# SRRTEP Committee Southern Dominion Supplemental Projects

April 14, 2021



# 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-2021-0026

Process Stage: Need Meeting 04/14/2021

Project Driver: Equipment Material Condition, Performance and Risk

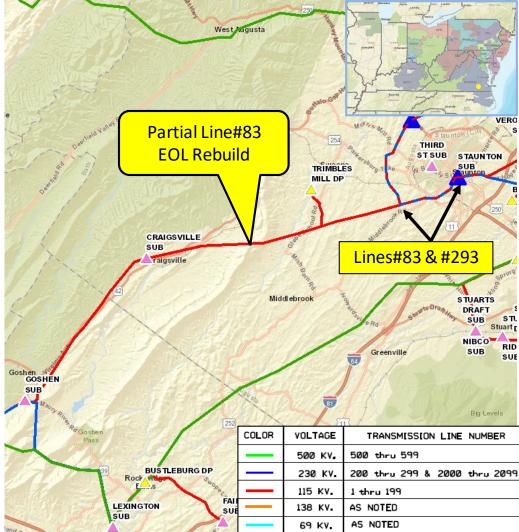
#### Specific Assumption References:

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

#### **Problem Statement:**

Dominion Energy has identified a need to replace approx. 14.6 miles of 115kV Line #83 from Craigsville to the junction where 115kV Line #83 transitions to double-circuit with 230kV Line #293.

- Line #83 was originally constructed in 1925 consisting of lattice steel towers, ACSR conductor and 3/8" static wire.
- Line #83 has a history of poor operational performance with many operations and lock-outs.
- The remaining segment of Line #83 that shares a common structure with Line #293 will be rebuilt as a part of project DOM-2020-0028.
- Industry guidelines indicate equipment life for steel structures 40-60 years, wood structures is 35-55 years, conductor and connectors are 40-60 years, and porcelain insulators are 50 years.





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

Need Number: DOM-2021-0027

Process Stage: Need Meeting 04/14/2021

Project Driver: Equipment Material Condition, Performance and Risk

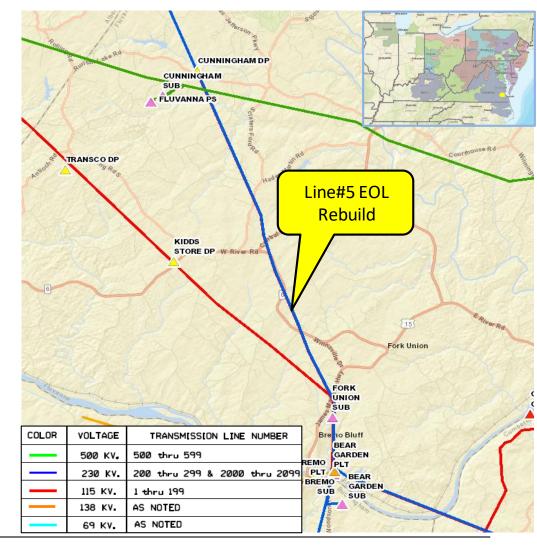
#### **Specific Assumption References:**

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

#### **Problem Statement:**

Dominion Energy has identified a need to replace the entire 12.6 miles of 115kV Line #5 (Bremo to Cunningham DP) based on the Company's End of Life criteria.

- The line was constructed on mostly wood H-Frame structures all dating back to 1930. The ACSR conductor was installed in the 1950's.
- A number of structures have been replaced and continued deterioration is expected.
- 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.







## Dominion Transmission Zone: Supplemental

## Equipment Material Condition, Performance and Risk

Need Number: DOM-2021-0030

Process Stage: Need Meeting 04/14/2021

Project Driver: Equipment Material Condition, Performance and Risk

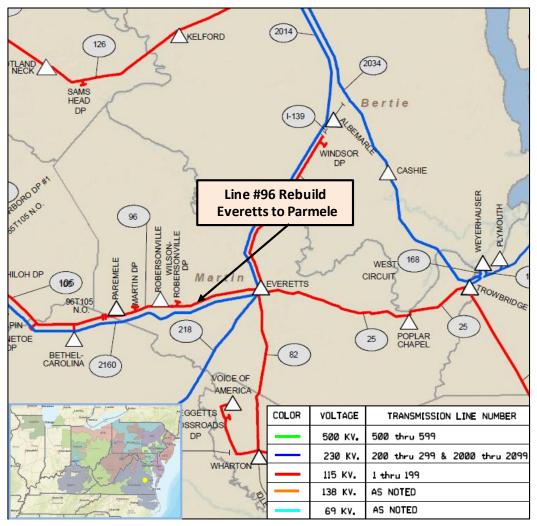
### Specific Assumption References:

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

### **Problem Statement:**

Dominion Energy has identified a need to replace approximately 12.4 miles of 115kV Line #96 (Everetts to Parmele) based on the Company's End of Life criteria.

- Line #96 was constructed on wood pole structures dating back to 1963.
- A number of structures have been replaced and continue to experience deterioration. Conductor failure has occurred over the last 10 years.
- 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.







## 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	Do No Harm (DNH) analysis for selected solution	Prior to posting selected solution
Projects & Local Plan	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**

## 4/2/2021 – V1 – Original version posted to pjm.com



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