

Public Service Company of New Hampshire
d/b/a Eversource Energy
Docket No. DE 20-161
Testimony of Russel Johnson, Lavelle Freeman, and Gerhard Walker
September 30, 2022

STATE OF NEW HAMPSHIRE
BEFORE THE
NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

DOCKET NO. DE 20-161
2020 LEAST COST INTEGRATED RESOURCE PLAN

REBUTTAL TESTIMONY OF
RUSSEL JOHNSON, LAVELLE FREEMAN, AND GERHARD WALKER

On behalf of Public Service Company of New Hampshire
d/b/a Eversource Energy

September 30, 2022

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PETITION OF PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
d/b/a EVERSOURCE ENERGY
2020 LEAST COST INTEGRATED RESOURCE PLAN

Docket No. DE 20-161

1 **I. INTRODUCTION**

2 **Q. Mr. Johnson, please state your full name, position and business address.**

3 A. My name is Russel D. Johnson. I am employed by Eversource Energy Service
4 Company as Director of Distribution Engineering. My business address is 780
5 North Commercial Street, Manchester, New Hampshire.

6 **Q. What are your principal responsibilities in this position?**

7 A. As the Director of Distribution Engineering, I am responsible for optimizing the
8 performance of the distribution system assets of Public Service Company of New
9 Hampshire d/b/a Eversource Energy (“Eversource” or the “Company”) and
10 ensuring customer needs for service and reliability are satisfied in this regard. The
11 Distribution Engineering and Design Group reports to me. I am also primarily
12 responsible for the Company’s capital budgeting and project approval process
13 associated with distribution line projects and programs. I have also had
14 responsibility for the Reliability Enhancement Program (“REP”) Plan, which

1 supported up to \$40 million of capital investment annually targeted at reliability
2 projects.

3 **Q. Please summarize your professional experience and educational background.**

4 A. I graduated from Clarkson University in Potsdam, New York in 1985 with a
5 Bachelor of Science in Electrical and Computer Engineering. I also received a
6 Master of Science in Electric Engineering with a concentration in Power
7 Engineering from Clarkson University in 1987. Upon graduation from Clarkson
8 University, I was hired by the Company and have held various positions in
9 Distribution Engineering, Large Commercial and Industrial Sales, System Projects,
10 and System Planning with increasing responsibility leading to my current position
11 as Director of Distribution Engineering. I have also been a licensed Professional
12 Engineer in the State of New Hampshire since 1990.

13 **Q. Have you previously testified before the New Hampshire Public Utilities
14 Commission?**

15 A. Yes, I have testified before the New Hampshire Public Utilities Commission (the
16 “Commission”) in past proceedings, including Docket No. DE 09-035 (Reliability
17 Enhancement Program), Docket No. DE 13-177 (Least Cost Integrated Resource
18 Plan), and Docket No. DE 16-576 (Development of New Alternative Net Metering
19 Tariffs and/or Other Regulatory Mechanisms and Tariffs for Customer-
20 Generators). I have also co-sponsored pre-filed testimony in Docket Nos. DE 22-
21 010 (the Company’s 2022 Regulatory Reconciliation Adjustment) and DE 22-030
22 (the Company’s pending Third Step Adjustment).

1 **Q. Mr. Freeman, please state your full name, position and business address.**

2 A. My name is Lavelle A. Freeman. I am employed by Eversource Energy Service
3 Company as Director of Distribution System Planning. My business address is 247
4 Station Drive, Westwood, Massachusetts 02090.

5 **Q. What are your principal responsibilities in this position?**

6 A. In this role, I am responsible for overseeing system planning and distributed energy
7 resource (“DER”) interconnection activities in Eversource’s service areas,
8 including New Hampshire.

9 **Q. Please describe your educational and professional background.**

10 A. I earned a Bachelor of Science degree in Electrical Engineering from the University
11 of Alabama. Subsequently, in 1995, I earned a Master of Science degree in
12 Electrical Engineering with Power Systems concentration from the University of
13 North Carolina at Charlotte and earned a Master of Science degree in Computer
14 Engineering from North Carolina State University in 2000. I joined the IEEE
15 Power Engineering Society while in graduate school and have been on the ANSI
16 C84.1 Standard Committee since 2019.

17 I started my power systems career in 1997 as an R&D Engineer at ABB Corporate
18 Research in Raleigh, NC, where I devised innovative new products, algorithms and
19 solutions to improve the value and efficiency of transmission and distribution
20 product offerings within ABB Power T&D Inc. In 1999, I became a Senior
21 Consulting Engineer in the ABB Utility Consulting group in Raleigh, NC where I

1 performed system studies in distribution and transmission planning for utility
2 customers, worked with customers to implement changes, and developed and
3 supported power systems software applications that improved the efficiency,
4 marketability and cost-effectiveness of the group.

5 From 2003 to 2013, I was a Senior Engineer and then a Principal Engineer at
6 General Electric Energy in Schenectady, NY, where I led consulting studies in
7 distribution planning and analysis, power systems engineering, equipment
8 applications, smart grid initiatives, and renewables impact and contributed to
9 development of new products and technology for various General Electric Energy
10 businesses. From 2013 to 2016, I was Manager of Transmission and Distribution
11 at General Electric Energy Consulting where I directed a broad spectrum of client
12 activities in the T&D space, with emphasis on power systems operation and
13 planning, equipment application, renewables impact, and systems analysis. From
14 2016 through 2020, I was Technical Director at General Electric Energy Consulting
15 in Schenectady, New York. In this position, I led project teams and developed
16 business opportunities in the distribution space with emphasis on DER integration,
17 microgrid design, grid modernization, reliability, power quality and resiliency. I
18 developed and led execution of over \$5M in distribution-related projects in New
19 York, New Jersey and Massachusetts. I also successfully completed four ground-
20 breaking New York Prize Stage 2 microgrid design projects and managed the
21 DSTAR consortium (www.dstar.org), working extensively with distribution
22 planners and engineers in investor-owned, municipal and cooperative utilities all

1 across the country. In 2020, I joined Eversource Energy as Director, Distribution
2 System Planning.

3 **Q. Have you previously testified before the Commission or other regulatory**
4 **agencies?**

5 A. I have not previously testified before the Commission, although I have participated
6 in technical session regarding system planning in New Hampshire. I also
7 participated in technical sessions conducted by the Connecticut Public Utilities
8 Regulatory Authority, in Docket No. 17-12-03RE07 PURA Investigation into
9 Distribution System Planning of the Electric Distribution Companies – Non-Wires
10 Alternatives, as well as other system planning dockets in Connecticut. I recently
11 testified before the Massachusetts Department of Public Utilities in NSTAR
12 Electric Company d/b/a Eversource Energy’s distribution rate proceeding, Docket
13 D.P.U. 22-22.

14 **Q. Mr. Walker, please state your full name, position and business address.**

15 A. My name is Gerhard Walker. I am the Manager for Advanced Forecasting and
16 Modeling for Eversource Energy. My business address is 247 Station Drive,
17 Westwood, Massachusetts 02090.

18 **Q. What are your principal responsibilities in this position?**

19 A. As the Manager for Advanced Forecasting and Modelling, I am responsible for
20 Eversource’s advanced forecasting and modeling efforts to transition the
21 Company’s distribution planning processes to address the Commonwealth’s Net

1 Zero Carbon Objectives. Furthermore, I oversee the non-wires alternative
2 (“NWA”) screening and planning process. In this proceeding, I am testifying on
3 behalf of Public Service Company of New Hampshire d/b/a Eversource Energy. .

4 **Q. Please summarize your professional and educational background.**

5 A. I hold a Doctorate in electrical engineering from University of Stuttgart, Germany.
6 I began my career in 2013 at the Netze BW, Germany’s third largest distribution
7 system operator. While at Netze BW, I led research and development efforts into
8 probabilistic forecasting, advanced system planning, and electric vehicle grid
9 integration. Additionally, I oversaw efforts with the Association of German Energy
10 and Water Industries to align DSO objectives with the automotive industry on
11 issues regarding charge specifications and load management, as well as ELT
12 coordination across all Netze BW subsidiaries on grid modification topics. In 2016,
13 I joined General Electric Current as the Director for Grid Solutions in Boston, to
14 develop distribution use cases for virtual power plant aggregation of DERs. In
15 2017, I became the Director for Product Management at Opus One Solutions, a
16 Canadian Utility Software supplier, where I led the scaling up of software solutions
17 and successful customer acquisitions including HECO, SCE, Ameren, as well as
18 expansions into the UK and Germany. I joined Eversource Energy in 2020 as a
19 Principal Engineer in System Planning and transitioned into my current role in
20 2022.

1 **Q. Have you previously testified before the Commission or other regulatory**
2 **agencies?**

3 A. I have not previously testified before the Commission but I have participated in
4 technical session regarding system planning in New Hampshire. I also participated
5 in technical sessions conducted by the Connecticut Public Utilities Regulatory
6 Authority, in Docket No. 17-12-03RE07 PURA Investigation into Distribution
7 System Planning of the Electric Distribution Companies – Non-Wires Alternatives,
8 as well as other system planning dockets in Connecticut. I recently testified before
9 the Massachusetts Department of Public Utilities on behalf of NSTAR Electric
10 Company d/b/a Eversource Energy in Dockets D.P.U. 22-22 (NSTAR Electric
11 Company’s base rate proceeding) and D.P.U. 22-47 (in support of a capital
12 investment project proposal).

13 **Q. What is the purpose of your joint testimony?**

14 A. The purpose of our testimony is to respond to the direct testimony submitted on
15 August 19, 2022 by the Department of Energy (“DOE”),¹ Office of Consumer
16 Advocate (“OCA”) and Clean Energy New Hampshire (“CENH”), regarding the
17 Company’s 2020 Least Cost Integrated Resource Plan (“2020 LCIRP”). The

¹ DOE filed a revised version of its testimony on August 26, 2022 because the initial version inadvertently omitted the first two attachments referenced in the table of contents. Any references to the DOE’s testimony in this rebuttal are made with respect to the DOE’s revised version.

1 Company has reviewed the direct testimony filed by each party and responds to
2 their respective recommendations below.²

3 **Q. What is the fundamental goal of the Company's 2020 LCIRP?**

4 A. As a public utility, the Company has an obligation to plan, construct and operate an
5 electric distribution system that provides safe, reliable and cost-effective service to
6 all customers currently connected to the system. The Company also has an
7 obligation to plan, construct, and operate an electric distribution system that will
8 meet the needs of new and existing customers in the future. The Company's 2020
9 LCIRP provides the roadmap for meeting these obligations.

10 **Q. Have there been any regulatory or policy developments since the Company**
11 **developed its 2020 LCIRP?**

12 A. Yes. The Commission has concluded and/or initiated a number of investigations
13 that will impact the development of future LCIRP filings. The issues addressed in
14 these investigations include grid modernization, electric vehicles, energy storage,
15 and energy efficiency, among other issues. As discussed in greater detail below,
16 the Commission decisions and guidance on these issues have occurred subsequent
17 to the Company's preparation of the 2020 LCIRP. For this reason, the 2020 LCIRP
18 did not address these issues in the initial filing. In recognition of these changes,
19 however, the Company is proposing initiation of an LCIRP working group that

² Silence with respect to any recommendation should not be viewed as agreement. This testimony is focused on supporting the Company's filing and outlining next steps the Company will take to address recommendations in a future LCIRP.

1 would inform its next LCIRP process. The Company's proposed framework for
2 this working group is set forth below. It is the Company's intent that the next
3 iteration of the LCIRP will reflect the transition that the electric grid is undergoing;
4 given the number of changes that are occurring or expected to occur in the near-
5 term it is appropriate to convene a working group that can determine the format and
6 substance of the next LCIRP submitted by the Company.

7 **Q. How is your testimony organized?**

8 A. Following this introduction, Section II provides the Company's response to the
9 Department of Energy's prefiled testimony. Section III provides the Company's
10 response to OCA. Section IV is the Company's response to CENH. Section V is
11 the Conclusion.

12 **II. RESPONSE TO DEPARTMENT OF ENERGY**

13 **A. Compliance with RSA 378:38**

14 **Q. What statutory provisions are encompassed in RSA 378:38?**

15 A. The statutory provision designed as RSA 378:38, states as follows:

16 **378:38 Submission of Plans to the Commission.** Pursuant to the
17 policy established under RSA 378:37, each electric and natural gas
18 utility, under RSA 362:2, shall file a least cost integrated resource
19 plan with the commission within 2 years of the commission's final
20 order regarding the utility's prior plan, and in all cases within 5 years
21 of the filing date of the prior plan. Each such plan shall include, but
22 not be limited to, the following, as applicable:

- 23 I. A forecast of future demand for the utility's service area.
- 24 II. An assessment of demand-side energy management
25 programs, including conservation, efficiency, and load
26 management programs.

- 1 III. An assessment of supply options including owned capacity,
2 market procurements, renewable energy, and distributed
3 energy resources.
- 4 IV. An assessment of distribution and transmission
5 requirements, including an assessment of the benefits and
6 costs of "smart grid" technologies, and the institution or
7 extension of electric utility programs designed to ensure a
8 more reliable and resilient grid to prevent or minimize power
9 outages, including but not limited to, infrastructure
10 automation and technologies.
- 11 V. An assessment of plan integration and impact on state
12 compliance with the Clean Air Act of 1990, as amended, and
13 other environmental laws that may impact a utility's assets
14 or customers.
- 15 VI. An assessment of the plan's long- and short-term
16 environmental, economic, and energy price and supply
17 impact on the state.
- 18 VII. An assessment of plan integration and consistency with the
19 state energy strategy under RSA 12-P.
- 20 **Q. Did the Company comply with these requirements in developing its 2020**
21 **LCIRP?**
- 22 A. Yes. As part of its normal course of business, the Company contemplates each of
23 these elements in one or more aspects of the Company's day-to-day business
24 planning for the system. To the extent that these concepts apply to the electric
25 distribution system (and some do not), the elements have a fundamental role in the
26 development of the 2020 LCIRP in one form or another. In Appendix A of the
27 Company's initial filing associated with the 2020 LCIRP, the Company addressed
28 these elements.

1 **Q. What is the Department of Energy’s claim with respect to the Company’s**
2 **compliance with RSA 378:38?**

3 A. In its direct testimony, DOE states that, based on its review of the Company’s filing,
4 its conclusion is that the Company has generally met the requirements of RSA
5 378:38.³ DOE also correctly notes that Eversource does not own any generating
6 assets in its New Hampshire service territory and therefore RSA 378:38, Parts III
7 and V are arguably not applicable to the LCIRP before the Commission in this
8 proceeding.⁴ However, with respect to RSA 378:38, II-Demand Management,
9 DOE concludes that the Company should be more proactive and aggressive at
10 looking for competitive non-wire alternative (“NWA”) solutions and consider
11 third-party ownership, as well.⁵

12 **Q. Did the Company provide information in relation to the 2020 LCIRP**
13 **regarding its NWA Framework?**

14 A. Yes. The Company provided its NWA Framework Version 2.0 as part of this
15 proceeding and DOE has reviewed this updated framework.⁶ DOE stated that its
16 review “indicates [the framework] is reasonably complete and covers a wide range
17 of alternatives and corresponding capital, operating, real estate and program

³ See, e.g., Joint Direct Testimony of Jay E. Dudley and Ronald D. Willoughby (“DOE Testimony”) at Bates 13.

⁴ DOE does not that there may be instances where RSA 378:38, Part III could apply to an electric distribution company’s LCIRP but that such instances are not presented here. Id. at Bates 11.

⁵ Id. at Bates 23.

⁶ Id. at Bates 22.

1 costs.”⁷

2 **Q. Did the DOE make any recommendations regarding the Company’s NWA**
3 **assessments?**

4 A. Yes, DOE stated that it expects there to be more comprehensive NWA assessments
5 now that the NWA Framework has been developed.⁸ DOE also stated that the
6 appropriate test of a screening tool is whether it is actually used by the Company’s
7 personnel and how accurately the costs are evaluated.⁹ Based on these assertions,
8 DOE is recommending that the Company clearly communicate in its documentation
9 its corresponding actions and results from use of the NWA framework on a regular
10 basis.¹⁰ Specifically, DOE has recommended that the Company include a statement
11 in every project authorization form (“PAF”) that addresses the appropriateness of
12 potential NWA solutions.¹¹ DOE also notes that the Company should be prepared
13 to address implementation, application and use of the NWA Framework in its next
14 rate case.¹²

15 **Q. Does the Company have any concerns with DOE’s recommendations**
16 **regarding these NWA recommendations?**

17 A. The Company agrees that it could include a statement in every PAF (going forward)
18 that addresses the appropriateness of potential NWA solutions in relation to each

7 Id.

8 Id. at Bates 23.

9 Id.

10 Id. at Bates 23.

11 Id.

12 Id.

1 particular project undertaken by the Company. The Company will also be prepared
2 to respond to inquiries regarding the NWA Framework in its next rate proceeding.

3 However, it is important to note that the Company does not apply NWA screening
4 to every project. The NWA screening process is initiated by the Company for any
5 project where the cost of the traditional solution exceeds \$3 million. This is because
6 NWAs can be costly and would only constitute a more cost-effective solution where
7 the costs of the traditional solution are in the same range. Applying this cost
8 threshold assures that the Company does not dedicate engineering resources to
9 projects where savings opportunities are minimal. Further, the Company considers
10 only projects that fall under “System Planning Efforts” for a potential NWA
11 solution due to the fact that an NWA evaluation takes time to develop, and if a
12 technically feasible and financially beneficial solution is found, additional time is
13 needed to engineer, procure, test and operate the NWA. These timelines apply in
14 standard system planning projects.

15 Smaller upgrades to the system are performed on an ad hoc basis with a planning
16 horizon of less than one year (e.g., feeder line segment upgrades, pole mount
17 replacements, etc.). These types of projects are not appropriate for the NWA
18 screening process. Applying the screening process to these smaller upgrade
19 projects would introduce unrealistic delay into the process and would spark a
20 significant increase in engineering and project management overhead costs.

21 The Company also does not consider NWA solutions for projects that have an asset

1 age or asset condition component because there is no practical application for an
2 NWA to be developed for a failing asset.

3 Accordingly, the NWA screening process applies to any capital project with costs
4 in excess of \$3 million; with a planning horizon of three or more years; and, where
5 the project is not age or asset-condition related.

6 **B. Compliance with RSA 378:39**

7 **Q. What statutory provisions are encompassed in RSA 378:39?**

8 A. The statutory provision designed as RSA 378:39, states as follows:

9 **378:39 Commission Evaluation of Plans.** The commission shall
10 review integrated least-cost resource plans in order to evaluate the
11 consistency of each utility's plan with this subdivision, in an
12 adjudicative proceeding. In deciding whether or not to approve the
13 utility's plan, the commission shall consider potential
14 environmental, economic, and health-related impacts of each
15 proposed option. The commission is encouraged to consult with
16 appropriate state and federal agencies, alternative and renewable
17 fuel industries, and other organizations in evaluating such impacts.
18 The commission's approval of a utility's plan shall not be deemed a
19 pre-approval of any actions taken or proposed by the utility in
20 implementing the plan. Where the commission determines the
21 options have equivalent financial costs, equivalent reliability, and
22 equivalent environmental, economic, and health-related impacts, the
23 following order of energy policy priorities shall guide the
24 commission's evaluation:

- 25 I. Energy efficiency and other demand-side management
26 resources;
- 27 II. Renewable energy sources;
- 28 III. All other energy sources.

29

1 **Q. Did the DOE reach any conclusions regarding the Company’s compliance with**
2 **RSA 378:39?**

3 A. Yes. The DOE states that the Company has not addressed RSA 378:39 as part of
4 its LCIRP filing and should submit a supplement that addresses the criteria of RSA
5 378:39.

6 **Q. Although you are not attorneys, what is your understanding of RSA 378:39?**

7 A. RSA 378:39 sets forth the standard of review that the Commission should apply to
8 its review of an LCIRP. RSA 378:39 states that “[i]n deciding whether or not to
9 approve the utility’s plan, the commission shall consider potential environmental,
10 economic, and health-related impacts of each proposed option.”

11 **Q. Does the Company consider the potential environmental, economic, and**
12 **health-related impacts associated with its planning process and/or specific**
13 **projects that it selects?**

14 A. Yes. There are two key drivers of the Company’s decisions regarding investment
15 in its distribution system, which are: (1) maintaining and improving the safety and
16 reliability of the distribution system for the benefit of all customers; and
17 (2) accomplishing this goal at a reasonable cost. On a project-by-project basis, the
18 Company considers a range of project attributes other than impact on reliability and
19 cost, including environmental considerations (e.g., impacts to wetlands, etc.),
20 losses, and other factors. Public health impacts are intertwined with environmental
21 impacts in relation to distribution operations. Similarly, the reliability and
22 resiliency improvements are project impacts that have a direct nexus with economic
23 impacts. As a result, there are steps that the Company takes to factor these

1 considerations into its project selections, although not all of these considerations
2 were raised in the 2020 LCIRP, and the Company agrees with DOE on this point.

3 **Q. Is the Company aware of any recent LCIRP dockets where the Commission**
4 **considered how to address RSA 378:39?**

5 A. Yes. The Company is aware that the Commission has issued orders in Docket Nos.
6 DE 20-020 and DG 19-126 that address compliance with RSA 378:39. These
7 decisions were issued on August 15, 2022 and August 8, 2022, respectively, which
8 is subsequent to the Company's filing of the 2020 LCIRP.

9 **Q. From the Company's review of these decisions, what is the Company's**
10 **takeaway with respect to the Commission's perspective on the application of**
11 **RSA 378:39?**

12 A. Again, we are not attorneys, but it is our understanding that the Commission has
13 indicated that its priority in reviewing LCIRPs is minimizing costs. We also
14 understand that the Commission has stated that consideration of environmental,
15 economic and health impacts should be done on a project-by-project basis.

16 **Q. Does the Company comply with this recent guidance?**

17 A. Yes. Within the overall project-evaluation process, Company personnel referred to
18 as "project initiators" are charged with considering all reasonable solutions to
19 address the identified project need. The project initiator gathers input from a team
20 of individuals across the Company's functional areas. This team provides a variety
21 of perspectives including environmental impacts, community and external
22 stakeholder impacts, procurement, property rights, siting and permitting, outage

1 planning, constructability, electrical performance, and future system expandability.

2 The result of this analysis is selection of the “preferred alternative.”

3 With respect to the Commission’s statement that its priority for LCIRP evaluation
4 is minimizing costs, the Company agrees that cost is a key consideration in
5 evaluating alternatives to address the project need, such as reliability and safety.

6 The Company strives to apply rigorous cost control to its capital projects in
7 recognition of the fact that it is critically important to be in a position to address
8 current and future needs on the distribution system, while at the same time
9 maintaining reasonable rates for customers.

10 **Q. Given this recent guidance from the Commission and the recommendations of**
11 **DOE, does the Company agree with DOE’s conclusion that the Company**
12 **could provide additional information, explanation and documentation in a**
13 **supplement to its 2020 LCIRP filing to demonstrate compliance with RSA**
14 **378:39?**

15 A. Yes. The Company’s planning and project-authorization process inherently
16 involves evaluation of a range of considerations, including consideration of the
17 impacts described in RSA 378:39. However, DOE is correct that there is no express
18 discussion in the 2020 LCRIP addressing these elements and/or considerations on
19 a discrete basis. A supplement would improve the review process for stakeholders
20 and the Commission. For that reason, Eversource is preparing a supplement that it
21 will file in this proceeding specifically addressing RSA 378:39.

1 **Q. Does the Company also agree that stakeholder involvement should be**
2 **incorporated into the development of future LCIRP filings to address**
3 **compliance with RSA 378:39?**

4 A. Yes. The Company views the supplement that it will file in this docket to be a
5 starting point. Eversource is aware that other utilities have engaged in working
6 groups with stakeholders including DOE and OCA to address compliance with
7 RSA 378:39. Subject to further guidance from the Commission on its expectations
8 regarding compliance with RSA 378:39, the Company welcomes additional
9 feedback and collaboration with these stakeholders that can be incorporated into
10 future iterations of Eversource's LCIRP. The Company's next IRP will be due for
11 filing two years from the date an order is issued in this proceeding or no later than
12 October 2025. It is the Company's expectation that it will work with these
13 stakeholders prior to development of the next LCIRP.

14 **Q. Has the Company considered how this stakeholder process would be**
15 **structured?**

16 A. Yes. The Company recommends that a Working Group could commence within
17 90 days following the Commission's Order in this proceeding with meetings at least
18 bi-monthly. The Working Group could commit to filing a report setting forth
19 recommendations for the Company's next LCIRP within one year of its
20 commencement. Eversource would also commit to filing its next LCIRP within
21 one year of a Commission order regarding the recommendations set forth in the
22 Working Group report.

1 **Q. Does DOE make any additional recommendations in their direct testimony?**

2 A. Yes. DOE makes two additional recommendations, which are that: (a) Eversource
3 should participate in the process set forth by the Commission's "guidance" in
4 Docket No. IR 15-296, Order No. 26,575, to develop its next LCIRP, and that the
5 substance of that LCIRP should align with the expectations expressed by the
6 Commission in that order; and (b) the Company should continually evaluate the
7 balance achieved between tree trimming and the use of covered wire and spacer-
8 cable to ensure that the appropriate option is selected to maximize reliability and
9 resiliency.

10 **Q. What is Docket No. IR 15-296?**

11 A. Docket No. IR 15-296 was the Commission's Investigation into Grid
12 Modernization. The Commission issued Order No. 26,575 on February 3, 2022
13 closing the proceeding and clarifying that Order No. 26,358 (also issued in Docket
14 No. IR 15-296) should be viewed as guidance for future LCIRPs.

15 **Q. Does the Company agree that it will align the development of its next LCIRP**
16 **with the guidance set forth in Docket IR 15-296.**

17 A. Yes. It is the Company's understanding that alignment with the guidance set forth
18 in Docket No. IR 15-296 will be required as part of the development of its next
19 LCIRP. The Company's next LCIRP will include a discussion of how the
20 Company's plan incorporates this guidance. The Company would also expect to
21 discuss incorporation of this Commission guidance as part of the Working Group
22 process it has outlined above.

1 **Q. With respect to DOE’s final recommendation, does the Company balance tree-**
2 **trimming and the use of covered wire and spacer-cable?**

3 A. Yes. The Company balances these options to meet system-reliability needs while
4 maintaining reasonable costs. Each of these activities is important for the system
5 and the Company plans to continue to balance these strategies for the betterment of
6 the system.

7 **III. RESPONSE TO THE OFFICE OF THE CONSUMER ADVOCATE**

8 **Q. Please describe the OCA’s recommendations regarding the Company’s**
9 **LCIRP.**

10 A. The OCA argues that the Company’s LCIRP should be rejected and that Eversource
11 should be directed to prepare and file a new LCIRP that is consistent with the
12 LCIRP statute, Commission directives and OCA’s recommendations set forth in its
13 testimony.¹³ OCA also recommends that a stakeholder working group be convened
14 to provide meaningful impact to Eversource’s new LCIRP.¹⁴

15 **Q. Notwithstanding these claims and recommendations, has the Company**
16 **submitted an LCIRP that should be approved by the Commission?**

17 A. Yes. As detailed in Appendix A of its LCIRP filing, the Company has addressed
18 each component of RSA 378:38 in its filing. The Company is also working on a
19 supplement that will directly address RSA 378:39 in this proceeding. The
20 Company has met its burden with respect to the statutory provisions and the
21 Commission should move forward with its evaluation of the Company’s 2020

¹³ Direct Testimony of Tim Woolf and Ben Havumaki (“OCA Testimony”) at Bates 007.

¹⁴ Id.

1 LCIRP, which has been pending before the Commission now for almost two years.
2 What OCA is seeking is a material change in approach to LCIRPs, which the
3 Company agrees with and will work with stakeholders to institute for the next plan.
4 Certain of OCA's recommendations could be incorporated into future LCIRPs in
5 recognition of the ongoing transition of the electric grid, particularly in conjunction
6 with a stakeholder process that the Company is anticipating for its next LCIRP
7 filing. Addressing how best to incorporate this additional information and any
8 formatting recommendations associated with the LCIRP are best addressed in the
9 stakeholder Working Group because it will take time and process to accomplish
10 these goals and it is unreasonable to institute these substantial changes in the midst
11 of a docket for a plan that the Company ultimately has prepared over two years in
12 the past.

13 **Q. Does the OCA provide a detailed explanation in support of its contention that**
14 **the LCIRP is inconsistent with the LCIRP statute and other Commission**
15 **directives?**

16 A. Yes. The OCA argues that the Company's LCIRP is too narrow based on an
17 assertion that it does not properly address distribution system needs, generation
18 resource options, or environmental impacts.¹⁵ OCA also argues that the LCIRP
19 fails to sufficiently evaluate distributed energy resources, smart grid options,

¹⁵ OCA Testimony at Bates 015.

1 renewable resources, or default energy services.¹⁶ Based on these conclusions, the
2 OCA provides a list of ten recommendations for the Company's next LCIRP filing.

3 **Q. How does OCA contend that these recommendations could be addressed?**

4 A. Although OCA does go into detail on each of its recommendations, ultimately OCA
5 expresses support for a working group authorized to address any directives received
6 from the Commission in this proceeding, including directives to implement OCA
7 recommendations. The Company agrees that a working group is appropriate ahead
8 of its next LCIRP and has outlined a framework for conducting such a working
9 group including proposed timelines for deliverables and interaction with the
10 Commission.

11 A working group ahead of the Company's next LCIRP is further supported by
12 OCA's recommendation to explore opportunities for expanding or modifying
13 programs supporting distributed energy resources, including energy efficiency and
14 demand response resources beyond those included in NH-Saves. The Company is
15 willing to explore additional energy efficiency and demand response but only with
16 clear guidance from the Commission that could be provided prior to the
17 commencement of the working group. The OCA's recommendations also include
18 requests for a better organized and consolidated inventory of distribution system

¹⁶ Id.

1 needs. The format of the Company's LCIRP could also be discussed through a
2 working group process, enhancing the LCIRP review process going forward.

3 **Q. With respect to OCA's specific arguments, OCA first claims that the**
4 **Company's LCIRP is too narrow in scope because it does not evaluate**
5 **generation resource options. Does the Company agree with this assessment?**

6 A. No. The Company no longer owns generation in its New Hampshire service
7 territory. As a result, its impact on generation capacity through the LCIRP is
8 largely limited to accommodating customer-owned renewable generation projects.

9 The Company agrees with OCA's contention that it would not be accurate to say
10 that the Company will never have to address supply as part of its LCIRP.¹⁷ As
11 explained in the Company's filing, when the Company sought to develop the
12 Northern Pass Transmission Project there were potential impacts related to that
13 project including to supply.¹⁸ However, there were no projects or proposals that
14 required an assessment of supply for this LCIRP.

15 It is also not accurate that the Company did not consider the environmental impacts
16 of generation as part of its LCIRP. Eversource explained that, because it no longer
17 owns generation, it provides default energy service through the issuance of
18 competitively procured electric supply obtained through the wholesale market.¹⁹

19 As a result, the electricity supply mix for Eversource customers is consistent with

¹⁷ OCA Testimony at Bates 018.

¹⁸ Appendix A, at 2; Company Initial Filing, Bates 000053.

¹⁹ Appendix A, at 2; Company Initial Filing, Bates 000053.

1 the regional resource mix. Eversource expects that this supply mix will continue
2 to shift away from carbon-intensive sources driven by state and regional policy
3 goals. Currently, the wholesale market for electric generation is dominated by
4 natural gas but continues to evolve in response to these state and regional policy
5 goals.

6 **Q. OCA devotes an extensive portion of its testimony to arguing that the**
7 **Company's LCIRP fails to sufficiently evaluate resource options. Is this**
8 **discussion relevant to the Company's LCIRP?**

9 A. Not entirely. As explained above, with the divestiture of the Company's generation
10 assets in New Hampshire, the Company is not procuring resources with the
11 exception of default Energy Service. The Company procures this electricity supply
12 through a competitive bid process. The Company is willing to explore some of the
13 ideas expressed in OCA's testimony regarding ways to mitigate these costs;
14 however, the Company's 2020 LCIRP appropriately accounted for supply as
15 required. For example, OCA argues that there is no analysis of utility-scale
16 renewable resource opportunities in the LCIRP.²⁰ This analysis is not included
17 because it is not something that the Company is currently considering.

18 OCA also identified grid modernization as a topic that warrants additional detail in
19 a future LCIRP pointing to the Commission's guidance issued in Order 26,358. As
20 discussed above, the Company has committed to discussing incorporation of this
21 guidance as part of the proposed working group. The majority of OCA's

²⁰ OCA Testimony at Bates 29.

1 recommendations are best suited to a working group, which is an approach
2 consistent with the OCA's own testimony.

3 **IV. RESPONSE TO CLEAN ENERGY NEW HAMPSHIRE**

4 **A. Adequacy of the Company's LCIRP**

5 **Q. Please provide a brief summary of Clean Energy New Hampshire's testimony.**

6 A. Clean Energy New Hampshire is recommending that the Company resubmit its
7 2020 LCIRP with an expanded analysis of the required sections in RSA 378:38,
8 including a full plan for how the Company will implement distribution system
9 management to reduce electric supply, distribution system, and transmission costs
10 through investments in the distribution system.²¹

11 CENH points to a series of recent proceedings on issues including grid
12 modernization (IR 15-296); electric vehicles (DE 20-170); and energy storage (IR
13 20-166). The Company agrees that these proceedings will impact its LCIRP
14 process *for the next LCIRP*. However, the outcomes of these proceedings were not
15 known at the time that the LCIRP currently before the Commission was prepared.
16 For example, Docket No. IR 15-296 concluded February 3, 2022 with the issuance
17 of Order No. 26,575. The Commission had previously issued Order No. 26,358 in
18 Docket No. IR 15-296 on May 22, 2020; however, Order No. 26,538 was suspended
19 by the Commission on July 22, 2020. Pending the Commission's Order No. 26,575
20 (issued more than a year after the Company's filing), alignment of grid-

²¹ CENH Testimony at 34.

1 modernization objectives with the LCIRP process was not established.

2 Similarly, a decision was not issued in Docket No. DE 20-170 until April 7, 2022.
3 Docket No. IR 20-166 regarding compensation associated with energy storage
4 projects for avoided transmission and distribution costs was closed on July 20,
5 2022, with the creation of the Department of Energy. With the creation of the
6 Department of Energy, the responsibility for investigating these issues transfers to
7 the DOE and therefore no Commission action was taken.

8 **Q. Based on these recent developments, what is the Company's response to the**
9 **claims asserted by CENH?**

10 A. The issues raised by CENH regarding how to incorporate these transitions to the
11 electric grid are not appropriate for incorporation into the Company's 2020 LCIRP,
12 as an ongoing proceeding that commenced over two years ago. The Company is
13 able to address these issues through a stakeholder process conducted ahead of its
14 *next* LCIRP filing. The Company recognizes there have been a series of
15 developments since the filing of this 2020 LCIRP; however, CENH (and OCA to
16 an extent) seek to essentially have the Company redo its current filing, which is
17 inappropriate given that the underlying planning analysis is outdated in any event.
18 The Company is committed to undertaking a stakeholder process to continue to
19 refine how it addresses RSA 378:39 in its LCIRP. Addressing the issues raised by
20 CENH in the context of the working group would be appropriate.

21

- 1 **Q. CENH argues that a more detailed load forecast, including individual**
2 **forecasts for behind the meter, electric vehicles, energy efficiency and**
3 **photovoltaics are necessary to evaluate the Company's load forecast and**
4 **ensure that the least-cost option is selected.²² Does the Company agree?**
- 5 A. The Company does not yet agree or disagree with this contention. The crux of the
6 issue is that this type of detailed assessment needs to be evaluated and discussed by
7 stakeholders before it would be clear that the approach would have the purpose and
8 effect that CENH attributes to it. This detailed load forecast is not appropriate for
9 implementation in this docket, but aspects of it could be helpful to inform and
10 enlighten in the future. This is the field of inquiry that the Company sees as
11 warranting a stakeholder process where discussion can occur as to sought-after
12 outcomes and methodological approaches to inform progress toward those
13 outcomes. The Company is building capabilities to conduct this level of forecast
14 and expects, based on early data from other jurisdictions, that it will show
15 significant load growth across most regions as electrification of heating and
16 mobility take hold.

²² CENH Testimony at 10-14.

1 **B. Interconnection Standards**

2 **Q. CENH argues that the Company has failed to include its most up-to-date**
3 **Distribution System Planning Guide as part of its filing in this proceeding. Is**
4 **this accurate?**

5 A. As part of the 2020 LCIRP, the Company included its most recent Distribution
6 System Planning Guide, as well as the Company’s N-1 bulk station design standard,
7 which has been applied to all bulk stations across the Eversource Energy footprint.
8 CENH is referring to the Company’s determination to apply this N-1 standard to
9 Distributed Energy Resource (“DER”) interconnections across the Eversource
10 Energy operating companies.

11 **Q. Why did the Company determine that it was appropriate to apply the N-1**
12 **interconnection standard to DERs?**

13 A. This enterprise-wide application of the N-1 planning and design standard to DERs
14 was initiated because DER saturation and the accompanying “loading” of the
15 Company’s station equipment during historically low load periods was driving the
16 upgrade needs for many of the Company’s stations and DSS lines used to transfer
17 load between stations. If the Company does not account and design for the capacity
18 needed to keep both load and DER online during N-1 events at bulk stations (which
19 can take a long time to resolve), the Company risks losing service to customers for
20 extended periods of time.

21 **Q. CENH argues that the Company’s decision to apply this standard to DER has**
22 **resulted in increased costs to CENH members. Can you please explain why it**
23 **is appropriate for these costs to be borne by the interconnecting party?**

24 A. As explained above, the need for the station upgrades is propelled by the

1 interconnection of DER, creating costs where costs would not otherwise occur.
2 Therefore, it is not appropriate to seek recovery of these costs from the Company's
3 customers. Instead, the party driving the need for these upgrades is the appropriate
4 party for cost responsibility. The Company has an obligation to provide reliable
5 service to its customers that it cannot meet without application of this N-1 standard.

6 **Q. Are there reliability benefits associated with this interconnection standard?**

7 A. Yes. The new interconnection standard is necessary to mitigate the risk that the
8 Company's customers (load and DER alike) will experience outages of extended
9 duration, which is entirely unwarranted in light of their support of the system.

10 **Q. CENH concludes by stating that the Company should not have implemented**
11 **this interconnection standard in light of the legislative directive for DOE to**
12 **investigation interconnection issues. Does the Company agree with this**
13 **conclusion?**

14 A. No. In fact, the Company had already implemented this interconnection standard
15 well in advance of the June 2022 legislation that CENH references. Second, the
16 Company is responsible for ensuring the reliability of the distribution system and
17 has implemented a design standard to meet that objective for modern distribution
18 systems. The Company will, however, actively participate in any investigation
19 conducted by the DOE on this issue. The Company would also expect to include
20 any updates to its planning processes that may come out of such investigation as
21 part of the next LCIRP. An LCIRP by its very nature is a snapshot in time because
22 planning standards, including with respect to interconnection, change over time in
23 response to evolving circumstances and regulatory guidance.

1 **V. CONCLUSION**

2 **Q. Has the Company complied with the requirements of RSA 378:38?**

3 A. Yes. The Company has complied with each of the relevant provisions of 378:38 as
4 detailed in Appendix A of its LCIRP. The Company has also agreed in this
5 testimony to adopt the recommendations set forth by DOE regarding its NWA
6 analysis on a going forward basis. The Company has also committed to a working
7 group that could discuss additional analysis for inclusion in future LCIRP filings.

8 **Q. Has the Company complied with the requirements of 378:39?**

9 A. Yes. The Company's project evaluation process complies with this provision.
10 However, the Company agrees that supplemental explanation will provide more
11 clarity as to how the Company accounts for the factors identified in RSA 378:39 to
12 aid the Commission's review. The Company plans to submit this supplement no
13 later than October 18, 2022. The Company also commits to working with
14 stakeholders to address identify other strategies for demonstrating compliance for
15 purposes of developing its next LCIRP through a working group process, subject
16 to any feedback from the Commission in this proceeding.

17 **Q. Does this conclude your testimony?**

18 A. Yes, it does.

19