In its May 18th, 2023 presentation of its B-112, U-199 and Q-195 complete rebuild projects to the PAC, Eversource claimed its structures were rated "in accordance with" (what does this mean?) EPRI structure rating guidelines *and* provided unattributed recommendations:

Wood Structure Asset Condition

EVERSOURCE ENERGY

- Recently completed inspections of these lines graded condition of all structures in accordance with Electric Power Research Institute (EPRI) guidelines:
  - *A: Nominal Defect – No Action Required*
  - *B: Minimal Defect – Monitor Degradation*
  - *C: Moderate Defect – Repair or Replace under next maintenance*
  - *D: Severe Defect – Repair, Reinforce, or Replace immediately*

In its February 28th and June 20th, 2024 presentations of the X-178 project to the PAC Eversource provided condition categories but failed to provide the recommended actions.

In its June 20th, 2024 X-178 presentation to the PAC Eversource "identified" Category C structures "for immediate replacement," its former recommendation for Category D Severe Defect structures:

- 2022 inspections of this line graded condition of structures in accordance with Electric Power Research Institute (EPRI) guidelines
  - *A: Nominal Defect, B: Minimal Defect, C: Moderate Defect, D: Severe Defect*
  - Priority C structures showed one or more of the following age-related degradations, leading to decreased load carrying capability
    - Woodpecker damage, pole top rot, cracked arms, split pole top, and/or decay
  - 43 structures (41 priority C structures and two LWS structures) identified for immediate replacement throughout the line

At the same meeting, Eversource's presentation for the N-133 (Maine) project included recommended actions for Category C and D structures which differed from those for the . B-112, U-199 and Q-195:

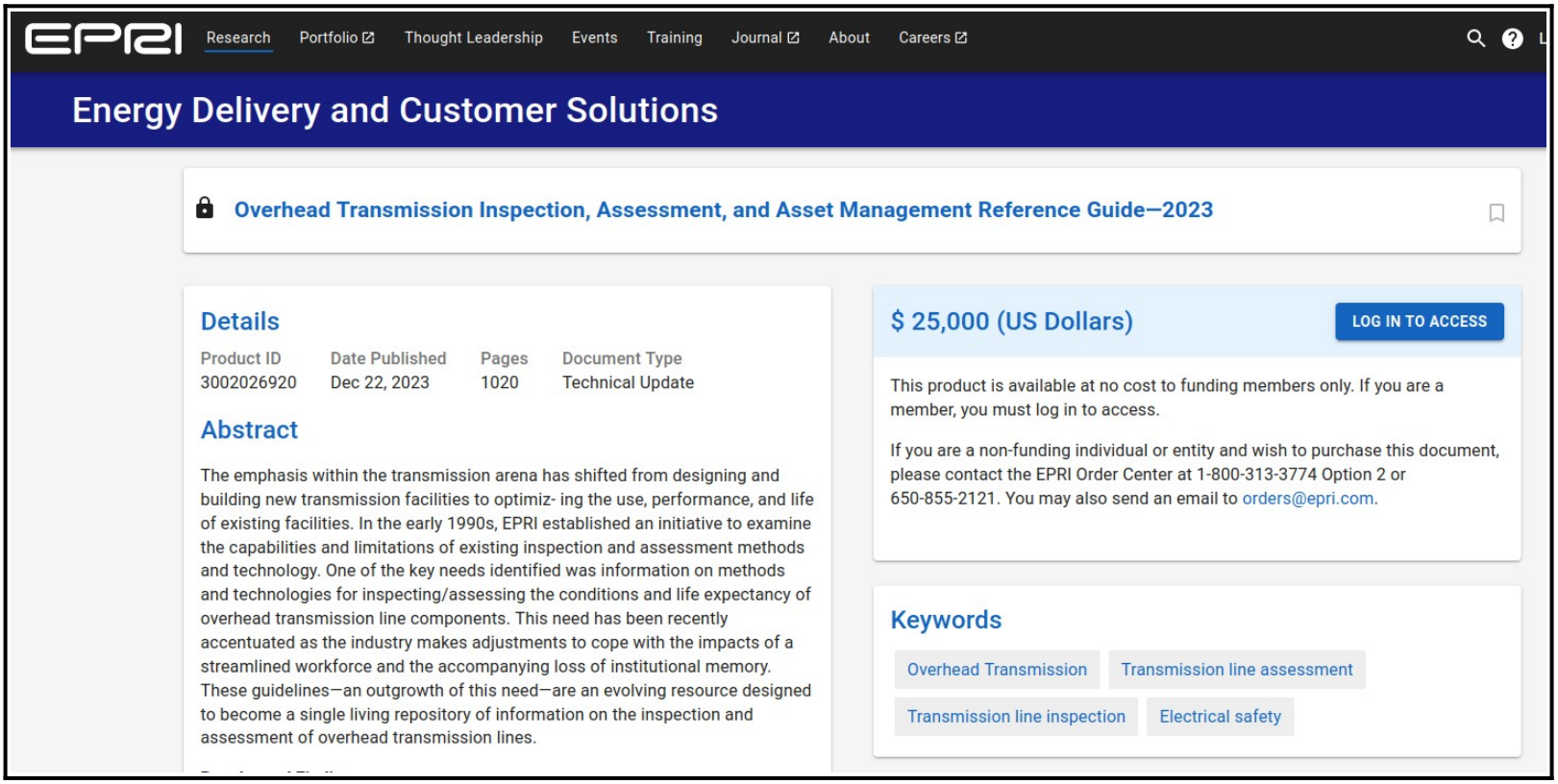
Project Drivers

EVERSOURCE ENERGY

- Recently completed inspections of these lines graded condition of all structures in accordance with Electric Power Research Institute (EPRI) guidelines:
  - *A: Nominal Defect – No action required*
  - *B: Minimal Defect – Monitor degradation*
  - *C: Moderate Defect – Rehabilitation recommended as scheduled maintenance*
  - *D: Severe Defect – Repair, reinforce, or replace as soon as possible*

“Repair or replace at next maintenance” was changed to “Rehabilitation recommended as scheduled maintenance” and “Repair, reinforce or replace immediately” was changed to “Repair, reinforce, or replace as soon as possible.”

The EPRI structure assessment system Eversource implies that it is using lists a cost $25,000 for “non-funding members.”



Eversource presented the recommended actions for each structure category as EPRI recommendations but they appear to be Eversource’s recommendations. Eversource has not provided documentation of the EPRI inspection and rating system.

The inspection notes Eversource provided to the SEC are not the complete inspection reports. The 2024 inspection notes are suspect because Eversource clearly needed more Category C structures to justify its “proposed” complete rebuild.

At the February PAC meeting Eversource met unprecedented questioning from some members of the public and the PAC about its plan for a complete line rebuild as a response to 41 structures it claimed were Category C.

The minutes note:

“The following comments were issued:

Structure replacements driven by “access opportunity” do not seem like an appropriate PTF [Pooled Transmission Facility] asset condition need.

It is difficult to decipher which elements of this proposal are true asset condition needs and which are merely add-ons for desired buildout….

Eversource’s proposal to install OPGW on X-178 does not seem like a true asset condition need and its inclusion in this preferred solution feels like a strategic maneuver to regionalize this cost.”

In response to a question about the capacity of the new conductor Chris Soderman said Eversource “is unsure how the line’s rating will be impacted after replacing all the conductors. It could lead to a 40-50% increase in the line’s capacity” though he knew the capacity would be more than doubled with the 1272 ACSS conductor. When asked about advanced conductors Eversource stated it “did not consider ACCC conductors for this project because of the way they swing due to their low weight.”

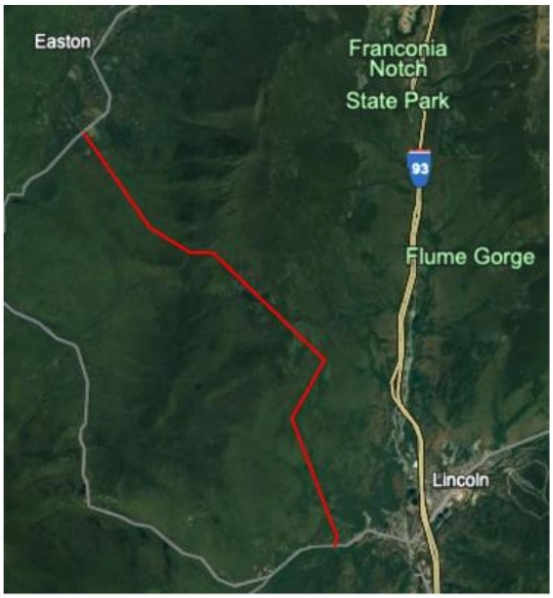
At its June 20th presentation to the PAC, when Eversource was asked for an updated count of structures in each category, Chris Soderman stated: “That was not the intent. Um, you know, again, recognizing that, you know the existing identified C structures and the condition of the transmission line and our overall strategy, you know, we kind of already thought that it stood on its own. So we weren't intending to kind of come back, but it does kind of speak to the underlying issue that these lines are continuing to deteriorate as they just age over time.” It announced “2024 drone inspections are ongoing and additional priority C structures may be identified.” VELCO’s representative commented; “if it were us, I think we would wait on sections one and two, do them at some later time...” When asked about the location of the 41 structures Eversource claimed were Category C, Chris Soderman said “Yeah, uh, specifically we don't provide that as part of the ISO PAC proceeding.”

This may be because only one Category C structure is in White Mountain National Forest, as the 2022 inspection notes Eversource provided to the SEC on 12/13/24 show.

In its October 23rd presentation to the PAC Eversource announced that its 2024 drone inspections had revealed 158 additional structures rated Category C (since the drone inspection in 2022.) Twenty one of these are evenly distributed in White Mountain National Forest. Like all Eversource’s asset condition presentations to the PAC, its October presentation cannot withstand the most basic scrutiny.

X-178 line crosses White Mountains with limited access points for construction equipment

EVERSOURCE

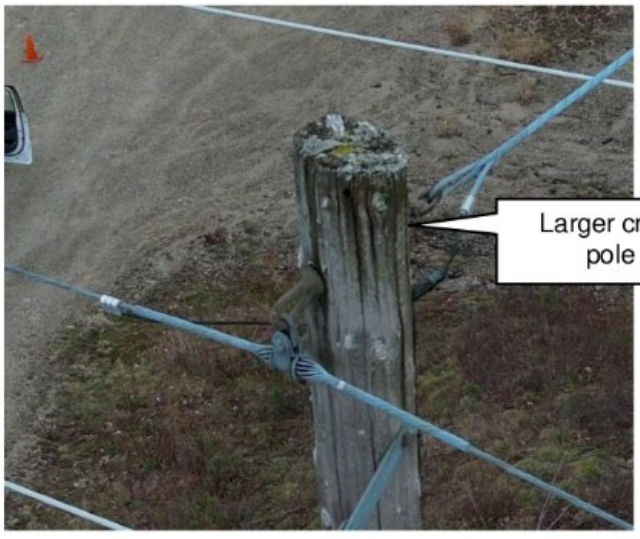


9+ mile section with no crossings/entry points across White Mountain National Forest

Highest point (2,606 ft) at crossing of Appalachian Trail is 4+ miles from closest road in either direction

The photographs Eversource provided in its October presentation to the PAC, purporting to show degradation since 2022 do not meet any standard of evidence:

2022 Photo



2024 Photo

Above:

Photo of dry pole	Photo of wet pole
Crosss-arm anchor facing toward viewer	Anchor facing 90 degrees left
	Cracks labeled as larger not visible in 2022 photo
No white marking on r. side of ground wire	White band on r. side of ground wire
Ratio of ground wire attachment 4: 2.4	Ratio of ground wire attachment 3: 3.5

This ratio difference could be due to the fact that the photos are not comparable. Note that the cross-arm brace anchor appears to end at ground wire in the 2022 photo and the cross-arm brace anchor is clearly seen to end below the ground wire anchor in the 2024 photo.

The cross-arm that was replaced would have been easy to photograph after it was removed and on the ground but Eversource chose not to show its condition.

It is not clear that these photos are even of the same pole.

Eversource's response to pole top rot has not been to do nothing, claiming, without documentation, that coverings are ineffective.

Eversource's inspection and rating process is opaque.

Eversource structure ratings, inspection reports and ever shifting structure repair/replacement recommendations should be rejected by the PUC.

The PUC needs to require an independent third party inspection of the X-178.

Above, U-181/E-194, 2023 Below: 345kV; 373 or 391, 2024

SEC 2024-02 DE-24-087

kris pastoriza January 6, 2025