DE-24-087 DOE witness contradicts Eversource testimony.

DOE witness DeVergilio provides no evidence for his statements. He also contradicts statements made by Eversource:

DOE witness DeVergilio:

“Additionally, the existing structures will not support the additional weight associated with the larger conductor size under severe weather conditions as specified in NESC 250B.”

Eversource witness Soderman:

“Q Does the change from -- is the change from wood poles to steel poles in part necessitated by a change in weight of the wires?

A (Soderman) No.” (p. 30) 2025-1-24 SEC hearing (X-178 design is the same as the U-199 design)

DOE witness DeVergilio:

Q. Based on your review, do you believe it is reasonably necessary for Eversource to replace the 5 existing poles with higher structures?

“A. Yes. According to the Company, the current structures will not provide sufficient vertical clearance associated with the increase of conductor size from 795 ACSR to 1272 ACSS. This vertical clearance is dictated by National Electric Safety Code (NESC) standards and internal Eversource clearance standards.2

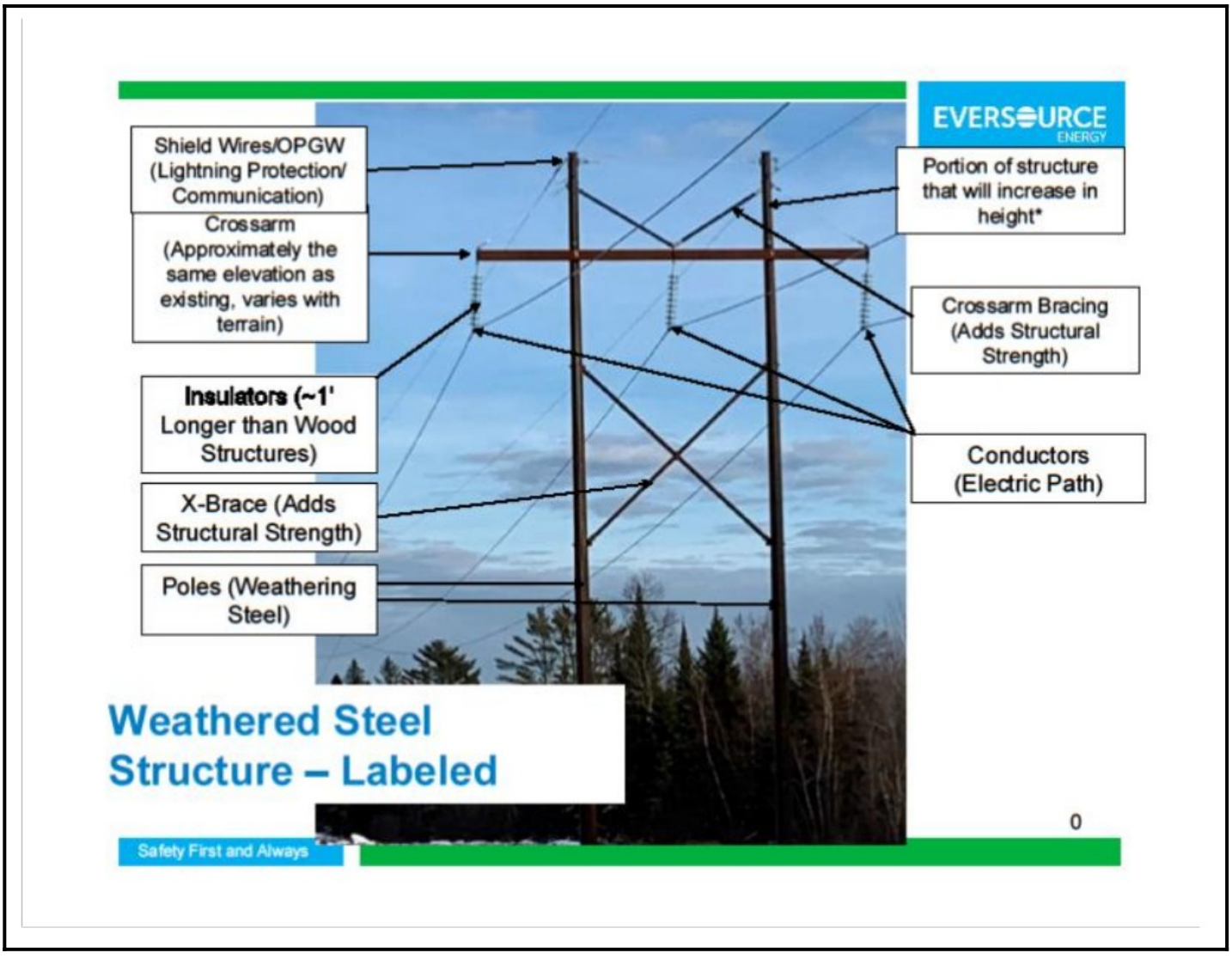
Eversource witness Soderman:

“Q Does the increase in height -- or is the increase in height necessitated in any way by the change from – the change in form of conductor wire and the change in form of shield wire?

A (Soderman) Certainly not the shield wire. The conductor has, I would say, for the span of length that we're talking about, very similar set of characteristics, even at its max sag condition. So I would expect it to -- I would expect it to -- you know, 500-foot span length to not really have a material effect.” (pgs 29-30) 2025-1-24 SEC hearing

Eversource produced a diagram which shows the structure height increases occurring only above the cross-bar and insulators, and elsewhere claims that the OPGW requires a 15’ clearance from the conductors (compared to 10’ required by the existing shield wire.)

The diagram does not show structure heights increasing below the cross-bar and insulators because to greater sag of the 1272 conductor:



DOE witness DeVergilio:

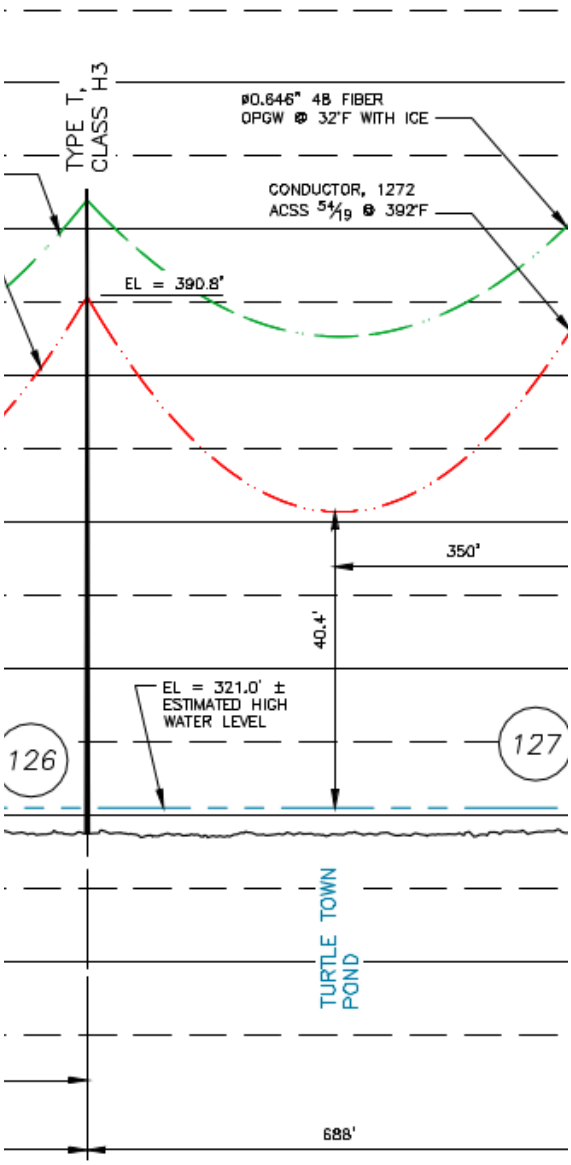
“If the existing conductor size is not replaced, the U199 normal summer capacity rating will be reduced by 44% on the rest of the upgraded line. “

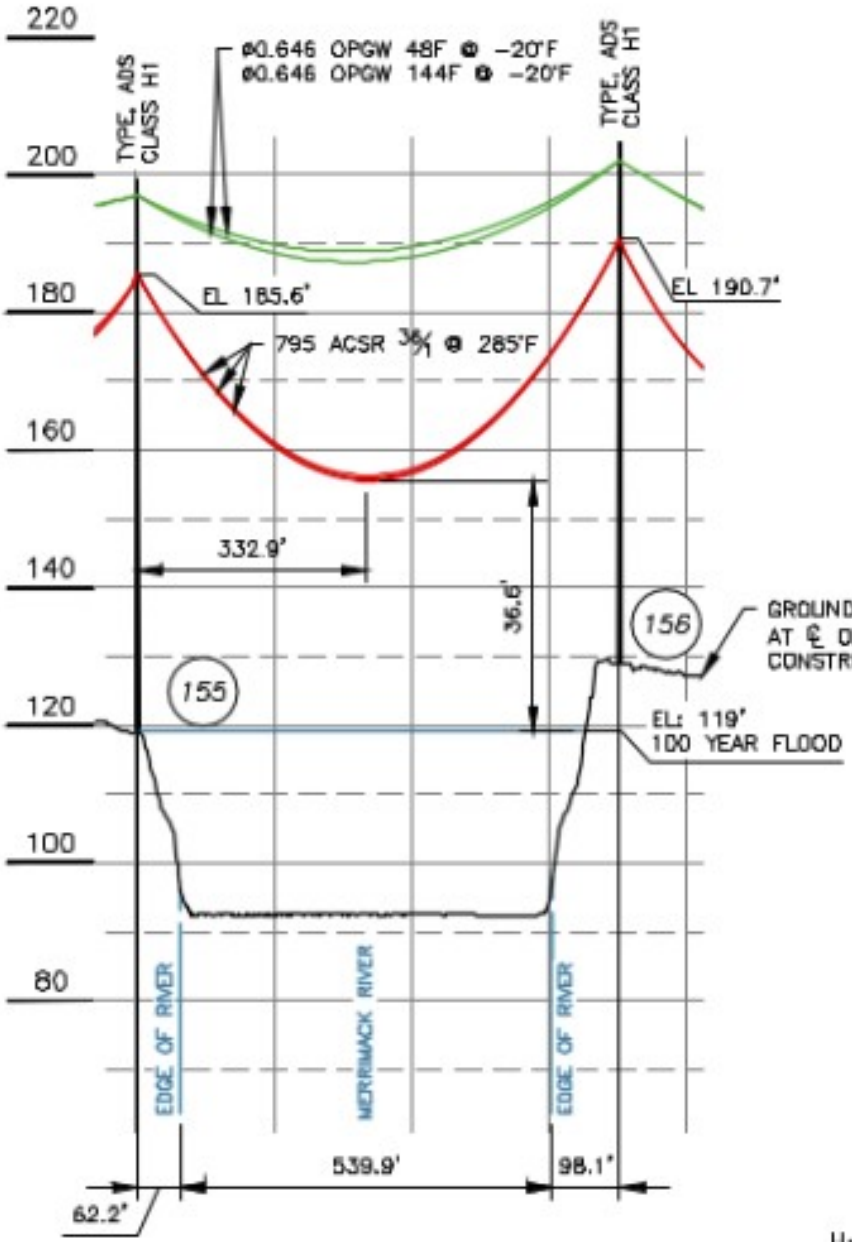
Eversource lawyer Bellis:

“MR. BELLIS: Yeah. Marvin Bellis with Eversource.
The way this [X-178] line upgrade -- or not upgrade, but rebuild --works is you have a different kind of conductor that has, in theory, by itself, a higher capacity than the conductor that is in place today. But in order for any increased capacity, there would have to be other system upgrades at the substations, which are not being currently considered.” 2025-1-24 SEC hearing

Below, 1272 ACSS
28’ sag @ 688’ span

Below, 795 ASCR
28’ sag @ 700’





The U-199 taps into the X-178 so unless the X-178 was rebuilt with more than doubled capacity, (as Eversource plans) and unless the Woodstock substation and Streeter Pond tap are upgraded to allow this extra capacity to flow to the Z-180 and U-199, which Eversource claims it is not considering, then the U-199 appears to be limited by the X-178 capacity.

Witness DeVergilio did not address the alternative of doing nothing; using the remaining 20 years of service the existing U-199 had. The U-199 was built in 1969-70. The recently replaced O-154, D-142 and W-157 were built in 1946-7, 1948 and 1948, and no structure ratings were provided for these projects so they may have had years of service remaining.

Witness DeVergilio did not provide inspection reports showing need for any structure replacements.

Witness DeVergilio did not address the fact that doubling the capacity of the U-199 (from 1,094 to 2,200 max amps.) violates FERC's definition of an Asset Condition project, which can only increase capacity incrementally, and that this project warrants a complaint to FERC.

Witness DeVergilio did not address the use of GETS or advanced conductors as an alternative to a rebuild (which would still violate FERC's definition of an Asset Condition project). Eversource's standard rebuild conductor, (1272) ACSS was introduced in the 1970s and has been superceded by several generations of advanced conductors, as shown in a June 18, 2025 meeting of ISO and the PAC where these were presented and discussed.

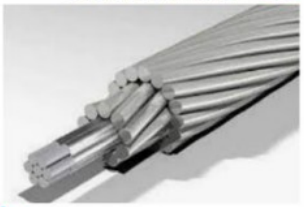
https://www.iso-ne.com/committees/planning/planning-advisory

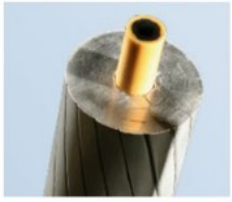
Below:

June 2018 ISO-NE GETS meeting; pages from CTC Global and National Grid presentations:

Design Considerations - HTLS Properties

ACSS - mid-70's	ACCR - early 90's	ACCC - mid-90's	AECC - today
Reduced sag	Reduced sag	Reduced sag	Reduced sag
High Amp	High Amp	High Amp	High Amp
Light weight	Light weight	Light weight	Light weight
High Strength	High Strength	High Strength	High Strength
Bending	Bending	Bending	Bending
Cost	Cost	Cost	Cost
Std Hardware	Std Hardware	Std Hardware	Std Hardware

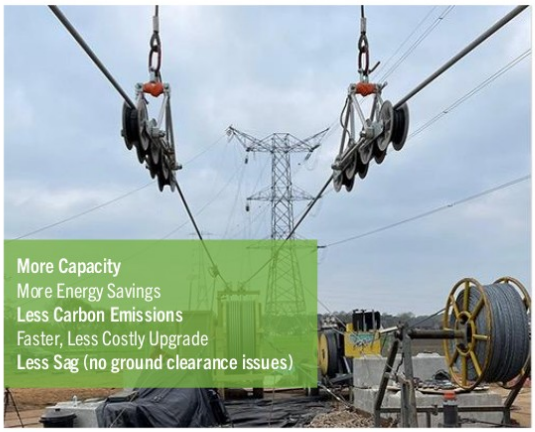


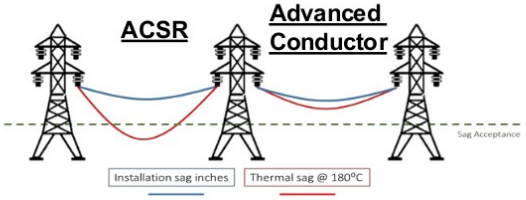


Advanced Conductors

CTC GLOBAL

What Does Advanced Reconductoring Enable?





SPEED. LOWER COST. MORE CAPACITY & LOWER LOSSES. WILDFIRE RISK MITIGATION & RESILIENCE.

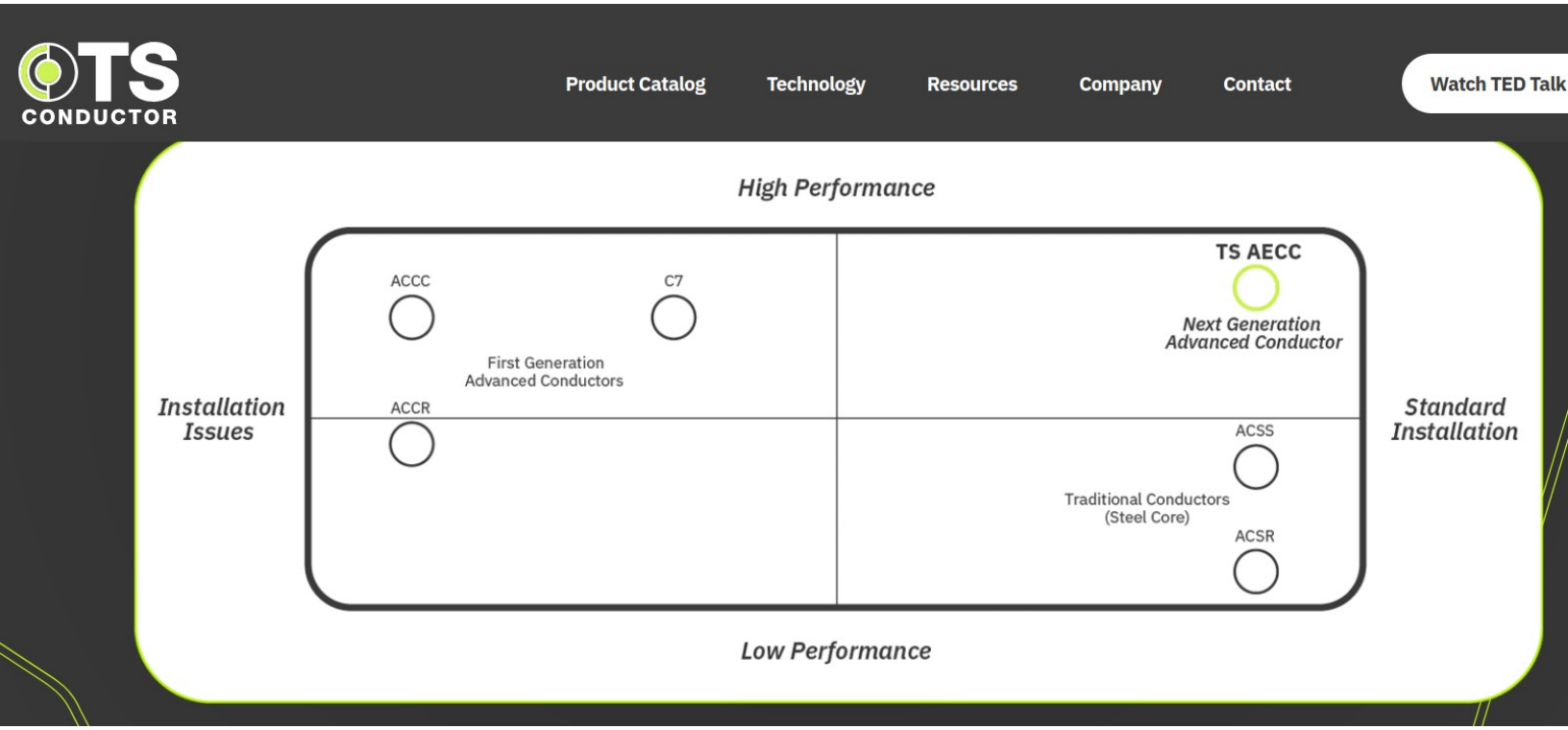
Reconductoring with Advanced Conductor using the same structures in existing ROW, results in:

50%-100% More Operating Capacity	50% Less Thermal Sag	~ 30% Lower Resistance	Up to 40% Lower Line Losses
~25% the Cost of a New Line	Faster Process ~ 8 - 24 months*	Wildfire Risk Mitigation**	There is an ACCC® option to meet ANY extreme ice criteria

* Construction & Environmental permits (& processes) are eliminated

** GREATLY REDUCED sag; LOWER operating temperature of lines – Max 356°F v. 482°F for ACSS; ACCC can better withstand wildfire temperatures for faster service restoration - RESILIENCE

ACSS, Eversource’s standard rebuild conductor, is rated as “Low Performance.”



https://tsconductor.com/product-information/

kris pastoriza August 17, 2025