

DOMINION NORTHERN NECK AREA VIOLATIONS

The Northern Neck Load pocket is provided power from 3 sources. (2083 from Fredericksburg, 224 from Lanexa, and 65 from Harmony Village). Historically, Dominion has employed an operating procedure to open the 115kV LN 65 at the Northern Neck end to accommodate outages on one of the two 230 kV feeds into Northern Neck to mitigate thermal overloads on Dominion Line 65 and also to help control & mitigate voltage issues when either of the 230kV feeds are out going to the Northern Neck area.

The results of the winter 2025 RTEP N-1-1 analysis show that both thermal and voltage violations will occur on the loss of both 230 kV feeds (230kV Line 224 and 230kV Line 2145) that go into the Northern Neck area in 2025.

However, continued use of the operating procedure by Dominion Operations to mitigate thermal and voltage issues on Line 65 will result in a PJM planning criteria violation of dropping over 300 MW in the 2022/2023 timeframe based on the 2020 PJM load forecast. Increases in load and a shift in the load profile in Dominion to better match the winter peaking condition in Dominion has resulted in the increase in the magnitude of the load in this area of Dominion at an accelerated rate, leading to exceeding 300 MW load loss in this timeframe.

As a result, this project will be designated immediate need to address the near term violation of dropping more than 300 MW in the 2022/2023 timeframe as well as those violations seen in 2025. Given the configuration of the facilities in the area, Dominion will be designated the entity to mitigate these violations.