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VIA ELECTRONIC DELIVERY

June 6, 2016

William H. Chambliss, Esq. Alisson P. Klaiber, Esq. Andrea Macgill, Esq. Office of General Counsel Tyler Building – 10th Floor 1300 East Main Street Richmond, Virginia 23219

Application of Virginia Electric and Power Company for approval and certification of electric facilities: Haymarket 230 kV Double Circuit Transmission Line and 230-34.5 kV Haymarket Substation

Case No. PUE-2015-00107

Dear Counsel:

Enclosed are the responses of Virginia Electric and Power Company to the Interrogatories and Requests for Production of Documents by the Staff of the State Corporation Commission (Fifth Set).

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

Sincerely,

Charlotte P. McAfee

Senior Counsel

Enclosure

cc: Mr. Neil Joshipura

Cliona Mary Robb, Esq. Michael J. Quinan, Esq. James G. Ritter, Esq. Will Reisinger, Esq. Todd Sinkins, Esq. Courtney Harden, Esq. Michael Coughlin, Esq. Wendy Alexander, Esq.

Vishwa Link, Esq. Jennifer Valaika, Esq.

The following response to Question No. 42 of the Fifth Set of Interrogatories and Requests for Production of Documents Propounded by the Virginia State Corporation Commission Staff received on May 25, 2016 has been prepared under my supervision.

Mark R. Gill

Consulting Engineer

Virginia Electric and Power Company

The following response to Question No. 42 of the Fifth Set of Interrogatories and Requests for Production of Documents Propounded by the Virginia State Corporation Commission Staff received on May 25, 2016 has been prepared under my supervision as it pertains to legal matters.

Charlotte P. McAfee Senior Counsel

Dominion Resources Services, Inc.

Question No. 42

During the past six years, has there been any instance where the Company constructed a radial transmission line (69 kV and above) to serve one customer (e.g., remote water pumping stations, large manufacturing customer, etc.)? If so, how did the Company treat the cost of the transmission line, in terms of cost allocation and recovery? Did the Company apply its line extension policy to any such customer?

Response:

The Company objects to this request as overly broad and unduly burdensome to the extent it requests a review of all radial transmission lines and customers served throughout the Company's system during the six-year period specified. The Company further objects to this

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Mark R. Gill Consulting Engineer Virginia Electric and Power Company

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Charlotte P. McAfee

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Dominion Resources Services, Inc.

Question No. 42

During the past six years, has there been any instance where the Company constructed a radial transmission line (69 kV and above) to serve one customer (e.g., remote water pumping stations, large manufacturing customer, etc.)? If so, how did the Company treat the cost of the transmission line, in terms of cost allocation and recovery? Did the Company apply its line extension policy to any such customer?

Response:

The Company objects to this request as overly broad and unduly burdensome to the extent it requests a review of all radial transmission lines and customers served throughout the Company's system during the six-year period specified. The Company further objects to this

request to the extent it seeks information that is not relevant or reasonably calculated to lead to the discovery of admissible evidence.

Based on a review of its records, the Company was unable to identify any instance in which it has constructed a radial transmission line (69 kV and above) to initially serve one customer (e.g., remote water pumping stations, large manufacturing customer).

Based on further discussions between Staff and the Company regarding this Question No. 42 and Staff's request for the cost treatment of such a situation, see the Company's responses to Question No. 14 of the Staff's First Set and Question No. 36 of the Staff's Fourth Set for the cost allocation and recovery applicable to a hypothetical radial transmission line of this nature. Consistent with the Company's response to Question No. 43 of the Staff's Fifth Set, the hypothetical radial transmission line is an "integrated transmission facility" "subject to PJM operational control," including for the reason that is available for future tap(s) by any PJM customer.

The following response to Question No. 43(a) of the Fifth Set of Interrogatories and Requests for Production of Documents Propounded by the Virginia State Corporation Commission Staff received on May 25, 2016 has been prepared under my supervision.

Harold W. Payne, Jr./ Manager, Regulation

Virginia Electric and Power Company

The following response to Question No. 43(a) of the Fifth Set of Interrogatories and Requests for Production of Documents Propounded by the Virginia State Corporation Commission Staff received on May 25, 2016 has been prepared under my supervision as it pertains to legal matters.

Charlotte P. McAfee Senior Counsel Dominion Resources Services, Inc.

Question No. 43

- a. Define "integrated transmission facilities".
- b. Identify and describe, in detail, the parameters that would qualify a transmission facility to be subjected to PJM operational control.

The following response to Question No. 43(a) of the Fifth Set of Interrogatories and Requests for Production of Documents Propounded by the Virginia State Corporation Commission Staff received on May 25, 2016 has been prepared under my supervision.

Harold W. Payne, Jr. Manager, Regulation Virginia Electric and Power Company

The following response to Question No. 43(a) of the Fifth Set of Interrogatories and Requests for Production of Documents Propounded by the Virginia State Corporation Commission Staff received on May 25, 2016 has been prepared under my supervision as it pertains to legal matters.

Charlotte P. McAfee

Senior Counsel

Dominion Resources Services, Inc.

Question No. 43

- a. Define "integrated transmission facilities".
- b. Identify and describe, in detail, the parameters that would qualify a transmission facility to be subjected to PJM operational control.

Response:

a. The Company believes generally that, other than generator step-up transformers and generator interconnection facilities, all of its transmission facilities (69 kV and above) are integrated.

If there is a need to examine a particular facility, then the FERC "Mansfield Test" and additional guidance from FERC would be considered.

For reference, the five factors of the Mansfield Test (FERC Order No. 454, 97 FERC ¶ 61,134) are provided below:

- 1. Whether the facilities are radial, or whether they loop back into the transmission system;
- 2. Whether energy flows only in one direction, from the transmission system to the customer over the facilities, or in both directions, from the transmission system to the customer, and from the customer to the transmission system;
- 3. Whether the transmission provider is able to provide transmission service to itself or other transmission customers over the facilities in question;
- 4. Whether the facilities provide benefits to the transmission grid in terms of capability or reliability, and whether the facilities can be relied on for coordinated operation of the grid; and,
- 5. Whether an outage on the facilities would affect the transmission system.

Additional FERC guidance includes the following:

- 1. A facility is a network facility if "any degree of integration" is shown (FERC Opinion No. 483, 113 FERC ¶ 61,091 at para. 34).
- 2. Facilities required but for a particular wholesale customer's requirements can be part of a cohesive network that cannot be dismembered (FERC Opinion No. 474, 108 FERC ¶ 61,084 at para. 50).
- 3. Facilities deemed as part of the network need not meet all five factors of the Mansfield Test (Opinion No. 483, para. 35).
- 4. A negative showing with respect to all five factors of the Mansfield Test constitute "exceptional circumstances" (Opinion No. 474, 108 FERC ¶ 61,084 at para. 51).

The following response to Question No. 43(b) of the Fifth Set of Interrogatories and Requests for Production of Documents Propounded by the Virginia State Corporation Commission Staff received on May 25, 2016 has been prepared under my supervision as it pertains to system operations.

Jack Kerr Consulting Engineer Virginia Electric and Power Company

The following response to Question No. 43(b) of the Fifth Set of Interrogatories and Requests for Production of Documents Propounded by the Virginia State Corporation Commission Staff received on May 25, 2016 has been prepared under my supervision as it pertains to legal matters.

Charlotte P. McAfee

Senior Counsel

Dominion Resources Services, Inc.

Question No. 43

- a. Define "integrated transmission facilities".
- b. Identify and describe, in detail, the parameters that would qualify a transmission facility to be subjected to PJM operational control.

The following response to Question No. 43(b) of the Fifth Set of Interrogatories and Requests for Production of Documents Propounded by the Virginia State Corporation Commission Staff received on May 25, 2016 has been prepared under my supervision as it pertains to system operations.

Jack Kerr

Consulting Engineer

Virginia Electric and Power Company

The following response to Question No. 43(b) of the Fifth Set of Interrogatories and Requests for Production of Documents Propounded by the Virginia State Corporation Commission Staff received on May 25, 2016 has been prepared under my supervision as it pertains to legal matters.

Charlotte P. McAfee Senior Counsel Dominion Resources Services, Inc.

Question No. 43

- a. Define "integrated transmission facilities".
- b. Identify and describe, in detail, the parameters that would qualify a transmission facility to be subjected to PJM operational control.

Response:

b. All of Dominion Virginia Power's integrated transmission facilities are subject to PJM operational control. See the Company's response to subpart (a) above.

In addition, see the following excerpts from the PJM Transmission Owners' Agreement:

1.27 Transmission Facilities

Transmission Facilities shall mean those facilities that: (i) are within the PJM Region; (ii) meet the definition of transmission facilities pursuant to FERC's Uniform System of Accounts or have been classified as transmission facilities in a ruling by FERC addressing such facilities; and (iii) have been demonstrated to the satisfaction of PJM to be integrated with the Transmission System of the PJM Region and integrated into the planning and operation of such to serve the power and transmission customers within such region, regardless of whether the facilities are listed in the PJM Designated Facilities List contained in the PJM Manual of Transmission Operations or successor thereto.

4.1.2 Directing the Operation of Transmission Facilities.

Each Party shall transfer to PJM, pursuant to this Agreement and in accordance with the Operating Agreement, the responsibility to direct the operation of its Transmission Facilities provided that such transfer is not intended to require any change in the physical operations or control over Transmission Facilities.