
Dominion Virginia Power

PROJECT PROPOSAL

Palmyra 500 kV Switching Station

for:

2016-17 Long Term Window

February 28, 2017

PUBLIC VERSION

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A. Executive Summary

A.1. Name of proposing entity

This proposal is submitted by Dominion Virginia Power (Dominion).

A.2. Proposal window and associated violations/issues addressed

2016-17 Long Term Window

A.2.a. Reliability violation(s) addressed by project

This proposal by Dominion Virginia Power is in response to the 2016/17 RTEP Long Term Proposal Window, and is comprised of the following components:

- **Palmyra 500 kV Switching Station:** Construct a new 500 kV switching station on Dominion-owned property by connecting the existing 500 kV line 553, Elmont to Cunningham, and 500 kV line 576, Midlothian to North Anna, into a 500 kV breaker and half arrangement and install a 300 MVAR capacitor bank.

A.2.b. Violations caused by proposal/nearby violations not addressed by this proposal

There are no new violations caused by this proposal and no nearby violations not addressed by this proposal.

A.3. Project interrelation with other entities

This project does not span between two PJM Transmission Owner zones or between PJM and a neighboring Balancing Authority.

A.4. Intention to construct/own/operate/maintain

For this proposal, Dominion seeks to be the designated entity to construct, own, operate, maintain and finance the Project.

A.5. Description of the proposed solution and corresponding violation(s) it resolves

To alleviate congestion for market efficiency in the PJM region as provided in the accompanying Congestion Reduction Summary spreadsheet, Dominion proposes to construct **Palmyra 500 kV Switching Station** (the "Project") in Virginia. The Project includes the following facilities:

- **Palmyra 500 kV Switching Station:** Construct a new 500 kV switching station on Dominion-owned property by connecting the existing 500 kV line 553, Elmont to Cunningham, and 500 kV line 576, Midlothian to North Anna, into a 500 kV breaker and half arrangement and install a 300 MVAR capacitor bank.

A.6. How this project should be considered

This project should be considered as a whole. Optionally, PJM may consider eliminating the capacitor bank or including additional capacitor banks.

A.7. Cost and cost commitment overview

The estimated total capital cost in today's dollars for all components of the Project, including components that PJM may consider as upgrades, is approximately \$29.1 million.

PJM can have confidence in the reasonableness of this cost estimate. Dominion, the incumbent Transmission Owner in the PJM Southern region of the Project, has extensive knowledge and experience developing, constructing, operating and maintaining similar facilities in Virginia. These estimates were derived using actual cost from recent projects.

A.8. Additional benefits

In addition to resolving the above stated violations, the Project yields the following additional benefits:

- **Land already owned by Dominion:** All construction will occur on property already owned by Dominion.
- **Minimal outages:** Constructing this proposal will not require any extended outages of any transmission or generation facilities.