

# SRRTEP Committee Southern Dominion Supplemental Projects

December 12, 2024

# Solutions

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-2024-0013

**Process Stage:** Solutions Meeting 12/12/2024

**Previously Presented:** Need Meeting 10/17/2024

**Project Driver:** Equipment Material Condition, Performance Risk

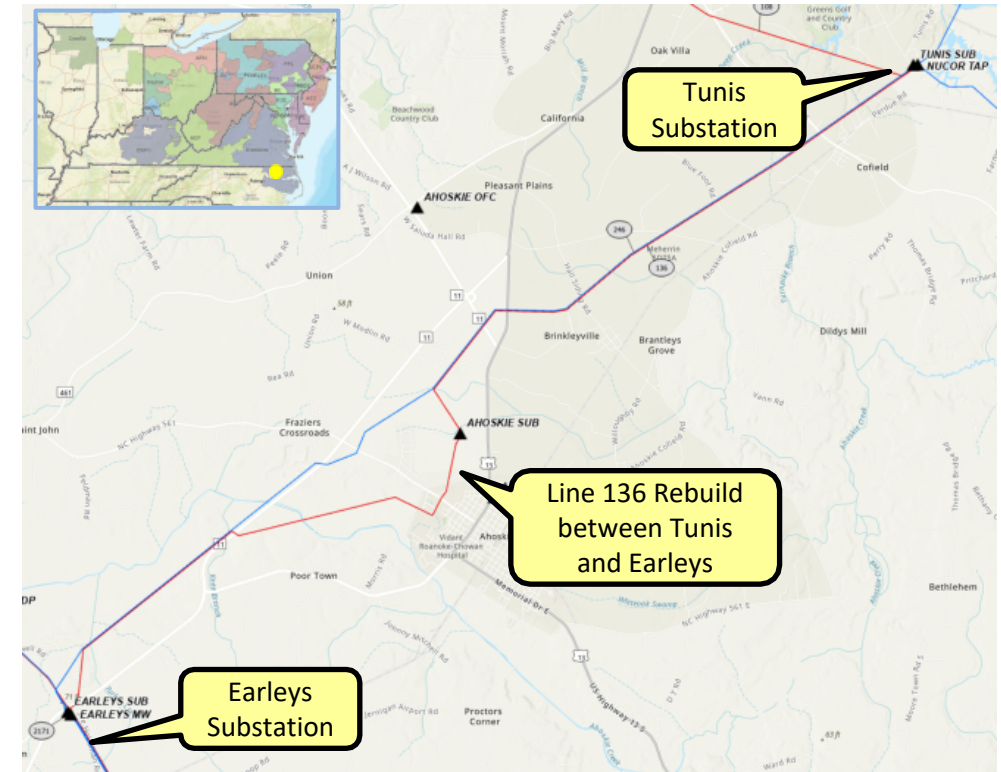
## Specific Assumption References:

See details on Equipment Material Condition, Performance and Risk in Dominion's Planning Assumptions presented in December 2023.

## Problem Statement:

Dominion Energy has identified a need to replace approximately 14.8 miles of 115kV Line #136 (Earleys to Ahoskie) to new 115kV standards based on the Company's End of Life criteria.

- Line #136 was constructed on primarily wood frame structures dating back to 1969 with many in need of replacement due to deterioration. These structures show a maintenance history of woodpecker damage as well as leaning and bowed poles.
- 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.
- There are 157 wooden structures that need to be replaced.
- Line #136 is critical to provide load at Ahoskie Substation. Permanent load loss for removal of this line is estimated to be 25.1 MW.



COLOR	VOLTAGE	TRANSMISSION LINE NUMBER
Green	500 KV.	500 thru 599
Blue	230 KV.	200 thru 299 & 2000 thru 2099
Red	115 KV.	1 thru 199
Orange	138 KV.	AS NOTED
Cyan	69 KV.	AS NOTED

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

**Need Number:** DOM-2024-0013

**Process Stage:** Solution Meeting 12/12/2024

**Project Driver:** Equipment Material Condition, Performance Risk

**Proposed Solution:** Rebuild approximately 14.8 miles of Line 136 between Earleys and Tunis to current 115kV standards. The normal rating of the line conductor will be 393 MVA.

**Estimated Project Cost:** \$50M

**Alternatives Considered:**

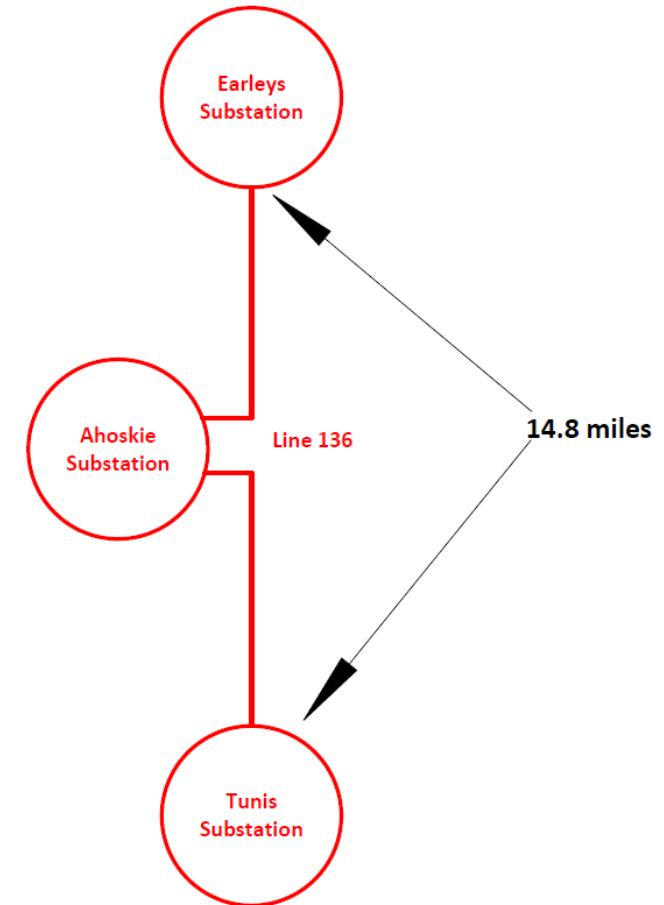
No feasible alternatives, End-of-Life

Line 136 is the only transmission supply to Ahoskie Substation. Permanent load loss for removal of this line is estimated at 25.1MW.

**Project In-service Date:** 12/31/2028

**Project Status:** Conceptual

**Model:** 2028 RTEP





Questions?

# 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 Supplemental Projects & Local Plan

Activity	Timing
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

12/03/2024 – V1 – Original version posted to pjm.com.