

**BEFORE THE NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION**

Docket No. DE 20-161

**Brief of Clean Energy NH**

Clean Energy NH (“CENH”) submits this post-hearing brief. In consideration of direction offered by the Public Utilities Commission (the “Commission”), reiterates CENH’s unique standing in this case, which is followed by a broad opening statement, and then concludes with a set of recommendations to the Commission along with more detailed justification.

**I. BASIS FOR STANDING**

CENH reiterates its unique position among the parties to this docket that provides it with a perspective worth special notice in this docket.

As noted during the hearing, CENH is not a trade organization that is focused on advancing the agenda of a narrow segment of the business community. Instead, CENH is a statewide non-profit organization dedicated to strengthening New Hampshire’s economy by transitioning to an abundant, local, reliable, and 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.

As the state’s leading clean energy advocate, our business members do include more than 20 solar companies with hundreds of NH employees. These companies have collectively installed hundreds of MW of solar power in NH and across the northeast. Our business members deliver clean low-cost energy that reduces consumer costs and increases NH’s own energy supply. 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. The facilities are a critical mix of our local and in-state energy portfolio. CENH now has 36 municipal members, representing over 425,000 NH citizens, nearly one-third of the state's population. They are all looking for affordable, clean energy supplies, particularly at this moment in time, as energy prices are at historic highs and are expected to remain so.

Finally, we actively partner with the state agencies, as well as NH's travel and tourism interests, chambers of commerce, regional planning commissions, as well as universities and workforce development entities across the entire state.

Furthermore, all three of the state's utilities are CENH members.

As such, CENH is unique in this proceeding as we bring a perspective informed by no one entity or type of entity, but instead by all sectors of the NH economy and most segments of NH society. Clean energy measures, including energy efficiency, strategic electrification, storage, and renewable energy technologies all present economic, energy, and environmental opportunities for the state as they are increasingly the least cost method to manage overall energy consumption and therefore energy costs, while also reducing fossil fuel consumption. Each of the technologies can be utilized as "non wires alternatives", and, therefore, impact distribution and transmission system costs as well.

As the Least Cost Integrated Resource Plan (LCIRP) statute directly requires planning for the development of NH energy system that provides for affordability, reliability, efficiency, and public and environmental health, this docket is of significant interest and concern.

## II. INTRODUCTIONARY STATEMENT

*“If you fail to prepare, you are preparing to fail.” — H.K. Williams<sup>1</sup>*

Over the past year, energy supply rates in the ISO-New England (ISO-NE) region have significantly increased due to dynamic global energy markets, influenced by national and international natural gas prices. Planning for where the system is likely to go absent active intervention, versus could go with utility management is critical at this time. The energy transition is projected to reverse historic electric sector trends with electricity consumption and net demand likely to dramatically increase in the coming decades, due to the electrification of building heating and the transportation sector. In the coming decades, New England and New Hampshire anticipate a substantial rise in electricity consumption as the building and transportation sectors undergo electrification. It is projected that electricity usage may more than double or triple compared to the present. To accommodate this surge in demand, there will be a need for a proportional increase in power generation capacity, as well as transmission and distribution infrastructure.

Preparing for and taking proactive measures ahead of these changes is crucial to minimize costs. While we cannot predict the precise nature of the energy system's transformation and its economic impacts, we can forecast and plan for the general direction and scale of the changes. ISO-NE has been engaged in long-term forecasting and planning, continuously improving its forecasts and plans to ensure reliable and cost-effective service. By engaging in

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<sup>1</sup> This quote is frequently credited to Benjamin Franklin. No evidence to support this claim exists. Of variations of this adage found, the earliest is attributable to an excerpt by Pastor H.K. Williams as cited in “Religious Education” in the journal *The Biblical World*, Volume 53, Number 1, January 1919, <https://www.journals.uchicago.edu/toc/biblicalworld/1919/53/1>.

proactive planning and preparation, energy system managers can guide the system towards a preferred state, rather than implementing costly reactive measures.

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. By reducing energy consumption in the short term, 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 conservation 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.

The second most impactful measure to alleviate the situation is the deployment of local distributed energy resources (DERs), such as battery electric storage and solar photovoltaics (PV). DERs and renewable energy already represent the most cost-effective sources of generation currently available, evident from the fact that around 95 percent of resources in the ISO New England Interconnection queue are renewable or battery storage projects. Solar PV, in particular, is the fastest-growing source of low-cost electricity generation that can meet New Hampshire's increasing demand for clean and affordable power. It can provide insulation from the volatility of global and regional energy markets while benefiting residents, businesses, local governments, and manufacturers, thus enhancing the overall competitiveness of the state's economy. Studies have projected that a clean energy grid with widespread distributed energy projects across the United States could save \$88 billion in energy spending by 2050. However,

realizing these economic benefits requires careful planning and preparation to guide effective action.

To achieve the economic gains of a clean energy grid that maximizes distributed energy projects nationwide, meticulous preparation and planning are essential. An efficient and fair interconnection process is necessary to bring new sources of local, affordable, and abundant energy resources online, ensuring they align with the needs of the interconnected state and regional energy systems while minimizing environmental impacts and preserving natural resources.

Utilities have a vital role to play in facilitating the energy transition at the lowest possible cost for consumers. The data clearly indicates that the energy policy in New Hampshire cannot afford to delay as changes are rapidly approaching. Given the rapid pace of change in the energy landscape, New Hampshire's utilities should act promptly to plan and prepare for the future. In fact, Eversource explicitly recognizes this in the conclusion of the LCIRP,

*“Considering the new and rapidly evolving demands being placed on modern electric systems, System Planning must adapt to keep pace with customer needs and to anticipate changes in technology and customer expectations.”* (Exhibit 1 at BATES 44).

Despite this, Eversource’s 2020 LCIRP including the supplement, and DOE’s acceptance of these filings, are a plan for failure.

The LCIRP statute (RSA 378:37-40) provides a clear framework for planning a dynamic energy system. It clearly directs NH's electric utilities to engage in planning that ensures each company's future operations enable the lowest possible cost while maximizing social and environmental benefits. The LCIRP is vital for transparent and rigorous planning, involving

input from a broad range of stakeholders at the Commission. Eversource and DOE's narrow interpretation of the statute has long-term negative implications for the state.

RSA 378:37-40 is intended to minimize energy costs of all types by allowing for a thorough and transparent opportunity to evaluate NH electric and gas distribution utilities forward looking investment plans to ensure that each utility has selected a portfolio of energy efficiency, distributed energy, and grid modernization measures that will be able to meet this new demand and consumption reliably, but also while delivering low cost, abundant power capable of supporting strong long term economic development, community welfare, and environmental health. *Similar language does not exist anywhere else in NH law.* This statute is a critical guide post for state agencies and their staff, and a vital guardrail for Commission decisions.

The LCIRP statute has been in place for decades and has been modified only slightly in 2014 and 2021. The statute clearly calls for a forecast of the future state of the energy system and the development of a plan to mitigate future cost increases to ratepayers across the generation, distribution, and transmission elements of the system.

Eversource has been in the business of operating the state's largest distribution for decades, and further has been deeply involved in every energy discussion held during that time, including dockets pre-dating this one that have explored future trends and technological solutions. The Department of Energy, though only created on July 1, 2021, was formed from staff and agencies with similar levels of experience and expertise. As such both should be deeply familiar with the LCIRP and the changes to the grid that are already underway.

In fact they are. Eversource witness, Dr. Gerhard Walker, noted with respect to growing demand that *"we're expecting, at a minimum, a doubling of the system load over the next 20 to*

*30 years as electrification progresses” (Gerhard, Tr. 3/7/23 at 230:2-4). And DOE’s witness, Mr. Ron Willoughby, noted that “[w]hen we’re talking about the distribution system, and we’re talking about integrating distributed energy resources, you have to recognize that the distribution system was never designed to handle that. And, so, what the utility has to deal with is “how can I upgrade my existing system, in a systematic manner, without breaking the bank?” (Willoughby, Tr. 3/8/23 at 142: 4-11).*

Despite the above, Eversource and DOE are asking the Commission to approve stamp a Partial Settlement Agreement (“Agreement”) that rubber stamped an LCIRP that grossly misses the requirements of the statute, allows for continued application of a technical standards that have undergone inadequate cost benefit analyses, and recognizes a highly restrictive definition.

As noted during the second day of hearings Settlement Agreement in Eversource Energy’s 2019 Least Cost Integrated Resource Plan Docket, DE 19-139,

*“[t]hese LCIRPs are becoming more of a distribution planning exercise, and that more granular information is necessary, in order for the Commission to successfully review and understand a company’s LCIRP” (Schwarzer, Tr. 3/8/23 at 137:13-18).*

This filing offers more granularity with little expansion beyond a distribution planning exercise, falling well short of a comprehensive and coherent integrated plan.

Approval of this Agreement and the Plan would send a message to NH’s regulated utilities that preparation for foreseeable future conditions is not necessary and that they are free to implement reactive solutions rather than active management of the system, a decision that could come at great cost to NH’s ratepayers.

### III. RECOMMENDATIONS TO COMMISSION

CENH makes the following recommendations to the Commission based on the Docket Record and consistent with CENH's original testimony (Exhibit 19):

1. The Partial Settlement Agreement between Eversource and the NH Department of Energy (DOE) should be rejected;
2. The LCIRP as filed (Exhibit 1) and amended by the Supplement (Exhibit 3) should be rejected and Eversource should be directed to resubmit a new and complete plan that meets the full requirements of each section of the LCIRP as detailed in RSA 378:37-40; and
3. That Eversource's requirement that distributed energy resources (DERs) interconnecting into the grid pay the meeting the company N-1 reliability standard be suspended pending the NH Department of Energy's IP 2022-01 - Investigative Proceeding Relative to Customer-Generator Interconnection<sup>2</sup> and any necessary legislative and regulatory processes.

In addition, CENH makes the following additional recommendation:

4. That Eversource's definition of non-wires alternatives (NWAs) as being company owned (Walker, Tr. 4/25/23 at 61:11) should be deemed inconsistent with industry practices and counter to the goals of achieving a least cost energy system.

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<sup>2</sup> NH DOE (2023). [IP 2022-01 - Investigative Proceeding Relative to Customer-Generator Interconnection](https://www.energy.nh.gov/rules-and-regulatory/investigative-proceedings), NH Department of Energy, <https://www.energy.nh.gov/rules-and-regulatory/investigative-proceedings>.



#### IV. JUSTIFICATION

**Recommendation 1:** The Partial Settlement Agreement between Eversource and the DOE should be rejected.

CENH's arguments concerning this recommendation are based on its Recommendations 2 – 4, and specific justification is provided arguments in those sections.

**Recommendation 2:** The LCIRP as filed (Exhibit 1) and amended by the Supplement (Exhibit 3) should be rejected and Eversource should be directed to resubmit a new and complete plan that meets the full requirements of each section of the LCIRP as detailed in RSA 378:37-40.

Contrary to Eversource and DOE's interpretation, the LCIRP did not lose relevance when NH ceased to have vertically integrated utilities<sup>3</sup>. The statute's requirements go beyond traditional large-scale generation and distribution plant assets. Both entities may have fallen victim to "expert bias", reading the statute for what each believe it means versus what the statute says and therefore could allow. In doing so, Eversource and DOE are seeking approval of a plan that is too narrow in its analysis and assessments and provides only a limited range of possible options that could deliver lower cost service to ratepayers.

Eversource's LCIRP in Appendix A (Exhibit 1 at 47) describes how each requirement in RSA 378:38 is generally addressed in the filing. The company's failings in the 2020 LCIRP occurred primarily in this section as follows.

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<sup>3</sup> Eversource contention that energy supply options were no necessary to propose (Walker, Tr. 3/7/23 at 121:9; Walker, Tr. 3/8/23 at 79:6-14); Eversource Exhibit 1 at BATES 47; DOE acceptance of LCIRP filing via the Technical Statement (Exhibit 20 at BATES 5).

**RSA 378:38, I** requires “*A forecast of future demand for the utility's service area.*”

Appendix A (Exhibit 1 at BATES 47) notes that this requirement is documented in Section 5 (Exhibit 1 at BATES 14). However, as noted in CENH’s initial testimony, this forecast lacks sufficient substance to allow the Commission and other intervenors to adequately evaluate whether the company is in fact preparing for a realistic approximation of the future potential grid conditions system wide. The LCIRP includes only a qualitative description of the elements that are included in the system wide and substation level forecasts rather than allowing for a detailed analysis of the assumptions for the various influences on demand over time. These influences as noted in the LCIRP include “for energy efficiency, DER, large customer projects, or other material changes in load or supply” (Exhibit 1 at BATES 15). Eversource *does* provide the methodology for calculating the load forecast in Appendix D (the Distribution System Planning Guide 2020) (Exhibit 1 beginning at Bates 87). That methodology describes how growth in behind-the-meter (BTM) solar photovoltaics (PV), energy efficiency (EE), and electric vehicles (EVs) are incorporated into the load forecast. However, individual forecasts for BTM PV, EE, and EVs are not included in the Eversource filing. As a result, it is not possible to evaluate the company’s forecast<sup>4</sup> and whether the distribution level solutions that are proposed would incur the lowest possible cost.

Absent more detailed model inputs and assumptions, as well as outputs, it is impossible to ascertain whether the company has robust data or not, calling into question the remaining elements of the plan. If the forecast is the foundation of the LCIRP, then there is no means to determine whether the structure is stable or prone to collapse.

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<sup>4</sup> In comparison, ISO-New England provides state level forecasts for BTM PV, EE, and EVs in its annual Capacity Energy Load Transmission (CELT) Report available at: <https://www.iso-ne.com/system-planning/system-plans-studies/celt/>.

**RSA 378:38, II** requires “*An assessment of demand-side energy management programs, including conservation, efficiency, and load management programs.*”

Appendix A (Exhibit 1 at BATES 47) notes that this requirement is documented in Section 11 (Exhibit 1 at BATES 37). Again, however, as noted in CENH’s initial testimony, this assessment is lacking.

As the OCA’s expert witness clearly articulated,

*“[T]he [2020] LCIRP simply does not comply with the LCIRP statute. The statute is very clear that LCIRPs must include, among other things, an assessment of demand-side resources, an assessment of supply options, including capacity market procurements, renewable energy, distributed energy resources, an assessment of the plan’s long-term and short-term environmental, economic, and energy price/supply impacts on the state[.]*

*As we articulate in our testimony, Eversource’s LCIRP does not include assessments. The LCIRP is essentially a description of the process that the Company uses to make resource investment decisions. But it does not actually include any assessment of those options. And it’s important to understand what I mean by ‘assessment’. An ‘assessment’ would include presentation of multiple resource options, an articulation of the costs and benefits of those options, and an optimization of those options”* (Woolf, Tr. 3/8/23 at 175:13-24; 176:1-11).

The company does include a review of the existing ratepayer-funded energy efficiency but ends there rather than providing an assessment of how the company might 1) propose additional programs beyond those provided by NHSaves, or 2) offer programs that enable third parties to efficiently provide privately-funded energy conservation, efficiency, and load management programs. As noted in CENH testimony, such demand management programs could broadly include battery storage programs, managed charging of EVs, and time varying rate design (Exhibit 19 at BATES 15-16).

**RSA 378:38, III** requires “An assessment of supply options including owned capacity, market procurements, renewable energy, and distributed energy resources.”

This assessment did not adequately occur. As the company notes in Appendix A, Section 1, III (Exhibit 1 at BATES 47), the company has divested its generation assets and solicits bids for its default energy supply. However, as a distribution utility, the company has considerable influence over how easily renewable energy assets and other DERs can interconnect and therefore provide a range of grid services. Privately funded, local DER investments can provide near-term, low-cost energy supply options that generate immediate savings for the customers that utilize these investments directly, and they can have the potential in aggregate to reduce energy costs for all ratepayers by reducing peak demand. Reducing peak demand can reduce not only wholesale supply costs, but also defer distribution investments and transmission costs.

Unfortunately, the company’s approach to DERs is passive rather than actively planning for how they might serve as “non-wires solutions” (NWS), alternately referred to as “non-wires alternatives” (NWA) in the net-metering docket, DE 16-576.<sup>5</sup> Eversource’s passive treatment is reflected in Appendix A, Section 1, III (Exhibit 1 at BATES 47):

*“Eversource accommodates the development of such projects and installations by customers as part of its distribution system planning process as described in Section 5 of this filing.”*

And:

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<sup>5</sup> 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/>.

*“Eversource expects the development of such facilities to continue and expand in New Hampshire and, consistent with Section 10, will continue to plan for a system that can accommodate such development.”*

Such an approach appears to treat energy efficiency, renewable energy, and other DERs *reactively*. Rather than treating these technologies and grid entrants as assets that could be integrated into the distribution system in a manner that reduces electricity consumption and demand on the distribution and transmission systems, the LCIRP appears to lay out an approach to managing them as if they would only be a burden on the system. A burden that will need to be addressed through utility side investments.

A key to understanding this improper treatment of DERs is Eversource’s narrow view of what the term NWA applies to within their NWA framework. As noted in an exchange between Commissioner Carleton Simpson and the Eversource witness, Mr. Lavelle Freeman,

*“a non-wires alternative remains an asset that is within control of the Company”*  
(Simpson/Freeman, Tr. 4/25/23) at 45:12-24; 46:1-15).

Under such a definition, the only “NWAs” on the Eversource system are those that are under their control AND part of the company’s capital assets with all costs passed on to ratepayers. Such a narrow definition of NWAs within its service territory has allowed Eversource to disregard the opportunity to harness private capital to defer distribution grid upgrades.

As a result, no programs have been proposed that could incentivize the widespread and geo-targeted integration of the broad range of available demand reducing technologies.

**RSA 378:38, IV** requires “An assessment of distribution and transmission requirements, including an assessment of the benefits and costs of "smart grid" technologies, and the institution or extension of electric utility programs designed to ensure a more reliable and resilient grid to

prevent or minimize power outages, including but not limited to, infrastructure automation and technologies.”

Reiterating CENH’s testimony (Exhibit 19 at BATES 20-21), grid modernization investments are needed to spur market adoption of more innovative demand-side management technologies, and the clean energy transition in general through price signals, or utility side upgrades. The grid mod docket, DE 15-296, occurred over a period of several years and engaged numerous stakeholders from all sectors of the state, and further benefited from participation of well-respected technical consultants. While the conclusion of that docket did not occur until after the 2020 LCIRP was filed, Eversource was fully aware of the issues and opportunities presented in that docket.

However, the company’s treatment of this matter (Exhibit 1 at BATES 36) reflects only a broad overview of the benefits that could result from grid modernization. Following such a lengthy investigation in Docket 15-296, which included the 2017 Report on Grid Mod that Eversource helped draft, the company should have provided a more exhaustive treatment of what investments they would make, and how such investments would result in a lower cost, more reliable energy system.

The OCA expert witness, Mr. Tim Woolf noted that,

*“Grid modernization, as you know, covers a broad range of technologies. [R]eliability is usually the first one. [And] safety, and resilience, and so forth. Reducing cost is one of them -- oh, also, interconnection DERs is a big benefit of grid mod. And that itself, if the DERs are cost-effective, leads to cost reductions”* (Woolf, Tr. 3/8/23 at 229:1-14).

In essence, Grid Mod is the means to address the concerns that DOE’s witness, Mr. Ron Willoughby raised concerning changes to the distribution grid that ran counter to its original one-

way energy-flow design (citation above noted above and Willoughby, Tr. 3/8/23 at 142: 4-11) .

Rather than identify opportunities to the future, Eversource cursorily described what smart grid technology could do, and largely avoided this topic altogether,

**RSA 378:38, V** requires “An assessment of plan integration and impact on state compliance with the Clean Air Act of 1990, as amended, and other environmental laws that may impact a utility's assets or customers.” and **RSA 378:38, VI** requires “An assessment of the plan's long- and short-term environmental, economic, and energy price and supply impact on the state.”

For both RSA 378:38 V and VI, the company relied on its divestiture to claim that these sections of law did not apply as it is subject to the ISO-NE market for its default supply and has little direct control over the sources of energy that are dispatched (Exhibit 1 at BATES 48). In this section, Eversource notes,

*“Eversource will seek to incorporate NWS where economically and technically feasible into its solution portfolio, which has the potential to support environmental goals in the State.”*

Again, the key to understanding Eversource’s failure to assess how DERs integration in their territory could improve public health and environmental quality comes down to Eversource’s narrow view of what the term NWA applies to within their NWA framework,

*“a non-wires alternative remains an asset that is within control of the Company”*  
(Simpson/Freeman, Tr. 4/25/23) at 45:12-24; 46:1-15).

As noted above, this definition of NWAs has enabled Eversource to disregard the opportunity to incentivize the investment of private capital in local, clean DERs to not only defer system wide and geographically specific distribution system upgrades, but also to deliver real improvements to health and well-being of New Hampshire residents by reducing reliance on imported, polluting forms of energy.

By taking a broader view of NWAs, Eversource does have the capacity to examine its policies, plans, and projects to assess how they will support the adoption of clean energy technologies that can reduce energy electricity consumption and demand, and specifically the consumption of fossil fuels and, therefore, reduce energy costs, as well as the public health and environmental impacts associated with fossil fuel energy consumption.

**Recommendation 3:** Eversource's requirement that DERs interconnecting into the grid be required pay all costs of meeting the company's N-1 reliability standard be suspended pending the NH Department of Energy's IP 2022-01 - Investigative Proceeding Relative to Customer-Generator Interconnection<sup>6</sup> and any necessary legislative and regulatory processes.

The implementation of an N-1 interconnection standard by a utility refers to the ability of the power grid to maintain reliability and stability even if one component of the system fails. The "N" represents the total number of interconnected components, while the "1" represents the failure of a single component. Ensuring safe and reliable power for all customers is central to maintaining meeting the electric utilities' obligation to society. Further CENH recognizes that it is important for NH electric utilities to ensure that the integration of DERs into the grid does not compromise the reliability and stability of the overall system.

What is at issue is the decision by Eversource to adopt this reliability standard without any assessment of the relative costs and benefits, as well as their decision to assign the full costs of meeting the N-1 standard to DERs when they seek to interconnect into the grid, and when that interconnection requires upgrades along the primary circuit as well as along a secondary circuit.

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<sup>6</sup> NH DOE (2023). [IP 2022-01 - Investigative Proceeding Relative to Customer-Generator Interconnection](https://www.energy.nh.gov/rules-and-regulatory/investigative-proceedings), NH Department of Energy, <https://www.energy.nh.gov/rules-and-regulatory/investigative-proceedings>.



The secondary circuit provides an alternate path should the primary path fail. However, the requirement that the DER pay for the full costs of meeting that N-1 standard along the secondary path was made without any study of the costs and benefits. This failure is part of the larger failure within this LCIRP to comprehensively forecast future conditions and present a plan to manage the energy system to achieve the optimum economic, social, and environmental outcome.

Ultimately, the decision to allocate interconnection costs for DERs should be based on a comprehensive analysis that provides a clear picture of not only what the total upgrades costs are but also what the relative benefits are so that costs can be proportionately assigned. Under the current paradigm Eversource is assigning all the interconnection costs to the DER projects that first incur them regardless of the full set of benefits that are delivered to the system, to whom those benefits accrue, and any accounting for what the benefits to all ratepayers.

Eversource has defended the assignment of the full costs of meeting their N-1 technical standard to DER projects wishing to interconnect, citing longstanding reliability standard and using traditional cost allocation methodologies. Further, they have claimed that by requiring upgrades to the primary and secondary path, then they can ensure that the newly interconnecting DER project will stay online should the primary path be tripped. While keeping the DERs online is a desirable outcome, the reliability upgrades along the secondary path do not only deliver benefits to the DER, and those reliability benefits might not be worth the cost of the elevated interconnection fees. Furthermore, DERs are not like historical electric infrastructure projects that simply lead to an increase in demand and consumption on a distribution network and transmission system requiring upgrades to distribution system infrastructure. DERs, however, are grid assets. They not only generate economic value for the project developers, but they also

provide benefits to ratepayers. In the case where DERs are electric power generators, these assets increase the overall available capacity available on the grid. This can help stabilize and lower energy supply costs as well as electricity transmission costs. These projects are a key part of the solution to the volatile energy prices in the region. Further, by requiring upgrades to the primary and secondary paths, the DER projects provide the utility itself the flexibility to reconfigure the network as needed due to changes in system condition and demand in the future. This benefit accrues to the utility, theoretically to its customers and not to DER owners. As the N-1 standard is being applied now, the DER project is funding reliability and resilience that benefits the broader energy system, but these benefits have not been quantified and costs are being born only by DER developers. At present CENH members are reporting that the application of these N-1 standards for interconnection is resulting in the delay or cancellation of solar projects. These delays and cancellations are restricting rapid deployment of low cost energy supply at a time of historically high energy rates. The decision to institute an N-1 interconnection standard for DERs should be based on a comprehensive analysis of the specific circumstances and needs of the utility and the grid system. Because of the potential for these system upgrades to have a range of beneficiaries, Eversource should have worked closely with state agencies, the Office of the Consumer Advocate, and stakeholders to ensure that any interconnection standards they put in place are cost-effective, fair, and sustainable over the long term.

As noted in CENH's testimony (Exhibit 19 at BATES 32-33), the need for such an evaluation has already been recognized and is underway. SB262 (2022) was signed by Governor Sununu nearly a year ago on June 8, 2022. The bill became effective on September 8, 2022, and directed that:

*“I. Within 90 days of the effective date of this section, the department of energy shall initiate a proceeding to investigate modification of the rules of the public utilities commission in PUC 903.01(e) to ensure cost-effective, predictable, and timely interconnection procedures for customer generators to the state’s electric distribution system. In so doing, the department shall consult with electric distribution utilities, distributed generation project developers, and any person or entity the department deems relevant to its study.”*

And

*“The department’s investigative proceeding shall examine and make specific recommendations concerning the following:”*

*“(c) How to ensure just and reasonable pricing of grid modernization upgrades mandated by the distribution utility for interconnection of distributed energy resources, including transparency and consistency in pricing guidelines and appropriate cost-sharing among parties benefitting from such upgrades.”*

This investigation is actively underway and will result in findings that clarify how standards should be set and costs should be allocated across the system. Until that investigation is concluded, Eversource should pause the application of the N-1 standard to DER interconnection. This recommendation does not contradict DOE’s position taken in its Technical Statement (Exhibit 20 at BATES 5),

*“DOE approval of the application of the N-1 criteria for DER interconnections to be contingent upon the outcome of DOE Docket No. IP 2022-001[.]”*

This practice is delaying project construction and therefore delaying the development of energy projects that can increase in-state energy generation precisely when the state needs low-cost power most.

**Recommendation 4:** That Eversource's definition of non-wires alternatives (NWAs) as being company owned (Walker, Tr. 4/25/23 AM at 61:11) should be deemed inconsistent with industry practices and counter to the goals of achieving a least-cost energy system.

See arguments above.

## V. CONCLUSION

The state energy policy in RSA 378:37 at the opening of the LCIRP section clearly states that energy should be provided at the lowest possible cost *while also* delivering economic, social, and environmental benefits. The sections that follow provide explicit guidelines to ensure that the state's energy utilities undergo a comprehensive process that allows them to forecast future conditions and develop a comprehensive plan that integrates solutions to maximize benefits. Innovation over the past decade has made previous energy technologies not just cost-competitive but lower cost and new technologies exist to accommodate the intermittent nature of renewable energy and flexibility of new end use technologies. Eversource and DOE are aware of all these changes and have neglected to account for them in the 2020 LCIRP. As a result, the current LCIRP is a distribution management strategy. It may be perfect for ensuring reliability and safety of the expected evolution of the NH energy system, but it is insufficient to guide the energy system from what is expected to what is possible. By failing to present a plan that actively manages the system to optimize the interconnection and integration of utility owned and

privately owned assets that can provide local, abundant, cheap, clean energy, the company and the agency may be enabling low cost but missing the opportunity to enable the LOWEST cost.

By disapproving the Partial Settlement Agreement and the LCIRP, the Commission will send a clear message that they expect the NH utilities to not simply manage the system conditions as they emerge, but for the NH utilities to change the optimize the direction the grid is going.