

SRRTEP Committee Southern Dominion Supplemental Projects

April 16, 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-2020-0011

Process Stage: Need Meeting 04/16/2020

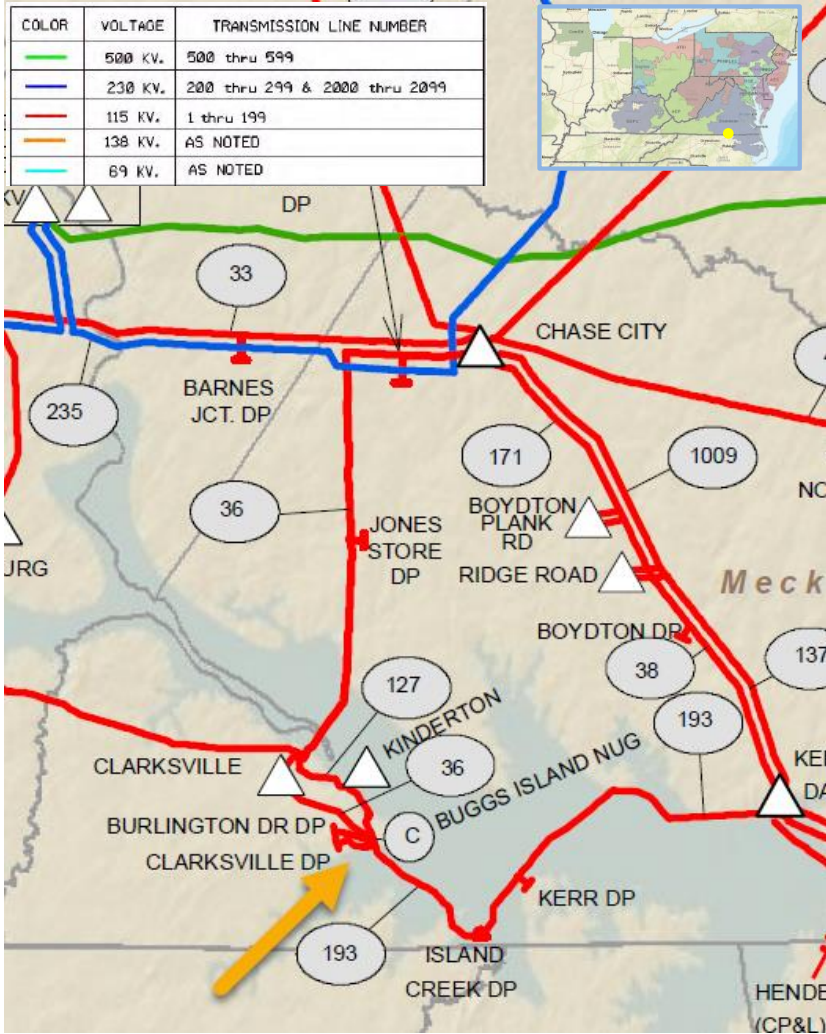
Project Driver: Equipment Material Condition, Performance and Risk

Specific Assumption References:

See details on Equipment Material Condition, Performance and Risk in Dominion’s Planning Assumptions presented in December 2019

Problem Statement:

Dominion Energy has identified a need to replace Line #36 wave trap and arresters at Buggs Island NUG Substation due to end of life.



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; Operational Flexibility and Efficiency

Need Number: DOM-2020-0007

Process Stage: Solutions Meeting 04/16/2020

Previously Presented: Need Meeting 03/20/2020

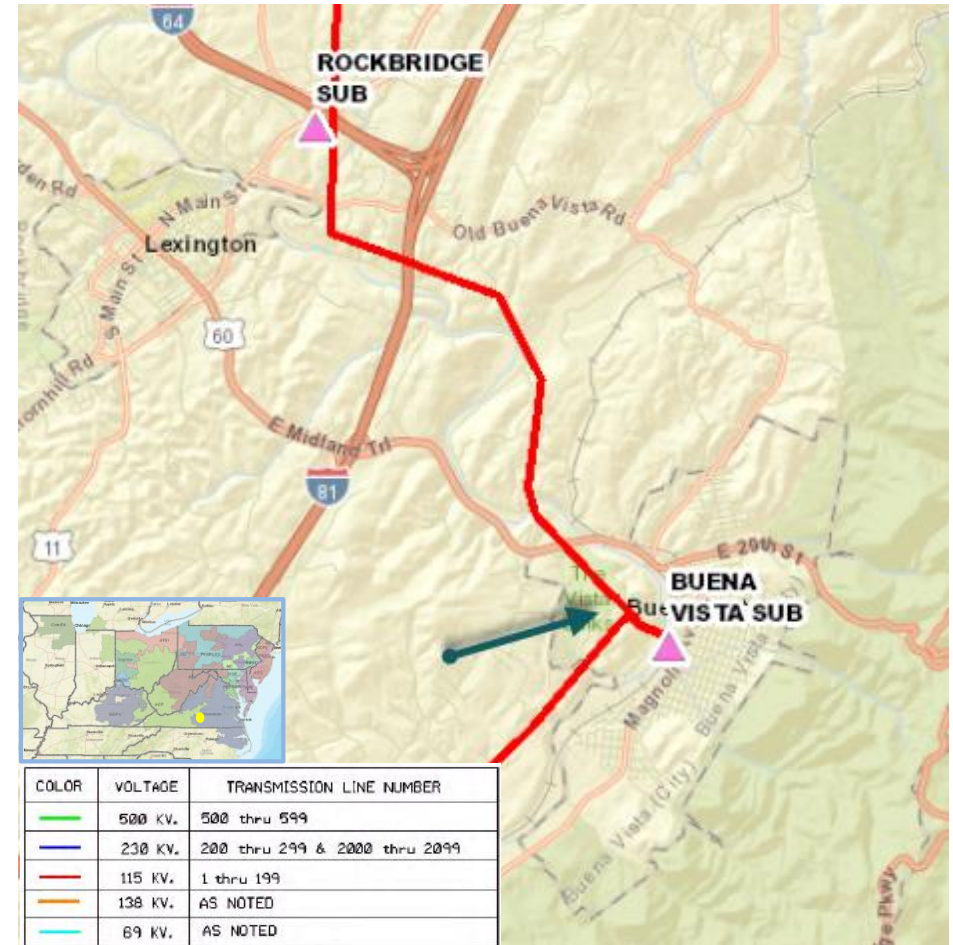
Project Driver: Equipment Material Condition, Performance and Risk; Operational Flexibility and Efficiency

Specific Assumption References:

See details on Equipment Material Condition, Performance and Risk in Dominion’s Planning Assumptions presented in December 2019

Problem Statement:

- The two ground switch/MOAB schemes protecting Buena Vista transformers #1 and #2 need to be replaced to prevent transformer operations from impacting adjacent Rockbridge and James Lee Substations
- The two 800A wave traps located outside of Buena Vista Substation on structures 26/215A and 26/215B need to be replaced due to age (25 years)
- A single span (approx. 625’) of 721 ACAR between structures 26/214 and 26/215 at Buena Vista Substation is the most limiting element affecting the rating of Line #26



Dominion Transmission Zone: Supplemental Install Circuit Switchers, Replace Wave Traps, Reconductor Span at Buena Vista Substation

Need Number: DOM-2020-0007

Process Stage: Solutions Meeting 04/16/2020

Proposed Solution:

- Replace the ground switch/MOAB schemes on Buena Vista Transformers #1 and #2 with circuit-switchers
- Upgrade the 800A wave traps to 1200A at Buena Vista
- Replace the single span (approx. 625') 721 ACAR between structures 26/214 and 26/215 with 636 ACAR (24/7). The existing summer rating will increase from 180 MVA to 248 MVA

Estimated Project Cost: \$0.63 M

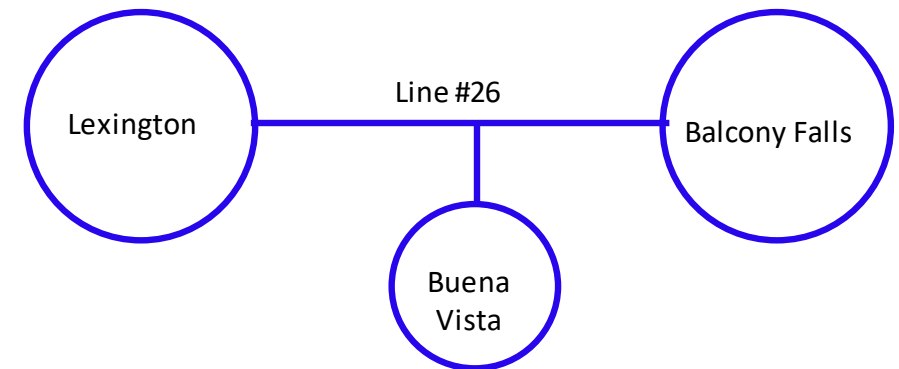
Alternatives Considered:

No feasible alternatives

Projected In-service Date: 04/10/2020

Project Status: Construction

Model: 2023 RTEP



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

Need Number: DOM-2020-0009

Process Stage: Solutions Meeting 04/16/2020

Previously Presented: Need Meeting 03/20/2020

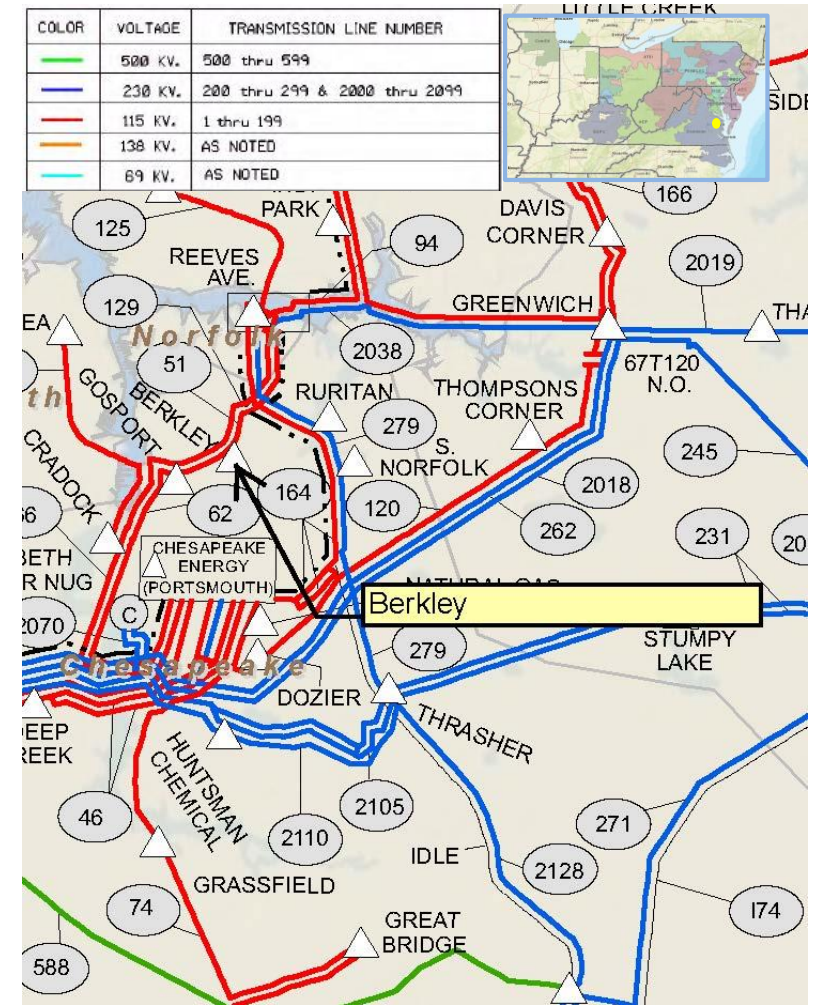
Project Driver: Performance and Risk

Specific Assumption References:

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

Problem Statement:

A 115kV line switch at Berkley substation has been identified with operating issues. This switch on Line #51 is in-operable.



Dominion Transmission Zone: Supplemental Replace 115kV Line #51 Switch at Berkley Substation

Need Number: DOM-2020-0009

Process Stage: Solutions Meeting 04/16/2020

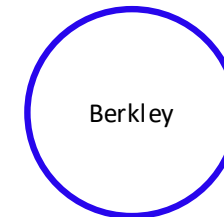
Proposed Solution:

Replace the 1200 Amp 115kV line switch with a 2000 Amp switch. Perform related string bus work. Line #51 (Gosport-Berkley-ReevesAve) summer emergency ratings will be increased from 173 MVA to 239 MVA.

Estimated Project Cost: \$0.2 M

Alternatives Considered:

No feasible alternatives



Projected In-service Date: 04/29/2020

Project Status: Construction

Model: 2023 RTEP

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

4/6/2020 – V1 – Original version posted to pjm.com