

kris pastoriza response to: Response to inquiry

Codispoti, Jennifer A May 25, 2023, 6:21 PM (9 hours ago)

Good afternoon, Ms. Pastoriza,

Below please find responses to your inquiries.

1. Requesting a map with the structures currently on your property and new structure locations as well as the existing and proposed structure heights

Eversource Response: Mapping for the project is not yet available, but will be complete in the coming months. Once the draft mapping is available, we will post it to our website www.eversource.com/X178-Line-. Structures on your property are as follows (subject to change):

Structure Number	Existing	Proposed	Height Increase
308	52.00	65.50	13.50
309	52.00	61.00	9.00
310	56.50	65.50	9.00
311	52.00	65.50	13.50
312	52.00	61.00	9.00
313	52.00	65.50	13.50

kris response: Increase in pole heights for an Asset Condition project of unproven need is not acceptable. Many of the pole numbers have been removed. Mapping was done for Northern Pass, so must be available.

1. Conductor size and amps

Eversource Response: The proposed is 1272 ACSS (1.381” Dia) and the maximum amperage is 2200 amps.

1. Diameter of poles

Eversource Response: In general, the average pole diameter at the bottom of the pole will be about 20”.

1. Number of insulators

Eversource Response: There are generally three insulators on each structure, however some angled structures may have nine insulators. All are similar configurations to the existing structures. See examples below:

Weathered Steel Structures

EVERSOURCE
ENERGY

Examples of typical structures to be installed



“H-Frame” structure with three insulators

“Angled” structure with nine insulators

Safety First and Always

kris response: I meant, how many insulators would be between the cross arms and the conductor. Larger conductor, more current, more insulators, more visual impact, a more industrial and aesthetically degraded corridor. For example, the present conductor strings are 4’ long.

1. Proof of damage

Eversource Response: See below examples of pole rot, pole cracking and woodpecker damage:

Examples of Structure Degradation

On the X178 Line

EVERSOURCE
ENERGY

Pole Rot



Woodpecker Damage



Cracked Poles



Safety First and Always

1

kris response: Whoever gave you the pole photos is disrespecting both of us. Eversource had the whole X-178 line inspected for pole damage, by NM Group and possibly CHA companies. I need a copy of this report.

NM Group, A Trimble Company, contact Jim Collins

- Foot Patrol –
 - Line crews walk/drive line to observe general condition of structures (ground level up) and general condition of ROW (access, vegetation, encroachments)
- Structure Ground Line –
 - Specialized crews excavate at each structure (~18”) to determine subsurface integrity of pole and apply treatment as necessary
- High Resolution Aerial –
 - Entire system flown, and with detail hover review at most structures, accompanied by high-resolution photos
- Thermography -
 - Infra-red camera (typically on helicopter) observes line for hot-spots
- Comprehensive Drone - Started in 2017
 - Combines foot and High Res Aerial. Plan to inspect whole system in 3 years
- Items Reviewed - Wood Structures
 - Significant Woodpecker Damage
 - Severe Checking/Splits/Cracking
 - Insect Damage
 - Structure with Rot or Decay
 - Severe Fracturing, Buckling, Leaning
 - Compression Breaks
 - Fire Damage
 - Damage / Vandalism
 - Hardware / Insulator damage

<https://www.chacompanies.com/projects/nh-transmission-foot-patrol-inspection/>

I also request the pre and post-removal inspections of the poles on a 336 (the O-194 line) and a 795 line, which Eversource must have done to assess the accuracy of their pole inspections.

1. Proof of easement language allowing fiber optic on your property and use for electric service only

Eversource Response: OPGW (Optical Ground Wire) will replace an existing shield wire to facilitate faster and more reliable internal system communication between Eversource's substations. There has long been an inter-substation communication functionality on the line and OPGW is the current industry standard to support those system communications. The OPGW is not related to, nor does it support any cellular or telecom service. This communication allows for increased visibility of our system, quicker response times for system issues, increased automation, reduces outages and their length and overall improves reliability across the electric system. Accordingly, the OPGW is an integral part of the electric transmission facilities covered by your easement which authorizes Eversource to install poles and towers with wires strung upon and extending between the same, for the transmission of electric current together with all necessary cross-arms, braces, anchors, wires [emphasis added] and guys.

kris response: The ROW easement deeds do not contain the word "intelligence", as do later deeds. Thus intelligence, which is carried by fiber optic, is not permitted. The easement language limits your rights in the ROW. It does not permit anything related to the functioning or construction of the lines, for example housing for workers, real-time surveillance cameras with sound recording, land-mines as a response to destructive acts to the powerlines, illumination of the ROW at night, etc. So Eversource's claims of rights for OPGW (increased weight, larger towers) and road building, are really statements by Eversource that they have the money to hire lawyers and most of the people whose land is encumbered by ROWs do not. Eversource's claim is simply one of power; "we can so we will."

1. Is the line "HVAC/HVDC simultaneous transmission"

Eversource Response: The existing line is High Voltage Alternating Current (HVAC) and will be the same when rebuilt.

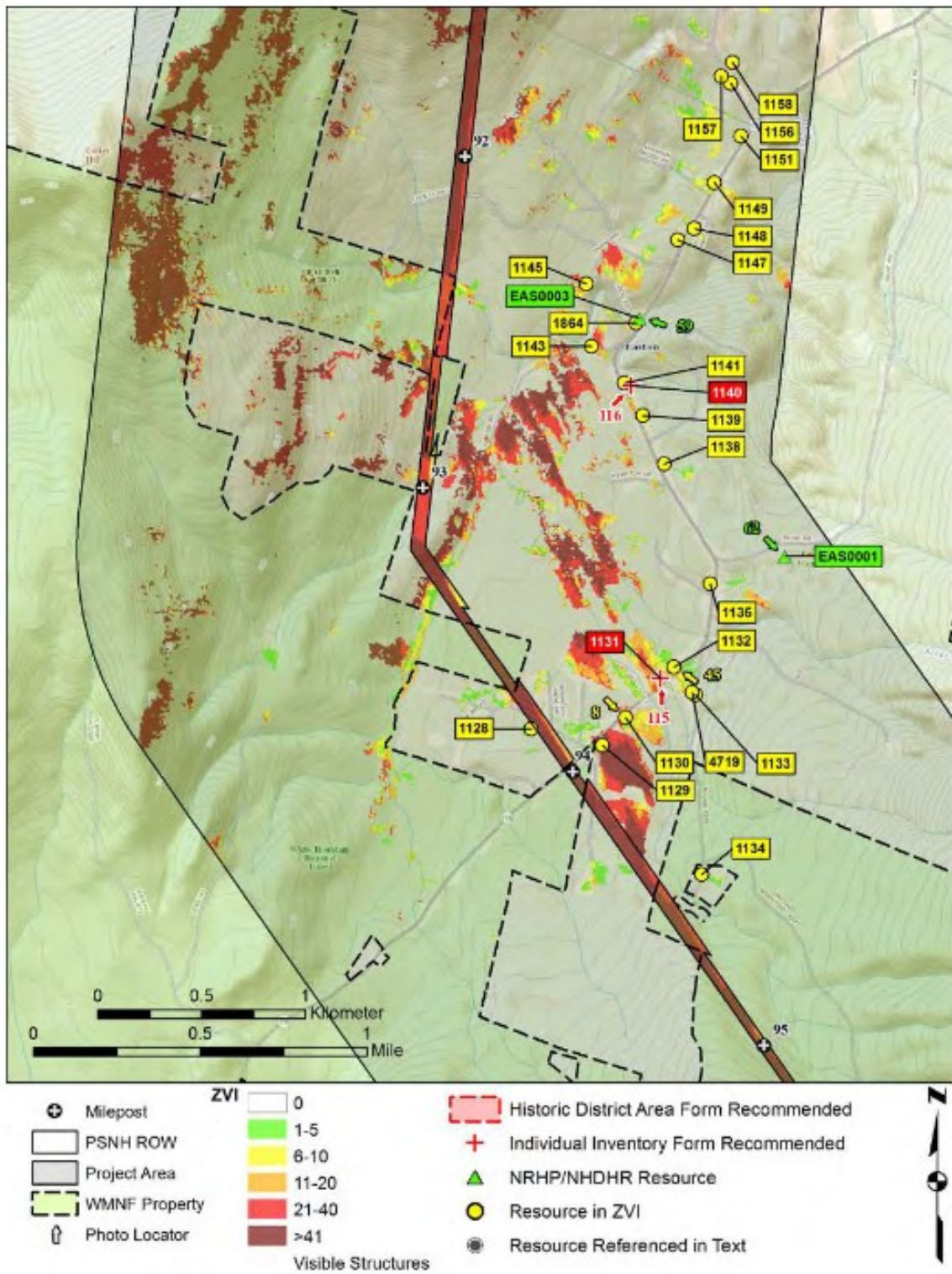
kris response: Would the proposed new transmission line be capable of carrying simultaneous HVAC/HVDC current?

If so, how much would this increase the power carrying capacity of the lines?

1. A visual impact map showing where any poles will be visible from anywhere on my property.
 - a. For example, some of the poles in the Reel Brook area of WMNF are visible from here, as well as poles at the height of land above Ruskin Road.

Eversource Response: Visual simulations are not anticipated to be developed.

kris response: In the absence of visual impact maps (or visual simulations), landowners and others will have to rely on the Northern Pass maps:



Sketch Map J.

1. Book and page where the requirements for the distance between the conductor and the ground is stated.

Eversource Response: The distance between the conductor and static wire at the top of the pole, does not meet updated industry standards for lightning protection on our system. The existing X178 Line is over 50 years old, and industry and company standards have changed, driven by increased system reliability.

kris response: What is the Code book name and the page on which the claimed required distances are listed. Please provide this page.

The existing X-178 line is 37 years and 72 years old.

1. Would the whole ROW width be cleared (225', of which 150' is cleared now,)

Eversource Response: Clearing to the edge of the easement boundary is unknown at this time, but may be needed in select locations on the line to safely access each structure.

1. would the old pole stubs be pulled out,

Eversource Response: Generally, old poles are removed. Poles may be removed entirely or may be cut at the base.

kris response:



1. would any road-building be done (AOT, imported fill, grading) and how would these roads be 'removed' and soil compression remedied,

Eversource Response: Yes, access roads will be built to provide construction vehicles the ability to safely access each structure. Therefore, we build or enhance access roads using gravel or timber mats within the power line corridor which need to be stable enough for heavy construction equipment. Generally, gravel access roads remain in place for future maintenance unless required to be removed by permitting or other considerations, which is less disruptive to the environment than removing and rebuilding as future maintenance needs arise.

kris response: It would be less disruptive not to build a new line with larger, heavier steel towers and conductors that require heavy equipment to install, unlike the existing wood structures, which have exceeded the 60 year lifespan stated for steel structures (Deerfield NH minutes.) Road building here (and in the Bog Pond area) is unacceptable. Glacial erratics will not be moved nor imported fill permitted. Replacing poles with helicopters, which were used for the cross-arm and insulator replacements in 2017, would be less disruptive to the environment. Eversource claims it is building a new line to reduce overall impacts, yet plans to build roads and leave them for 60 years, to ease the maintenance it claims the rebuild is precluding. Roads would also allow vehicle access at any time, including OHRV access, whereas the only vehicle access possible now is for the brontos.

1. in what areas would helicopters be used for access,

Eversource Response: It is unknown if there is a need for helicopter-assisted access at this time.

kris response: Eversource knows it would need helicopters to replace structures in Bog Pond and the whole Bog Pond area which is environmentally sensitive and really should not be entered or touched at all (see following photos.)

1. how would Eversource comply with local noise regulations,

Eversource Response: Eversource will reference and comply with all local noise ordinances

1. how would Eversource comply with Endangered Species Act restrictions for the Northern Long-Eared bat,

Eversource Response: Eversource will coordinate with the US Fish and Wildlife Service and NH Fish and Game relative to the Northern Long-Eared bat.

kris response: Please copy me on all correspondence with the U.S. Fish and Wildlife Service and NH Fish and Game relative to the Northern Long-Eared bat and any other endangered species.

1. if hay/straw is used to cover denuded areas, what certification will be provided that this came from a field that was never spread with sludge,

Eversource Response: Eversource and its contractors source hay free of weeds.

kris response: I asked about sludge, which contains toxic chemicals including pfas.

1. what kind of photographic/other documentation would Eversource provide of existing conditions, for ROW encumbered property owners?

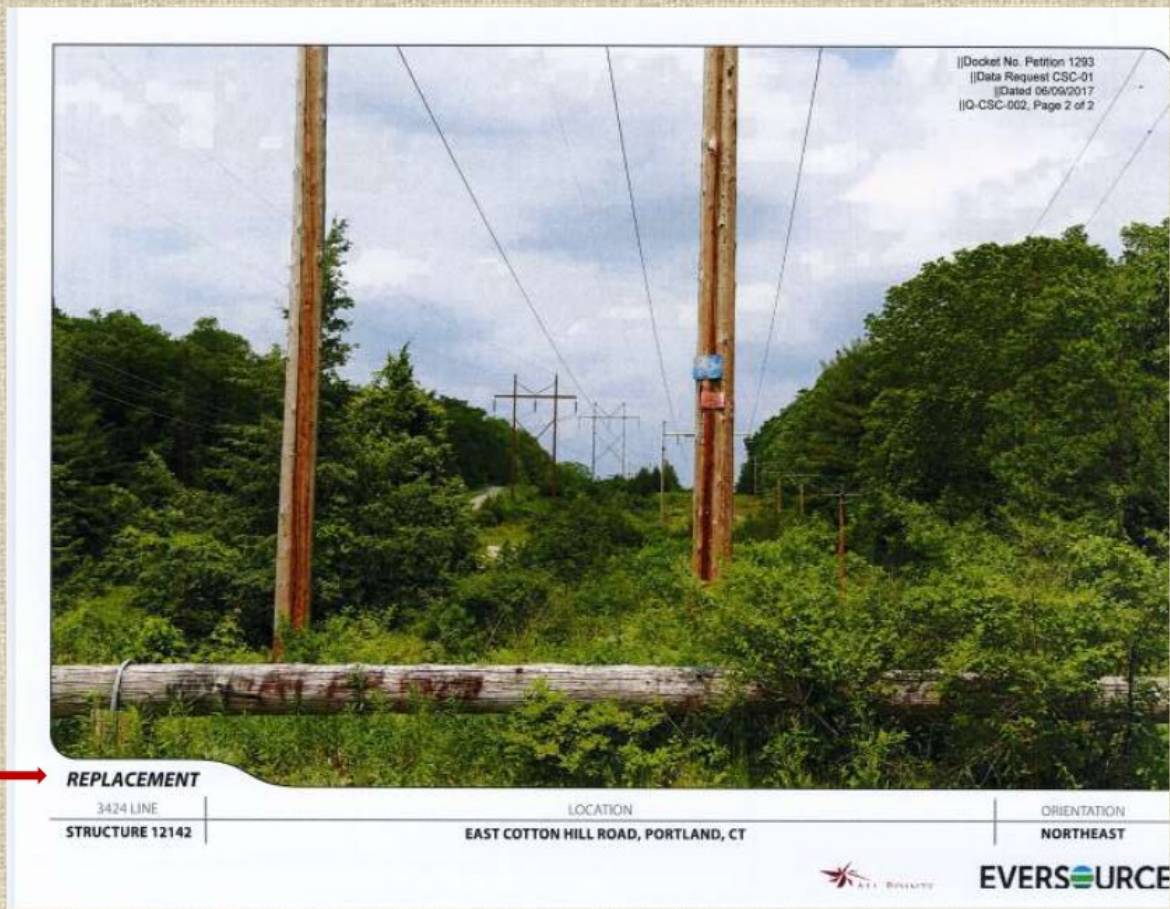
Eversource Response: It is general practice for Eversource and/or its contractors document existing conditions prior to construction.

Kris response: I will recommend all ROW encumbered landowners to photograph their ROWs, extensively and with drones, if they can afford this.

Before picture – from Eversource for petition



After picture – from Eversource for petition



<https://ctconservation.org/wp-content/uploads/Advocating-for-your-Right-of-Way-Basics.pdf>

Please provide the lichen and moss survey results.

Eversource Response: We do not anticipate conducting lichen or moss surveys.

1. Please provide your studies on the effects of landscape fragmentation on animals for the current and proposed powerline corridor.

Eversource Response: As an existing power line corridor, Eversource has no plans to conduct a landscape fragmentation study.

kris response: Roads increase fragmentation, even in a powerline. Eversource has refused to create/allow wildlife crossing areas by leaving strips of higher growth, especially along streams.

1. Please provide a noise-map, for the proposed construction. An example is shown below:

Eversource Response: A noise map will not be developed for construction.

1. Please provide a wetlands delineation map.

Eversource Response: Mapping for the project is not yet available, but will be in the coming months. Once the draft mapping is available, we will post it to our website www.eversource.com/X178-Line-.

kris response: Wetlands mapping was done for the proposed Northern Pass project. Pink plastic tape is still out on the ROW, where local residents failed to clean it up.

1. Construction plans including alteration of terrain, road building plans, road restoration plans, and weight of proposed conductor.



Eversource Response: Construction plans are not yet developed. Mapping for the project is not yet available, but will be in the coming months. Once the draft mapping is available, we will post it to our website www.eversource.com/X178-Line- .

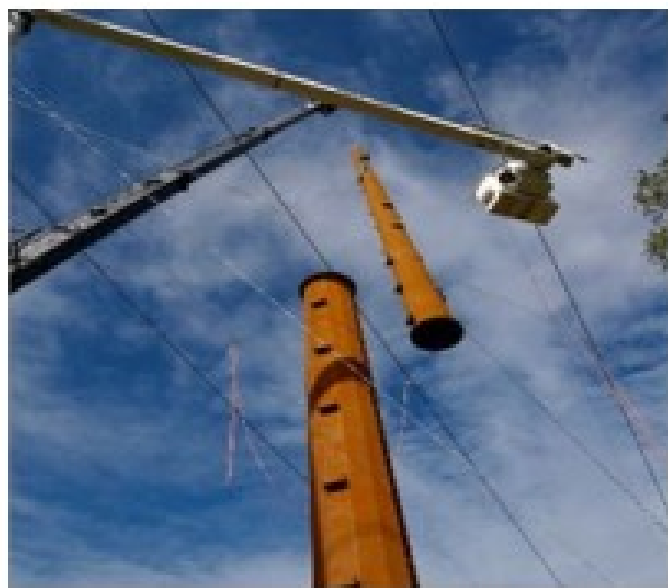
kris response: No road building will be allowed here. Construction plans must be very similar to construction plans for the rest of the 140 miles north-south new 115kV 1272 line.



1. List of all vehicles/heavy equipment proposed to be used.

Eversource Response: Several types of vehicles and equipment are used during construction and restoration. Specific vehicles have not been identified at this time but are part of the planning process for construction that will be further developed at a later date.

kris response: Construction plans must be very similar to construction plans for the rest of the 140 miles north-south new 115kV 1272 line.



Bog Pond area: protection, not exploitation, is called for here.



Below: Pond area with pentachlorophenol-treated poles dumped in 1986 and left for 30 years until the Easton Conservation Commission demanded that Eversource remove them.



Below, X-178, recently bronto-mowed, private land. The glacial erratics will not be moved.



Left, Bog Pond area looking west toward the Appalachian Trail; more terrain in which the structures should be removed, not replaced with larger steel structures, larger conductors longer strings of insulators and roads, to be left for “future maintenance needs.”

1. Time frame of proposed upgrade.

Eversource Response: The current schedule is as follows

- Project Information Sessions: 3rd Quarter 2023
- Permitting: Beginning 2nd Quarter 2023
- Construction: 2nd Quarter 2024 through 4th Quarter 2026 (duration includes all three segments)

● **kris response:**

- From a Nov. 1 interview with Northeast Utilities:

Now Chuck talked about the Northern Pass projects. And we are extremely confident in getting this project done in terms of the projects that we have made with the TSA being signed, with file that TSA by the end of this month. With FERC, we expect to have somewhere around late January, early February. We have filed with the DOE for the presidential permit, which is a permit that you need to cross over into Canada. That permit just two things. Environmental impact of building the lines and then answers that would align process opens into another country, doesn't cause any undue security from the energy standpoint is to building the line. Some other key milestones. We will begin all of our engineering, life long lead time, conversion station in 2011. And start construction of the project in 2013 for completion in late 2013. The person later that project, Jim Muntz is our President of transmission project director for \$1.2 billion middle project is that in that effort. **All of the roll out we'll have so far with business leaders, government leaders in the various communities has been very, very positive. So this has been well accepted inside of New Hampshire.** So we will continue to give you updates on this.

Full text at: <http://seekingalpha.com/article/233894-northeast-utilities-ceo-discusses-q3-2010-results-earnings-call-transcript>

1. Documentation that Eversource has been allowed to be out of compliance with the electrical codes it now states it must upgrade the structures to be in compliance with.

Eversource Response: Eversource is not out of compliance with electrical codes. The current distance between the conductor and static wire at the top of the pole, does not meet updated industry standards for lightning protection on our system. Industry and company standards have changed, driven by increased emphasis on system reliability from the public and regulators.

Kris response: Since Eversource is in compliance with electrical code, it doesn't need to build a new line to comply with the Code. Eversource has provided no documentation that a new and larger X-178 line is necessary for system reliability, nor do you state the specific standards (if there are any) and who has imposed them.

Eversource will be out of compliance with Code if it installs the larger conduit (on the existing poles) to carry more power, to increase its profits while adding to its assets on which it is given, by the PUC, a guaranteed rate of return.

1. Time frame of proposed restoration.

Eversource Response: Site Restoration will be ongoing through construction for stabilization and upon construction completion.

Kris response: Eversource plans to stabilize its roads:



1. I see nothing in the ISO interconnection request queue for the X-178 line. Please add Eversource's request to ISO to my list of requests for information.

Eversource Response: No interconnection agreement with ISO-New England is associated with this project.

Kris response: Why is the proposed X-178 replacement with a new, larger transmission line, any different than the replacement of all the other Eversource 115kV lines with new, larger lines?



Brent Oberlin
Director, Transmission Planning

July 15, 2021

Ms. Meiyang Li
Eversource Energy
780 North Commercial Street
Manchester, NH 03101

Subject: Eversource New Hampshire Transmission Lines Rebuild Project - Proposed Plan Applications (PPAs) – ES-21-T40, ES-21-T41, ES-21-T42, ES-21-T43, ES-21-T44 & ES-21-T45

Dear Ms. Li,

This letter is to inform you that, pursuant to review under Section I.3.9 of the ISO Tariff, no significant adverse effect has been identified with regard to the following PPAs:

ES-21-T40 – Transmission application from Eversource Energy (ES) for the replacement of 18.09 miles of overhead transmission on the D142 115 kV Line with 1272 MCM ACSS conductor along with new structures between Whitefield Substation and the Lost Nation Substation in New Hampshire. The proposed in service date of the project is December 2023.

ES-21-T41 – Transmission application from ES for the replacement of 12.65 miles of overhead transmission on the O154 115 kV Line with 1272 MCM ACSS conductor along with new structures between the Lost Nation Substation and Paris Switching Station in New Hampshire. The proposed in service date of the project is December 2023.

ES-21-T42 – Transmission application from ES for the replacement of 13.87 miles of overhead transmission on the W179-1 115 kV Line between the Berlin Substation and the Pontook Tap and 1.46 miles of overhead transmission on the W179-2 115 kV Line between the Pontook Tap and the Paris Switching Station in New Hampshire with 1272 MCM ACSS conductor along with new structures. The proposed in service date of the project is December 2023.

ES-21-T43 – Transmission application from ES for the replacement of 3.39 miles of overhead transmission on the Z180 115 kV Line with 1272 MCM ACSS conductor along with new structures between the Beebe River Substation and Huckins Hill Switching Station in New Hampshire. The proposed in service date of the project is December 2023.

ES-21-T44 – Transmission application from ES for the replacement of 6.87 miles of overhead transmission on the E115-1 115 kV Line between the Huckins Hill Switching Station and the Ashland Tap, 8.07 miles of overhead transmission on the E115-2 115 kV Line between the Ashland Tap and the Pemigewasset

Substation, and 0.53 miles of overhead transmission on the E115-3 115 kV Line between the Ashland Tap and the Ashland Substation with 1272 MCM ACSS conductor along with new structures in New Hampshire. The proposed in service date of the project is December 2023.

ES-21-T45 – Transmission application from ES for the replacement of 10.61 miles of overhead transmission on the A111 115 kV Line with 1272 MCM ACSS conductor along with new structures between the Pemigewasset Substation and Webster Substation in New Hampshire. The proposed in service date of the project is December 2023.

The Reliability Committee (RC) reviewed the materials presented in support of the proposed projects and did not identify a significant adverse effect on the reliability or operating characteristics of its transmission facilities, the transmission facilities of another Transmission Owner or the system of any other Market Participant.

Having given due consideration to the RC review, ISO New England has determined that implementation of the plan will not have a significant adverse effect upon the reliability or operating characteristics of the Transmission Owner's transmission facilities, the transmission facilities of another Transmission Owner, or the system of a Market Participant. A determination under Section I.3.9 of the ISO Tariff is limited to a review of the reliability impacts of a proposed project as submitted by Participants and does not constitute an approval of a proposed project under any other provisions of the ISO Tariff.

Sincerely,

/s/ Brent Oberlin
Brent Oberlin
Director, Transmission Planning

cc: Proposed Plan Applications

1. 1. Carbon footprint of proposed upgrade (X-178 line portion.)

Eversource Response: While Eversource maintains a company-wide greenhouse gas (GHG) inventory, we typically do not conduct GHG emission calculations at the individual project level related to the construction period due to the relatively short duration of the work. As for the constructed project, we do believe the proactive maintenance and investments in infrastructure upgrades is a core responsibility of Eversource to our customers to ensure we can reliably deliver critical services, help mitigate outages, and respond to the additional electrification trends in our region.

Kris response: “Proactive maintenance” means it is optional and that only the poles needing replacement could be replaced with wood poles of the same height. Many of the crossbars and insulators on the X-178 were replaced in 2017, indicating that Eversource had assessed the line as adequate with those replacements.

“Common maintenance performed on a transmission line includes adjusting or replacing ground wires, conductors, insulator, and hardware. At times, it is necessary to remove the wires from their supports and lower them to the ground or transfer them to a temporary structure or temporary alternate location on the structure being maintained. The loads induced during these operations could exceed the original design loading of the structure or the adjacent structures.” (ASCE Manuals and Reports on Engineering Practice No. 74)

Eversource assessed these loads and confirmed that the existing wood H-frames were sound enough for these loads, and that the line workers were not in danger of being killed by the collapse of poles it now claims have been rendered unsafe by woodpeckers. Five years after this photograph was taken, these still youthful and useful structures are targeted by Eversource for removal and disposal.

Beech Hill, Moosilauke, Mt. Blue and Mt. Clough, in the distance, 2017



Please also provide:

List of public land and water crossings that require an application for permission to the NH Department of Energy (before 2021 the PUC granted these permits.)

Special Use Permit application submitted to the White Mountain National Forest.

Map of National Register of Historic Places resources affected by the proposed new transmission line construction.

The carbon footprint of proposed rebuild with steel structures at 65' and wood structures at 65', (with the proposed 1272 conductor) and steel structures at the current structure heights (40'-60') and replacement with wood of the current heights, with 795 conductor.

Sources and source locations (countries) of conductor, OPGW and structure components.

Life-cycle costs of wood vs. steel structures.

The Code book and page where the requirement for the distance between the OPGW (Optical Ground Wire) and conductor is stated.

Northern Long-Eared bat survey results.

NH Heritage Bureau survey results for rare plants and animals.

Bridge specs and locations for proposed stream crossings.

kris pastoriza

May 24, 2023