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VIA HAND DELIVERY

November 19, 2012

Mr. Joel H. Peck, Clerk
c/o Document Control Center
State Corporation Commission
1300 East Main Street
Tyler Building – First Floor
Richmond, Virginia 23219

**Application of Virginia Electric and Power Company
For approval and certification of electric facilities for the
Dooms-Lexington 500 kV Transmission Line Rebuild
Case No. PUE-2012-00134**

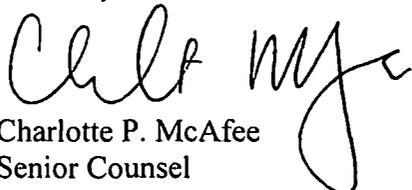
Dear Mr. Peck:

Enclosed for filing are an unbound original and fifteen (15) copies of Virginia Electric and Power Company's application for approval of electric facilities. This filing contains the Application, Appendix, DEQ Supplement, Direct Testimony and Exhibits.

As indicated in Section II.A.9.b of the Appendix contained in the enclosed filing, three (3) copies of a map showing the proposed route of the transmission line project described in the application were hand delivered to the Commission's Division of Energy Regulation today. The Company also delivered to the Division of Energy Regulation today a CD-ROM containing the digital geographic information system (GIS) map required by Virginia Code § 56-46.1, which is Attachment II.A.2 to the Appendix contained in the enclosed filing.

If you have any questions regarding this matter, please do not hesitate to contact me.

Sincerely,



Charlotte P. McAfee
Senior Counsel

Enclosures

Mr. Joel H. Peck
November 19, 2012
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cc: William H. Chambliss, Esq. (w/enclosures)
Stephen H. Watts, II, Esq. (w/enclosures)
All federal, state and local agencies and officials listed in Section V.C. of the
Appendix (w/enclosures)

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**Application,
Appendix, DEQ
Supplement, Direct
Testimony and
Exhibits of
Virginia Electric and
Power Company**

**Before the State Corporation
Commission of Virginia**

**Dooms-Lexington 500 kV
Transmission Line Rebuild**

Application No. 261

Case No. PUE-2012-00134

Filed: November 19, 2012

Volume 1 of 2

**COMMONWEALTH OF VIRGINIA
BEFORE THE
STATE CORPORATION COMMISSION**

**APPLICATION OF
VIRGINIA ELECTRIC AND POWER
COMPANY
FOR APPROVAL AND CERTIFICATION
OF ELECTRIC FACILITIES**

**Dooms-Lexington
500 kV Transmission Line Rebuild**

Application No. 261

Case No. PUE-2012-00134

Filed: November 19, 2012

COMMONWEALTH OF VIRGINIA
BEFORE THE
STATE CORPORATION COMMISSION

Application of)
)
Virginia Electric and Power Company) Case No. PUE-2012-00134
)
For approval and certification of electric)
transmission facilities under Va. Code)
§ 56-46.1 and the Utility Facilities Act,)
Va. Code § 56-265.1 *et seq.*)

**APPLICATION OF VIRGINIA ELECTRIC AND POWER COMPANY
FOR APPROVAL AND CERTIFICATION OF ELECTRIC FACILITIES
FOR THE DOOMS-LEXINGTON 500 KV TRANSMISSION LINE REBUILD**

Virginia Electric and Power Company (“Dominion Virginia Power” or the “Company”) respectfully shows as follows:

1. Dominion Virginia Power is a public service corporation organized under the laws of the Commonwealth of Virginia furnishing electric service to the public within its Virginia service territory. The Company also furnishes electric service to the public in portions of North Carolina. Dominion Virginia Power’s electric system, consisting of facilities for generation, transmission and distribution of electric energy, as well as associated facilities, is interconnected with the electric systems of neighboring utilities, and is a part of the interconnected network of electric systems serving the continental United States. By reason of its operation in two states and its interconnections with other utilities, the Company is engaged in interstate commerce.

2. In order to perform its legal duty to furnish adequate and reliable electric service, Dominion Virginia Power must, from time to time, construct new transmission facilities to its system. The electric facilities proposed in this application are necessary so

that Dominion Virginia Power can continue to provide reliable electric service to its customers, consistent with mandatory North American Electric Reliability Corporation (“NERC”) Reliability Standards for transmission facilities and the Company’s planning criteria.

3. Accordingly, the Company proposes to (a) rebuild, entirely within existing right-of-way, approximately 39.1 miles of its existing 500 kV Dooms-Lexington Line #555 transmission line in Augusta and Rockbridge Counties between its existing Dooms Substation (Augusta Co.) and its existing Lexington Substation (Rockbridge Co.), and (b) construct and install associated facilities at the Company’s Dooms and Lexington Substations (Line #555 rebuild and construction of associated facilities at Dooms and Lexington Substations, together, the “Rebuild Project”).

4. The proposed Rebuild Project is needed to address the NERC reliability criteria violations. Power flow studies conducted by regional transmission operator PJM Interconnection L.L.C. (“PJM”) and the Company project that by summer (commencing June 1) 2016, Line #555 will violate mandatory NERC Reliability Standards. The failure to address these projected NERC violations by summer 2016 could lead to service interruptions and potentially damage the Company’s electrical facilities in this area, significantly impacting electric service to this region. The need for the proposed transmission facilities is being driven by load growth in the region, which has experienced significant load growth over the past ten years. Over the 10-year period from 2003 to 2012, peak electrical demand grew from 16,349 MW to 19,249 MW, an increase of 17.74%, representing an actual average annual (compound) growth rate of 1.65%, and continued growth is expected to occur. The projected annual growth rate is approximately 1.9%, the highest projected growth rate in

PJM. In addition to load growth, the planned retirement of Chesapeake Units #1 - #4 and Yorktown #1 in the eastern part of the Company's territory is contributing to the increased loading on the Dooms-Lexington Line.

5. As a transmission owner in PJM's planning region, the Company fully participates in PJM's transmission planning process under PJM's Regional Transmission Expansion Plan Protocol and is obligated under the PJM Operating Agreement to construct, operate and own transmission facilities as designated by PJM in its annual Regional Transmission Expansion Plan ("RTEP"). Each year, PJM, transmission owners and other stakeholders conduct a thorough study of the electric transmission grid and, based upon the findings, consider proposals to address the system needs identified by the study. At the conclusion of this process, the PJM Board approves its annual RTEP. PJM's regional transmission expansion planning process, including the Company's own planning criteria and analysis, produced PJM's RTEP for 2012, which identified the need for the Rebuild Project to relieve violations of mandatory NERC Reliability Standards by the summer of 2016, and PJM's Board of Directors approved the proposed Rebuild Project as a base line reliability project.

6. The Rebuild Project provides the additional benefit of replacing aging transmission facilities that are reaching the end of their useful lives. Line #555, which was constructed in the early 1960s and completed in 1966 as part of Dominion Virginia Power's 500 kV "original loop," is part of the first 500 kV transmission system built in North America. It was built with first generation 500 kV technology, and, after more than 45 years of continued operation, the line and associated facilities are approaching the end of their expected service lives and require replacement with new facilities to maintain reliable

service. The deterioration of the tower structures has become so extensive that the existing steel tower structures must be replaced as soon as possible. The same aging COR-TEN®¹ infrastructure background was presented to the Commission as the basis for the Company's proposed rebuild of 500 kV Mt. Storm-Doubs Line #551 and 500 kV Lexington-Cloverdale Line #566, each also part of the 500 kV "original loop," in Case No. PUE-2011-00003. The Commission approved both the Line #551 and Line #566 rebuild, and the Line #551 project is under construction.

7. The in-service date for the proposed rebuilt line is May 2016, with an estimated 26 months for construction of the Project and a period of 18 months for engineering, material procurement and construction permitting. The estimated total cost of the Rebuild Project is approximately \$103.4 million, which includes approximately \$98.1 million for the transmission line construction, and approximately \$5.3 million for the estimated cost of modifications at the Lexington and Dooms Substations. The necessity for the Rebuild Project is described in more detail in Section I of the Appendix attached to this application.

8. The Company proposes to remove Line #555's existing 500 kV weathering steel (COR-TEN®) lattice towers, originally constructed by 1966, and replace them with new 500/230 kV double circuit galvanized steel lattice towers, and to replace the existing 2-2049.5 bundled AAAC conductors with three triple-bundled 1351.5 ACSS/TW (HS-285) phase conductors. Rebuilding Line #555 as proposed, with modern facilities and in accordance with current good utility engineering practices and National Electrical Safety Code ("NESC") requirements, will increase the transfer capability of Line #555 from 2913

¹ Registered trademark of United States Steel Corporation.

MVA to 4330 MVA. At the existing Lexington and Dooms Substations, the Company proposes to replace two existing 500 kV breakers at each substation and install associated equipment within the existing fence to interconnect Line #555. The approximate size of the structures, the materials to be used for the transmission line, and the right-of-way clearing methods, corridor usage and maintenance procedures are described in Section II of the Appendix. The rebuilt facilities will meet or exceed the standards of the NESC in effect at the time of construction.

9. The proposed facilities will afford the best means of meeting the continuing need for reliable service while reasonably minimizing adverse impact on the scenic, environmental and historic assets of the area. The route for the Rebuild Project is located entirely within existing right-of-way. The transmission line route is described in Section III of the Appendix.

10. Based on current planning assumptions, a new 230 kV line between Dooms and Lexington Substations will be needed by 2018 or before. The Rebuild Project presents an unusual opportunity to reduce the cost to customers, as well as the impacts to the environment and landowners, of the 230 kV line by installing of the conductors for the 230 kV line on the Line #555 structures during construction of the proposed Rebuild Project. The 230 kV conductors would not be energized unless and until Commission authorization for the new 230 kV line is sought and obtained in a separate proceeding.

11. Based on consultations with the Virginia Department of Environmental Quality ("DEQ"), the Company has developed a supplement ("DEQ Supplement") containing information designed to facilitate review and analysis of the proposed facilities by

the DEQ and other relevant agencies. The DEQ Supplement is included as Volume II of this Application.

12. Dominion Virginia Power's experience, the advice of consultants and a review of published studies by experts in the field have disclosed no causal link to harmful health or safety effects from electric and magnetic fields generated by the Company's existing or proposed facilities. For further discussion of this topic, see Section IV of the Appendix.

13. A list of federal, state and local agencies and officials that reasonably may be expected to have an interest in the proposed construction, and to which a copy of the application will be sent, is set forth in Section V of the Appendix.

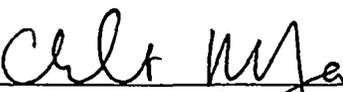
In addition to the information provided in the Appendix and the DEQ Supplement, this application is supported by the prepared direct testimony of Company witnesses Kyle D. Hannah, Robert J. Shevenock, II, Wilson O. Velasquez and John B. Bailey filed with this application.

WHEREFORE, Dominion Virginia Power respectfully requests that the Commission expeditiously:

(a) direct that notice of this application be given pursuant to § 56-46.1 of the Code of Virginia; and

(b) approve pursuant to § 56-46.1 of the Code of Virginia the proposed transmission facilities and grant a certificate of public convenience and necessity for those transmission facilities under the Utility Facilities Act.

VIRGINIA ELECTRIC AND POWER COMPANY

By: 
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November 19, 2012