directing parties to submit written comments that address the following 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?
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?

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

Written responses to those questions were submitted by: a coalition of parties consisting of Acadia Center, The Alliance for Solar Choice, Conservation Law Foundation, Energy Freedom Coalition of America, LLC, ReVision Energy, LLC, and Vote Solar (collectively, the Joint Commenters); 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. (collectively, the Joint Utilities); the Office of Consumer Advocate (OCA); the City of Lebanon (Lebanon); the Department of Environmental Services (NHDES); and Representative Lee W. Oxenham (Rep. Oxenham).¹

Staff has reviewed the comments submitted by those parties in response to the specified questions, and has concluded that the Commission should reconsider and modify the NWA pilot program requirement as set forth in the June 23rd Order. Staff’s conclusion is based on interpretation of that order to require development of NWA pilot programs limited exclusively to DG projects and not open to participation by other DERs. Staff also believes the fundamental purpose of the NWA pilot programs would be to ascertain the potential locational value of DG on the utility distribution system, through capital investment avoidance or deferral and/or through operating expense reduction or deferral. That potential locational value information would then be used in the overall

¹ Rep. Oxenham is a New Hampshire State Representative, but she appears as an individual ratepayer in this proceeding. *See* Prehearing Conference June 10, 2016 Transcript at 13-15.

value of DER study, the results of which will inform the Commission's evaluation of future net metering tariff development.

Staff has concluded that the development of DG-only NWA pilots should be reconsidered and discontinued, but that unrestricted NWAs open to all DERs may not represent an effective means of obtaining relevant data regarding the locational value of DG on utility distribution systems. Staff therefore believes that the focus of distribution system locational valuation should be shifted to study and analysis rather than NWA pilot programs.

Based on the foregoing, Staff recommends that the Commission modify the requirements of the June 23rd Order as follows:

1. Development and implementation of any NWA pilot programs restricted only to DG to be suspended indefinitely;
2. Acknowledgement that unrestricted NWAs may be appropriate in another context, such as grid modernization or utility integrated resource planning;
3. Directive to parties in working group process to consider alternative study designs and methodologies to address potential locational value of DG on the utility distribution system, through capital investment avoidance or deferral and/or operating expense reduction or deferral (e.g., equipment life extension, lower maintenance and labor costs, etc.);
4. Specifically reference the Nexant Central Hudson Gas & Electric study as a potentially relevant example of a distribution-level capacity valuation analysis;
5. Leave open the potential for distribution-level locational benefit issues to be addressed through a separate study or within the overall scope of the Value of DER study;
6. Directive that parties consider the potential for implementing one or more demonstration projects using DG plus storage to address distribution system capacity upgrade avoidance or deferral; and
7. Directive that the utilities and other parties identify and make available the data and information necessary to conduct the locational studies and analyses, and any potential demonstration projects, as described above. That data may include, for example, the following:
 - (a) Actual Substation Equipment Loading Data and Associated Transformer Condition Measurements;
 - (b) Actual Circuit Load Data, i.e., Voltage, Power Factor, Current, Load Flow (if applicable) at the Substation node and throughout the feeder at significant

impedance nodes (e.g., end points, stepdown (ratio) points, and existing DER locations);

- (c) Annual Peak Load Growth at the circuit and at a more granular sub-circuit level;
- (d) Actual Distribution Capacitor/Regulator Data and Status;
- (e) Actual kW/MW load at risk for Loss of Line at distribution and distribution supply level; and
- (f) Actual measurement of overloaded portions of Circuit Feeders under normal and contingency operations, including actual sub-circuit impedances, length, ratings (normal, short term/long term emergency).

In accordance with RSA 365:28, Staff recommends that the Commission schedule a public hearing so that parties have an opportunity to comment on the recommendations outlined above before any modification of the relevant directives in the June 23rd Order.

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