STATE OF NEW HAMPSHIRE
DEPARTMENT OF ENERGY

IP 2022-01

Investigative Proceeding Relative to Customer Generator Interconnection

COMMENTS SET 3 OF PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE d/b/a EVERSOURCE ENERGY

Pursuant to the request for further comments issued by the New Hampshire Department of Energy ("DOE") in this investigative proceeding on August 1, 2023, Public Service Company of New Hampshire, d/b/a Eversource Energy ("Eversource" or the "Company"), submits these additional comments addressing the issues listed by the DOE in that request.

1. Interconnection Queue

The Company believes there may be benefits to publishing an Interconnection Queue containing relevant information and updated on a periodic basis. The published Interconnection Queue should be kept simple and cover only the most relevant information. Eversource believes the following is an appropriate listing of such information:

1. Project number for proposed interconnecting distributed generation ("DG") facility of ≥ 25 kW capacity size;

2. Capacity size of DG project in watts or kW (e.g., max. AC inverter size);

3. Distribution circuit for DG project interconnection;

4. Substation, whether distribution or bulk, for DG project interconnection;

5. Location of the DG project by town or other municipality;

6. Technology of the DG project (e.g., solar PV); and

7. Queue date of DG project interconnection application.

This level of detail is consistent with that provided by Eversource's Connecticut affiliate through its posted interconnection queue (see Eversource CT IC Queue). The queue is generated through the PowerClerk system, which the Company currently plans to implement for New Hampshire in September 2023. The Company anticipates that its New Hampshire Interconnection Queue may be operating and posted publicly by January 1, 2024.

With respect to the frequency of Interconnection Queue updates, the Company believes that monthly updates would be most appropriate. The format of the updates should be the same

as for the original Interconnection Queue, which in Eversource's case would be an Excel spreadsheet.

2. Interconnection Standard References and Preferences

Eversource is not persuaded there is a compelling need for adoption of uniform DG interconnection procedures and standards among the New Hampshire electric distribution utilities, nor that alignment with other states in the region must be a primary focus. Standardization should not be seen as a goal in and of itself, but should be pursued only if and to the extent it makes sense under the circumstances.

The Company continues to believe that interconnection procedures should be updated to better define the process, timeframes, and respective responsibilities of the utility and the applicant. However, as noted in previous comments, with greater automation of the application and review processes, many of the current procedures, related screening, and pre-application requirements, such as many of those that would apply under the IREC 2019 model, have been rendered out-of-date and inefficient. For example, it should be possible for DG interconnection applications to be processed faster and more efficiently than the IREC 2019 procedures would require, at least for most projects less than 1 MW in size.[1] That said, there are portions of the IREC 2019 model procedures that may have merit and should be considered for adoption by individual New Hampshire utilities.

In addition to the IREC 2019 model, Eversource is familiar with and believes there may be benefits to incorporating components of the interconnection procedures and policies in effect or under active consideration in Connecticut and Massachusetts. The Company does not see the need to import procedures or policies from New York or other states outside the New England region, unless any such procedures and policies can be clearly demonstrated to represent "best practices" for DG interconnection.

3. Cost Allocation for Distribution System Upgrades Needed for DG Interconnection

Eversource reiterates its prior willingness to consider grouping, clustering, and initially socialized cost allocation alternatives for distribution system upgrade construction related to DG project interconnection. Eversource supports the Capital Investment Project ("CIP") infrastructure upgrade program recently implemented in Massachusetts, which generally employs a "beneficiary pays" approach to cost allocation. Under the CIP program, electric distribution utilities are permitted to file for state approval proposals for specific system locations, with each CIP designed to limit interconnection costs for common distribution system modifications allocated to each individual DG facility to $500/kW or less. Utility customers as a whole help to fund the initial construction of these system upgrades and are later "reimbursed" over time for a portion of the CIP costs from fees charged to future DG facilities able to interconnect as a result of the system upgrades constructed through the CIP.

[1] DG projects of 1 MW or greater capacity size are subject to the Small Generator Interconnection Procedures and related study process set out in the ISO New England Open Access Transmission Tariff Schedule 23.

The Company also continues to believe that, in the absence of implementation of a CIP process or another acceptable cost allocation alternative, the default rule for cost allocation must be that each DG project applicant is studied individually and must agree to fund all necessary interconnection facilities and related system upgrades at its own up-front cost, effectively based on the cost-causation principle.

With respect to other cost allocation models identified by the DOE, the Company is open to considering such alternatives in the context of the DG interconnection working group process, provided that any alternative is based on a "beneficiary pays" model and other sound cost-causation principles.

4. Interconnection Facilitator or Ombudsman

The Company is not persuaded of the need for formal designation of an interconnection "facilitator" or ombudsman" to address scheduling, delays, technical issues, and other similar matters. The role of such an individual and the scope of the individual's responsibility and authority have not been defined, nor have the benefits of such an overlay of additional oversight and process been demonstrated. Moreover, the costs of implementing such a facilitator or ombudsman must be borne either by the DG project developers through application fees or by all utility customers through retail rates; it is unclear whether the costs of such a designated individual performing such a formal role would be outweighed by the putative benefits of the function performed by such individual.

That said, the Company believes there may be merit in adoption of an approach similar to that followed by its Connecticut affiliate, in which a specified individual serves as a single point of contact for DG interconnection issues. That individual would have the authority to internally escalate issues for resolution, which may eventually involve more formal internal dispute resolution processes. Such a streamlined internal process involving a knowledgeable and experienced individual has the potential to address difficult issues as they arise in an efficient and timely manner, while significantly limiting the number of disputes that may be submitted for resolution through the formal complaint process administered by the DOE, subject to ultimate adjudication by the Public Utilities Commission ("PUC"), if necessary.

5. Interconnection Working Groups

Eversource agrees with a number of other stakeholders that the details of updating DG interconnection procedures and policies, including potential cost allocation alternatives, are best addressed through an active stakeholder working group process. There should be two such working groups: one to address policies and procedures and another to address technical and engineering issues. The Company supports the establishment of informal working groups within the near-term time period, with facilitation by the DOE but a minimum of formal structural arrangements and governance processes.

With respect to the need to establish more formal DG interconnection working groups over a longer period of time, the Company is not persuaded that a more formal approach, such as through limited participation, designated representatives, defined voting rights, and restricted agenda items, is necessary or advisable. Nor does the Company believe it will be necessary for

the working groups to involve extensive commitment of resources for staffing and studies, in particular through the use of third-party consultants.

Subject to resolving the Senate Bill 166 (2023) ("SB 166") question discussed below, the Company believes that the DG interconnection working groups should stay focused on a narrow set of issues and not be expanded to cover other issues such as net metering,[2] energy storage incentives, or grid modernization. Of course, if the decision were made to combine the efforts of such working groups with those within the purview of the Grid Modernization Advisory Group ("GMAG"), a more formal group required to be established by the DOE under SB 166, then the scope of issues under review by the groups would be far more comprehensive.

The Company has reviewed the listed "DER technologies" that the DOE has indicated might be considered for inclusion in the scope of the DG working groups' efforts. Eversource notes that Senate Bill 262 requires the DOE to investigate and report on "interconnection procedures for *customer generator*s to the state's electric distribution system." (Emphasis added).[3] Accordingly, the scope of this investigative proceeding necessarily is limited to behind-the-meter DG using renewable energy sources with capacity of not more than 5 MW, and its scope is not broad enough to encompass standalone energy storage,[4] fuel cells using non-renewable energy, or any fossil-fueled generation such as technologies combusting natural gas, oil, or propane.

That said, Eversource strongly favors a "technology-neutral" approach to interconnection of DG and other distributed energy resources ("DERs") and believes that interconnection procedures and policies developed for DG projects should also be applicable to other types of DERs, even if that involves coordination with separate but related regulatory processes.

With respect to DG interconnection working group composition, Eversource anticipates that representatives of utilities, DG developers, renewable energy advocates, and other interested stakeholders will actively participate in the process, and their participation should be welcomed and encouraged. There seems to be no good reason to restrict or limit participation to certain categories of stakeholders or to specific numbers of representatives, at least in the more informal model that the Company prefers. As noted above, it would be most appropriate for the DG interconnection working groups to be convened and facilitated by the DOE, although certain supporting functions might be performed by stakeholder group members in order to relieve administrative burdens and time constraints.

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[2] Eversource notes that the PUC currently has an open docket, DE 22-060, addressing net energy metering issues.

[3] The term "customer-generator" is defined in the net metering statute to mean "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, except as provided for a municipal host as defined in paragraph II-c, 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." RSA 362-A:1-a, II-b.

[4] It should also be noted that, under RSA 374-H:2, I, it is the PUC and not the DOE that has the statutory authority to "adopt rules clarifying policy for the installation, interconnection, and use of energy storage systems by customers of utilities, . . ."

The near-term focus of the DG interconnection working groups (i.e., over the next 3-12 months) should be on the following matters: application format, threshold levels, and review periods; application fees and study costs; timelines for processing applications, including screening, review, information-gathering, study, and approval; interconnection queue; and potentially increased transparency of study costs and utility system upgrade costs. In addition, the working groups should review and discuss potential cost allocation alternatives, technical standards for interconnection (such as the N-1 standard), and the findings and recommendations to be included in the DOE's report to the state legislature due in December 2023.

If the DG interconnection working group process is kept informal, then the goals should be to achieve consensus, if possible, or alternatively to develop well-defined majority and minority positions and supporting rationales. In this informal model, it should not be necessary to designate specific individual representatives, define voting rights, set quorum requirements, or adopt a charter, by-laws, or other formal governance processes. Nor should stakeholder representatives be required to have legal representation in order to attend working group meetings. It may be helpful to have meeting agendas and any written proposals or other submissions posted on the DOE website to enhance efficient communications and foster transparency.

Finally, the Company reiterates its view that the DG interconnection working groups should be convened and begin work as soon as possible this Fall so that progress in addressing relevant issues may be made without undue delay.

6. New Hampshire Grade from the "Freeing the Grid" Report

Eversource has reviewed the "Freeing the Grid" Report and grading for New Hampshire, including the specific recommendations made in that report. The Company does not believe the grading system used in the report is relevant to the status of DG interconnection in New Hampshire or in New England as a whole. For example, Massachusetts received a grade of "C" even though it has far greater DG penetration than other states receiving higher grades. And Connecticut likewise received a "C" grade, notwithstanding increasing solar PV installations in the state. The Company believes that state renewable energy policies have a far greater impact on DG adoption than do utility interconnection procedures, while the Freeing the Grid grades are not truly indicative of effective and efficient DG interconnection procedures and policies.

With respect to the specific recommendations for New Hampshire included in the Freeing the Grid Report, Eversource believes that certain of those recommendations may merit consideration through the stakeholder working group process. For example, the application of DG interconnection procedures to energy storage as well, the use of "export capacity" as an appropriate metric for evaluation of interconnection applications, the adoption of a "fast track" review process for certain projects based on size, and the adoption of a "supplemental review" process with specified screens that applies to systems larger than 100 kVA, are all approaches that may be discussed in detail by the appropriate working group. In the Company's view, it would be premature to conclude that any such approaches should be implemented before those discussions have occurred.

7. Senate Bill 166 (2023) GMAG Scope

SB 166 was recently enacted and will become effective on October 7, 2023. Under SB 166, the DOE is required to establish and support the GMAG, which is to have designated voting

members representing the DOE, state consumer advocate, electric utilities, DER providers, clean energy, environmental, or consumer advocacy organization, municipal aggregation supplier, and business and industry association. The GMAG is required to consider and provide recommendations to the DOE and the legislature on issues including the following:

(1) Grid modernization as defined in RSA 374-F:2, which includes interconnection standards and procedures for state-jurisdictional DG;

(2) "Transactive energy" and DERs including advanced metering infrastructure;

(3) Settlement of appropriate price signals for transactive energy at the distribution system level for DERs; and

(4) Appropriate customer and DER access to temporal price signals.

The GMAG is also directed to review different cost structures that enable a reasonable portion of costs of DG and storage interconnections to be shared by entities that interconnect future DG or storage to the distribution grid to the extent that such subsequent interconnection is enabled by the investment or costs incurred by the prior entity or entities that interconnect. Recommendations to address that specific issue are required by September 1, 2024. The GMAG is required to report annually on November 1 of each year regarding its meetings and any recommendations for legislation, rules, and practices, to the Governor, legislative leaders, and the PUC chair.

Although there is some overlap between issues to be addressed by the GMAG and those relevant to this investigation into DG interconnection procedures and policies, Eversource believes that the two stakeholder processes should proceed separately. The DG interconnection working groups should be less formal and focus on reaching consensus regarding near-term improvements to interconnection procedures and policies (i.e., serve as more of a practical "problem-solving" initiative). By contrast, the GMAG is more formal, has a far broader scope of inquiry, and is intended to serve primarily as an advisor to state policymakers and regulators.

The efforts of the DG interconnection working groups may inform the broad inquiry to be undertaken by the GMAG, but the two processes need not and should not be combined, from the Company's perspective.

8. Conclusion

In conclusion, the Company continues to believe that the two overriding goals of this investigatory proceeding going forward should be to organize and commence the DG interconnection stakeholder working group process and to review and finalize the report to be submitted to the legislature pursuant to Senate Bill 262. Eversource appreciates the opportunity to provide these additional comments to the DOE and looks forward to further constructive engagement with the DOE and interested stakeholders regarding the important issues to be addressed through and in connection with this investigatory proceeding.