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DIRECT TESTIMONY

Part 4

COMMONWEALTH OF VIRGINIA  
STATE CORPORATION COMMISSION

APPLICATION OF	)	
	)	
VIRGINIA ELECTRIC AND POWER COMPANY	)	Case No. PUR-2019-00191
	)	
For approval and certification of electric transmission	)	
facilities: Evergreen Mills 230 kV Line	)	
Loops and Evergreen Mills Switching Station	)	

**IDENTIFICATION, SUMMARIES, AND TESTIMONY OF DIRECT WITNESSES  
OF VIRGINIA ELECTRIC AND POWER COMPANY**

**Harrison S. Potter**

Witness Direct Testimony Summary  
Direct Testimony  
Appendix A: Background and Qualifications

**Robert J. Shevenock II**

Witness Direct Testimony Summary  
Direct Testimony  
Appendix A: Background and Qualifications

**Santosh Bhattarai**

Witness Direct Testimony Summary  
Direct Testimony  
Appendix A: Background and Qualifications

**Laura P. Meadows**

Witness Direct Testimony Summary  
Direct Testimony  
Appendix A: Background and Qualifications

**Barry A. Baker**

Witness Direct Testimony Summary  
Direct Testimony  
Appendix A: Background and Qualifications

## WITNESS DIRECT TESTIMONY SUMMARY

Witness: Harrison S. Potter

Title: Engineer III – Electric Transmission Planning

Summary:

Company Witness Harrison S. Potter sponsors those portions of the Appendix describing the Company's transmission system and the need for, and benefits of, the proposed Project, as follows:

- Section I.A: This section details the primary justifications for the proposed project.
- Section I.B: This section details the engineering justifications for the proposed project.
- Section I.C: This section describes the present system and details how the proposed project will effectively satisfy present and projected future load demand requirements.
- Section I.D: Although not applicable to the proposed project, this section, when applicable, describes critical contingencies and associated violations due to the inadequacy of the existing system.
- Section I.E: This section explains feasible project alternatives.
- Section I.G: This section provides a system map for the affected area.
- Section I.H: This section provides the desired in-service date of the proposed project and the estimated construction time.
- Section I.J: This section provides information about the project if approved by the RTO.
- Section I.K: Although not applicable to the proposed project, this section, when applicable, provides outage history and maintenance history for existing transmission lines if the proposed project is a rebuild and is due in part to reliability issues.
- Section I.L: Although not applicable to the proposed project, this section, when applicable, provides details on the deterioration of structures and associated equipment.
- Section I.M: Although not applicable to the proposed project, this section, when applicable, contains information for transmission lines interconnecting a non-utility generator.
- Section I.N: This section provides the proposed and existing generating sources, distribution circuits or load centers planned to be served by all new substations, switching stations, and other ground facilities associated with the proposed project.
- Section II.A.3: This section provides color maps of existing or proposed rights-of-way in the vicinity of the proposed project.
- Section II.A.10: This section provides details of the construction plans for the proposed project, including requested line outage schedules.

Additionally, Company Witness Potter co-sponsors the following portions of the Appendix:

- Section I.I. (co-sponsored with Company Witnesses Robert J. Shevenock II and Santosh Bhattarai): This section provides the estimated total cost of the proposed project.

A statement of Mr. Potter's background and qualifications is attached to his testimony as Appendix A.

**DIRECT TESTIMONY  
OF  
HARRISON S. POTTER  
ON BEHALF OF  
VIRGINIA ELECTRIC AND POWER COMPANY  
BEFORE THE  
STATE CORPORATION COMMISSION OF VIRGINIA  
CASE NO. PUR-2019-00191**

1   **Q.   Please state your name, business address and position with Virginia Electric and**  
2       **Power Company (“Dominion Energy Virginia” or the “Company”).**

3   **A.   My name is Harrison S. Potter, and I am an Engineer III in Electric Transmission**  
4       **Planning for the Company. My business address is 10900 Nuckols Road, Glen Allen,**  
5       **Virginia 23060. A statement of my qualifications and background is provided as**  
6       **Appendix A.**

7   **Q.   Please describe your areas of responsibility with the Company.**

8   **A.   I am responsible for planning the Company’s electric transmission system for voltages of**  
9       **69 kilovolt (“kV”) through 500 kV.**

10   **Q.   What is the purpose of your testimony in this proceeding?**

11   **A.   In order to provide service requested by a retail electric service customer (the**  
12       **“Customer”), to maintain reliable service for the overall growth in the area, and to**  
13       **comply with mandatory North American Electric Reliability Corporation (“NERC”)**  
14       **Reliability Standards, Dominion Energy Virginia proposes, in Loudoun County, Virginia,**  
15       **to construct: (i) a new 230 kV switching station on land owned by the Customer**  
16       **(“Evergreen Mills Switching Station”); (ii) a new approximately 0.6-mile 230 kV double**  
17       **circuit loop of the Company’s existing 230 kV Brambleton-Yardley Ridge Line #2172 on**  
18       **new right-of-way, supported by seven structures, from a tap point along those lines (the**

1 “Evergreen Mills Junction”) to Evergreen Mills Switching Station (the “#2172 Loop”);  
2 and (iii) a new approximately 0.6-mile 230 kV double circuit loop of the Company’s  
3 existing 230 kV Brambleton-Poland Road Line #2183 on new right-of-way, supported by  
4 nine structures, from Evergreen Mills Junction to Evergreen Mills Switching Station (the  
5 “#2183 Loop”). The Evergreen Mills Switching Station, the #2172 Loop, and the #2183  
6 Loop are collectively referred to as the “Project.”

7 The purpose of my testimony is to describe the Company’s transmission system and the  
8 need for, and benefits of, the proposed Project. I also support the evaluation of  
9 distribution alternatives based on my prior experience with the Company as a distribution  
10 planner. I am sponsoring Sections I.A, I.B, I.C, I.D, I.E, I.G, I.H, I.J, I.K, I.L, I.M, I.N,  
11 II.A.3, and II.A.10 of the Appendix. Additionally, I co-sponsor Section I.I with  
12 Company Witnesses Robert J. Shevenock II and Santosh Bhattarai.

13 **Q. Does this conclude your pre-filed direct testimony?**

14 **A.** Yes, it does.

**BACKGROUND AND QUALIFICATIONS  
OF  
HARRISON S. POTTER**

Harrison Potter is a 2012 graduate from Virginia Commonwealth University with a Masters in Business Administration and a 2005 graduate from Virginia Polytechnic Institute and State University with a Bachelor of Science in Mechanical Engineering. Mr. Potter has been employed by the Company for 15 years. His experience with the Company includes distribution planning (eleven years), distribution design (two year), and GIS services (two years). Mr. Potter was promoted to his current role in transmission planning in 2019.

### WITNESS DIRECT TESTIMONY SUMMARY

Witness: Robert J. Shevenock II

Title: Principal Engineer – Electric Transmission Line Engineering

Summary:

Company Witness Robert J. Shevenock II sponsors those portions of the Appendix providing an overview of the design characteristics of the transmission facilities for the proposed Project, and discussing electric and magnetic field levels, as follows:

- Section I.F: This section describes any lines or facilities that will be removed, replaced, or taken out of service upon completion of the proposed project.
- Section II.A.5: This section provides drawings of the right-of-way cross section showing typical transmission lines structure placements.
- Section II.B.1 to II.B.5: These sections provide the line design and operational features of the proposed project, as applicable.
- Section IV: This section provides analysis on the health aspects of electric and magnetic field levels.

Additionally, Company Witness Shevenock co-sponsors the following portions of the Appendix:

- Section I.I. (co-sponsored with Company Witnesses Harrison S. Potter and Santosh Bhattarai): This section provides the estimated total cost of the proposed project.
- Section II.B.6 (co-sponsored with Company Witness Laura P. Meadows): This section provides photographs of existing facilities, representations of proposed facilities, and visual simulations.

A statement of Mr. Shevenock's background and qualifications is attached to his testimony as Appendix A.

**DIRECT TESTIMONY  
OF  
ROBERT J. SHEVENOCK II  
ON BEHALF OF  
VIRGINIA ELECTRIC AND POWER COMPANY  
BEFORE THE  
STATE CORPORATION COMMISSION OF VIRGINIA  
CASE NO. PUR-2019-00191**

1   **Q.   Please state your name, business address and position with Virginia Electric and**  
2       **Power Company (“Dominion Energy Virginia” or the “Company”).**

3   A.   My name is Robert J. Shevenock II, and I am a Principal Engineer in the Electric  
4       Transmission Line Engineering Department of the Company. My business address is  
5       10900 Nuckols Road, Glen Allen, Virginia 23060. A statement of my qualifications and  
6       background is provided as Appendix A.

7   **Q.   Please describe your areas of responsibility with the Company.**

8   A.   I am responsible for the estimating and conceptual design on high voltage transmission  
9       line projects from 69 kilovolt (“kV”) to 500 kV.

10   **Q.   What is the purpose of your testimony in this proceeding?**

11   A.   In order to provide service requested by a retail electric service customer (the  
12       “Customer”), to maintain reliable service for the overall growth in the area, and to  
13       comply with mandatory North American Electric Reliability Corporation (“NERC”)  
14       Reliability Standards, Dominion Energy Virginia proposes, in Loudoun County, Virginia,  
15       to construct: (i) a new 230 kV switching station on land owned by the Customer  
16       (“Evergreen Mills Switching Station”); (ii) a new approximately 0.6-mile 230 kV double  
17       circuit loop of the Company’s existing 230 kV Brambleton-Yardley Ridge Line #2172 on  
18       new right-of-way, supported by seven structures, from a tap point along those lines (the



“Evergreen Mills Junction”) to Evergreen Mills Switching Station (the “#2172 Loop”);  
 and (iii) a new approximately 0.6-mile 230 kV double circuit loop of the Company’s  
 existing 230 kV Brambleton-Poland Road Line #2183 on new right-of-way, supported by  
 nine structures, from Evergreen Mills Junction to Evergreen Mills Switching Station (the  
 “#2183 Loop”). The Evergreen Mills Switching Station, the #2172 Loop, and the #2183  
 Loop are collectively referred to as the “Project.”

The purpose of my testimony is to describe the design characteristics of the transmission  
 facilities for the proposed Project, and also to discuss electric and magnetic field  
 (“EMF”) levels. I am sponsoring Sections I.F, II.A.5, II.B.1 to II.B.5, and IV of the  
 Appendix. I am co-sponsoring Section I.I with Company Witnesses Harrison S. Potter  
 and Santosh Bhattarai; and Section II.B.6 of the Appendix with Company Witness Laura  
 P. Meadows.

**Q. Does this conclude your pre-filed direct testimony?**

**A.** Yes, it does.

**BACKGROUND AND QUALIFICATIONS  
OF  
ROBERT J. SHEVENOCK II**

Robert J. Shevenock II graduated from Pennsylvania State University in 1985 with a Bachelor of Science in Electrical Engineering. He joined the Company in 1985 and has held various engineering titles within the Electric Transmission Engineering department, where he currently works as a Principal Engineer.

Mr. Shevenock previously has testified before the Virginia State Corporation Commission.

WITNESS DIRECT TESTIMONY SUMMARY

Witness: Santosh Bhattarai

Title: Engineer III – Substation Engineering

Summary:

Company Witness Santosh Bhattarai sponsors or co-sponsors the following portions of the Appendix describing the substation work to be performed for the proposed Project as follows:

- Section I.I (co-sponsored with Company Witnesses Harrison S. Potter and Robert J. Shevenock II): This section provides the estimated total cost of the proposed project.
- Section II.C: This section describes and furnishes a one-line diagram of the substation associated with the proposed project.

A statement of Mr. Bhattarai's background and qualifications is attached to his testimony as Appendix A.

**DIRECT TESTIMONY  
OF  
SANTOSH BHATTARAI  
ON BEHALF OF  
VIRGINIA ELECTRIC AND POWER COMPANY  
BEFORE THE STATE CORPORATION COMMISSION OF VIRGINIA  
CASE NO. PUR-2019-00191**

1    **Q.    Please state your name, business address and position with Virginia Electric and**  
2       **Power Company (“Dominion Energy Virginia” or the “Company”).**

3    A.    My name is Santosh Bhattarai, and I am a Consulting Engineer in the Substation  
4       Engineering section of the Electric Transmission group of the Company. My business  
5       address is 2400 Grayland Avenue, Richmond, Virginia 23220. A statement of my  
6       qualifications and background is provided as Appendix A.

7    **Q.    What are your responsibilities as a Consulting Engineer?**

8    A.    I am responsible for evaluation of the substation project requirements, feasibility studies,  
9       conceptual physical design, scope development, preliminary engineering and cost  
10       estimating for high voltage transmission and distribution substations.

11   **Q.    What is the purpose of your testimony in this proceeding?**

12    A.    In order to provide service requested by a retail electric service customer (the  
13       “Customer”), to maintain reliable service for the overall growth in the area, and to  
14       comply with mandatory North American Electric Reliability Corporation (“NERC”)   
15       Reliability Standards, Dominion Energy Virginia proposes, in Loudoun County, Virginia,  
16       to construct: (i) a new 230 kV switching station on land owned by the Customer  
17       (“Evergreen Mills Switching Station”); (ii) a new approximately 0.6-mile 230 kV double  
18       circuit loop of the Company’s existing 230 kV Brambleton-Yardley Ridge Line #2172 on

1 new right-of-way, supported by seven structures, from a tap point along those lines (the  
2 “Evergreen Mills Junction”) to Evergreen Mills Switching Station (the “#2172 Loop”);  
3 and (iii) a new approximately 0.6-mile 230 kV double circuit loop of the Company’s  
4 existing 230 kV Brambleton-Poland Road Line #2183 on new right-of-way, supported by  
5 nine structures, from Evergreen Mills Junction to Evergreen Mills Switching Station (the  
6 “#2183 Loop”). The Evergreen Mills Switching Station, the #2172 Loop, and the #2183  
7 Loop are collectively referred to as the “Project.”

8 The purpose of my testimony is to describe the work to be performed as part of the  
9 Project at the Evergreen Mills Switching Station. As it pertains to station work, I am  
10 sponsoring Section II.C of the Appendix and co-sponsoring Section I.I of the Appendix  
11 with Company Witnesses Harrison S. Potter and Robert J. Shevenock II.

12 **Q. Does this conclude your pre-filed direct testimony?**

13 **A.** Yes, it does.

**BACKGROUND AND QUALIFICATIONS  
OF  
SANTOSH BHATTARAI**

Santosh Bhattarai received a Master of Science degree in Electrical Engineering from South Dakota State University in 2006. Before working for the Company, Mr. Bhattarai worked at Electrical Consultants, Inc., from 2006 to 2009 in Billings, Montana as a Substation Design Engineer. Then, from 2010 to 2013, he worked at Electrical Consultants, Inc. in Madison, Wisconsin as a Substation Project Engineer. Mr. Bhattarai's responsibilities included the evaluation of the substation project requirements, development of project scope documents, estimates and schedules, preparation of specifications and bid documents, material procurement, develop detailed physical drawings, bill of materials, electrical schematics and wiring diagrams. Mr. Bhattarai joined the Dominion Energy Virginia Substation Engineering department in November 2013 as an Engineer III. He has been promoted to the Consulting Engineer in July 2019. He has been licensed as a Professional Engineer in the Commonwealth of Virginia since 2015. In recognition of his professional standing, the Institute of Electrical and Electronics Engineers ("IEEE") board has elected him to the grade of Senior Member in 2017.

Mr. Bhattarai previously has testified before the Virginia State Corporation Commission.

### WITNESS DIRECT TESTIMONY SUMMARY

Witness: Laura P. Meadows

Title: Siting and Permitting Specialist

Summary:

Company Witness Laura P. Meadows will sponsor those portions of the Appendix providing an overview of the design of the route for the proposed Project, and related permitting, as follows:

- Section II.A.12: This section identifies the counties and localities through which the proposed project will pass and provides General Highway Maps for these localities.
- Section V: This section provides information related to public notice of the proposed project.

Additionally, Ms. Meadows co-sponsors the following portion of the Appendix:

- Section II.A.1 (co-sponsored with Company Witness Barry Baker): This section provides the length of the proposed corridor and viable alternatives to the proposed project.
- Section II.A.2 (co-sponsored with Company Witness Barry Baker): This section provides a map showing the route of the proposed project in relation to notable points close to the proposed project.
- Section II.A.4 (co-sponsored with Company Witness Barry Baker): This section explains why the existing right-of-way is not adequate to serve the need.
- Sections II.A.6 to II.A.8 (co-sponsored with Company Witness Barry Baker): These sections provide detail regarding the right-of-way for the proposed project.
- Section II.A.9 (co-sponsored with Company Witness Barry Baker): This section describes the proposed route selection procedures and details alternative routes considered.
- Section II.A.11 (co-sponsored with Company Witness Barry Baker): This section details how the construction of the proposed project follows the provisions discussed in Attachment 1 of the Transmission Appendix Guidelines.
- Section II.B.6 (co-sponsored with Company Witness Robert J. Shevenock II): This section provides photographs of existing facilities, representations of proposed facilities, and visual simulations.
- Section III (co-sponsored with Company Witness Barry Baker): This section details the impact of the proposed project on scenic, environmental, and historic features.

Finally, Ms. Meadows co-sponsors with Company Witness Barry Baker the DEQ Supplement filed with the Application.

A statement of Ms. Meadows's background and qualifications is attached to her testimony as Appendix A.

**DIRECT TESTIMONY  
OF  
LAURA P. MEADOWS  
ON BEHALF OF  
VIRGINIA ELECTRIC AND POWER COMPANY  
BEFORE THE  
STATE CORPORATION COMMISSION OF VIRGINIA  
CASE NO. PUR-2019-00191**

1   **Q.   Please state your name, business address and position with Virginia Electric and**  
2       **Power Company (“Dominion Energy Virginia” or the “Company”).**

3   A.   My name is Laura P. Meadows, and I am a Siting and Permitting Specialist for Virginia  
4       Electric and Power Company (“Dominion Energy Virginia” or the “Company”). My  
5       business address is 10900 Nuckols Road, Glen Allen, Virginia 23060. A statement of my  
6       qualifications and background is provided as Appendix A.

7   **Q.   Please describe your areas of responsibility with the Company.**

8   A.   I am responsible for identifying appropriate routes for transmission lines and obtaining  
9       necessary federal, state, and local approvals and environmental permits for those  
10      facilities. In this position, I work closely with government officials, permitting agencies,  
11      property owners, and other interested parties, as well as with other Company personnel,  
12      to develop facilities needed by the public so as to reasonably minimize environmental  
13      and other impacts on the public in a reliable, cost-effective manner.

14   **Q.   What is the purpose of your testimony in this proceeding?**

15   A.   In order to provide service requested by a retail electric service customer (the  
16      “Customer”), to maintain reliable service for the overall growth in the area, and to  
17      comply with mandatory North American Electric Reliability Corporation (“NERC”)   
18      Reliability Standards, Dominion Energy Virginia proposes, in Loudoun County, Virginia,



1 to construct: (i) a new 230 kV switching station on land owned by the Customer  
2 (“Evergreen Mills Switching Station”); (ii) a new approximately 0.6-mile 230 kV double  
3 circuit loop of the Company’s existing 230 kV Brambleton-Yardley Ridge Line #2172 on  
4 new right-of-way, supported by seven structures, from a tap point along those lines (the  
5 “Evergreen Mills Junction”) to Evergreen Mills Switching Station (the “#2172 Loop”);  
6 and (iii) a new approximately 0.6-mile 230 kV double circuit loop of the Company’s  
7 existing 230 kV Brambleton-Poland Road Line #2183 on new right-of-way, supported by  
8 nine structures, from Evergreen Mills Junction to Evergreen Mills Switching Station (the  
9 “#2183 Loop”). The Evergreen Mills Switching Station, the #2172 Loop, and the #2183  
10 Loop are collectively referred to as the “Project.”

11 The purpose of my testimony is to provide an overview of the route and permitting for  
12 the proposed Project. I sponsor Sections II.A.12 and V of the Appendix. I also co-  
13 sponsor Sections II.A.1, II.A.2, II.A.4, II.A.6 to II.A.8, II.A.9, II.A.11, and III of the  
14 Appendix with Company Witness Barry Baker; and co-sponsor Section II.B.6 of the  
15 Appendix with Company Witness Robert J. Shevenock II. Lastly, I co-sponsor the DEQ  
16 Supplement with Company Witness Barry Baker.

17 **Q. Has the Company complied with Va. Code § 15.2-2202 E?**

18 A. Yes. The Company met with Loudoun County officials on July 26, 2018, and again on  
19 March 18, 2019, during which time the proposed Project was discussed. In addition, a  
20 letter dated March 7, 2019, was sent to Loudoun County officials advising of the  
21 Company’s intent to file this Application, describing the Project, and inviting the locality  
22 to consult with the Company about the Project. A copy of this letter is included as  
23 Appendix Attachment V.D.1.

1 Q. Does this conclude your pre-filed direct testimony?

2 A. Yes, it does.

**BACKGROUND AND QUALIFICATIONS  
OF  
LAURA P. MEADOWS**

Ms. Laura P. Meadows earned her Bachelor of Arts in History from Longwood University in 2012 and her Master of Arts in Museum Studies from Johns Hopkins University in 2014. In 2013, she began working as an Environmental Specialist and Transportation Planner, coordinating technical NEPA review for linear transportation projects. Ms. Meadows joined the Company in 2017 as a Siting and Permitting Specialist to secure permits for electric transmission and substation projects.

Ms. Meadows has previously submitted pre-filed testimony to the Virginia State Corporation Commission.

### WITNESS DIRECT TESTIMONY SUMMARY

Witness: Barry A. Baker

Title: Vice-President and Regional Practice Lead for the Impact Assessment & Permitting Practice, and Technical Lead in the Transmission & Distribution Practice for AECOM

Summary:

Company Witness Barry Baker sponsors the Environmental Routing Study provided as part of the Company's Application.

Additionally, Mr. Baker co-sponsors the following portion of the Appendix:

- Section II.A.1 (co-sponsored with Company Witness Laura P. Meadows): This section provides the length of the proposed corridor and viable alternatives to the proposed project.
- Section II.A.2 (co-sponsored with Company Witness Laura P. Meadows): This section provides a map showing the route of the proposed project in relation to notable points close to the proposed project.
- Section II.A.4 (co-sponsored with Company Witness Laura P. Meadows): This section explains why the existing right-of-way is not adequate to serve the need.
- Sections II.A.6 to II.A.8 (co-sponsored with Company Witness Laura P. Meadows): These sections provide detail regarding the right-of-way for the proposed project.
- Section II.A.9 (co-sponsored with Company Witness Laura P. Meadows): This section describes the proposed route selection procedures and details alternative routes considered.
- Section II.A.11 (co-sponsored with Company Witness Laura P. Meadows): This section details how the construction of the proposed project follows the provisions discussed in Attachment 1 of the Transmission Appendix Guidelines.
- Section III (co-sponsored with Company Witness Laura P. Meadows): This section details the impact of the proposed project on scenic, environmental, and historic features.

Finally, Mr. Baker co-sponsors with Company Witness Laura P. Meadows the DEQ Supplement filed with this Application.

A statement of Mr. Baker's background and qualifications is attached to his testimony as Appendix A.

**DIRECT TESTIMONY  
OF  
BARRY A. BAKER  
ON BEHALF OF  
VIRGINIA ELECTRIC AND POWER COMPANY  
BEFORE THE  
STATE CORPORATION COMMISSION OF VIRGINIA  
CASE NO. PUR-2019-00191**

1    **Q.    Please state your name, business address, position, and place of employment.**

2    A.    My name is Barry A. Baker and I am a Vice-President and Regional Practice Lead for the  
3           Impact Assessment & Permitting Practice at AECOM. I also serve as a Technical Lead in  
4           the Transmission & Distribution Practice for AECOM. My business address is 625 West  
5           Ridge Pike, Suite E-100, Conshohocken, PA 19428. A statement of my qualifications  
6           and background is provided as Appendix A.

7    **Q.    What professional experience does AECOM have with the routing of linear energy**  
8           **transportation facilities?**

9    A.    AECOM has assisted a variety of clients in several mid-Atlantic and northeastern states  
10          in the routing and feasibility assessments of linear energy transportation projects.  
11          AECOM's role has been in assisting these clients in identifying, evaluating, and selecting  
12          linear energy routes with specific focus on high-voltage electric transmission lines. We  
13          have developed a comprehensive approach to the routing assessment and route selection  
14          process that is based on the identification, mapping, and comparative evaluation of  
15          routing constraints and opportunities within defined study areas. The process uses  
16          Geographic Information System ("GIS") spatial and dimensional analysis in conjunction  
17          with the most recent publicly available data layers, current aerial photography resources,

1 and project specific data to aid in identification, evaluation, and selection of viable  
2 transmission line routes.

3 In addition to Dominion Energy Virginia, AECOM has assisted clients including  
4 American Electric Power, FirstEnergy, PPL Electric Utilities Corporation, Exelon  
5 company utilities (including, PECO, BGE and ACE), and the PSE&G. AECOM has also  
6 assisted in the development of many Federal Energy Regulatory Commission ("FERC")  
7 pipeline projects through the identification and evaluation of linear energy routes to  
8 support federal National Environmental Policy Act ("NEPA") evaluations.

9 **Q. What were you asked to do in connection with this case?**

10 A. In order to provide service requested by a retail electric service customer (the  
11 "Customer"), to maintain reliable service for the overall growth in the area, and to  
12 comply with mandatory North American Electric Reliability Corporation ("NERC")  
13 Reliability Standards, Virginia Electric and Power Company ("Dominion Energy  
14 Virginia" or the "Company") proposes, in Loudoun County, Virginia, to construct: (i) a  
15 new 230 kV switching station on land owned by the Customer ("Evergreen Mills  
16 Switching Station"); (ii) a new approximately 0.6-mile 230 kV double circuit loop of the  
17 Company's existing 230 kV Brambleton-Yardley Ridge Line #2172 on new right-of-way,  
18 supported by seven structures, from a tap point along those lines (the "Evergreen Mills  
19 Junction") to Evergreen Mills Switching Station (the "#2172 Loop"); and (iii) a new  
20 approximately 0.6-mile 230 kV double circuit loop of the Company's existing 230 kV  
21 Brambleton-Poland Road Line #2183 on new right-of-way, supported by nine structures,  
22 from Evergreen Mills Junction to Evergreen Mills Switching Station (the "#2183 Loop").

The Evergreen Mills Switching Station, the #2172 Loop, and the #2183 Loop are collectively referred to as the "Project."

AECOM was engaged on behalf of the Company to assist it in the identification and evaluation of route alternatives to resolve the identified electrical need that would meet the applicable criteria of Virginia law and the Company's operating needs. Specifically, AECOM prepared the Environmental Routing Study to develop alternative routes for the proposed Project; identified social, environmental, and engineering constraints along each alternative route; and analyzed potential impacts resulting from the construction, operation, and maintenance of the alternative routes.

The purpose of my testimony is to introduce and sponsor the Environmental Routing Study, which is included in part of the Application filed by the Company in this proceeding. I also co-sponsor Sections II.A.1, II.A.2, II.A.4, II.A.6 to II.A.8, II.A.9, II.A.11, and III of the Appendix with Company Witness Laura P. Meadows. Lastly, I am co-sponsoring with Company Witness Laura P. Meadows with the DEQ Supplement.

**Q. Does this conclude your pre-filed direct testimony?**

**A.** Yes, it does.

**BACKGROUND AND QUALIFICATIONS  
OF  
BARRY A. BAKER**

Barry A. Baker received a Bachelor of Science with Honors degree in Environmental Science from the University of East Anglia in Norwich, England in 1996. A key focus of his studies was on the use of GIS and computer applications for environmental problem solving.

Mr. Baker has been employed by AECOM for the last fourteen years and has been responsible for siting studies both as a Project Manager and as a technical lead for transmission line siting as well as new power development throughout the mid-Atlantic and northeast regions of the U.S. He has completed work in VA, PA, NJ, MD, NY, CT, OH, IL, DE, and MA. Mr. Baker also co-leads the Regional Impact Assessment & Permitting Practice where he is responsible for a team of biologists, ecologists, and GIS specialists. Additionally, Mr. Baker is an AECOM Technical Lead designated for supporting and developing major transmission opportunities on the U.S. East Coast with a focus in the mid-Atlantic and northeast. Prior to joining AECOM, he held GIS and environmental development positions for other environmental and government consultants.

Mr. Baker has previously testified before the Pennsylvania Public Utility Commission, New Jersey Board of Public Utilities, and Maryland Public Service Commission.