

May 2, 2023

To the ISO-NE Planning and Advisory Committee (PAC),

over the past several years Eversource has replaced a large portion of its 345 kV and 115kV structures and conductors. Most of these appear to be elective transmission upgrades with 'asset condition' given as the justification for the upgrade. On the 115kV ROWs in New Hampshire, existing wood structures have been, and are proposed to be, replaced with steel structures, generally 15' + taller. Conductors that were 336 ASCR/768 amps and 795 ASCR/1372 amps, are replaced, (in one section for which information could be found,) with 1272 kcmil with a max. amperage of 1172.

Last week NH landowners encumbered by Eversource's X-178 line received notification that Eversource "identified the need to replace the structures, conductor (wire)" on the X-178 line:

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Eversource identified the need to replace the structures, conductor (wire), and install fiber optic cable, known as Optical Ground Wire (OPGW) along our existing X178 transmission line. This line, originally constructed in 1969 and 1985, crosses through the towns of Campton, Thornton, Lincoln, Woodstock, Easton, Sugar Hill, Bethlehem, Dalton, and Whitefield, NH. Recent physical inspections and engineering analysis of the line revealed many of the existing structures are in need of replacement from woodpecker damage, insect damage, and pole rot. Due to this, all of the wooden structures will be changed to steel, which are more resilient to pole rot as well as insect and woodpecker damage. Furthermore, the steel poles can better withstand the heavier OPGW and storms that we experience here in New Hampshire.

No documents were provided by Eversource that supported their claim that "many" (how many?) of the structures were damaged (how damaged?), or that explained why, after years of failing to meet Code, the upgrades are being done now. Eversource did not give the present and proposed (increased) capacity of the lines or explain how this would increase system reliability (and electromagnetic radiation) or in what ways the present system is unreliable. Fiber-optic is not permitted in the terms of the easements, yet taller structures were justified by the need to support new Optical Ground Wire (OPGW), which includes fiber optic. No data was provided showing how much the fiber optic increases system reliability. No data was provided documenting increased strength for the steel structures, nor was a cost/benefit or CO2 assessment of wood vs. steel structures provided.

On February 8, 2023 NESCOE sent to you and New England Transmission Owners, a letter addressing "Asset Condition Projects and Process Improvements", which addresses these Eversource upgrades:

"Investments in Asset Condition Projects have grown steadily. Today they are a material portion of the overall regional network service charge that consumers ultimately pay. Asset Condition Projects have an important role in system reliability. **However, the process by which Asset Condition Projects are developed by NETOs, reviewed by ISO-NE, states and the public, approved for rate recovery, and considered in overall transmission system needs and planning is antiquated and ultimately, inadequate.** [my emphasis] It is the right time to implement planning process improvements to protect consumers from excessive costs and to maximize the use of all transmission assets by moving Asset Condition Projects from the current siloed, notice-based method into meaningful and holistic transmission system planning.

We offer below some suggested process enhancements to improve the transparency, predictability, and cost discipline of Asset Condition Projects in the nearest term, and to enable the region to better incorporate them into holistic transmission planning to allow consumers, and the system, to realize their full benefits. NESCOE is interested in working collaboratively and

expeditiously with NETOs, ISO-NE and stakeholders on such reforms.”

Some recent ‘Asset Condition’ projects in New Hampshire:

Webster-Beebe River 115 kV Corridor Asset Condition and OPGW Project - E115 Line	\$64,147,000
Webster-Beebe River 115 kV Corridor Asset Condition and OPGW Project - Z180 Line	\$14,529,000
Moore #20 Substation Asset Condition and Separation	\$49,307,000
Laminated Wood Structure Replacement Program Phase II - A152 115 kV Line	\$17,476,000
P145 Line Rebuild - Asset Condition and OPGW	\$52,142,000
Deerfield Station 345 kV Breaker Replacements	\$5,182,000
Timber Swamp Station 345 kV Breaker Replacements	\$7,431,000
Line 373 Asset Condition Wood Structure Replacements	\$7,066,000
Line 326 Asset Condition Wood Structure Replacements	\$6,194,000
Line 385 Asset Condition Wood Structure Replacements	\$5,035,000
Line 391 Asset Condition Wood Structure Replacements	\$8,953,000
Line C196 Asset Condition Wood Structure Replacements	\$14,800,000
Scobie Pond Station 345 kV Trench Replacement & Control House Expansion Project	\$19,652,000
Greggs Substation Rebuild	\$72,193,000
Eagle Substation 345/115 kV Autotransformer Replacement	\$6,375,000
115 kV Structure Replacements and OPGW Installation - P106 Line	\$5,634,000
115 kV Structure Replacements and OPGW Installation - Q171 Line	\$14,966,000
Line 381/379 Optical Ground Wire Upgrade	\$8,238,000

115 kV Structure Replacement Project - Line A126	\$8,292,000
115 kV Structure Replacement Project - Line H123	\$6,168,000
115 kV Structure Replacement Project - Line H141	\$9,400,000
115 kV Structure Replacement Project - Line K174	\$8,665,000
115 kV Structure Replacement Project - Line L163	\$16,992,000
115 kV Structure Replacement Project - Line A152	\$6,884,000
345 kV Structure Replacement Projects - Line 326	\$3,630,000
345 kV Structure Replacement Projects - Line 367	\$13,631,000
345 kV Structure Replacement Projects - Line 373	\$10,995,000
345 kV Structure Replacement Projects - Line 379	\$11,589,000
345 kV Structure Replacement Projects - Line 381	\$6,590,000
345 kV Structure Replacement Projects - Line 385	\$14,408,000
345 kV Structure Replacement Projects - Line 391	\$17,313,000
115 kV Wood Pole Replacement - B143	\$6,403,000
115 kV Wood Pole Replacement - C129	\$10,048,000
115 kV Wood Pole Replacement - F139	\$7,530,000
115 kV Wood Pole Replacement - G128	\$7,404,000

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiXxp2gg9b-AhXykokEHT1rAxYQFnoECAsQAQ&url=https%3A%2F%2Fwww.iso-ne.com%2Fstatic-assets%2Fdocuments%2F2023%2F03%2Ffinal_asset_condition_list_march_2023.xlsx&usg=AOvVaw33bdGnZC4Wyw7NBBWpgOtN

Among the very few (9 out of almost 400) canceled Asset Condition projects in this March 2023 list is the X-178 line, estimated cost \$14,580,000.

CANCELLED PROJECTS	
NIPCC Directory#1 Protection Modifications - Phase 4	
115 kV Structure Replacement Project - Line X178	

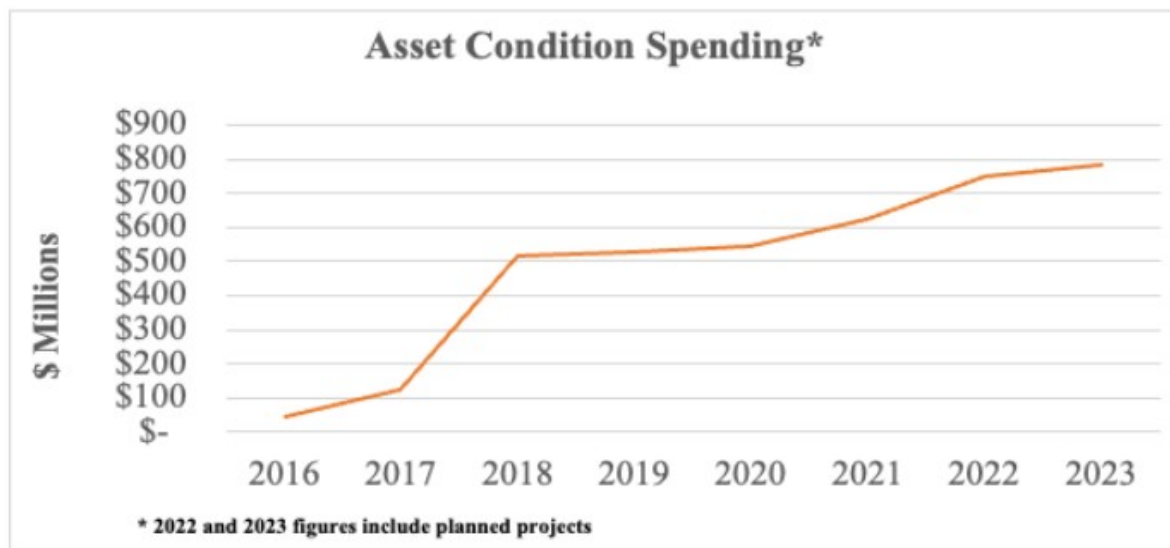
The Asset Condition category of this line is 1b: “Concept or Proposed.” For Proposed Asset Condition projects “Asset owner has determined that the solution is appropriate to address the asset condition and the solution has been presented to the PAC.” The PAC is the Planning and Advisory Committee of ISO-NE.

For Asset Condition projects, NESCOE notes:

“the process is simply for NETOs to provide to the PAC notice-style, informational presentations on Asset Condition Projects with an estimated cost of \$5 million or greater.

NESCOE is not aware of any Asset Condition Projects with a cost estimate over \$5 million that have ever been withdrawn or materially modified based on PAC feedback. NESCOE has no information about the overall number of Asset Condition Projects over time estimated to cost less than \$5 million.

This visibility into Asset Condition Projects is significantly less than the visibility into transmission projects that move through the planning process that ISO-NE leads. Yet, the costs of Asset Condition Projects are nonetheless allocated to consumers across New England in the same way as the reliability projects that ISO-NE selects, i.e., on a pro rata basis across regional network load...



In March 2016, when ISO-NE first began tracking Asset Condition Projects and making them visible in a central location, there were \$58 million in Asset Condition Projects planned or under construction. Since that time, over \$2.787 billion of Asset Condition Projects have been placed in service, and \$3.255 billion more are proposed, planned, or under construction...

The question of whether and to what extent to “right-size” transmission to account for broader potential needs will arise more often in the future as the region considers transmission expansion to account for clean energy resources and state decarbonization requirements. This was a driver behind NESCOE’s ONE Transmission concept and our request that ISO-NE include in its 2023 Work Plan an allocation of resources to develop standards or guidelines for right-sizing future transmission projects, including asset condition and reliability projects.

Confidence in a right- sizing approach requires confidence in the first instance that the underlying project is warranted and prudent. The current framework makes it difficult to assess Asset Condition Projects in this context.”

Since the NH PUC grants Eversource a guaranteed rate of return on its utility investments (assets, which include transmission lines, structures, substations, etc.) and Eversource’s assets depreciate yearly, Eversource can increase its profits by building more, and more expensive, infrastructure.

I request that ISO-NE include in its 2023 Work Plan an “allocation of resources to develop standards of guidelines for right-sizing future transmission projects, including asset condition and reliability projects.”

I request that ISO-NE and NESCOE require NETOs to place on hold all ‘Asset Condition’ and reliability projects, including Eversource’s X-178 project, until adequate oversight of these projects is created, to protect ratepayers, and landowners burdened with utility ROWs.

I request that ISO-NE and NESCOE audit the ‘Asset Condition’ projects in ISO-NE’s 2023 list and determine if transmission operators created unnecessary costs to ratepayers for these projects.

I request that Eversource cancel (if it isn’t already canceled as the 3/2023 ISO-NE list states) it’s proposed X-178 ‘upgrade’.

In the meantime, Eversource can explain why it has reconstructed most, if not all, of it’s 345kW and 115kW system in New Hampshire under the essentially unregulated Asset Condition category.

Eversource can also explain its plans for using its ROWs for HVDC and/or simultaneous HVAC/HVDC transmission,.

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