

Questions for Eversource:

Eversource claims that Code requires that it design its lines to withstand 1” of radial ice and 40 mph winds.

“The primary driver of the height increase is Rule 250D of the National Electrical Safety Code. Rule 250D was introduced in 2007 and currently requires that transmission lines in this area of New Hampshire be designed to withstand 1-inch of radial ice with 40 mile-per-hour winds.”

(Eversource exhibit 11 DE-24-087 p. 61)

It’s X-178 crossing [exhibit](#) cable schedule submitted to the DOE lists .5” ice and 40 mph winds as the design conditions for the conductor and the OPGW.

CABLE SCHEDULE						
WIRE	QTY OF CABLES	DESCRIPTION	DESIGN CONDITIONS			
			MAX DESIGN TENSION (lb)	TEMP (°F)	ICE (in)	WIND (psf)
CONDUCTOR	3	ACSS, 1272 kcmil 54/19, PHEASANT	10000	0	0.5	4
OPGW	2	48F #0.646 AFL S3-81/69/646	5500	0	0.5	4

It’s crossing profiles for the X-178, submitted to the DOE show .5” ice on the OPGW and the conductor at 392 degrees F. as the conditions of greatest sag.

The DOE approved and licensed the X-178 river and public land crossings.

Does the .5” ice listed mean non-radial ice, which would mean 1” radial ice?

ACCC type conductor would lower structure heights or remove the need for new structures altogether (other than the 41 category c structures that Eversource has not proven are in need of replacement in the near future.) If ACCC type conductor is inferior to the ACSS under conditions of ice-loading, as Eversource claims (without saying if it meant conductors of equal size or equal amperage) why does it refuse to produced profiles showing this? Where is Eversource’s clarification of how NESC 250D increased structure heights of structures it did not apply to, which may well be the majority of the X-178 structures?

PROFILE VIEW

SCALE: HORZ 1" = 200'

VERT 1" = 20'

