CLEAN ENERGY NH
Your Voice in All Energy Matters

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September 29, 2023

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

**RE: NH Department of Energy, Request for Public Comment on Improvements and Potential Changes to Renewable Energy Fund Programs**
**Clean Energy NH Responses to Request for Comments - Set 1**

Dear Commissioner Chicoine –

Clean Energy NH (CENH) offers the following in response to the NH Department of Energy's (the "Department") Request for Comments issued on September 1, 2023. CENH provides an overarching introduction followed by specific comments on the process and substance of the review of the Renewable Energy Fund ("REF").

CENH appreciates the Department opening this review and inviting comments, especially as Department staff are in process of managing two legislatively mandated investigations, participating substantively in numerous proceedings before the (PUC), preparing for another session of the legislature, and are working on several programs for the Inflation Reduction Act of 2022.

CENH offers the following comments, informed in part by our members. However, we hope this round of comments is but a first step in a open and iterative process. **To that end, CENH recommends that, as part of this review, the Department hosts at least two technical sessions, and issues at least one draft set of findings for comment by stakeholders before finalizing a summary report.** The REF is more than a decade old and has served the state extremely well. Changes in the technology, the market, and policy offer opportunities for reevaluation and reconfiguration of existing programs and perhaps the development of new ones. However, that evaluation should allow for all ideas to be offered and reviewed fully before substantive conclusions are made. A single round of comments may result in key ideas being underappreciated or misunderstood, resulting in lost opportunities for NH residents, communities, and businesses.

CENH looks forward to reviewing the comments submitted by the other stakeholders in this investigation and engaging in a constructed dialogue.

## CENH Introduction

CENH is a statewide non-profit organization dedicated to strengthening New Hampshire's economy by transitioning to a local, reliable, clean energy system with lowest possible energy costs that benefits all

NH citizens, local governments, and businesses. In fact, CENH's economy-wide, bipartisan focus has enabled the organization's membership to rapidly grow to include a significant proportion of the state's population, energy system, and economy.

CENH business members do include more than 20 solar companies with hundreds of NH employees. Our members also include a variety of hydro power companies, whose facilities have provided consistent, low-cost, clean energy to the local governments and in-state businesses for decades. However, CENH is not a trade organization that is focused on advancing the agenda of a narrow segment of the NH business community.

CENH now has 37 municipal members, representing over 440,000 NH citizens, nearly one-third of the state's population. In addition, CENH also represents the interests of hundreds of NH business and residential members. They are all looking to reduce their energy costs by accessing affordable, clean energy supplies. Furthermore, all three of the state's utilities are CENH members. And finally, CENH actively partners with multiple NH state agencies, as well as travel and tourism interests, chambers of commerce, regional planning commissions, state colleges, universities and community colleges, and workforce development entities across the entire state. As such, CENH is unique in this proceeding as we bring a perspective informed by no single entity or type of entity, but instead by all sectors of the NH economy and most segments of NH society.

CENH's focus is, therefore, equally broad, and inclusive. The clean energy measures we advocate for include not only renewable energy sources, but also energy efficiency, strategic electrification (*e.g.*, buildings and transportation), and energy storage. Each of these energy technologies present economic, energy, and environmental opportunities for the state as they are increasingly the least-cost method to reduce the state's overall energy consumption and, therefore, energy costs. In addition, each of these energy solutions provide an ancillary benefit of avoiding fossil fuel consumption, which reduces the "export" of energy dollars into the state, while also improving environmental quality and public health measures. Finally, when integrated and deployed in a coordinated fashion, each of these technologies can also be utilized as "non-wires alternatives" (NWAs),[1] and, therefore, reduce distribution and transmission system costs as well.

## Comments

### *Overarching*

Over the past year, default energy supply rates skyrocketed in response to dynamic global energy markets that deeply affected the ISO-New England (ISO-NE) region as electricity prices are highly correlated with national and international natural gas prices. The most powerful policy tool New Hampshire has to dampen these rate shocks and provide long term relief is to reduce the overall demand for energy. The second most powerful tool to deploy is local distributed energy resources (DERs), primarily solar photovoltaics (PV). DERs and renewable energy represent the least cost source of generation that can be constructed currently,[2] which is reflected by the fact that the ISO New England Interconnection queue is

[1] 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*." 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/.

[2] Lazard's Levelized Cost of Energy Analysis, Version 16.0 available at: https://www.lazard.com/media/typdgxmm/lazards-lcoeplus-april-2023.pdf

approximately 98 percent renewable resources and battery storage,[3] and can easily be installed onto distribution grids.

Since its inception, the NH REF has been a critical "brick" in the foundation of NH policies that have supported modest progress in the transition away from imported fossil fuels and toward local, low-cost, reliable energy supplies through a combination of demand management and integration of intermittent energy sources. In fact, the REF was essential to incentivizing the installation of renewable DERs a decade ago when capital costs were higher. The REF not only supported the installation of projects, but also the emergence of a range of clean energy companies that through competition have helped drive down the costs for installations. Absent the REF, this transformation was unlikely to happen.

The beneficial impact of local renewable energy was attested to at a Federal Energy Regulatory Commission meeting on June 20, 2023, when ISO-NE released a new analysis that finds that Mystic Station, one of the region's largest natural gas fired power plants, fueled exclusively by imported liquified natural gas (LNG), is no longer needed for reliability. Mystic station has been operating on the basis of a cost-of-service agreement since June of 2022, and that agreement had cost New England ratepayers nearly $400 million dollars as of February of this year.[4] The ISO-NE analysis credited stronger than expected growth in distributed solar power as one of the key reasons allowing this retirement.

Due to programs like the REF, the DER market has grown. Solar PV is the fastest source of low-cost electricity generation that can be built to meet New Hampshire's growing needs for clean, affordable power, capable of providing insulation from broader market forces. Further this resource can benefit residents, businesses, local governments, and manufacturers, improving the competitiveness of the entire state economy. Studies have forecast that a clean energy grid that maximizes distributed energy projects throughout the United States is one which would save $88 billion in energy spending by 2050.5 As a result of rising energy costs and the effectiveness of solar PV, solar energy developers, working at residential, small commercial, large commercial, and utility scale projects, have seen an explosion of interest by customers seeking affordable energy solutions.

However, far more electric power capacity and generation will be needed in the near and medium term, necessitating continued support for local, affordable sources of electricity production. This increased need is driven by two key trends. The first is the demonstrated volatility in the global energy market, as demonstrated by the 2022 invasion of Ukraine and the resulting economic sanctions on the Russian economy. The second is the impact of electrification of the building and transportation sectors, which will have implications for total consumption and demand across ISO-NE, which will affect energy supply costs as well as investments in transmission and distribution infrastructure.

With respect to the impact of geopolitics on New Hampshire's electric rates, local renewable DERs acts as a buffer against a surge energy price resulting from global shocks. Investments in DERs in advance enable businesses and individuals to minimize their exposure to the increased rates, leading to significant cost savings. This suppression of energy costs can deflect a cascade of impacts to the broader economy by allowing companies to maintain their workforce and other planned investments rather than divert funding to their energy budget.

With respect to electrification of end uses, renewable energy can also suppress electric supply rates by minimizing growth in consumption and demand, but it can also reduce or defer investments in

[3] The latest queue data can be accessed at: https://irtt.iso-ne.com/reports/external.
[4] https://www.iso-ne.com/static-assets/documents/2023/04/mystic_cos_prelim_02_2023.pdf
[5] VCE (2020). Why Local Solar For All Costs Less: A New Roadmap for the Lowest Cost Grid, Executive Summary, https://www.vibrantcleanenergy.com/wp-content/uploads/2020/12/WhyDERs_ES_Final.pdf,

transmission and distribution infrastructure. Both the adoption of electric vehicles in the transportation sector and the of heat pumps in the building sector for heating, cooling, and hot water are projected to increase significantly over the next decade in the ISO-NE region. While electrification of the building and transportation sectors will reduce the total energy consumed by the NH economy, due to the significant efficiencies these technologies provide over their combustion counterparts, they will dramatically increase the overall electrical consumption and peak demand.

As electric load grows in New Hampshire without a corresponding increase in local DERs, then there could be significant economic implications. The most effective initial action that New Hampshire can take to mitigate the impacts on the energy system and resulting rate increases is to incentivize overall energy demand reduction through energy efficiency, as provided by the NHSaves program. The second most impactful action is to further support the deployment of local, renewable DERs. By reducing energy consumption in the short term, while raising the level of local DERs, there will be spare generation, distribution, and transmission capacity available to accommodate the initial waves of electrification in the transportation and building sectors. This approach buys time for the orderly development of additional energy supply capacity and grid infrastructure. Energy efficiency and local DERs, when paired in this manner can be compared to gradually lowering the water level behind a dam in anticipation of a severe storm. As the rains fall and the rivers rise, the dam's reservoir will have sufficient capacity to store water, protecting downstream communities and infrastructure without risking dam failure. Expanded local renewable DERs will provide significant economic benefits to all ratepayers by mitigating uprates rate impacts across each rate element.

By maintaining key elements of the existing REF program, while implementing judicious revisions and expansions, the state can optimize the deployment of critical DERs for the benefit of all residents and ratepayers.

***Responses to DOE Questions***

**Section I. Residential Solar/Wind Rebate**

1) Given market maturity, and mindful of the goal of making investments to make projects possible, should the Department seek to overhaul the current program?

   **The DER market is still maturing, and specific market segments and technologies have advanced more rapidly than others. CENH recommends that the Department convene a technical session following its receipt and review of these comments to work with stakeholders to identify the most appropriate changes to program in order to optimize the investment of the limited REF funding and increase the reach of the programs.**

2) Should the program increase the rebate amount while also requiring means testing to target the rebates?

   **The current lottery-based rebate is not an appropriate use of funding. The program as it is being operated is no longer providing an incentive that is driving consumer demand. The program design should be revised to support the installation of systems that benefit low-income consumers.**

3) If so, how could means testing be done in an efficient way, while safeguarding personally identifiable information (PII)?

**Utilize the lists that are already maintained by government agencies and entities that track and serve the populations. The individuals and households on those lists should qualify categorically.**

**Also recommend that the Department consider using the Solar for All (SFA) definitions for consistency.**

4) Is there a rebate amount and an income threshold for eligibility that can incent development that would not have otherwise happened? Would a sliding scale approach be effective?

**A sliding scale may be the most equitable approach. However, it may add to the complexity of administration. A simpler approach may be to elevate the rebate to 50 percent of total system cost.**

Should something else entirely take its place as a rebate for residential customers and if so, what should it be?

**CENH does not believe that the residential rebate should be entirely replaced. In fact, given the program design of Solar for All program, NH should consider reallocating some of the money from the LMI community solar program into the (new) income restricted LMI residential rebate program.**

5) Should a 'battery storage paired with renewable technologies rebate program' take the place or supplement the current or revised program?

**Yes, this component should be incorporated with the above-mentioned program. Further, it should mirror the design of the Clean Energy Fund (CEF) (PUC Docket DE 22-004) from the restructuring settlement by requiring the REF recipients to enroll in Demand Response.**

6) LMI solar for individual homes (rather than community solar) is also an option, but program design is notoriously difficult. Is this something that the Department should invest time and effort in developing?

**CENH agrees that this is an appropriate inclusion, and the Department should invest time and effort supporting these projects.**

7) Are there states that have models worth emulating? Conversely, are their failed models that should be avoided?

**The current partnership with NH Housing Finance Authority, the public housing authorities, and the Community Loan Fund should be fostered and continued.**

**Similarly, the State should consider implementing consolidated billing to facilitate the development of community solar.**

**Lastly, the state should consider issuing an RFP for an organization to create a consolidated wait list of income tested LMI individuals who could benefit from LMI community solar,**

**which could be used to create a predictable pipeline of LMI community solar projects, and lower customer acquisition and project development costs.**

**Section II - Residential Wood Pellet Rebate**

1) Generally speaking, the Department considers this rebate program to be operating effectively and efficiently. Is this a correct assessment?

   **Yes.**

2) If it is a correct assessment, are there any areas where the program can be improved to further the goal of incenting new development that otherwise would not occur absent this rebate program?

   **CENH offers two suggestions to consider:**

   a) **The program has not kept up with inflation which has risen by 40 percent since program began. Raised to $15,000.**
   b) **The program should also consider allowing central pellet boilers that are manually bag fed, if the meet the same efficiency as the current program requirements. This is an important consideration as it may bring down installed costs, as well as address limitations in the current delivered pellet market.**

3) If this is an incorrect assessment, what revisions should be made to the program?

   **N/A**

**Section III - Commercial Solar**

1) Given the market's maturity, and mindful of the goal of making investments to make projects possible, should the Department seek to overhaul the current program?

   **Based on CENH's experience and member feedback, this program can be left in its current form.**

2) Should the program increase the rebate amount while also targeting this program to small businesses?

   **CENH feels this is unnecessary. Rural Energy for America Program (REAP) currently does that already, providing 50 percent of the project cost.**

3) If so, what would be an effective benchmark to use to target this rebate program?

   **N/A**

4) Should something else entirely take its place as a rebate for commercial customers that would be more attractive and useful to business owners?

   **N/A**

5) Should battery storage paired with renewable technologies take the place of or supplement the current or revised program?

**Yes. The $10,000 rebate that is available through the CEF (restructuring) fund has revealed itself to be insufficient to insufficient to incent storage in the absence of an active demand response (ADR) program to participate in. Unless and until the utilities are granted authority by the PUC to develop these battery ADR programs, additional incentives are required to develop solar market.**

**CENH suggests that the Department and stakeholders consider adding an additional $10,000 to the funds already available through the CEF for commercial batteries.**

**Section IV – Commercial Wood Pellet**

1) What is the cause for the drop off in interest in this program? Is there a residual impact from COVID-19 pandemic or something else?

2) If the drop off in interest is non-pandemic related, what are the hurdles for businesses participating in this rebate program?

**Similar to the residential program, the cap for C&I wood pellet rebates is too low. CENH recommends raising the cap to at least $75,000.**

3) Are there program design changes that could improve interest in the program and/or overcome those hurdles?

**CENH has heard consistently that this program needs to be better advertised.**

**Section V - Low-Moderate Income Community Solar Program**

1) Are the changes made as a result of that review process working as intended?

**The program changes seem to have had a positive impact so far.**

2) Is there a consistent funding level that Department should target to encourage project development?

**The $1M per year that is currently set should be maintained for now.**

**Attention should be paid to changes in inflation and other market factors, and in other programs funded by REF in future to determine if and when funding should be modified, and how that modification would impact other programs.**

3) The Department is leading an application for the EPA's Solar for All program. Funding is being awarded on a competitive basis. If New Hampshire's application is awarded funding, additional federal dollars will be used to scale up this program. Those federal funds come with a variety of restrictions and compliance requirements (such as BABA, Davis Bacon, etc. - Please see the

"Solar for All RFA", page 63-64) that are not part of the current program.

**Noted.**

4) Should the Department mix the federal and state funds, making the total program funding available larger, but at the expense of extending those federal funding requirements to the state funds as well?

**Developing a consistent set of programs by mixing the funds sends a clear and simple signal to the market. Segregated funds increase administrative complexity and enhances the possibility of confusion for installers.**

**Conversely, more programs may allow for certain projects to qualify for rebates and therefore go forward. Based on stakeholder feedback and future discussion, the Department may be deemed worthwhile having a limited number of small programs that are designed to support very specific technologies and customer groups.**

5) Or should the Department keep the funding sources as separate as possible, leaving one batch of successful applications solely funded with state funds and the remaining with federal funds? If so, how should a successful application's funding source be determined?

**The Department should consider entirely separate programs if it is determined that by mixing the funds then all project elements must meet each of the federal requirements, regardless of whether the dollars originated from state or federal sources.**

**Section VI - Non-Residential Competitive Grant**

1) Generally speaking, the Department considers this grant program to be operating effectively. Is this a correct assessment?

**Yes.**

2) If it is a correct assessment, are there areas where the program can be improved to further the goal of incenting new development that otherwise would not occur absent this rebate program?

**The Department and stakeholders should consider expanding the competitive grant program so that funds are available to 1) <u>all</u> renewable types, and 2) new AND existing renewables.**

**All other programs are targeted at specific renewable fuels and generally new projects, and there is program specific to supporting local hydro, which has unique costs and benefits. The addition of hydro to the competitive grant program is important for this reason.**

3) If this is an incorrect assessment, what needs to be changed in the program?

**N/A**

**Section VII - Local Government Specific Programs**

1) Should the Department create stand-alone solar and wood pellet rebate programs for local governments with higher limits than provided for commercial and industrial users?

   **This change is not necessary. The majority of funding is already going to these entities.**

2) If so, what should the rebate maximums be for such programs?

   **N/A**

3) Should enhanced rebate amounts be made available to communities with fewer resources?

   **This is worthy of further consideration. CENH recommends that the Department and stakeholders consider whether communities that have less than 80 percent of the Area Median Income (AMI) should receive an additional percentage of project costs (See below).**

4) If so, what rebate amounts would make the difference for those communities? How should those communities with fewer resources be selected?

5) **In general, the rebates need to be bumped up to reflect inflation. At a minimum, qualifying communities could receive an extra 25 percent of project cost?**

**Section VIII - Co-Located Battery Storage**

1) Should this be a separate, technology-neutral program or does a requirement for it to be paired with renewable energy generation seem reasonable?

   **Currently, the value proposition of batteries as a resilience asset is greatly enhanced by co-location with solar. However, a co-location requirement seems unnecessary. NH DOE should ABSOLUTELY require enrollment in an ADR program as a condition for battery storage receiving a grant through the REF.**

2) Should there be separate commercial and residential level incentives, or should such a program be only targeted towards one sector?

   **Yes, there should be separate levels.**

3) Should there be a separate competitive grant program that funds co-located storage projects?

   **Yes. Rebates for the residential program and larger competitive grants for commercial.**

4) What rebate levels would be required to effectively incent non-residential and residential storage installations?

   **As noted previously, review the Eversource CEF battery program. The $10,000 available to commercial project doesn't appear to be enough to move the market.**

5) Are there existing incentive models in other states that are worth emulating?

**Demand response programs, and any other programs that monetize grid services. Also consider input into the Department's Investigation into Battery Storage, Inv 2023-002 for additional information from stakeholders.**

6) Are there design elements in other states that are worth avoiding?

**Section IX - Other Questions to Consider**

1) Are there other changes to REF that the Department should consider?

   **The Department should avoid carrying a high balance of reserve funds. While CENH appreciates the concern regarding a "see-saw" in funding levels, the relatively high balance that has been withheld year over year is not aligned with the goals of the REF, which are to support the development of clean, local energy projects and develop an overall competitive market to bring costs down further. Spending those funds in the near term will assist in achieving that goal.**

   **To set budgets, the Department should perform an annual analysis of expected RPS shortfalls and ACP revenues and budget accordingly.**

2) Has the general timing of RFPs (posting time, RFP response times, etc.) for the competitive grant programs been reasonable?

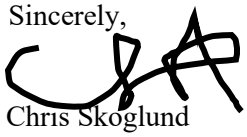
   **Generally, yes. The low level of funding has been the greatest concern.**

3) If a local government competitive program is developed, is there a time of year that would be make it easier for units of local government to apply both in terms of staff bandwidth as well as timing for town meeting?

   **The timing should be developed to allow for projects to be voted on and approved at the annual town meeting for communities that follow that process.**

CENH looks forward to reviewing the comments submitted by the other stakeholders in this investigation and engaging in a constructive dialogue.

Sincerely,



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