CLEAN ENERGY NH
Your Voice in All Energy Matters

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August 22, 2023

Jared Chicoine, Commissioner
Department of Energy,
21 S. Fruit St., Suite 10,
Concord, New Hampshire 03301-2429

RE: IP2022-001, Investigative Proceeding Relative to Customer-Generator Interconnection
Clean Energy NH Solar Working Group (SWG) – Round 3 Comments

Clean Energy NH (CENH) offers the following comments, which are informed by our members, in response to the NH Department of Energy's (the "Department") Request for Comment in the Notice issued on August 1, 2023.

CENH wishes to emphasize that an Interconnection Rulemaking is the priority and should not be a topic assigned to a working group for further discussion. The publication of a monthly updated Interconnection Queue is also highly recommended. This will allow DER developers to be more strategic in project development and provide more transparency into the overall interconnection process. Finally, the creation of a DER Ombudsperson that will provide informal conflict resolution has also risen near the topic. However, the latter two items are inconsequential without Interconnection Rules in place; rules that clearly establish expectations for utilities and DER developers alike and form the basis for enforcement on all sides to ensure the process is smooth and efficient.

CENH wishes to thank the Department for providing additional opportunities for participants to engage in this complicated process and looks forward to reviewing the comments shared by other parties. CENH is hopeful that parties will be able to identify actionable recommendations in the near term to advance the development of local distributed-energy resources, while establishing a clear set of topics to work on over the longer term.

Sincerely,

Chris Skoglund
Director of Energy Transition
Clean Energy NH

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IP2022-001, Investigative Proceeding Relative to Customer-Generator Interconnection

Clean Energy NH – Round 3 Comments

1. Interconnection Queue(s)

a. Anticipated Benefits of a Published Interconnection Queue

As noted in previous comments, this publication could simply be an excel spreadsheet that allows developers to see where each of their projects stand. A published interconnection queue, updated monthly, would provide a broad range of benefits by positively influencing utility and developer operations leading to more rapid growth in operating DER projects.

Strategic Project Development:

- The hosting capacity map and queue data can be combined to inform project siting and development. Detailed queue data can be "layered" on to the maps to indicate the level of DER saturation on a circuit or substation.
- As current and future saturation levels can lead to interconnection study delays and higher system upgrade costs, DER developers can use the portfolio of information to inform their land acquisition, project feasibility evaluation, and project valuation.
- The information can assist developers in determining where they might sight a project and what size project(s) can be located there, and ultimately whether they will apply for a project at all.

Administrative Efficiency:

- Unless and until NH moves away from the traditional "cost causer pays" model, such upfront information can help screen for projects that will require infrastructure upgrades and those that remain within the system capacity.
- Overall, greater transparency can reduce the number of "speculative" interconnection requests that utilities will receive, lowering the burden on utilities, reducing wait times for viable projects, and avoiding wasted costs for other developers.
- The queue data can also be used to audit how well utilities are moving projects through the interconnection process.
- Further, the queue data can be used to identify inefficiencies in the process and focus improvement efforts. This falls to the utilities as well as to DER developers. The utilities have a responsibility to process projects in a timely fashion. However, DER developers also have a responsibility to maintain viable projects in queue.
- Finally, a regularly updated queue will engender trust among residents, business, and local

governments who have invested in projects; assuring them that their projects are moving forward and will come online in a timely fashion and deliver savings and clean energy.

b. Minimum Information in a Published Interconnection Queue.

For all projects in queue

1. Project ID
2. Town
3. Project Size (AC kW)
4. Project Type (*e.g.*, BESS, PV)
5. Substation
6. Feeder
7. Date of application
8. Date application was deemed complete
9. Status (active, withdrawn, operational)
10. Date of supplemental review/study start
11. Date of supplemental review/study finish
12. ISA execution status
13. Permission to Operate Date
14. Cost paid for interconnection
15. i.3.9 approval date (if applicable)

c. Publication Frequency

Monthly.

d. Publication Format

Excel. No PDF.

2. Interconnection Standard Reference/Preferences

a. Considerations of Interstate Renewable Energy Council (IREC)

CENH proposes that the final interconnection investigation report include the recommendation that ***NH should adopt formal interconnection rules in the near term***. These rules should be adopted through a PUC rulemaking docket rather than be designated for further consideration in a follow-up working group. The IREC model rules should be the basis for this rulemaking proceeding.

CENH has been engaged with stakeholders including utilities, DER developers, and prospective DER owners over the past year regarding the topic of interconnection. New Hampshire residents, businesses, and local governments interest in solar and other DERs has significantly expanded in the past 18 months and will only increase as federal funding is made available, supply chains improve,

and concerns regarding energy costs and the environment grow. ***Therefore, CENH recognizes that near-term rules are necessary to establish reasonable and enforceable standards that will provide certainty and efficiency to stakeholders going forward and improve the rate of deployment of DERs while ensuring reliability***.

b. Development of NH Interconnection Standard

As noted above, CENH supports using the IREC Model Interconnection Procedures as the starting point for immediate and accelerate rulemaking. IREC anticipates releasing their Model Interconnection Procedures on Thursday, August 24th, and adoption of the model rules would enable New Hampshire to advance DER development while relying on the most updated understanding of the DER and utility industries. Primary advantages of using IREC's Model Rule, as opposed to other models such as FERC's SGIP or another state's rules, include:

- Updated regularly so that it provides a current look at best practices (especially relative to other models like the FERC SGIP which has not been updated in nearly a decade);
- Based upon practices that have been adopted by one or more states and thus have a track record of performance, and reflects the innovations from a diverse set of states;
- Designed to operate in states regardless of size and populations density;
- Considers the range of capabilities that utilities in those states may have;
- Uses a transparent framework that proceeds sequentially;
- Uses up-to-date technical standards, including incorporation of IEEE 1547-2018;
- Comprehensively addresses how to incorporate energy storage;
- Updated model interconnection and study agreements; and
- Is designed specifically for distribution system interconnection.

However, the rulemaking should absolutely be informed by the utilities and other stakeholders' experiences in surrounding states, ultimately allowing adoption IREC rules that have been customized to best suit New Hampshire. The rules and procedures in states that have high DER penetration such as Hawaii should be screened as well.

3. Cost Allocation for Distribution System Upgrades Necessary for DER interconnection

CENH reiterates the points made in Comment Set 2 that the state should equitably allocate cost allocation by developing alternatives to the "cost causer pays" model. As noted above, there continues to be historic demand for DER projects. The lack of interconnection rules and enforcement are a significant barrier to project development, but the reliance on antiquated cost allocation methodologies drive up project costs, and either reduce the energy cost benefits realized by NH residents, businesses, and local governments, OR it cancels projects outright. By making certain DER projects uneconomical, the cost causer methodology reduces development of affordable, local energy projects that can benefit the whole state.

To maximize the rate of DER project development, the state should prioritize consideration of the following cost allocation methodologies:

- *Utility Prorated Cost Sharing* – In this model, the utility makes the investment necessary to expand the capacity at the interconnection site and the project pays for its share of the upgrade. Provides smaller DERs with opportunities they would not otherwise have if they were to bear the full cost and allows new projects to follow and pay their way as they come online.

- *Proactive Upgrade Cost Sharing* – In this model, the utilities would utilize their experience and expertise to identify points where interconnection upgrades will likely need to occur and develop those sites. This reduces delays for new projects coming online as the hosting capacity is in place and they can pay their share of the costs as they interconnect.

Two other models that have been considered around the country, but which have drawbacks that make them less appealing and are NOT recommended are:

- *Group Study/Group Cost Allocation* – This can result in fair allocation of costs and lower costs to interconnect, but cluster studies can take longer to complete as more variables to integrate. If the project drops out, the study may need to be repeated, causing further delays.
- *Post-Upgrade Allocation (Reimbursement)* - The "cost causer" still pays for the upgrades incurred but they bear the full financial burden unless/until a new project(s) interconnects, reimbursing them for its share of the capacity utilized. This model can still result in a significant number of projects not being built as they won't have certainty regarding the financing and cashflows of the project.

3B. Engineering Standards

Not raised directly in the Department's Notice. CENH anticipates submitting supplemental comments shortly.

4. Interconnection Facilitator or Ombudsperson

CENH supports the development of a DER Ombudsperson within state government and corresponding staff within each electric utility to promote the development of a competent and trusting network of individuals to speed clean energy development. The Ombudsperson will be critical to resolving dispute resolution as the interconnection rules and enforcement provisions are clarified.

The energy transition is well underway, and the state's energy regulatory and governance apparatus needs to adapt in lock step. As electric vehicle and heat pump deployment within New England is expected to surge in the coming decade, driving up electricity consumption and demand, there will be a concomitant demand for DERs to either generate additional power, or to serve as non-wires alternatives to reduce infrastructure upgrades. The evolution from a vertically integrated utility to a DER-dominated grid requires the state host a DER Ombudsperson to help utilities and developers navigate this new terrain.

The DER Ombudsperson would be an independent entity, like the Office of the Consumer Advocate, but administratively attached to the Department of Energy. The Ombudsperson would be charged with resolving DER-related issues and/or complaints, guided on the interconnection rules established earlier in the process. The Ombudsperson role would be non-formal but would provide DER developers and owners with an open access, transparent means to get help and assistance. Ultimately, the Ombudsperson could enable greater efficiency by reducing the number of formal complaints and regulatory petitions.

In parallel, each electric utility should assign a director-level employee to serve as their own internal DER Ombudsperson responsible for ensuring these matters are given appropriate attention, are addressed by the proper utility divisions or teams, and are handled in a manner that is consistent and compliant with rules, standards.

5. Interconnection Working Group(s)

CENH addresses areas 5 and 7 together.

SB 166 has been signed by the Governor and will go into effect on October 7, 2023. The law creates the

Grid Modernization Advisory Group (GMAG), whose members are defined in statute. The Department is directed to establish and support the GMAG and may retain the services of a consultant to assist.

The GMAG is tasked with investigating and reporting on a broad range of topics and presents and opportunity for the state to pick up on the work of the PUC's investigatory docket, IR 15-496, Investigation into Grid Modernization. This benefited from years of engagement, but ultimately did not lead to a binding order.

However, the GMAG has some inherent limitations. Its membership is narrow, stakeholder participation is not required, meeting frequency undefined, and, most importantly, there are no goals or outcomes that that the body is directed to support.

As a result, CENH recommends that an working groups should be developed to continue the discussions of interconnection. There are topics that the stakeholders in the Department's investigation will require more time to discuss and reach conclusions, and this should not be left to the GMAG at time. ***To emphasis points made in the opening; this discussion should not include the Interconnection Rules as noted above. The rulemaking should begin immediately rather than languish in committee.***

However, navigating the energy transition will require coordinated planning, policy setting, and program development among myriad topics. While an interconnection working group(s) should be established, they could eventually be nested within the GMAG. This may be an appropriate venue for the topic of Interconnection to eventually land, but for the time being, CENH recommends that an Interconnection Working Group(s) begin in short term to maintain momentum around this pressing issue.

Near-Term Informal Working Groups:

a. Initial Groups

Starting with Procedural/Process and Technical/Engineering seems appropriate.

b. DER Technologies

While CENH mission is focused on clean energy development, inclusive of renewable energy, energy efficiency, and strategic electrification, the workings groups should remain technology neutral.

A simple lens could be:

> "*RSA 378:37, New Hampshire Energy Policy. – The general court declares that it shall be the energy policy of this state to meet the energy needs of the citizens and businesses of the state at the lowest reasonable cost while providing for the reliability and diversity of energy sources; to maximize the use of cost effective energy efficiency and other demand side resources; and to protect the safety and health of the citizens, the physical environment of the state, and the future supplies of resources, with consideration of the financial stability of the state's utilities.*"

c. Group composition

The interconnections groups should be open to those participants that are willing and able to attend. Formal designation would require legislative action.

d. Group lead(s)

As noted in Technical Session 2, CENH believes that a consultant should be retained to manage the

working group discussions. The consultant would ideally provide neutral facilitation as well as technical expertise. The combined roles would allow the consultant to expertly blend competing ideas and work towards consensus. Further, the reliance on a third-party facilitator would relieve the Department staff needing to play multiple roles in the discussions.

Alternatively, a smaller advisory committee, nominated from the stakeholders, would work with the Department to plan meetings, develop draft documents based on stakeholder input, and collaboratively run meetings.

When an Ombudsperson is brought onboard, they could chair the Working Groups with support of the advisory committee.

e. Immediate-Term (3 Months) Focus Areas

Finalize Interconnection Queue contents and begin to publish monthly. (3 months max)

f. Near-Term (3-12 Months) Focus Areas

CENH is generally supportive of these topics in the near term.

1. Consistency of application format, threshold levels, review periods.
2. Recommendations for reducing the time for processing applications, studies, and approvals.
3. Recommended timelines for various functions including application review, pre-screening, study duration ranges, etc.
4. Transparency of costs for studies and utility system upgrades.

g. Decision Processes

Working groups should endeavor to reach consensus on as many items as possible. Where full agreement cannot be reached, the working group members should determine whether enough elements have been resolved to implement a partial solution as the outcome is better than the status quo; working groups should avoid continuing to "wrangle" over perfect outcomes when the state and region's energy system can benefit from incremental progress.

Long-Term Formal Working Groups:

In addition to addressing the issues a. through f. above, please address the following in relation to long-term formal working groups:

h. Should the group(s) also address net metering, grid modernization, etc.?

The GMAG should address grid modernization and net metering should be left until after the PUC Docket No. DE 22-060 concludes in 2024.

i. Working Group Charters and Procedures

The working group should begin its work on high priority, high agreement issues to make early progress and build trust among working group members. As these working groups are not defined in statute and

have no formal authority, formal procedures would seem restrictive. However, the development of a charter should be considered to develop a common set of goals, clear expectations, responsibilities, and decision processes.

j. Formal Agenda vs. Informal Discussions

The advisory committee recommended above should develop agenda items that is circulated in advance of meetings to interested parties. Open discussion should be included in meetings as time allows.

k. Legal representation

Legal representation should NOT be required to attend working group meetings.

Legal counsels may be beneficial as PARTICIPANTS when discussing changes to statute or rules, but requiring legal counsel as representatives for parties would change the tone of conversation and eliminate certain parties from participation altogether due to the costs incurred.

l. Topics to Avoid

None of note at this time.

m. Formal Third-Party Facilitator

See item 5d above.

n. Funding for Working Groups

There's the rub.

o. Communications and Transparency

To the greatest degree possible, the working groups should follow RSA 91-A. However, limitations on funding for staffing and other resources should be respected. Meeting summaries rather than meeting notes would be adequate.

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

CENH appreciates the Department receptivity to hosting a presentation from IREC on the Freeing the Grid Report. CENH does not have feedback at this time as IREC's public facing report was a high-level summary of their findings. IREC has made available the detailed scoring sheet for New Hampshire, which is attached and which CENH is still reviewing.

CENH is hopeful that stakeholders will be able to hear from IREC directly and be able to explore their findings together in time to influence the report.

7. SB 166 (2023)

Addressed in section 5.

8. Other Topics

Regarding the upcoming development of the Final Investigation Report:

CENH recommends that the Department, rather than exclusively solicit written comments on any circulated drafts of the investigation report, the Department also schedule tech sessions for stakeholder to discuss the final recommendations and wording of the report.

The time remaining before the report is due is relatively short and focused meetings to directly discuss the final language and recommendations will allow for more precision and a greater opportunity for consensus to be reached.