SRRTEP Committee Southern Dominion Supplemental Projects

September 10, 2020



Needs

Stakeholders must submit any comments within 10 days of this meeting in order to provide time necessary to consider these comments prior to the next phase of the M-3 process



Dominion Transmission Zone: Supplemental

Equipment Material Condition, Performance and Risk

Need Number: DOM-2020-0032

Process Stage: Need Meeting 09/10/2020

Project Driver: End of Life – Transmission Lines Below 500kV

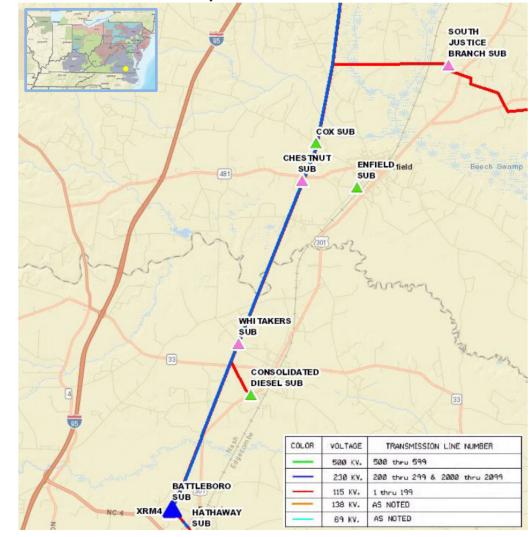
Specific Assumption References:

See details on Equipment Material Condition, Performance and Risk in Dominion's Planning Assumptions presented in December 2019 and updated in June 2020

Problem Statement:

Dominion Energy has identified a need to rebuild Line#1001 (Battleboro – Chestnut 115 kV) based on the Company's End of Life criteria.

- Line 1001 was constructed on predominately wood H-frame structures in 1959 from Battleboro to Chestnut (9.28 miles).
- Industry guidelines indicate equipment life for wood structures is 35-55 years, conductor and connectors are 40-60 years, and porcelain insulators are 50 years.
- The Line #1001 provides service to Consolidated Diesel and Whitakers substations with approximately 6.0 MW and 8.3 MW tapped load.





Dominion Transmission Zone: Supplemental Equipment Material Condition, Performance and Risk

Need Number: DOM-2020-0033

Process Stage: Need Meeting 09/10/2020

Project Driver: End of Life – Transmission Lines Below 500kV

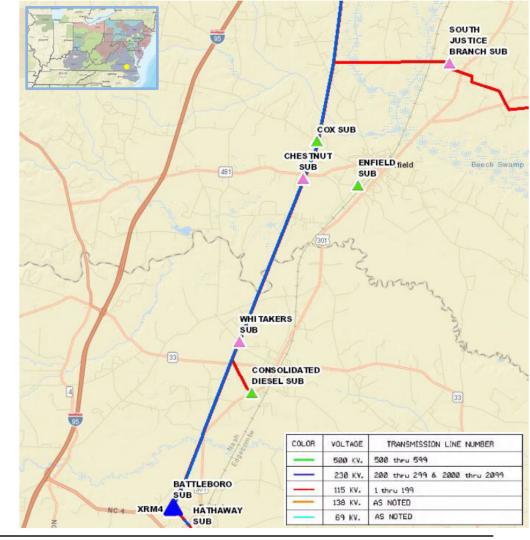
Specific Assumption References:

See details on Equipment Material Condition, Performance and Risk in Dominion's Planning Assumptions presented in December 2019 and updated in June 2020

Problem Statement:

Dominion Energy has identified a need to rebuild Line#1024 (Chestnut – South Justice Branch 115 kV) based on the Company's End of Life criteria.

- Line 1024 was constructed on predominately wood H-frame structures in 1959 from Chestnut to South Justice Branch (3.39 miles of 6.41 miles).
- Industry guidelines indicate equipment life for wood structures is 35-55 years, conductor and connectors are 40-60 years, and porcelain insulators are 50 years.
- The Line #1024 provides service to Cox DP substations with approximately 14.0 MW of tapped load.





Dominion Transmission Zone: Supplemental

Equipment Material Condition, Performance and Risk

Need Number: DOM-2020-0034

Process Stage: Need Meeting 9/10/2020

Project Driver: End of Life – Transmission Lines Below 500 kV

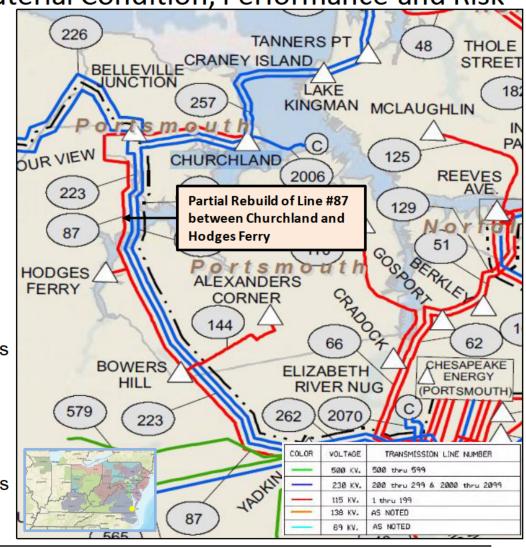
Specific Assumption Reference:

See details on Equipment Material Condition, Performance and Risk in Dominion's Planning Assumptions presented in December 2019 and updated in June 2020.

Problem Statement:

Dominion Energy has identified a need to replace 42 wood pole structures (Churchland – Hodges Ferry 115 kV segment) of Line#87 (Churchland – Chesapeake Energy Center 115 kV) based on the Company's End of Life criteria.

- The 5.21 miles segment of Line# 87 was constructed on wood H-frame structures in 1957, and includes ACSR conductor and 3#8 static. These structures are at the end of their useful life.
- Industry guidelines indicate equipment life for wood structures is 35-55 years, conductor and connectors are 40-60 years, and porcelain insulators are 50 years.
- Line#87 provides service to Bower's Hill and Hodges Ferry substations with approximately 18 MW and 61 MW tapped load. Removal of the Churchland Hodges Ferry segment will create a radial line exceeding Dominion's 700 MW-miles criteria.





Appendix



High level M-3 Meeting Schedule

Assumptions	Activity	Timing
	Posting of TO Assumptions Meeting information	20 days before Assumptions Meeting
	Stakeholder comments	10 days after Assumptions Meeting
Needs	Activity	Timing
	TOs and Stakeholders Post Needs Meeting slides	10 days before Needs Meeting
	Stakeholder comments	10 days after Needs Meeting
Solutions	Activity	Timing
	TOs and Stakeholders Post Solutions Meeting slides	10 days before Solutions Meeting
	Stakeholder comments	10 days after Solutions Meeting
Submission of	Activity	Timing
Supplemental Projects & Local Plan	Do No Harm (DNH) analysis for selected solution	Prior to posting selected solution
	Post selected solution(s)	Following completion of DNH analysis
	Stakeholder comments	10 days prior to Local Plan Submission for integration into RTEP
	Local Plan submitted to PJM for integration into RTEP	Following review and consideration of comments received after posting of selected solutions



Revision History

8/31/2020 – V1 – Original version posted to pjm.com

