The State of New Hampshire
Department of Environmental Services

Robert R. Scott, Commissioner

8 DEC

December 8, 2017

Debra A. Howland, Executive Director
State of New Hampshire
Public Utilities Commission
21 South Fruit Street
Concord, N.H. 03301-2429

Re: DE 16-576, New Alternative Net Metering Tariffs and/or Other Regulatory Mechanisms and Tariffs for Customer-Generators Providing for Written Comments on Non-Wires Alternative Pilot Program Issues Clarification

Dear Ms. Howland:

Thank you for the opportunity to provide written comments on the Non-Wires Alternative (NWA) Pilot Program, which were requested in the secretarial letter dated November 17, 2017 as part of the Public Utility Commission (PUC) Docket DE 16-576 "Development of New Alternative Net Metering Tariffs and/or Other Regulatory Mechanisms and Tariffs for Customer-Generators." The NH Department of Environmental Services (NHDES) strongly supports efforts to expand the development of clean distributed generation (DG) and other distributed energy resources (DERs) in New Hampshire as they provide an opportunity to manage energy costs by avoiding the energy losses associated with transmission and distribution (T&D), and to reduce emissions associated with electric generation.

NHDES was not a participant in the proceeding that led to PUC Order NO. 26,029, pursuant to DE 16-576, issued on June 23, 2017, but participates in the four work groups that were convened to launch specific pilot studies subsequent to that Order. NHDES views the focus and planning for each of the four work groups as being interrelated as well as key

elements within the larger topic of grid modernization that will be addressed further by the NH PUC, utilities, and stakeholders following an Order issued relative to Docket IR 15-296, Investigation into Grid Modernization. With respect to the clarification requested in the November 17 Secretarial Letter, NHDES offers the following comments:

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

NHDES supports the opening of the NWA pilots to other forms of DERs as the singular focus on DG may be too narrow to allow a correct valuation of the impact of NWA on the grid. The Order 26, 029 notes that a well-designed NWA pilot would provide valuable experience and data demonstrating the effects of NWA on potentially-stressed components of the utility distribution system at specific locations. The order further notes that the data may be relevant to the Commission's investigation into grid modernization, Docket IR 15-296. While the Order calls for DG projects alone, Navigant Research defines NWA as:

> *"[A]n electricity grid investment or project that uses non-traditional T&D solutions, such as distributed generation, energy storage, energy efficiency demand response, and grid software and controls, to defer or replace the need for specific equipment upgrades, such as T&D lines or transformers, by reducing load at a substation or circuit level.*[1]"

[11] Navigant Research (2017). Non-Wires Alternatives: Non-Traditional Transmission and Distribution Solutions - Market Drivers and Barriers, Business Models and Global Market Forecasts. Cited in Feldman, Brett (2017). Non-Wires Alternatives: What's Up Next In Utility Business Model Evolution, Utility Dive, https://www.utilitydive.com/news/non-wires-alternatives-whats-up-next-in-utility-business-model-evolution/446933/.

NHDES believes that a broader definition of DERs, inclusive of DG, should be applied to the NWA pilot as there may be more effective means of avoiding distribution and transmission investments than in new generation alone. While the use of grid software and controls may best be left to the distribution utilities to asses on their end, the inclusion in the NWA pilot of DG, storage, targeted energy efficiency and demand response measures, as well as any pairing of those technologies, will provide the the PUC, utilities and stakeholders with critical information that may help integrate and balance the work under the Net-Metering Docket (DE 16-576), as well as the Energy Efficiency Resource Standard Docket (DE 17-136), and the Grid Modernization investigation (IR 15-296).

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?*

NHDES believes they will. Energy efficiency measures alone have already been shown to have deferred hundreds of millions in T&D costs. This integration of NWA is becoming increasingly common nationwide and its application within New Hampshire will enlarge the tools that utilities and regulators can apply to manage energy costs, improve reliability and provide a cleaner environment to NH citizens. Further, the information and experience gained within this study can be applied to subsequent work in follow-up to the closely related Grid Modernization proceeding.

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

NHDES supports inclusion of the NWA pilot in DE 16-576.

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?*

NHDES supports inclusion of the NWA pilot in DE 16-576.

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 a specific location?*

NHDES supports studies to determine the NWA benefits of DG and other DERs, if they were not to be undertaken in DE 16-576. NHDES prefers that the NWA pilot occur under DE 16-676.

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

NHDES supports studies to determine where the benefits of DG and other DERs may be best located, if they were not to be undertaken in DE 16-576. NHDES prefers that the NWA pilot occur under DE 16-676.

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?*

NHDES supports the evaluation of all methods to avoid or defer distribution system capital projects if they were not to be undertaken in DE 16-576. NHDES prefers that the NWA pilot occur under DE 16-676, and would recommend that as the pilots move forward, open consideration of any viable methodology be allowed.

Thank you again for the opportunity to provide comments on DE 16-576. NHDES looks forward to collaborating with the PUC and other stakeholders to support the expansion of clean DG and DER assets in in New Hampshire and provide both environmental and economic benefits to New Hampshire citizens. If you have any questions or require further information, please contact either Christopher Skoglund (christopher.skoglund@des.nh.gov; 603-2717624) or me (michael.fitzgerald@des.nh.gov; 603-271-6390).

Respectfully,

Michael Fitzgerald
Assistant Director
Air Resources Division