

# SRRTEP Committee Southern Dominion Supplemental Projects

December 14, 2022

# 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 Operational Flexibility and Efficiency

**Need Number:** DOM-2022-0061

**Process Stage:** Need Meeting 12/14/2022

**Project Driver:** Operational Flexibility and Efficiency

## Specific Assumption References:

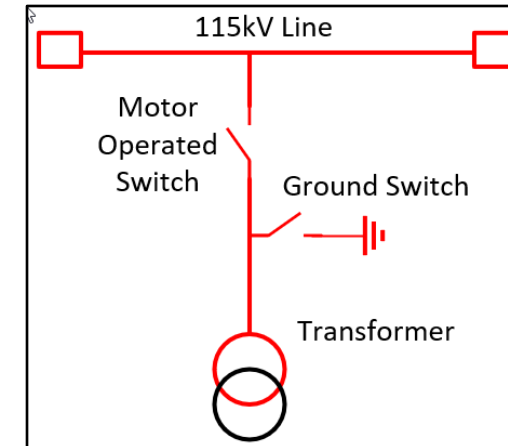
See details on Operational Flexibility and Efficiency in Dominion's Planning Assumptions presented in December 2021.

## Problem Statement:

Dominion has identified 6 substations that have legacy protection schemes on the 115kV high side of distribution transformers. These protection schemes utilize a ground switch and a motor operated switch on the high side of each transformer. For a fault in the transformer protection zone:

- ❑ The ground switch closes resulting in a bolted fault on the 115kV line
- ❑ This causes the transmission line breakers to open at the substation terminal ends
- ❑ The transformer motor operated high side switch opens isolating the transformer from the 115kV line and the terminal end breakers reclose to re-energize the 115kV line

These schemes are no longer standard protection due to the stress on the transmission equipment from the fault applied by the ground switch and the operation of the 115kV line interrupting service to all customers served by the line.



Substation	Tx #
Quantico	1 & 2
Deep Creek	1 & 2
Creswell	2
Alexander Corner	1
Tunis	2
Brown Boveri	1

# 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

11/30/2022 – V1 – Original version posted to pjm.com.

12/14/2022 – V2 – Updated substation table on slide 3 to reflect 6 substations.  
(Princess Anne was removed.)