

Prior Year Wood Structure Asset Condition Replacements

Planning Advisory Committee Meeting

December 16th, 2020

Agenda

- Project Background
- Project Needs
- Project Scope
 - Line 329 Structure Replacement (CT)
 - Line 338 Structure Replacement (EMA)
 - Line 352 Structure Replacement (CT)
 - Line 455-507 Structure Replacement (EMA)
- Summary

Project Background

- Eversource Manages ~4,000 Circuit Miles of Transmission Voltage OH lines, including ~3400 structure miles
 - Nearly 40% of all transmission in New England
 - Eversource maintains over 20,000 115-kV structures
- Wood poles are showing significant signs of age-related degradation and a program is underway to address those structures on our transmission system
- This presentation covers four structure replacement projects for Eversource wood transmission poles requiring replacement due to degradation
 - All 4 projects were omitted from prior PAC presentations

Project Needs – Asset Condition – Structure Replacement

- Many structures are well over 50 years old
- Wood structures suffer from one or more of the following deficiencies:
 - Woodpecker damage
 - Rot
 - Cracks
 - Deteriorated steel mechanical connections
- Structure deficiencies jeopardize the long-term electrical integrity and reliability of lines

Project Needs – Asset Condition – Structure Replacement



Split Pole Top –
Line 329



Deteriorated Davit Arm
– Line 455-507



Woodpecker Damage
– Line 352

Line 329 (CT) – Structure Replacements

- Replace 20 out of 106 wood structures with direct-embed steel structures on 345-kV Line 329 between Frost Bridge and Southington Substations

Cost: \$5.824 M

ISD: Q3 2018

Line 338 (EMA) – Structure Replacements

- Replace 30 out of 59 wood structures with light duty steel H-Frame structures on 345-kV Line 338 between Woburn and Billerica/Tewksbury Substations

Cost: \$5.804 M

ISD: Q4 2017

Line 352 (CT) – Structure Replacements

- Replace 24 out of 160 wood structures with direct-embed steel structures on 345-kV Line 352 between Long Mountain and Frost Bridge Substations

Cost: \$5.998

ISD: Q4 2018

Line 455-507 (EMA) – Structure Replacements

- Replace 78 of 96 wood monopole structures with direct-embed light duty steel poles on the 115-kV Line 455-507 between Sherburn and West Framingham Substations

Cost: \$10.128 M

ISD: Q2 2019

Summary

Project	Cost Estimate (\$M)	In-Service Date
Line 329	\$5.824 M	Q3 2018
Line 338	\$5.804 M	Q4 2017
Line 352	\$5.998 M	Q4 2018
Line 455-507	\$10.128 M	Q2 2019
Total Cost	\$27.754 M	

Questions

