

**THE STATE OF NEW HAMPSHIRE
BEFORE THE
NEW HAMPSHIRE SITE EVALUATION COMMITTEE**

DOCKET NO. 2024-02

**EVERSOURCE REPLY TO TOWNS OF EASTON AND BETHLEHEM
PETITION REQUESTING JURISDICTION AND OVERSIGHT OF
EVERSOURCE PROPOSED X-178 TRANSMISSION LINE
REPLACEMENT PROJECT**

Public Service Company of New Hampshire d/b/a Eversource Energy (“Eversource”) makes this reply to the Towns of Easton and Bethlehem (“Towns” or “Petitioners”) regarding their request that the New Hampshire Site Evaluation Committee (“SEC”) assume jurisdiction¹ and oversight of Eversource’s X-178 transmission line replacement work (“Petition”). Among other things, the Towns cite to RSA 162-H:2, XII [sic] as authority for their Petition² and contend that the X-178 replacement work qualifies as a sizeable change or addition and therefore requires a certificate of site and facility.

On July 29, 2024, the SEC issued an Order and Notice of Public Hearing and Meeting (“Notice”) that, among other things, set a deadline of September 3, 2024, for the filing of petitions for intervention. Eversource filed its petition for intervention on August 15, 2024. The Notice further indicates that the Committee must determine whether the transmission line replacement is a sizeable change or addition, or that it may, alternatively, determine whether to exempt the project from the approval and certificate requirements of RSA 162-H. The Notice also scheduled a public meeting for September 23, 2024, at which time “the Committee will consider motions to intervene, if any are filed, and in the absence of intervention, may deliberate on the merits of the Petition or may determine that further proceedings are necessary.”

¹ Pursuant to RSA 162-H:5, III, only an energy facility can submit a petition to assume jurisdiction.

² RSA 162-H:2, XI may have been the intended reference. The more appropriate reference would have been RSA 162-H:2, VII (h).

Eversource disputes the Towns’ assertion that the work on the X-178 transmission line is a sizeable change or addition to the existing facilities. In the first place, the information contained in the Towns’ Petition does not demonstrate that Eversource’s replacement work constitutes a sizeable change or addition to the X-178 transmission line. Moreover, the information provided below supports Eversource’s position that the changes to the X-178 transmission line are not sizeable. Finally, existing state statutes and municipal ordinances “provide adequate protection of the objectives of RSA 162-H:1.” RSA 162-H:4, IV.

I. BACKGROUND

The X-178 transmission line is a 115 kilovolt (“kV”) line that extends 49 miles from the Beebe River Substation in Campton New Hampshire to the Whitefield Substation in Whitefield, New Hampshire. Upon completion of the replacement work, the X-178 transmission line will remain a 115 kV transmission line, located within the existing right-of-way (“ROW”), between Beebe River Substation and the Whitefield Substation.

The X-178 transmission line plays a critical role in meeting the energy needs of the North Country because the system does not have a redundant means of delivering energy to the North Country if there is an outage on the X-178 transmission line. Timely replacement of the aging, outdated existing facilities will improve the resiliency and safety of the transmission line, and is part of Eversource’s continuing efforts to maintain reliable service to its customers by replacing degraded infrastructure, enhancing the effectiveness of system operations, and bringing New Hampshire’s transmission facilities up to current electric code requirements.³ Any

³ Eversource has planned the X-178 replacements in three segments to support scheduled outages in the most responsible manner for customers and as a contracting strategy that manages resources efficiently. In addition, each segment has three components, consisting of (1) the replacement of aging wood poles with steel structures, (2) the replacement of the conductor, and (3) the replacement of the existing static wire with Optical Ground Wire to facilitate effective communications for a safe and reliable transmission system. The three segments include (1) Beebe River Substation to North Woodstock Substation, 14.1 miles, (2) North Woodstock Substation to the Streeter Pond Tap, 20.8 miles, and (3) the Streeter Pond Tap to Whitefield Substation, 14.1 miles.

infrastructure component of the transmission system will eventually require replacement due to aging, as determined by data retrieved from periodic inspections of transmission structures, conductor, hardware, and static wire. The ISO New England Inc. (“ISO-NE”) Planning Advisory Committee (“PAC”) reviewed the X-178 replacement work (“X-178 Project”) on February 28, 2024, and June 20, 2024.

II. PETITION

The Petitioners contend that “Eversource’s proposed rebuild of the X-178 line is a sizeable change per RSA 162-H.” It sets forth several arguments why “a review by the S.E.C. for a required certificate is absolutely necessary and required for the public good.”

The Petition indicates that “X-178 has wood H-frame structures 55’ tall with 795 ASCR conductor that weighs 1,094 lbs. per 1,000’ and can carry 908 amps, and two galvanized steel 7/16” ground wires that weigh 399 lbs. per 1,000’.”⁴ In addition, it includes an assertion that “Eversource proposes to replace the wood H-frame structures with steel H-frame structures with an average height increase of 12’, and add two OPGWs (Optical Ground Wire⁵) that weigh 537 lbs. per 1,000’, and replace three 795 conductors with three 1272 ACSS conductor that can carry 2,200 amps (vs. 908 amps currently) and weigh 1,623 lbs. per 1,000’.” The Petition concludes that the “doubling of transmission capacity does not seem to be incidental to the replacement of all the deficient structures” and that the installation of OPGW does not “seem to be incidental to the replacement of all the structures.”

⁴ Eversource calculates the current average structure height as 50.5 feet and confirms that the 795 (DRAKE) ASCR conductor weight is accurate. However, portions of the line also carry 795 (COOT) ASCR conductor, which is 804.7 pounds per thousand feet and 1272 (PHEASANT) ACSS, which is 1,631 pounds per thousand feet.

⁵ Optical Ground Wire not only replaces the lightning protection function of the existing static wire, but also provides critical communication between substations regarding the operational status of the transmission line and system, enabling better and faster response to address operational issues and maintain reliability.

In addition, the Petition asserts that “Eversource proposes to construct permanent 16’ wide and 9” deep gravel roads along the whole easement (except for in wetlands) and permanent 100’ x 100’ excavated, graveled and graded construction pads at each structure.” It also posits that removal of plants, topsoils and subsoils “would inflict sizeable damage to the ecosystem of the easement, to its water absorbing and filtering capacity, and to its appearance.” In addition, the Towns suggest “effects on wildlife of further fragmentation of 49 miles of terrain already negatively impacted by the transmission line clearing would also constitute sizeable damage.”

Finally, the Petition identifies unspecified benefits to the public from SEC review and oversight. It includes a recitation of the findings required for a certificate pursuant to RSA 162-H:16, while also asking the SEC to evaluate the necessity of the Project (which the SEC does not have authority to do), seeming to suggest that the SEC “take” jurisdiction even if the changes are not sizeable.

III. STANDARD OF REVIEW

As the Petitioners, the Towns bear the burden of proof. Site 202.19 (“The party asserting a proposition shall bear the burden of proving the proposition by a preponderance of the evidence”). That burden has not been met.

RSA 162-H:5, I provides: “No person shall commence to construct any energy facility within the state unless it has obtained a certificate” and “certificates are required for sizeable changes or additions to existing facilities.” The SEC has addressed the question of whether a change or addition to an existing energy facility is sizeable in a handful of cases, all but one of which was filed by the energy facility itself. Recognizing that the determination of whether a particular change or addition is sizeable is fact-driven, the SEC has interpreted sizeable to mean “having considerable size” and in turn has interpreted considerable to mean “large in amount,

extent or degree” or “worthy of consideration, important.” See Docket No. 2012-02, Granite State Gas Transmission Company, Order Granting Motion for Declaratory Ruling (July 5, 2012) at p. 4.

As set forth most recently in Docket No. 2021-05, New Hampshire Transmission, LLC, the SEC considers five factors when determining whether a change or addition is sizeable. First, the existing size of the energy facility and the size of the proposed change. Second, whether the project requires the acquisition of new land. Third, whether the project changes the capacity of the existing facility. Fourth, whether the proposed change is a replacement of existing components as opposed to an expansion or increase in the size of those components. Fifth, whether the proposed addition or change will cause disruption in the existing environment. See Order on Petition for an Exemption, for a Declaratory Ruling that this Project is not a Sizeable Addition (September 12, 2022) at p. 9.

The SEC conducted its most extensive analysis of whether certain changes constituted a sizeable change or addition in Docket No. 2009-01, concerning the Merrimack Station Electric Generating Facility. In that case, the Committee concluded as an initial matter that Eversource was engaged in two separate projects, one involving a turbine replacement and the other involving the installation of a wet flue gas desulfurization system or scrubber with a 445-foot high chimney. The Committee determined that neither project was sizeable.

As part of its analysis of the scrubber, the SEC began by looking at RSA 162-H:1, the Declaration of Purpose, and concluding that the majority of siting considerations under the statute, for example, maintaining an appropriate balance among potential significant impacts and benefits, avoiding undue delay, providing full and timely consideration of environmental consequences, and treating siting as a significant aspect of land use planning, supported a determination that the scrubber was not sizeable. In that context, the SEC emphasized that the

scrubber did not require the acquisition of new land, that it would be installed within the confines of the existing site, and that it would not increase electric production.

IV. RESPONSE

A. *The Petition does not contain sufficient facts demonstrating that the replacement work is sizeable.*

Assuming for the sake of argument that the facts as stated in the Petition are accurate, which Eversource does not concede, the Petitioners have failed to meet the burden of proof that the proposed changes to the X-178 transmission line are sizeable. As noted above, the SEC defines sizeable to mean large in amount, extent or degree, or worthy of consideration, and it considers five factors when determining whether a change or addition is sizeable.

The Petition essentially alleges two theories for why the proposed changes to the X-178 transmission line are sizeable. First, it identifies certain physical components of the line, asserting that (a) the wood H-frame structures are on average 55' tall and that they will increase in height by 12' on average, (b) the conductor will be heavier, (c) conductor amperage will increase from 908 amps to 2,200 amps, and (d) the addition of OPGW is not "incidental" to the Project.⁶ Second, it suggests various forms of environmental disruption from the construction of roads along the easement, including impacts to the ecosystem from the removal of plants, topsoil and subsoil, and effects on wildlife from fragmentation due to line clearing.

The primary factor in determining whether a project amounts to a sizeable change focuses on the size of the existing energy facility relative to the size of the proposed changes or additions. The existing X-178 transmission line is a 115 kV line, approximately 49 miles in length, comprising 594 structures. After the X-178 Project is complete, the transmission line

⁶ The average height increase is closer to 13 feet (at 12.9 feet).

will remain 115 kV, will remain approximately 49 miles in length, and will consist of 591 structures.⁷

Ultimately, the pivotal question is whether a 13' change in the average height of the X-178 transmission structures alone constitutes a sizeable change. In light of the SEC's decision in Docket No. 2009-01, height alone is not a determining factor but must be considered in the fuller context of the footprint of the facility, which in this case is 49 miles long, broken down into segments of 14.1, 20.8 and 14.1 miles, along a corridor that is 265 feet wide along substantially all of its length. Notably, the X-178 Project will be installed within the existing ROW and existing access roads within the ROW will be utilized to the extent possible, though new in-ROW access roads will be required. Some existing access roads may need to be hardened (additional gravel) to permit the safe passage of construction vehicles.

Furthermore, the X-178 transmission line will continue to have a design rating of 115 kV, the measure RSA 162-H:2, IV uses to determine jurisdiction rather than the novel suggestion by the Towns that amperage triggers jurisdiction. Moreover, while the conductor installed as part of the X-178 Project has a higher amperage rating, additional substation work would be required to enable any additional power flows. Such substation work is not proposed and is not part of the scope of the X-178 Project. Finally, the alleged increased weight of the conductor is not worthy of consideration nor important in determining whether the X-178 Project constitutes sizeable change or additions because the size difference between the existing conductor and the new conductor will be negligible.

⁷ The X-178 transmission line currently consists of 594 structures, of which 580 are wood and 13 are steel, with an additional wood structure, due to its poor condition, in the process of being replaced with a steel structure. When the X-178 Project is complete, it will consist of 591 steel structures, with three structures eliminated to avoid wetlands and other impacts.

The X-178 Project is located in a long-established and well-maintained linear corridor devoted to the transmission of electricity and does not require or involve the acquisition of land. Consequently, the structure replacement work will not result in “further fragmentation” of the terrain. Moreover, the type and extent of potential impacts are well understood based on routine line rebuild projects in similar environments. In addition, the construction of access roads and temporary level work surfaces required to perform the replacement work will be limited to those areas strictly necessary to complete the X-178 Project. For all its projects, Eversource works closely with the applicable governing agencies to avoid, minimize, and mitigate any impacts.

As for any potential disruption, in every case where the SEC considered whether changes were sizeable, it looked to whether relevant state agencies were involved. Here, as acknowledged by the Towns, the Department of Energy, the Department of Environmental Services (“DES”) and the Fish & Game Department, as well as the towns along the ROW, are evaluating potential environmental and other impacts.

Finally, each structure replacement has been carefully reviewed with engineering to minimize the required height increases as much as possible. Height information, and the justification for height increases has been continually provided to the host communities since August 2023 after an initial presentation during two regional public information sessions hosted by Eversource.

B. The replacement work is not sizeable.

The X-178 Project has three purposes or components, the first being the replacement of aging wood structures,⁸ changing them to steel structures as part of what is commonly referred to

⁸ The X-178 line was originally constructed in the early 1950s, with the first segment (from Beebe River Substation in Campton to North Woodstock Substation in Woodstock) being reconstructed in 1969 and the other two segments being reconstructed in 1985.

as asset condition replacements, the second being the replacement of the existing conductor and the third being the replacement of the existing static wire with OPGW to improve system reliability, reduce outages, and promote grid modernization. Based on the following facts, the X-178 Project is neither a sizeable change nor a sizeable addition to the existing facilities.

A combination of factors drives the structure replacements, including asset condition where structures have been identified as needing replacement due to the degraded condition of the structures.⁹ Additional structures have been identified as needing to be replaced because they are showing sufficient signs of age-degradation that they have decreased load carrying capability and cannot support the new conductor or OPGW or both. Still other structures have been identified as needing to be replaced due to uplift.¹⁰ Structures are also proposed to be replaced due to their age and current level of degradation in order to forestall returning to the ROW in the near future to conduct their needed replacement, which would introduce additional construction period impacts, repeated environmental impacts, require reconstructing access roads, and increase project costs to remobilize.

The structures identified for replacement will be replaced with weathering steel and not with wood, due to steel's resiliency and resistance to degradation. Weathering steel is preferred over galvanized steel as the material is considered visually comparable to wood and is typically utilized for structure replacements where ROWs traverse through forested lands.

⁹ Per the industry standard guidelines issued by the Electric Power Research Institute (EPRI) structures that have been inspected and determined to be "Priority C" rated or showing moderate defect, should be replaced. Priority C structures typically show age-related defects such as woodpecker damage, rot, cracking or splitting, insect infestation and/or other signs of decay.

¹⁰ Uplift is an upward force, generally occurring on steeply inclined spans, where the conductor supports from ahead and back structures on a line are at different elevations. The conductors in the uphill span exert upward forces on the lower structure. Uplift at a structure can cause the conductor to pull the insulators up into the crossarm, and with pin-type insulators it might cause the conductor to pull away from the insulator and possibly pull the insulator pin out of the crossarm. Structures are designed to support conductor or "hold it up" and not to hold it down against cold and wind forces.

With respect to the OPGW installation, the replacement of existing shield wire with two 49-mile runs of fiber optic cable entails stringing the OPGW at the top of the structures, in the same location as the static wire on the existing structures. Installation methods are similar to those used for the conductor, where the OPGW is “pulled” in sections using a bucket truck and ground crews or by utilizing helicopters. The sections of OPGW are spliced together within a canister that is affixed to the structure.

Height increases are driven by the need to comply with current National Electrical Safety Code clearance requirements. Accordingly, the incremental changes resulting from the proposed Project benefit the public health and safety. Furthermore, the change in structure height will result in only a nominal increase in visibility of the structures within the X-178 Project area, further supporting the conclusion that a 13-foot change in the average height of structures does not constitute a sizeable change. Currently, the existing X-178 structures are visible from 1.5% of the town of Easton within a 3-mile radius of the existing structures. Following completion of the X-178 Project, the structures will be visible from 1.57% of the town of Easton within a 3-mile radius of the existing structures. Similarly, in the town of Bethlehem the existing structures are visible from 0.66% of the town within a 3-mile radius of the existing structures. Following completion of the X-178 Project, the structures will be visible from 0.78% of the town within a 3-mile radius of the existing structures. These percentages do not take into consideration the fact that only a small fraction of the existing or proposed structures may be visible from locations within a 3-mile radius.

In addition to the minimal change in overall visibility, based on a preliminary assessment there are no scenic resources within the X-178 Project area that will have visibility of any structures once constructed that do not currently have visibility of existing structures. In Easton,

there are no areas that will have views of the X-178 Project once construction is complete that did not previously have some visibility of the existing structures. Similarly, in Bethlehem most of the changes to visibility involve incremental increases in visibility in locations where the structures are already visible.

C. Existing statutes and municipal ordinance provide adequate protection.

As with other similar projects in New Hampshire and throughout its service territory, Eversource has prioritized early and consistent communication and engagement with host communities, including Easton and Bethlehem. Eversource introduced the X-178 Project to all the host communities¹¹ in March 2023 and has continued to provide updates and information on various aspects of the Project. This initial engagement included an introductory letter, followed by offering either in-person or remote video conference meetings with each of the host communities throughout April 2023. Details regarding a designated website and hotline e-mail and phone line were provided to the host communities.

A dedicated outreach team has engaged in over 200 direct interactions with abutting landowners either through e-mail, phone, or in-person visits to answer questions and address concerns. For example, to address abutter concerns regarding potential visual or environmental impacts, where possible, some structure locations have been shifted.

Since that initial outreach effort, Eversource has engaged in consistent communication with each of the host communities and abutting landowners to keep them informed of the X-178 Project details and updates. These efforts have included the dedicated outreach team engaging in over 200 direct interactions with abutting landowners either through e-mail, phone, or in-person visits to answer questions and address concerns. As part of this outreach effort, Eversource

¹¹ These include the towns of Campton, Thornton, Woodstock, Lincoln, Easton, Sugar Hill, Bethlehem, Dalton and Whitefield.

made over 73 unique construction-specific commitments with property owners to minimize or mitigate construction-related impacts. Concerns raised by property owners and host communities primarily focus on the installation and/or post construction status of gravel roads and structure height increases. Eversource has responded to these concerns by utilizing construction matting in some upland areas where appropriate, instead of installing gravel roads, and considering the use of helicopters in remote areas with difficult terrain to avoid constructing additional access roads, including though the White Mountain National Forest. Eversource is also currently in discussion with Bethlehem on the future use of proposed access roads for walking paths.

In addition, Eversource has consulted with state agencies and/or local departments to secure required permits and approvals. These include a site plan review, conditional use permits, and zoning variances in the town of Easton, building and driveway permits from the town of Sugar Hill, and a request for a waiver from the town of Bethlehem of its ordinance restricting structures greater than 40 feet in height.¹² Eversource met with several of the Conservation Commissions in the host communities in 2023 and 2024 to discuss the DES Standard Dredge and Fill Wetlands Application prior to submitting the application. In addition to the local permits, Eversource is seeking an Alteration of Terrain permit and other applicable state permits for wetland impacts and for forested wetland tree clearing at Streeter Pond Tap, located in Sugar Hill, as well as a National Environmental Policy Act (NEPA) Categorical Exclusion determination from the U.S. Forest Service to undertake work in the White Mountain National Forest.

¹² Bethlehem has denied the waiver request and Eversource has sought relief through a petition to the New Hampshire Public Utilities Commission. See, Docket No. DE 24-087.

V. CONCLUSION

The threshold issue for determining SEC jurisdiction in this case concerns whether the replacement work on the existing X-178 transmission line rises to the level of a sizeable change or addition, which is a fact-driven determination. The Towns do not meet their burden of proof, failing to state facts which demonstrate that the X-178 Project constitutes a sizeable change or addition. Instead, they allege that incremental changes to certain physical elements of the replacement components, and various perceived environmental impacts, provide a basis for the Committee to “assume” jurisdiction.

SEC precedent supports a determination that the Project is not sizeable inasmuch as the changes are not considerable in relation to the existing facility and the changes will not cause disruption in the environment because the relevant state agencies exercise authority over Eversource’s activities. Moreover, SEC review is neither necessary nor required for the public good because existing statutes provide adequate protection of the purposes of RSA 162-H.

Finally, as consistently shared with the host communities since outreach began, the construction schedule for the X-178 Project was designed to support a start date in Q3 of 2024. Eversource must engage in contract discussions with service providers imminently to maintain the construction schedule. More than a year after outreach began, and just months before the start of construction, the Petitioners’ request would significantly delay construction and stall the significant progress that has been made towards improving the resiliency and safety of the X-178 transmission line, while maintaining reliable service to customers in the North Country. Asserting SEC jurisdiction, therefore, would run counter to one of the goals of RSA 162-H by creating undue delay.

WHEREFORE, Eversource respectfully asks that the Committee:

- A. Deny Petitioners' request to assume jurisdiction and oversight of the X-178 transmission line replacement work; or
- B. Alternatively, determine that the X-178 Project is exempt under RSA 162-H:4, VI; and
- C. Grant such additional relief as the Committee deems just and appropriate.

Respectfully submitted,

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d/b/a Eversource Energy

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