



New England States Committee on Electricity

To: Eversource
From: NESCOE (Contact: Sheila Keane)
Date: June 30, 2023
Subject: 1704/1722 Underground Cable Rebuild Project
Cc: Planning Advisory Committee (PAC)

NESCOE writes in regard to Eversource’s 1704/1722 Underground Cable Rebuild asset condition project, which Eversource presented at the June 15, 2023, Planning Advisory Committee (PAC) meeting. As part of the project, Eversource plans to replace approximately seven miles of high-pressure fluid filled (HPFF) underground pipe-type cable (PTC) in the Hartford, Connecticut area. The presentation and discussion at PAC raised questions that require further discussion at future PAC meetings.

Drivers and Alternatives

NESCOE requests more information on the drivers of the projects and the alternatives that Eversource considered. For example, in regards to the photos and presentation relating to concerns with the vaults and ducts, did Eversource consider vault repairs? Some of these details were discussed briefly at the PAC, but Eversource did not include them in its presentation. Presenting this information at a future PAC will allow for a more informed discussion and considered questions. Further, for the alternative presented, Eversource did not include a cost estimate, which makes it difficult for states and stakeholders to compare possible alternatives. Eversource should provide an estimate for the alternative, even at an order of magnitude (-50 / +200%) estimation level.

Future Projects

Eversource notes that this proposed project pertains to seven (7) of the 300 miles of HPFF assets that Eversource owns. It appears that the other HPFF assets may be of similar vintage and subject to similar Eversource concerns, particularly those related to sole supplier exposure. Extrapolating based on this estimate, the total cost to address the remaining cables on Eversource’s system would be \$12.6 billion.¹

We understand from the discussion at the PAC that Eversource does not currently have a definitive replacement plan in place that would be similar to the approach that it has used for other assets, such as laminated wood structures.² It is not clear whether Eversource has inspected

¹ NESCOE recognizes that cost estimates may vary depending on project specific criteria but finds a simple extrapolation useful in this instance as a directional indicator of the possible magnitude of investment associated with this type of project in the future.

² In 2021, Eversource began a Laminated Wood Structure Replacement program to replace all 546 laminated wood structures across eight 115 kV transmission lines in New Hampshire. See Eversource NH 115-kV Laminated Wood Structure Replacement Program Phase I (March 17, 2021), at https://www.iso-ne.com/static-assets/documents/2021/03/a2_eversource_nh_115kv_laminated_wood_structure_replacement_phase_1.pdf; Eversource Laminated Wood Structure Replacement Program Phase II – Revision 1 (October 20, 2021), at

or plans to inspect other HPFF assets, in what timeframe it might do so, and how it prioritizes the different geographic areas (e.g., Boston, New Bedford, etc.). Visibility into planned inspections and possible interventions would allow time for states and stakeholders to consider the potential impact on ratepayers, including how the impact would be paced over time. It would also leave room for possible consideration of future needs. This would be especially efficient given the time and expense associated with underground projects in congested urban areas such as Boston. These discussions require far more time than the current asset condition project notification allows.

Right-sizing

The presentation states that Eversource’s preferred alternative is “driven primarily by equipment availability and long-term reliability considerations,” and notes that the preferred alternative would “address all potential future needs identified in ISO-NE 2050 transmission study.”³ We appreciate awareness of future needs. However, NESCOE is concerned that Eversource is using future needs identified in the 2050 study to justify, even in part, this project. New England has not yet developed a right-sizing approach. It is not possible to develop such an approach until the region improves the transparency, predictability, and cost discipline of asset condition projects.

Based on the information that Eversource has provided to date, NESCOE cannot offer an informed opinion on whether Eversource’s proposal is appropriate or prudent. NESCOE’s comments, or lack thereof, on this or other asset condition project proposals that purport to address future needs driven by state policy should not be construed as support for a project. As PAC presentations are often one of the only publicly accessible explanations of asset condition projects, NESCOE requests that this presentation and future presentations make clear whether a proposed asset condition solution is driven in part by future needs with a clear, detailed explanation of the rationale, including consideration of costs and benefits.

NESCOE strongly prefers to develop a comprehensive regional right-sizing approach in the first instance. We recognize that there may be isolated instances where right-sizing decisions may need to be made while the region works to develop a right-sizing approach. However, making those one-off determinations requires much more information than is included in this presentation.⁴ NESCOE encourages Eversource to prioritize substance and process improvements to the asset condition project process. Once these are underway, the region can begin considering right-sizing approaches.

https://www.iso-ne.com/static-assets/documents/2022/01/a2_eversource_laminated_wood_structure_replacements_phase_2_rev1_redline.pdf; Eversource Laminated Wood Structure Replacement Program Phase III (June 15, 2023), at https://www.iso-ne.com/static-assets/documents/2023/06/a05_2023_06_15_pac_laminated_wood_structure_replacements_phase_3.pdf.

³ Eversource 1704/1722 Underground Cable Rebuild Project (June 15, 2023), at 10. [https://www.iso-ne.com/static-](https://www.iso-ne.com/static-assets/documents/2023/06/a04_2023_06_15_1704_1722_underground_cable_rebuild_project.pdf)

⁴ NESCOE notes that in 2022, VELCO provided several alternatives, with high level cost estimates and cost benefit analysis to support a recommendation to use a double-bundled conductor configuration. See VELCO K42 Transmission Line Replacement Project (January 20, 2022), at https://www.iso-ne.com/static-assets/documents/2022/01/a4_velco_k42_transmission_line_replacement_project.pdf.