



Reliability Analysis Update

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Sub Regional RTEP Committee - PJM South

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Cancellation



Dominion Transmission Zone: Baseline B3162 Cancellation: Switching Station (Stevensburg/Batna)

Process Stage: Cancellation

Previously Presented: 2/11/2020

Criteria: Dominion’s FERC 715 Planning Criteria (Post-Contingency Radial - Thermal and Voltage)

Assumption Reference: Dominion Energy’s Facility Interconnection Requirements

Model Used for Analysis: 2024 RTEP Summer

Proposal Window Exclusion: Below 200kV, FERC 715 (TO Criteria)

Problem Statement:

- In the 2024 RTEP Summer case, 115kV Line #153 (Spotsylvania-Oak Green) overloads under an N-1-1 scenario. Voltage at Culpeper also drops below 85% under an N-1-1 scenario.

Existing & Preliminary Facility Rating:

Spotsylvania-Paytes Tap = 226 MVA (summer – Normal and Emergency)

Locust Grove-Unionville = 204 MVA (summer – Normal and Emergency)

Recommended Solution:

- Acquire land and build a new 230kV switching station (Stevensburg/Batna) with a 224MVA, 230-115kV transformer. 230kV Line #2199 (Gordonsville-Remington) will be cut and connected to the new station. 115kV Line #70 (Remington-Mt. Run) and 115kV Line #2 (Mt. Run-Oak Green) will also be cut and connected to the new station. This will provide Culpeper another source to support voltage in the area as well as eliminating the thermal issue. (b3162)

Total Estimated Baseline Cost: \$22M

Reason for Cancellation: Revised load allocations in the area caused the reliability violations to be resolved in the area within the study timeframe.



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SRRTEP-S Reliability Analysis Update



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Revision History

01/11/2024 – V1 – Original version posted to [pjm.com](https://www.pjm.com)