

PJM Facilities Study Report
For
Network Upgrade N6588
Transition Cycle #1

June 2025

Introduction

This Facilities Study has been prepared in accordance with the PJM Open Access Transmission Tariff and PJM Manuals. The Transmission Owner (TO) is Virginia Electric and Power Company (VEPCO or Dominion).

A. Project Description

The System Impact Study for PJM Interconnection Transition Cycle #1 has identified the need for PJM Network Upgrade N6588. The scope of this Network Upgrade includes the following:

- Replace 230kV Breaker at Yadkin.

B. Transmission Owner Facilities Study Results

1. Detailed Scope of work for Network Upgrade N6588:

The following is a detailed description of Transmission Owner Upgrades for Network Upgrade N6588. These facilities shall be designed according to the Transmission Owner's Applicable Technical Requirements and Standards. Once built the Transmission Owner will own, operate, and maintain these facilities.

See Preliminary Scoping Summaries located in the Appendices, Attachment #1.

2. MILESTONE SCHEDULE FOR COMPLETION OF DOMINION WORK

Facilities outlined in this report are estimated to take 40 months to construct, from the time of full execution of the Generation Interconnection Agreement and completion of a construction kickoff call. This schedule may be impacted by the timeline for procurement and installation of long lead items and the ability to obtain outages to construct and test the proposed facilities.

Description	Start month	Finish month
Engineering	1	9
Permitting/Procurement	3	35
Construction	36	40

3. ASSUMPTIONS IN DEVELOPING SCOPE/COST/SCHEDULE

- The preliminary construction schedule is dependent on outage availability.

- See Attachment 1 – Preliminary Scoping Summary – Substation for additional assumptions

4. LAND REQUIREMENTS

Dominion will be responsible for the following expectations in the area of Real Estate:

- Any additional land needed for Storm Water Management, Landscaping, and Wetlands/Wetlands Mitigation.
- Any other Land/Permitting requirements required by the Network Upgrade

5. ENVIRONMENTAL AND PERMITTING

The Dominion will be responsible for the following expectations in the area of Environmental and Permitting:

- Assessment of environmental impacts related to the Network Upgrade including:
 - Environmental Impact Study requirements
 - Environmental Permitting
- A stormwater easement and/or specific stormwater design BMP's to allow access to and use of the facilities, including a maintenance agreement for said stormwater facilities.
- Conditional Use Permit for Substation
- Any additional land needed for Storm Water Management, Landscaping, and Wetlands/Wetlands Mitigation
- Any other Permitting requirements required by the Network Upgrade

C. APPENDICES

Attachment #1: Preliminary Scoping Summary – Substation Yadkin



Project Number: N6588 – Yadkin Substation

Project Description: ***Substation Scope of Work*** Replace 230kV Circuit Breaker 210512

Date: 06/20/2025

Revision Number: 0

Project Summary

Network Upgrade N6588 provides for the replacement of 230kV circuit breaker 210512 at Yadkin Substation in Chesapeake, Virginia.

Purchase and install substation material – Network Upgrade:

1. One (1), 230kV, 4000A, 63kAIC, SF-6 circuit breaker
2. One (1) circuit breaker foundation
3. Conductors, connectors, conduits, control cables, and grounding materials as per engineering standards

Remove substation material – Network Upgrade:

1. One (1), 230kV, 2000A, 40kAIC, SF-6 circuit breaker
2. One (1) circuit breaker foundation
3. Conductors, connectors, conduits, control cables, and grounding materials as per engineering standards

Purchase and install relay material – Network Upgrade:

1. One (1), 1510 – 24” dual SEL-351-7 transmission breaker with reclosing panel
2. One (1), 4510 – SEL-2411 breaker annunciator
3. One (1), 4526_A – circuit breaker fiber optic make-up box

Remove relay material – Network Upgrade:

1. Retire Panel No. 17

