US Army Corps of Engineers Norfolk District Regulatory Office Received by: RLS Date: July 6, 2015

RESPONSES TO ACOE QUESTIONS RECEIVED JUNE 25, 2015

1. Page 2.1, Paragraph 1.0: "The project is the minimum necessary to address the immediate reliability issues directly resulting from the loss of generation." This project is providing 5,000MW of power to NHRLA, where the minimum required power is 2,000MW.

Response: The proposed Surry-Skiffes Creek-Whealton 500 kV/230 kV project ("Project") is the minimum necessary to resolve all identified violations of mandatory North American Reliability Corporation ("NERC") Reliability Standards ("NERC Reliability Violations" or "Reliability Violations") resulting directly from the loss of generation in the North Hampton Roads Load Area ("NHRLA"). While the proposed 500 kV Line will have a thermal capacity of around 5,000 MW, its injection into the NHRLA is limited by the two 500-230 kV Transformers which will be located at the proposed Skiffes Creek Switching Station. These transformers are thermally limited to approximately 1,000 MW, each for a total injection capability of approximately 2,000 MW. In a power system, actual power flow is determined by the actual impedance of the system elements and not the transfer capability of a transmission line or transformer. This power flow may actually result in a transmission element being thermally overloaded or under/over voltage conditions. The 500 kV system is the lowest impedance portion of the interconnected transmission system located throughout Dominion's service territory and, therefore, is most efficient at transferring power from generation resources to major load centers like the NHRLA where it is needed. An apparent minimum power deficiency in the NHRLA (of 2000 MW) does not directly relate to the minimum thermal capability of transmission infrastructure that is required to resolve NERC Reliability deficiencies. Actual power flow studies are required to determine the minimum amount of transmission infrastructure needed to resolve NERC thermal and voltage reliability criteria violations. This is why when Table 3.1 "Additional Analysis Summary Results" is analyzed it is apparent that the two 500 kV Solutions (Columns A & B) are the most efficient solutions for resolving the identified NERC reliability criteria violations in the NHRLA.

2. Page 2.1, Second paragraph: "Any alternatives considered to be viable ... must also be able to be feasibly constructed in this timeframe..." The preferred alternative cannot be constructed by April 2016.

Response: The inability to begin construction has made it impossible for the proposed facilities to be completed and in service by the initial compliance date of April 16, 2015, for the U.S. Environmental Protection Agency's ("EPA") Mercury and Air Toxics Standards ("MATS") regulation. As permitted by federal environmental regulations, the Company has obtained from the Virginia Department of Environmental Quality a one-year extension of the April 16, 2015 deadline for Yorktown Units 1 and 2 to comply with the MATS regulation that will be achieved by retiring the units, which drove the original June 1, 2015 need date for the new transmission facilities. The Company also will seek from the EPA an administrative order under EPA's Administrative Order Policy for the MATS rule,¹ which, if granted, would provide an additional

¹ The Environmental Protection Agency's Enforcement Response Policy For Use of Clean Air Act Section 113(a) Administrative Orders In Relation To Electric Reliability and the Mercury and Air Toxics Standard. EPA

one-year waiver of non-compliance with the regulations that drive those retirements and further extend the need date for the Project to June 1, 2017.² Therefore, June 1, 2017, is the current, relevant compliance date for the Project. No other alternative can be completed by June 2017, nor solve all of the NERC Reliability Violations.

3. Figure 2-1: This figure indicates a June 2015 of the preferred alternative being in service.

Response: See the Company's Response to ACOE Comment No. 2 above.

4. Page 3.13, Third paragraph: If an alternative is not cost effective, does it then not meet purpose and need? Why does cost determine purpose and need?

Response: The Company's statement at the quoted section states, "Retrofitting the Yorktown Units is not cost-effective and does not meet the purpose and need of the project." Costeffectiveness and ability to meet the need (and thereby the purpose) of the Project are two different, but related concepts. In other words, cost alone does not determine purpose and need as seems to be the premise of the question. Ability for an alternative to meet the identified need requires the alternative, in this circumstance, to fully resolve the identified NERC Reliability Violations and be constructed in time to address the Reliability Violations. Cost-effectiveness is a concept that, as a prerequisite, requires the alternative to solve the need and then do so in a manner that is at a reasonable cost. The Company examined the ability to retrofit Yorktown Units 1 and 2, and it was not a cost-effective solution because it was more than four times the cost of the Project and even with retrofits of Yorktown Units 1 and 2, the Project would still be needed to address NERC Reliability Violations in 2019. The Company also examined the ability to retrofit Yorktown Unit 3 and found it not to be a cost-effective solution, it does not solve the need because it is not able to quickly operate as a reliability solution because it is fueled by heavy oil, and it is one of the most expensive units of the Company's fleet to operate. See the SCC Rebuttal Testimony of Kelly (Public and Extraordinarily Sensitive Volume I of VI, filed March 14, 2013). These conclusions were also validated by the SCC's independent consultant. See the SCC Testimony of John W. Chiles of GDS Associates, Inc. (Public, Confidential and Extraordinarily Sensitive filed January 11, 2013).

Memorandum from Cynthia Giles, Assistant Administrator of the Office of Enforcement and Compliance Assurance to EPA Regional Administrators, Regional Counsel, Regional Enforcement Directors and Regional Air Division Directors (December 16, 2011).

² The NERC-power flow studies used by PJM and the Company to determine compliance with the NERC transmission planning reliability standards utilize an annual planning period beginning June 1, the start of the Summer peak season. Accordingly, the effects of the Yorktown retirements after June 1 of a given year begin to show up in the studies for the planning year that begins the following June 1 and successive planning years. For example, retirement by April 17, 2017, drives a need date of June 1, 2017, for compliance with NERC Reliability Standards.

5. Page 3.13, Fourth paragraph: "there is currently no sufficient gas supply..." Is there a gas line upgrade project proposed for this area?

Response: No. Currently there are no natural gas pipeline projects proposed or under development that would increase the availability of gas supply to the Yorktown generating facility. The newly proposed interstate Atlantic Coast Pipeline (ACP) will terminate over 30 miles away from the Yorktown area on the southern side of the James River with the earliest commercial operations date of November 2018.

6. Table 3-1 and throughout the document: There are many cost numbers on the table and throughout the document. How were the numbers generated? What assumptions apply? Are the estimates all created in the same manner so that it is reasonable to compare them?

Response: The cost figures were created by the generation and transmission planning groups at the Company. The estimates for each type of facilities (generation or transmission) were all created in the same manner so that they can be compared on an equal basis with other facilities of the same type. The Integrated Resource Plan (IRP) the Company filed with the Virginia SCC on September 1, 2011, contains the assumptions used to estimate the cost figures for generation. The IRP incorporated consistent assumptions regarding fuel prices, energy prices, costs associated with retrofits and repowering, pending environmental regulations, cost of existing equipment, fuel availability and operating costs. The estimates for generation alternatives to the proposed Project were provided by the SCC Rebuttal Testimony of Glenn Kelly (Public and Extraordinarily Sensitive filed March 14, 2013). The estimates for transmission facilities were provided in the Appendix to the Company's SCC Application and Direct Testimonies of James Cox (adopted by Mark Allen) and Anthony Spears (adopted by Robert J. Garrett) filed June 11, 2012 and the SCC Rebuttal Testimonies of Mark Allen and Walter Thomasson) filed March 14, 2013.

7. Page 3.16, Paragraph 3.2.3: "over eighteen different potential solutions were evaluated..." What were the other alternatives which were considered, but not included in this alternative analysis?

Response: The Company made a presentation to the Consulting Parties on October 7, 2014, which was titled "Alternative Analysis Meeting" and this presentation is available on the ACOE website along with the Company's Skiffes Creek website. Section Two of this presentation had a listing of the eighteen alternatives which were included in the Company's Application with the Virginia State Corporation Commission ("SCC") and considered, but rejected, by the SCC before approving the Project. See Attachment ACOE Question 7.

The SCC also reviewed and rejected other alternatives presented during the course of the certificate of public convenience and necessity proceeding. See November 26, 2013 SCC Order in Case No. PUE-2012-00029, pp. 23-45 (SCC also reviewed and rejected solar, offshore wind, liquefied natural gas and demand-side alternatives).

8. *Page 3.16, Third paragraph: "...able to resolve NERC violations in the short term." What is the timeframe for "short term"?*

Response: The Company's response at the quoted section states, "Of the alternatives considered, only the Chickahominy-Skiffes Creek 500 kV project is able to resolve NERC violations in the short term." The reference to "short term" in this sentence means the initial compliance date for the EPA MATS regulation which is when the NERC Reliability Violations would first occur. At the time the SCC Application was filed, this date was June 1, 2015. The point of the statement was to illustrate that no other alternative listed on page 3.16 could even resolve the Reliability Violations in the short-term, let alone the continuation of those violations into the future. This was demonstrated by power flow studies by the Company, and verified by the SCC's independent consultant, for the year beginning June 1, 2012.

9. Page 3.19, Paragraph 3.2.3.3: "... but due to numerous physical, electrical, routing and siting and environmental constraints..." Briefly list some of the constraints.

Response: See the SCC transcript at pp. 1680-1685 (Elizabeth Harper live testimony) and Exhibit 119 (Whittier Variations to Alternative C – Exhibit 71) from the SCC CPCN proceeding. In this testimony, Company Witness Harper details the physical, routing, siting and environmental constraints of expanding the right-of-way for an additional 230 kV facility along the same corridor that would be used for a Surry-Whealton 500 kV alternative. In sum, the aerial maps included in Exhibit 119 show the residential, historic districts and expanses of wetlands that would need to be crossed to expand the right-of-way for a 230 kV or 500 kV alternative on the south side of the James River, and the extensive portion of such a line in the City of Newport News where the degree of existing development would require such a line to be installed underground (underground installation of a 500 kV line is not feasible, as discussed elsewhere). Regarding electrical constraints, (1) there is no site in the Whealton area large enough for the installation of a 500-230 kV Switching Station, plus the transmission system in this area is not sufficient to deal with the injection of bulk power from the 500 kV system into the 230 kV system; and (2) the construction of a 500 kV Line from Surry-Whealton would impact the ability to support future load growth in the South Hampton Roads Load Area ("SHRLA") and any potential generation expansion plans at the Surry Power Station. See also the Company's Response to ACOE Comment No. 10 and No. 11 below.

10. Page 3.19, Paragraph 3.2.3.3: "...would physically block the ability to construct an additional 500kV line from Surry." Please describe the situation in more detail. With two available 500kV line getaways, why would using one for the Surry-Whealton block the remaining one? And why would using one for the Surry-Skiffes Creek not block the other one?

Response: The two available getaways make reference to the 500 kV terminals that are available at the Surry 500 kV Switching Station. The physical configuration of the Surry switchyard permits the Company to route only one additional 500 kV line to the southeast from the Surry 500 kV Switching Station. The construction of a Surry-Whealton 500 kV line would occupy this corridor and eliminate the option of extending another 500 kV Line from the Surry

500 kV Switching Station to the Southampton Roads Load Area. The Surry-Skiffes Creek Line preserves this option because the line exits the Surry 500 kV Switching Station to the north, leaving the southeast corridor option still available for future needs.

11. Page 3.19, Paragraph 3.2.3.3: If a 500kV line getaway was blocked, how would that "...undermine the operational capacity of the Surry Nuclear Power Plant"? It might impact Surry to respond to future growth, but how does blocking the line getaway undermine the operational capacity?

Response: This comment is referencing the ability to add additional generation at the Surry Power Station Site. If additional generation capacity were needed at Surry Power Station sometime in the future it would be necessary to add additional transmission capacity to support the transfer of generation to both the NHRLA and the Company's SHRLA since both areas are generation deficient. As stated in the response to ACOE Comment No. 10 above, however, construction of a 500 kV Surry-Whealton line now would preclude a second line to the southeast for that purpose.

12. Page 3.20, First paragraph: "It is unlikely that the new ROW could be obtained through Huntington Park..." How was it determined to be "unlikely? Which organization rejected the idea?

Response: The word "unlikely" refers to the inability of the Company to condemn public property; the Company does not have eminent domain over public lands. Without eminent domain, the Company would have to rely upon the City of Newport News agreeing to work with the Company to grant an additional easement. The Stantec synopsis of the alternatives analysis is reflective of questioning during the SCC evidentiary hearing on April 18, 2014, as reflected on pages 1682 and 1683 of the Official Hearing Transcript as well as the information contained within the Appendix and NRG Routing Report.

13. Page 3.20, Fourth paragraph: "... the potential to expand a 14.3 mile section of this existing corridor..." What is this expansion for? Is the 14.3 mile section the only portion of the existing ROW which would have multiple transmission lines?

Response: As discussed in paragraph five on page 3.20, this 14.3 mile section of ROW between Chickahominy and Lanexa Switching Station is fully occupied with four transmission lines (3-230 kV & 1-115 kV). Therefore, an expansion of this ROW would be needed to accommodate another transmission line. This expansion of ROW would have more significant impacts to forested lands, homes and wetlands than the Project, which include the taking of residences and impacts to wetlands and forested lands that would need to be cleared. *See* SCC Direct Testimony of Elizabeth Harper filed June 11, 2012, p. 6-7 and 10-11. This right-of-way is not the only right-of-way on the Company's transmission system which has multiple transmission lines located in it, however, it is the only right-of-way that has the potential to initiate cascading outages.

14. Page 3.20, Fifth paragraph: "As this alternative is not electrically viable and does not resolve NERC reliability criteria..." I understand that it does not resolve NERC reliability criteria as it would have multiple lines in the same right of way, but why is it not electrically viable.

Response: As discussed in the Company's Response to ACOE Comment No. 13 herein, and previous documents filed with the ACOE, the use of this route (Chickahominy-Lanexa 500 kV) would have presented extensive routing impacts. In addition, adding an additional line in this corridor would not resolve all of the NERC Reliability Violations, including those addressing failure of multiple tower lines in a common right-of-way that could produce cascading outages, making this alternative not electrically viable, electrical viability and failure to resolve Reliability Violations are terms used interchangeably in this context.

15. Page 3.21, Second paragraph: "Even with the double circuit 230kV alternative, additional projects would be needed to maintain long-term reliability." I understand that the double 230kV lines would provide 2,000MW. Is 2,000MW not the needed power and therefore meet purpose and need to prevent cascading outages?

Response: The purpose of the project is to maintain compliance with federally mandated NERC Reliability Standards for transmission planning. Every potential electrical infrastructure solution will have different impacts on the transmission system in the NHRLA. Therefore, a given potential solution may require additional transmission projects in the NHRLA to resolve all the identified NERC Reliability Violations. Although a double circuit 230 kV alternative emanating from Chickahominy to the Skiffes Creek Site via the unoccupied right-of-way in Charles City and James City Counties would theoretically inject 2000 MW of power into the transmission system in the vicinity of Skiffes Creek, it may not resolve all the identified Reliability Violations and may actually create additional Reliability Violations. *See* Response to ACOE Comment No. 1 above. This can be further emphasized by reviewing Table 3.1 and looking at row 3 ("If 'NO' in Line 1, what is the cost of additional transmission facilities to fully resolve 2015 NERC Reliability Violations") and row 7 ("Additional COST to fully resolve 2021 NERC Reliability Violations"). Rows 3 and 7 show the additional cost for additional transmission facilities needed in order to address all the Reliability Violations solved by the Project in order for a particular alternative to be made electrically equivalent to the Project.

16. Page 3.22, Fourth paragraph: "...none of which could be completed prior to the MATS deadline." None of the alternatives, even the preferred, can meet the construction MATS deadline date. Be consistent with the comparison of costs and time for each alternative. Instead of simply saying "...none of which could be completed prior to the MATS deadline", list the required projects and include the construction durations.

Response: Table 3.1 lists the nine alternatives that the Hearing Examiner and parties to the proceeding in the SCC CPCN proceeding wanted explored in greater detail to determine whether any potential alternative solved the NERC Reliability Violations, could be constructed in time to

address the need and the relative costs of each alternative. As described in the Company's Response to ACOE Comment No. 6, the costs associated with these alternatives were determined at the same point in time and in the same manner and therefore can be compared on an "apples to apples" basis. Row 9 lists the projected in-service date for each alternative based on the premise that the Company would have been able to receive all necessary regulatory approvals required by the fall of 2013. However, since more than two years have passed since Table 3-1 was created, the dates for all the alternatives would likewise have to move out in time, if any alternative to the Project were to be constructed. However, the relative relationships would remain the same. For example, the Stand Alone Generation Option (Column I) could not be completed until 2016 when studied in 2013 (i.e., 3 years later). If studied today, the Stand Alone Generation Option would have a completion date of approximately 2018, again approximately 3 years later. 2018 is one-year past the latest date for MATS compliance (i.e., April 2017), and therefore still does not address the need to resolve Reliability Violations based on the Yorktown unit retirements caused by the MATS regulations. Any transmission solution other than the Project would have to go back through the approval processes of PJM and the SCC, as well as any environmental regulators having jurisdiction. Any generation solution would have to go through the approval processes of the SCC and environmental regulators having jurisdiction.

17. Page 3.23, First paragraph: "...and would likely result in additional environmental..." Would it result in additional environmental impacts or not?

This reference is related to a single circuit underground 230 kV line. An underground single circuit 230 kV line alone does not resolve the Reliability Violations. See Table 3-1 (Alternative A, Column C). This alternative would need approximately \$214.8 million of additional transmission facilities in order to resolve the 2015 NERC Reliability Violations. The reference to "additional environmental impacts due to the number and scope of projects required" includes the \$214.8 million of additional transmission facilities for this alternative and this additional amount of transmission facilities would result in additional environmental impacts.

18. *Page 3.23, Paragraph 3.3.1.1: "...alternative created more deficiencies than it resolved." What are some of the created deficiencies?*

Response: Power flow studies showed that a single circuit 230 kV Line from Surry –Skiffes Creek, which was proposed to PJM by LS Power, would not only overload the 500-115 kV Transformer at Great Bridge and cause a voltage collapse in the SHRLA, among other violations, but the new 230 kV Line itself would thermally overload. In addition, the proposed developer voluntarily withdrew this alternative from future consideration.

19. Page 3.23, Fourth paragraph: "However, this alternative was shown to be ineffective as the PAR device and line overloaded and also caused additional facilities to overload." What is this sentence trying to say? What additional facilities?

Response: This proposed solution, suggested to PJM by a developer, LS Power, did not resolve the identified NERC Reliability Violations. The developer proposed an underground 230 kV Line from Surry – Skiffes Creek with an associated Phase Angle Regulator ("PAR") intended to reduce the loading on this proposed line. However, power flow studies showed that the PAR would thermally overload for contingency conditions, and the existing 230 kV Line from Lanexa-Waller also would thermally overload. Since the developer's proposed project did not resolve all the identified NERC Reliability Violations, and was more expensive than the proposed Project, PJM did not recommend it as a solution for identified NERC Reliability Violations.

20. Page 3.24, First paragraph: "It is unclear whether these areas could be avoided or if any adverse effects to these resources would occur..." Before making a determination on this alternative, should these questions be resolved?

Response: No, there is no reason to resolve whether underwater anomalies could be avoided by a potential 500 kV Underground Line from Surry – Skiffes Creek Switching Station. Underground 500 kV Lines are untested, highly experimental and not technically feasible. The SCC made such a determination based on the evidence in that proceeding. *See* November 26, 2013 SCC Order in Case No. PUE-2012-00029, p 33; and the Company's Response to No. 21 herein. *See also* the SCC Rebuttal Testimony of Walter R. Thomasson, III (Public Volume I of VI, filed on March 14, 2013) and the SCC transcript at pp. 1556-1558 (Walter Thomasson live testimony); and the SCC Rebuttal Testimony of Doug Lake (Public Volume II of IV, filed on March 14, 2013) and the SCC transcript at pp. 1763-1766 (Doug Lake live testimony).

21. Page 3.24, Second paragraph: "The uncertainty in technology and reliability of an underground 500kV line precludes it from being a practicable alternative to providing reliable..." The fact that there is uncertainty alone does not preclude it from being a practicable alternative.

Dominion is proud of their innovative long term storage solution for nuclear waste and routinely showcases the technology to other entities, here is another opportunity to construct a showcase project

Response: Constructing a 500 kV line underwater at the distances needed to cross the James River and at the capacity needed to solve the NERC Reliability Violations has never been done before and would carry too much risk to be a project supported by the Company. Although the Company does seek opportunities to be innovative, these decisions are made in situations where the benefit of being innovative outweighs risks to reliability and public safety. This 500 kV solution is too important to the reliability of the North Hampton Roads Load Area to serve as an experiment that would be the first-of-its-kind built in the world. The risk to reliability of service to customers is too great to rely on an unreliable and untested solution.

22. Page 3.24, Third paragraph: In the last sentence many factors are cited to determine the project is not practicable (without specific examples), but in the second sentence says that "DC has become the favorable method for transmitting large amounts of power..." What makes this HVDC project different from the other projects which make HVDC a preferred method for the transmission of power? Routing, land acquisition, reliability, cost, etc. are all factors which would be part of any HVDC project.

Response: Traditionally HVDC Projects are primarily driven by economics, meaning they are chosen over other alternatives because they are more economic. In this situation, the Project is more economic than an HVDC project. The use of HVDC allows for the transportation of large amounts of power over longer distances than conventional AC technology. This has also been the same case in generation resource requirements for utility systems where the economics of building a more expensive HVDC System are justified, since they avoid the costs associated with building generation in a load area. As discussed on page 3-26, an HVDC underground crossing is estimated to cost over a \$1 billion, compared to the approximately \$60 million for the proposed AC overhead crossing of the James River. *See also* Response to ACOE Comment No. 23.

23. Page 3.24, Third paragraph (last sentence): List specific examples for siting constraints, land acquisition requirements, reliability concerns, increased environmental and cultural impacts.

Response: Dominion, through its routing consultant (NRG), identified and mapped existing land use, environmental, visual, and cultural features within the vicinity of the proposed project area. Extensive data were collected, mapped, and plotted on U.S. Geological Survey (USGS) 7.5-minute series topographic quadrangles and recent (2011) high-resolution digital aerial photography using ArcGIS software (v. 10). Information was obtained from publicly available Geographic Information System (GIS) databases, agency websites and databases, published documents such as county or municipal land use plans, and communication with agency staff, stakeholders, and elected officials. In those cases where GIS data were not available for a particular environmental resource or other feature, NRG obtained the best available hard-copy or on-line map and hand digitized the information needed to complete the study.

Based on this existing baseline of data, NRG performed in its Environmental Routing Study (SCC Application Volume III of VI filed June 11, 2012) a comparative evaluation of the impacts of each of the alternatives with respect to:

- Land use Land ownership (public versus private), land cover (forest, agricultural, commercial, residential), recreational areas, zoning, conservation lands, and planned residential developments;
- Natural resources Wetlands, waterbodies, protected and managed lands, federal- and state-listed species, habitats, and bald eagle populations;
- Airports Aviation and airspace;
- Navigation shipping channels and navigation clearances;
- Aesthetics and visual landscape;

- Cultural resources archaeological and historic architecture, battlefields, Section 106 issues; and
- Mining resources.

Installation of an underground 500 kV line would be an experiment. The Company is not aware of any applications of 500 kV underground that have the thermal capacity needed for this Project let alone any which has been constructed underwater. Reliability concerns have also prompted owners of smaller capacity 500 kV underground lines to try to convert these same facilities to an equivalent overhead solution (i.e., the Hoover Dam). Voltage control of any underground line, let alone a 500 kV underground line, is extremely difficult in real time operations. Because one terminus of this line is a nuclear power station, if system voltages become unmanageable it would be necessary to remove the underground line from service to avoid impacting the operation of the power station. This would defeat the purpose of building the line since it could not remain in-service. As defects become known, it may be necessary to remove the first generation of underground cable and replace it with a new version, resulting in the same environmental and construction impacts multiple times.

24. Page 3.25, Third paragraph: "...does not enjoy either the presence of local excess generation..." Is there spare capacity at the Surry Nuclear Power Plant to support the NHRLA?

Response: The Company operates a portfolio of generation resources to meet its customer demand obligations. The Surry–Skiffes Creek 500 kV line will interconnect with the Company's 500 kV system at the Surry 500 kV Switching Station. The 500 kV system transmits power from a number of generating units and provides access to the portion of the Company's transmission system that transports bulk power into major load centers in the most economical and efficient manner. Surry Nuclear Power Station is just one of those generating resources and is not dedicated to serving one specific geographic area. Notwithstanding, both the NHRLA and the SHRLA are generation deficient areas, like most large metropolitan areas, and are required to import 86% and 52% of their power requirements under normal operating conditions (Summer 2015).

25. Page 3.25, Third paragraph: "...and lead to rolling blackouts in the NHRLA region." Is this a certainty? Describe the required mitigation.

Response: Absent a 500 kV system improvement in the NHRLA, the need to remain compliant with NERC Reliability Standards will require PJM/Dominion Operators to shed load in the NHRLA under both pre- and post-contingency conditions.

In order to ensure reliability for the Peninsula while the Surry-Skiffes Creek Line is being constructed in anticipation of the Yorktown Unit 1 and 2 retirements, the Company is conducting a rigorous inspection and maintenance program ("Inspection Program"). The focus of the Inspection Program is transmission lines and stations for assets that directly serve the Peninsula. This includes, but is not limited to, the lines and stations from Chickahominy east to Newport News, as well as lines from Surry and Chuckatuck that feed into the southern end of the Peninsula. The Inspection Program focuses on the human performance factor that will be

emphasized consistently over the work period to ensure the Electric Transmission and Station workforce involved in supporting the assets on the Peninsula are cognizant of the ongoing construction. The Inspection Program will also consist of a complete evaluation of all abnormal equipment logs that require equipment maintenance or replacement in order to ensure that all equipment is in-service, and infrared reviews of stations and transmission lines prior to and during long critical outages to identify any weak links in the system that need attention to prevent unplanned outage events. More frequent aerial and foot patrols of transmission lines and stations will also be incorporated into the Inspection Program. Lastly, the outages required to address any outstanding equipment issues will be scheduled around the necessary planned outages to support the construction of the Project to limit the overall system exposure.

If the Project is not in-service by the time that Yorktown Units 1 and 2 must retire to be in compliance with effective environmental regulations, then the plan for maintaining system reliability for the Peninsula will include careful planning of transmission outages and minimum work on assets on the Peninsula while the planned outages to support the construction of the Project are underway. Under some unplanned event scenarios, the reliability plan must include shedding of load in the amounts necessary to reduce stress on the system below critical demand levels. The shedding of load could occur in some instances at system load levels well below peak demand levels, on the order of 16,000 MW or higher. The exact system load level, load shed amounts and locations will be dependent on the circumstances that exist on the system at the time. This type of extended exposure to system stress that could require load shedding at moderate load levels is highly unusual.

26. Page 3.26, First paragraph: "...disturbance on the BASF site poses a risk of release of contamination into adjacent surface waters and is not desirable..." Can the risks of contamination be mitigated?

Response: Although the risk of release of contamination into adjacent surface waters could possibly be mitigated, this option is not desirable because the size of the disturbance is 10 to 20 acres and the risk of release of contamination is not eliminated. Dominion, EPA, VA DEQ, and the Army Corps met on May 21, 2014 to discuss the ongoing RCRA Corrective action on BASF property. EPA was not supportive of a Dominion project alternative that crossed BASF remediation areas, and thus an alternative transmission route on the BASF property was designed.

27. Page 3.26, Paragraph 3.3.3.4: "...the project cannot be constructed prior to the shutdown of Yorktown Units 1 and 2..." If the units are to be shutdown by April 2016, none of the alternatives can be constructed in this timeframe.

Response: See the Response to ACOE Comment No. 2 above.

28. Page 4.27, First sentence: "...does not meet the project purpose and need of resolving the NERC violation criteria..." There was no discussion of not meeting NERC criteria. How does this solution not meet NERC criteria?

Response: Section 3.3.3.4 Conclusion, which begins on page 4.26 and continues to page 4.27, summarizes the discussion of HVDC as a potential solution to resolve the identified NERC Reliability Violations in the NHRLA. The comment "does not meet the project purpose and need of resolving the NERC violation criteria," refers to the fact that an HVDC Solution cannot obtain the necessary regulatory approvals and permits and be constructed in-time to resolve the identified NERC Reliability Violations. Therefore, it is not a potential solution to maintaining reliable electric service in the NHRLA.

29. There are many references to not meeting NERC criteria in the analysis. For each alternative, include the specific NERC criteria which is not met and provide the NERC criteria as a reference if possible.

Response: *See* Table 3-1 "Additional Alternative Analysis Summary Results." Each alternative listed there was analyzed in such a manner to determine the scope of work that would be required to resolve all of the NERC Reliability Violations and the earliest date each alternative could have been completed based on parameters known in March of 2013. Rows 3 and 7 list the additional cost associated with each alternative required to make that alternative NERC compliant in 2015 and 2021. The rebuttal testimonies of Peter Nedwick, Mark Allen and Walter Thomasson discuss the alternatives and the additional construction, cost and time to be electrically equivalent to the Project. *Also see* Volumes 3, 4, 5, 6 of the Company's Rebuttal Testimony filed on March 13, 2013. These volumes contain the study results which identified the NERC Criteria Violations related to all the alternatives. These cost and associated projects were independently verified by SCC Staff Consultant John Chiles.

Attachment re_7 ACOE.pdf

Surry - Skiffes Creek 500kV Line Alternatives

Does not include the Skiffes - Whealton 230kv line nor the Skiffes Crees Switch station

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	Route Variations evaulated	NERC Criteria Resolved	Construction Timeframe	NEW SCC Application	Miles New ROW	ROW Width	Homes Acquired	Load Shedding	Potential for Frack Outs	Comments
Surry to Skiffes Creek 500 kV Overhead	15	Yes	15 months	No	8	150 feet	0	No	No	Approved by PJM and SCC
Chickahominy to Skiffes Creek 500 kV Overhead	1	Yes	15 months	Yes	0	150 feet	0	No	No	Significantly greater impacts to evironment and residents (See SCC RRouting Study)
Surry to Skiffes Creek Double Circuit 230 kV Overhead	1	No	15 months	Yes	8	120 feet	0	No	No	Not as robust a solution at 500kV
Chickahominy to Skiffes Creek Double Circuit 230 kV Overhead	1	No	15 months	Yes	0	150 feet	0	No	No	Not as robust a solution at 500kV
Chickahominy to Skiffes Creek 500 kV Overhead (Lanexa ROW)	2	No	NA	Yes	14.3	100 feet	18	No	No	Expand ROW between Chickahominy - Lanexa
Surry to Skiffes Creek Double Circuit 230 kV Underground (Rebuttal Alternative B)	1	No	60 Months	No	8	400 Feet	0	Yes	Yes	Estimated that is would require 36,000 CU Yards of river bottom to be removed
Surry to Skiffes Creek 500 kV Underground	1	No	NA	NA	NA	0	0	NA	NA	Not constructable
Surry to Skiffes Creek Single Circuit 230 kV UG (Rebuttal Alternative A)	1	No	60 Months	No	8	400 Feet	0	Yes	Yes	Estimated that 36,000 CU Yards of river bottom would need to be removed
James River Crossing Rebuild and Reconfigure (Rebuttal Alternative C -Whttier)	1	No	120 Months	Yes	4.5	100 feet	0	Yes	No	
Surry to Skiffes Creek Single Circuit 230 kV UG plus generation (Rebuttal Alternative A1)	1	No	60 Months	No	8	240	0	Yes	Yes	Estimated that 18,000 CU Yards of river bottom would need to be removed and requires environmental control for continued oil operation
Surry to Skiffes Creek Double Circuit 230 kV UG plus genration (Rebuttal Alternative B1)	1	No	60 Months	No	8	240	0	Yes	Yes	Estimated that 36,000 CU Yards of river bottom removed and requires environmental control for continued oil operation
James River Crossing Rebuild and Reconfigure plus generation (Rebuttal Alternative C -Whttier)	1	No	120 Month	s Yes	4.5	100 feet	0	Yes	No	Requires environmental controls to continue coal operations
Whittier Hybrid (Rebuttal Hearing) new 15.4 mile Chuckatuk - Newport News 230 kV Line	1	No	Unknown	Yes	15.4	Unknown	Yes	Yes	No	Surry unstable for this configuration

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Surry - Skiffes Creek 500kV Line Alternatives

								Does not inclu	ude the Skiffes -	Whealton 230kv line nor the Skiffes Crees Switch station
	Route Variations evaulated	NERC Criteria Resolved	Construction Timeframe	NEW SCC Application	Miles New ROW	ROW Width	Homes Acquired	Load Shedding	Potential for Frack Outs	Comments
James River Crossing with 500kv line (Rebuttal Alternative C -Whttier)	1	No	NA	NA	NA	0	0	NA	NA	Not constructable
Total	29									
Surry 230 kV Underground w/PAR (LS Power)	-	No	Unknown	Yes	8 plus	Unknown	Unknown	Unknown	Unknown	
Surry 230 kV Underground w/work at Great Bridge (LS Power)	-	No	Unknown	Yes	8 plus	Unknown	Unknown	Unknown	Unknown	
Existing Generation at Yorktown, with or without transmission upgrades	N/A	Yes	Unknown	No	0	0	0	0	0	Thoroughly analyzed in 2012 IRP, would require nvironmental controls to continue coal operations at Yorktown.
New Generation at Yorktown (New Fuel Source and/or Construction)	N/A	No	Unknown	Yes	0	1	2	3	4	Natural gassupply not available before 2018 Off-shore wind no active developments off of the VA coast; proposed project with ISD 8-31-17 withdrawn from PJM queue on 8-16-11 LNG Yorktown port too shallow to accept LNG tankers; significant permitting hurdle

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APPLICATION OF VIRGINIA ELECTRIC AND POWER COMPANY Commonwealth of Virginia on 04/18/2013

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1	up, and those sediments could be redistributed
2	downriver.
3	So it's not so there is impact to
4	from construction of an underground line across
5	the James River.
6	Q. Did you also examine Mr. Whittier's
7	variation that he presented in his Exhibit 71?
8	A. Yes.
9	MS. LINK: Your Honor, we have an
10	exhibit to hand out.
11	Your Honor, we've just handed out a
12	series of maps. It's entitled, "Whittier
13	Variations to Alternative C, Exhibit 71." May
14	we have an exhibit number for this?
15	HEARING EXAMINER SKIRPAN: I'll mark
16	this as Exhibit Number 119.
17	(Exhibit Number 119 is placed in the
18	record.)
19	BY MS. LINK:
20	Q. Ms. Harper, can you please walk us
21	through this exhibit and what it shows?
22	A. This
23	Q. And I'm sorry to interrupt. I have
24	hand numbered very quickly on the bottom right to
25	help us along with this process, but other folks

1	may want to also do the same, the page numbers.
2	A. This is 13 pages of aerial maps showing
3	the route from Chuckatuck across the river to the
4	Whealton substation.
5	Mr. Allen testified that if an
6	additional 230 kV line were built in this
7	corridor, that the right-of-way would need to be
8	expanded.
9	The route starts at Chuckatuck, which
10	is in Isle of Wight County, and really the
11	first almost all of the first five pages show a
12	somewhat rural area where the right-of-way could
13	be expanded and an easement could may be able
14	to be obtained.
15	But then you get to Page 5, and going
16	on into Page 6, where you see we're beginning to
17	get constraints along the right-of-way. You have
18	homes and perhaps some business there, too. A
19	little further north from Eagle Harbor Parkway, I
20	believe that might be a residential area, because
21	I see a pool, so they might be apartments.
22	Q. Is that on Page 6, Ms. Harper?
23	A. Yes, that's on Page 6.
24	So expanding the right-of-way through
25	this area would be very difficult. It would

Page 1682

1	require, possibly, that homes would be taken.
2	An option to expanding the right-of-way
3	in this area would be really to create a whole new
4	corridor for a new 230 that would simply go around
5	this area of constraint.
6	Then, on Page 7, you would come back to
7	the existing river crossing, and you see there,
8	there's a wide expanse of wetlands there on the
9	south side of the river.
10	Now, the next several pages are the
11	river crossing itself, and a 230 kV line would be
12	parallel to the existing lines and require the
13	appropriate permits for that.
14	Coming up on the north side of the
15	river, you enter into the City of Newport News.
16	Q. And I'm sorry, Ms. Harper, to
17	interrupt, but Page 11 we're on now?
18	A. That is Page 11.
19	Right there at the shore is what they
20	call Huntington Beach. It appears to be a public
21	beach. You can see that there is parking.
22	There's some piers or perhaps boat docks there. A
23	little further inland, there are tennis courts.
24	So this area is an area that is owned
25	by the City of Newport News, and of course to get

1	additional easement there, again, we would have to
2	hope that the City of Newport News would work with
3	us, since we would not have the power of
4	condemnation.
5	From this point forward, as noted by
6	Whittier, the right-of-way becomes constrained,
7	and even he had said that it might such a line
8	proposal might need to be underground.
9	So somewhere in this area around
10	Huntington Beach, we would need to find a terminal
11	location to take the line underground.
12	Q. Ms. Harper, we're back on Page 11 and
13	still talking about the terminal location?
14	A. Right. And that terminal location
15	would need to be somewhere soon after we cross the
16	river because, on Page 12 and 13, you will see
17	that again the right-of-way becomes very
18	constrained, and an overhead line probably would
19	not work there. And I think 12 and 13 basically
20	speak for themselves.
21	Then coming on Page 13, coming to
22	the Whealton substation, if the line is
23	underground, of course then you need another
24	terminal station to bring the line overhead.
25	The Whealton substation, as you can

1	see, is itself a very small station without room
2	for expansion, because it is in a residential
3	neighborhood. So, again, that terminal station
4	could not be within the Whealton substation and
5	would need to be at some point on this line prior
6	to coming into the Whealton substation.
7	In addition to the constraints, of
8	course this is basically a new route, we would
9	need to come back to the Commission with an
10	application. And prior to that application being
11	made, we would have to go through the process of
12	open houses, of talking to state agencies about
13	impacts, in order to prepare the application.
14	Then, of course, we'd have to go
15	through the whole approval process again through
16	the Commission. So it really would be starting
17	over completely with a new project.
18	Q. And since this was just presented to
19	you on Monday, have you been able to do even a
20	preliminary assessment of environmental impacts of
21	this Alternative C?
22	A. Not really. Not really. We know that
23	we have the wetlands and we have the river
24	crossing, and it would be just a matter of
25	figuring out those lengths and what those are

Page 1684

Page 1	1685
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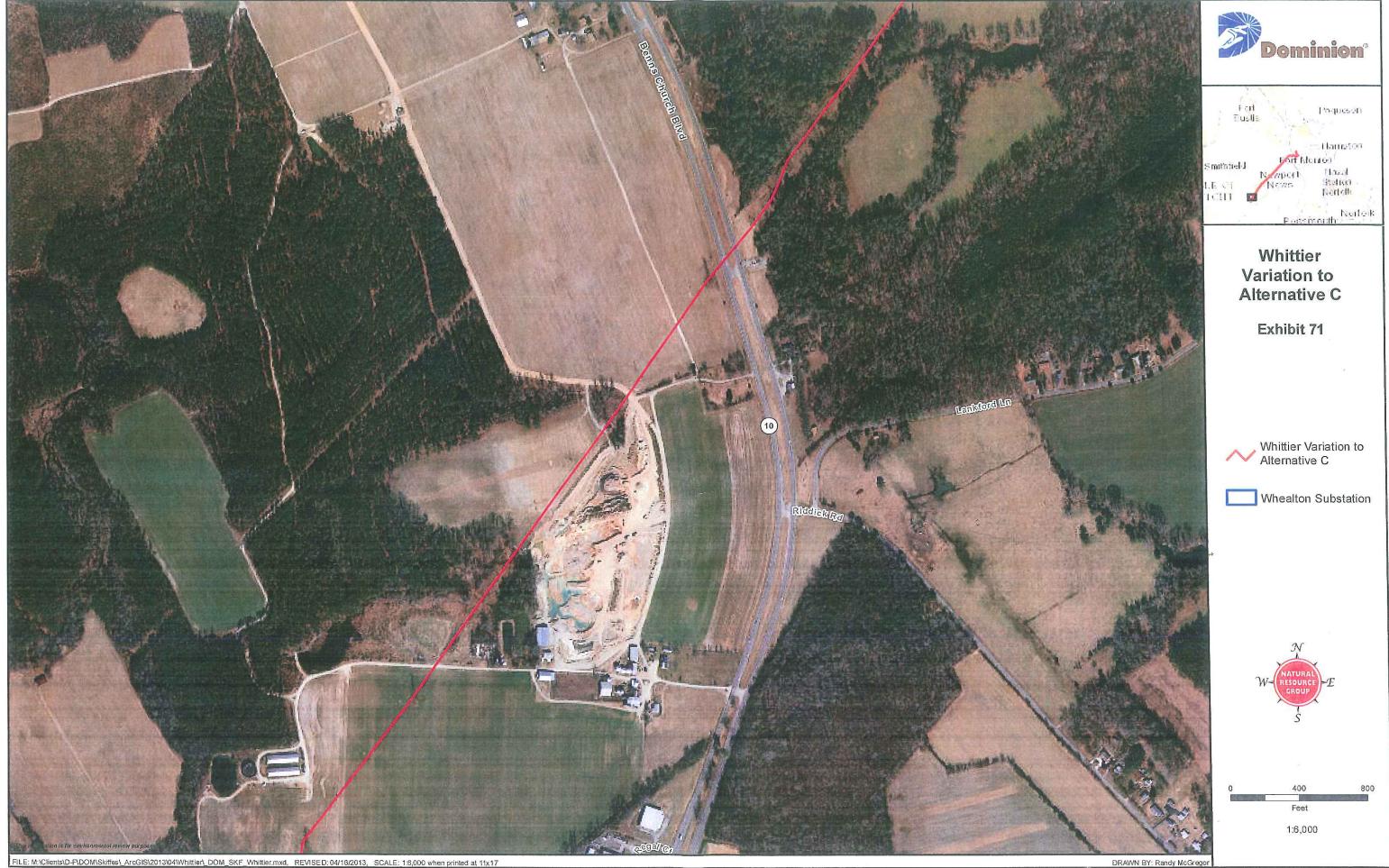
1	compared to perhaps other opportunities.
2	Q. All right.
3	A. One more thing. If we had to purchase
4	the new easement, of course that in itself takes a
5	tremendous amount of time for this much easement.
6	It's a long process. That's all.
7	MS. LINK: Your Honor, we'd move the
8	admission of Exhibit 119.
9	HEARING EXAMINER SKIRPAN: It's in.
10	BY MS. LINK:
11	Q. Turning to another topic, Ms. Harper,
12	do you recall being asked, on the second day of
13	the hearing, April 10th, about a zoning letter
14	that you that was dated April 4th, sent to you
15	and you received on April 8th?
16	A. Yes. I'm sorry. I'm searching for it
17	now.
18	Q. That's all right. I'll give you a
19	moment.
20	A. This is the zoning letter?
21	Q. The zoning letter
22	A. Okay.
23	Q that was dated April 4th
24	A. Yes.
25	Q and you received on April 8th.



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Ex-119

DRAWN BY: Randy McGrego



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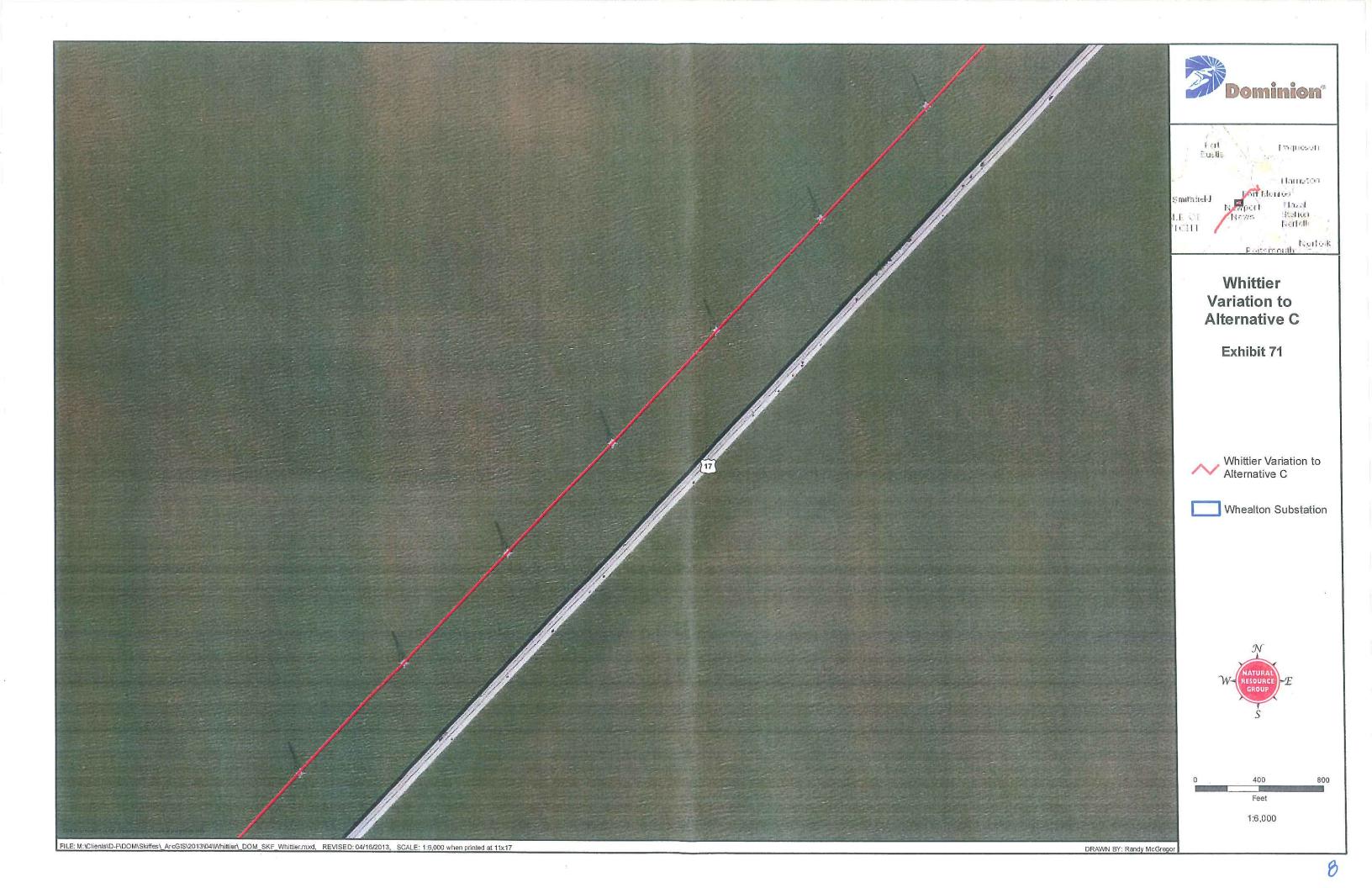
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DRAWN BY: Randy McGregor

Attachment re_12 2013-04-18 Official Hearing Transcript - Full.pdf

	Commonwealth of Virginia on 04/18/2013 Page 1650
1	COMMONWEALTH OF VIRGINIA
2	STATE CORPORATION COMMISSION
3	******************
4	APPLICATION OF
5	VIRGINIA ELECTRIC AND POWER COMPANY
6	d/b/a DOMINION VIRGINIA POWER Case No.
7	PUE-2012-00029
/	For approval and certification
8	of electric facilities: Surry-Skiffes Creek 500 kV
9	Transmission Line, Skiffes Creek-Whealton
10	230 kV Transmission Line, and Skiffes Creek 500 kV-230 kV-115 kV Switching Station
11	* * * * * * * * * * * * * * * * * * * *
12	
13	ADMINISTRATIVE HEARING BEFORE
14	ALEXANDER SKIRPAN, Hearing Examiner
15	Day 8
16	
17	9:00 a.m. to 2:39 p.m.
	April 18, 2013
18	Richmond, Virginia
19	
20	
21	
22	
23	
24	
25	REPORTED BY: Rhonda D. Tuck, RPR, CRR

1	APPEARANCES OF COUNSEL:
2	ON BEHALF OF THE APPLICANT:
3	McGUIRE WOODS, LLP
4	One James Center, 7th Floor
5	901 East Cary Street
6	Richmond, Virginia 23219-4030
7	(804) 775-1000
8	swatts@mcguirewoods.com
9	vlink@mcguirewoods.com
10	jvalaika@mcguirewoods.com
11	BY: STEPHEN H. WATTS, II, ESQUIRE
12	VISHWA B. LINK, ESQUIRE
13	JENNIFER D. VALAIKA, ESQUIRE
14	
15	HUNTON & WILLIAMS, LLP
16	Riverfront Plaza Tower
17	951 East Byrd Street
18	Richmond, Virginia 23219
19	(804) 788-8330
20	rgary@hunton.com
21	BY: RICHARD D. GARY, ESQUIRE
22	TIMOTHY E. BILLER, ESQUIRE
23	
24	
25	

1	APPEARANCES CONTINUED:
2	ON BEHALF OF THE COMMISSION STAFF:
3	STATE CORPORATION COMMISSION
4	OFFICE OF GENERAL COUNSEL
5	COMMONWEALTH OF VIRGINIA
6	1300 East Main Street
7	Richmond, Virginia 23219
8	(804) 371-9671
9	william.chambliss@scc.virginia.gov
10	matt.roussy@scc.virginia.gov
11	BY: WILLIAM CHAMBLISS, ESQUIRE
12	MATT ROUSSY, ESQUIRE
13	WAYNE N. SMITH, ESQUIRE
14	
15	ON BEHALF OF BASF CORPORATION:
16	CHRISTIAN & BARTON, LLP
17	909 East Main Street, Suite 1200
18	Richmond, Virginia 23219-3095
19	(804) 697-4100
20	mquinan@cblaw.com
21	BY: MICHAEL J. QUINAN, ESQUIRE
22	
23	
24	
25	

1	APPEARANCES CONTINUED:
2	ON BEHALF OF LENNAR CORPORATION:
3	WILLIAMS MULLEN
4	200 South 10th Street, 16th Floor
5	Richmond, Virginia 23219
6	(804) 420-6405
7	baxselle@williamsmullen.com
8	pcushing@williamsmullen.com
9	BY: RALPH L. "BILL" AXSELLE, JR., ESQUIRE
10	PATRICK A. CUSHING, ESQUIRE
11	
12	ON BEHALF OF JAMES CITY COUNTY:
13	COUNTY ATTORNEY'S OFFICE
14	JAMES CITY COUNTY
15	101-C Mounts Bay Road
16	Williamsburg, Virginia 23185
17	(757) 253-6612
18	BY: LEO P. ROGERS, JR., ESQUIRE
19	
20	
21	
22	
23	
24	
25	

1	APPEARANCES CONTINUED:
2	ON BEHALF OF OLD DOMINION ELECTRIC COOPERATIVE:
3	LECLAIR RYAN
4	4201 Dominion Boulevard, Suite 200
5	Glen Allen, Virginia 23060
6	(804) 968-2982
7	john.pirko@leclairryan.com
8	BY: JOHN A. PIRKO, ESQUIRE
9	
10	ON BEHALF OF JAMES CITY COUNTY, JAMES RIVER ASSOCIATION,
11	THE SAVE THE JAMES ALLIANCE TRUST:
12	SANDS ANDERSON
13	1111 E Main Street, Suite 2400
14	Richmond, Virginia 23219
15	(804) 783-7211
16	amcroberts@sandsanderson.com
17	BY: ANDREW R. McROBERTS, ESQUIRE
18	
19	ON BEHALF OF CHARLES CITY:
20	RANDOLPH, BOYD, CHERRY AND VAUGHAN
21	14 East Main Street
22	Richmond, Virginia 23219
23	(804) 592-4177
24	rboyd@rbcvlaw.com
25	BY: B. RANDOLPH BOYD, ESQUIRE

1	APPEARANCES CONTINUED:	
2	ON BEHALF OF ENVIRONMENTAL RESPONDENTS:	
3	SOUTHERN ENVIRONMENTAL LAW CENTER	
4	201 West Main Street, Suite 14	
5	Charlottesville, Virginia 22902	
6	(434) 977-4090	
7	BY: ANGELA NAVARRO, ESQUIRE	
8		
9	ALSO PRESENT:	
10	DAVID LEDBETTER, ESQUIRE Pro Se on behalf of David and Judith Ledbetter	
11	FIO SE ON DENAIT OF DAVID and Uddith Leubetter	
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1 INDEX 2 3 CURT SWANSON Examination by Mr. Watts.....1659 4 Examination by Mr. Ledbetter.....1667 5 Examination by Mr. McRoberts.....1672 Examination by Mr. Watts.....1674 6 7 ELIZABETH HARPER 8 Examination by Ms. Link.....1676 9 Examination by Mr. Gary.....1690 Examination by Ms. Quinan.....1692 10 Examination by Mr. Ledbetter.....1694 Examination by Mr. Rogers.....1701 Examination by Ms. Link.....1731 11 12 13 DOUGLAS J. LAKE Examination by Ms. Link.....1740 14 Examination by Mr. Gary.....1741 15 Examination by Mr. Quinan.....1747 Examination by Mr. Ledbetter.....1751 16 Examination by Mr. Rogers.....1753 Examination by Mr. Gary.....1769 17 18 MARVIN L. WOLVERTON 19 Examination by Mr. Gary.....1771 20 Examination by Mr. Quinan.....1789 Examination by Mr. Rogers.....1794 21 Examination by Mr. Gary.....1804 22 23 CATHY TAYLOR 24 Examination by Mr. Gary.....1805 Examination by Mr. Quinan.....1811 25 Examination by Mr. Gary.....1819

1	I N D E X
2	
3	MICHAEL BRUCATO
4	Examination by Mr. Gary
5	Examination by Mr. McRoberts
6	SCOT C. HATHAWAY
7	
8	Examination by Ms. Link1833 Examination by Mr. McRoberts
9	Examination by Ms. Link
10	
11	
12	EXHIBITS
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1	EXHIBITS
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1	(9:00 a.m., April 18, 2013)
2	
3	PROCEEDINGS
4	
5	MS. LINK: Your Honor, one housekeeping
6	matter before we call our first witness of the
7	day. We had a correction at Exhibit 100.
8	HEARING EXAMINER SKIRPAN: Okay.
9	MS. LINK: It's the fourth page of the
10	exhibit. It's Viewpoint 09.1, river bluffs
11	and sewer treatment plant, that viewpoint.
12	And on the right side, it says, Sewer
13	treatment plant is approximately 5.6 miles
14	away. It should not be 5.6 miles. It should
15	be 3.5 miles, and we thought it was worthy of
16	a correction. Thank you.
17	MR. WATTS: I call Curt Swanson. And
18	I'm going to use the podium, if I may.
19	
20	CURT SWANSON
21	was sworn and testified as follows:
22	EXAMINATION
23	BY MR. WATTS:
24	Q. Would you state your name, position of
25	employment and business address?

1	A. My name is Curt W. Swanson, project
2	director for regulation. My business address is
3	701 East Cary Street, Richmond, Virginia.
4	Q. Thank you. Do you have a document with
5	you entitled, "Rebuttal Testimony of Curt W.
6	Swanson," consisting of four typed pages of
7	questions and answers and two rebuttal schedules
8	which was filed in a public version only in this
9	proceeding on March 14, 2013?
10	A. Yes, I do.
11	Q. And was that document prepared by you
12	or under your supervision?
13	A. Yes.
14	Q. Do you have any corrections or
15	additions to it?
16	A. I do not.
17	Q. If you were asked the questions
18	appearing there, would you provide the same or
19	substantially the same answers?
20	A. Yes.
21	Q. Do you wish to sponsor that document as
22	your rebuttal testimony in this proceeding?
23	A. Yes, I do.
24	MR. WATTS: I ask that the document be
25	identified for marked for identification.

-		
1		HEARING EXAMINER SKIRPAN: I'll mark
2	his re	buttal testimony as Exhibit Number 116,
3	and it	's admitted subject to cross.
4		(Exhibit Number 116 is placed in the
5	record	.)
6		MR. WATTS: Thank you.
7	BY MR. WAT	TS:
8	Q.	Now, Mr. Swanson, I just have one
9	question,	I think, an additional question.
10		James City County Witness Whittier
11	presented	some additional 230 kV alternatives in
12	his rebutt	al testimony, and he presented his
13	calculatio	n of the rate effects of the costs of
14	those proj	ects.
15		Have you reviewed his calculations?
16	Α.	Yes, I have.
17	Q.	And what exhibit were did he make
18	those in?	Just for reference.
19	Α.	It was exhibit 72.
20	Q.	Okay. And what response do you have to
21	them?	
22	Α.	Well, there are several incorrect
23	values, as	well as corrections, with respect to
24	Dominion's	estimates of construction costs.
25	Q.	All right. And have you reflected

5
those in the document that I've just put up and
would like to have handed out now, please
A. Yes.
Q which is entitled, "DVP Revisions to
Exhibit 72?
A. Yes.
HEARING EXAMINER SKIRPAN: I'll mark
this as Exhibit 117.
(Exhibit Number 117 is placed in the
record.)
BY MR. WATTS:
Q. Mr. Swanson, could you take us through
Exhibit 117?
A. Okay. What I've done is taking
Mr. Whittier's Exhibit 72 and making corrections,
as necessary, to it. I've tried to maintain the
basic format of Mr. Whittier's exhibit.
The first row is labeled, "Annual
Revenue Requirement for Surry 500 kV Proposed
Project." Mr. Whittier had an annual revenue
requirement for the Virginia jurisdiction of
\$11 million, and DVP agrees with that. That was
included in my Rebuttal Schedule 2.
The second row provides numbers with
respect to "Annual Revenue Requirement for

1	Chickahominy 500 kV Alternative." Mr. Whittier
2	had a Virginia jurisdictional revenue requirement
3	amount of \$11.8 million, and Dominion, as well,
4	agrees with \$11.8 million. Again, that was in
5	Rebuttal Schedule 2.
6	HEARING EXAMINER SKIRPAN: Could you
7	just focus on where you're different?
8	THE WITNESS: I'm sorry?
9	HEARING EXAMINER SKIRPAN: Could you
10	just focus on the differences?
11	THE WITNESS: Certainly.
12	Okay. Row 3, "Annual Revenue
13	Requirement for Whittier Rebuttal Variation to
14	Alt A." Mr. Whittier had two analyses or two
15	approaches at 750 MVA transfer capability and
16	at 500 MVA transfer capability. He had a
17	construction cost of \$224 million. From
18	Exhibit 95, Dominion estimates that
19	construction cost should be \$301.1 million.
20	Mr. Whittier then multiplied his 224
21	times a carrying charge of 14.0582. The
22	allocation of 99.84 percent to the Dominion
23	zone. And at that point he stopped, leaving
24	him with an answer of \$31.4 million.
25	Mr. Whittier neglected to allocate the

1	next step to the Virginia jurisdiction, and
2	that's an allocation factor of
3	72.7784 percent. When I do that, with respect
4	to the estimated construction costs of
5	\$301.1 million, I get an answer of
6	\$301.8 million.
7	Likewise, for the 500 MVA transfer
8	capability, Dominion disagrees with his
9	construction cost of 192.1. Rather, we have
10	297.1 from Exhibit 95.
11	Again, Mr. Whittier neglected to
12	allocate costs to the Virginia jurisdiction,
13	which is, again, a 72.7784 percent factor.
14	Dominion has applied that allocation factor to
15	our estimated construction cost of 297.1, and
16	we get an answer of 30.3 relative to his 27.0.
17	The fourth row shows an "Annual Revenue
18	Requirement for Whittier Rebuttal Variation to
19	Alt C," and Mr. Whittier had broken up his
20	total of \$102.0 million into two components,
21	because he was allocating a portion of it
22	based on an assumption that a substation cost,
23	50 percent would be socialized to other LSE's
24	and other entities within the RTO, the PJM
25	RTO.
25	RTO.

1	Dominion disagrees with that conclusion
2	of 50 percent of the substation costs being
3	socialized, so rather than \$10 million being
4	applied to the carrying charge, and ultimately
5	Mr. Whittier had 12.38 percent being allocated
6	to the Dominion zone, Dominion has the full
7	\$20 million of the substation cost.
8	And using 99.84 percent, which is
9	basically the full allocation to the Dominion
10	zone, again, Mr. Whittier neglected to include
11	the Virginia jurisdiction allocation factor.
12	So where he has \$0.2 million for that
13	substation portion of the \$102 million,
14	Dominion has \$2.0 million.
15	Dominion, in total, for the Rebuttal
16	Variation to Alt C as shown in Exhibit 96
17	shows \$181.9 million total estimated
18	construction costs. So that left 161.9,
19	rather than \$92 million, as Mr. Whittier had.
20	Again, working through the numbers, Dominion
21	has 16.5 allocated to Virginia, and
22	Mr. Whittier had 12.9.
23	The total for Whittier Rebuttal
24	Variation to Alt C, Dominion is 18.5 compared
25	to Whittier's \$13.1 million.

1	BY MR. WATTS:
2	Q. Would you show us then, below the line,
3	the average monthly bill impact?
4	A. Yes. Again, we agree on the first two
5	items, Surry 500 and Chickahominy 500.
6	Mr. Whittier had 60 cents under the 750 MVA
7	transfer capability at Variation Alternative A.
8	Dominion would suggest that that number
9	is 58 cents, for the 1,000 kilowatt hour.
10	Likewise, we differ on the 500 MVA transfer
11	capability, 57 cents rather than Mr. Whittier's 52
12	cents.
13	And with respect to the Alternative C
14	variation, the Dominion indicates a calculation of
15	35 cents, rather than 25 cents.
16	We've also corrected the difference
17	from proposed project numbers that Mr. Whittier
18	had for the 750 MVA to 37 cents, rather than 39
19	cents. For the 500 MVA, 36 cents versus 31 cents.
20	And the Variation Alternative C, a 14-cent
21	difference compared to the proposed project versus
22	Mr. Whittier's 4 cents.
23	MR. WATTS: Thank you. I ask that this
24	
	be admitted to the record subject to

1	HEARING EXAMINER SKIRPAN: It's in
2	subject to cross.
3	MR. WATTS: The witness is available
4	for cross-examination.
5	HEARING EXAMINER SKIRPAN: Thank you.
6	MR. QUINAN: No questions.
7	HEARING EXAMINER SKIRPAN: Any
8	questions?
9	MR. McROBERTS: Mr. Swanson
10	HEARING EXAMINER SKIRPAN: I'm sorry.
11	I think
12	MR. LEDBETTER: I'm not sure who has
13	priority here, Your Honor.
14	HEARING EXAMINER SKIRPAN: I think you
15	do, Mr. Ledbetter.
16	MR. LEDBETTER: Thank you very much.
17	
18	EXAMINATION
19	BY MR. LEDBETTER:
20	Q. Good morning, Mr. Swanson.
21	A. Good morning.
22	Q. I'm David Ledbetter. I'm representing
23	myself and my wife. We live in eastern Charles
24	City County along the alternate route.
25	My questions concerning your testimony

1	relate specifically to costing and impact analyses
2	for the alternate route.
3	We have heard testimony earlier in the

proceedings that the socialization of costs for 4 the alternate route would not be at the same 5 percentages as the socialization which has already 6 7 been approved by PJM for the project as proposed, at least the overhead lines, but it appears to me 8 that your testimony and the schedules earlier to 9 10 your testimony assume that the same fairly high 11 percentage, over, I think, approximately 87 or 12 88 percent socialization to PJM on the proposed 13 project would also apply to the Chickahominy 14 route.

Do you agree that there may be some disparity there that might deserve some exploration, in terms of the calculations that you've made?

A. I do understand that subsequent to the
time that I filed my testimony, there was a FERC
Order 1000. I believe that came out on
March 21st, and we followed up, I believe, on
March 14th.
It's my understanding that if the

1	alternative route, that that would require the
2	Company to go back to PJM and receive approval for
3	this alternative route. And based on the fact
4	that if there are projects approved after
5	February 1st of 2013, then this new alternative
6	allocation methodology may very well apply to the
7	Chickahominy route.
8	Q. All right, sir. And are you familiar
9	with that alternative allocation formula?
10	A. Somewhat, yes. I understand that
11	50 percent would be socialized, and the remaining
12	50 percent would not.
13	Q. All right. So your understanding is if
14	it were to be approved by PJM and FERC, the best
15	that could be achieved on the alternate route
16	would be a 50-50 split then?
17	A. Yes.
18	Q. All right. Looking at Exhibit 117, I
19	have just put little carets in the margin next to
20	some numbers here. I'd just like to understand
21	them, and they all relate to the alternate route.
22	The difference that is shown here in
23	terms of costing to Virginia ratepayers for the
24	alternate route, by comparison to the proposed
25	project, seems to be 5 percent. I mean,

1	essentially relatively trivial, one penny per
2	month difference in residential bills. Is that
3	correct?
4	A. Yes.
5	Q. Would that difference really reflect
6	the difference in socialization costs that you've
7	just described?
8	A. No. I believe, on Route 2, where you
9	show where \$11.8 million is shown
10	Q. Yes, sir.
11	A that number would be approximately
12	\$18 million.
13	Q. All right. And how would that change
14	from 11.8 to approximately 18 alter the
15	calculations that you've made below the line on
16	Exhibit 118 or 117?
17	A. Rather than 22 cents, under the DVP
18	Chickahominy 500 alternative amount, it would
19	rather than 22 cents, it would be 35 cents.
20	Q. I see. And on the difference in the
21	project, then it would be it would be
22	A. Fourteen cents.
23	Q. Fourteen cents rather?
24	A. That's correct.
25	Q. All right. So, essentially, that
1	

difference between the project as proposed and the alternate route, in terms of impact on Virginia residential ratepayers. Is that a fair summary then of the math here? A. The differential. Q. Right. Would go up 14 A. From one penny Q over the calculations presented. Did you hear Mr. Whittier's testimony? A. I was not here for Mr. Whittier's testimony. Q. All right. Is it your understanding, if you have one, that Mr. Whittier relied upon the socialization rates that would be associated with the project as proposed in making his calculations concerning the cost of the Chickahominy route and its impact, which are reflected in the first column above the line on this same exhibit? A. That's my understanding, based on the information he had on his Exhibit 72. Q. So would it be your testimony then that his calculation, because he relied on those former numbers by Dominion, is similarly incorrect and	1	change would change by a multiple of 14, the
 4 residential ratepayers. Is that a fair summary 5 then of the math here? 6 A. The differential. 7 Q. Right. Would go up 14 8 A. From one penny 9 Q over the calculations presented. 10 Did you hear Mr. Whittier's testimony? 11 A. I was not here for Mr. Whittier's 12 testimony. 13 Q. All right. Is it your understanding, 14 if you have one, that Mr. Whittier relied upon the 15 socialization rates that would be associated with 16 the project as proposed in making his calculations 17 concerning the cost of the Chickahominy route and 18 its impact, which are reflected in the first 19 column above the line on this same exhibit? 20 A. That's my understanding, based on the 21 information he had on his Exhibit 72. 22 Q. So would it be your testimony then that 23 his calculation, because he relied on those former 	2	difference between the project as proposed and the
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22 Q. So would it be your testimony then that 23 his calculation, because he relied on those former	20	A. That's my understanding, based on the
23 his calculation, because he relied on those former	21	information he had on his Exhibit 72.
	22	Q. So would it be your testimony then that
24 numbers by Dominion, is similarly incorrect and	23	his calculation, because he relied on those former
	24	numbers by Dominion, is similarly incorrect and
25 would need revision in order to be accurate?	25	would need revision in order to be accurate?

That's correct. 1 Α. 2 MR. LEDBETTER: Those are all the 3 questions I have, Your Honor. 4 HEARING EXAMINER SKIRPAN: Thank you. MR. LEDBETTER: Thank you, Mr. Swanson. 5 6 7 EXAMINATION 8 BY MR. MCROBERTS: 9 Mr. Swanson, good morning. Andrew 0. 10 McRoberts here for James City County, the James River Association, and the Save the James Alliance 11 12 Trust. 13 Α. Good morning. 14 Good morning. You said that you used 0. 15 the construction figures given to you by the 16 Company. Is that correct? 17 Α. That's correct. 18 All right. Just summarizing the 0. changes that you made to Mr. Whittier's Exhibit 19 20 Number 72, it appears that he neglected to give 21 enough credit to the Dominion customers in 22 Virginia and neglected to include the 23 72.7784 percent multiplier above the line. Is 24 that correct? 25 Well --Α.

б

Q. Inserted that, and that's why he
didn't
A. I'm sorry?
Q. He did not include the 72.7784 percent
allocation to Virginia customers?
A. He did not include the allocation to
Virginia. Yes, that's correct.
Q. Okay. The only other real change I see
on here, besides the construction costs, which,
obviously, we have a disagreement on, is the
change on, I guess it's your Line 4, under "Annual
Revenue Requirements for Whittier Rebuttal
Variation to Alt C."
He had assumed in his Footnote 2 that
there would be some socialization of this 500 kV,
230 kV transformer at Surry. Correct?
A. That's correct.
Q. And in your opinion, that should not
have been socialized, except to the lower level.
Is that correct?
A. That's correct.
Q. Otherwise, his analysis is really the
same as yours, from your work that you've
submitted in rebuttal. Correct?
A. With those with those changes, yes.

1	MR. McROBERTS: Thank you.
2	HEARING EXAMINER SKIRPAN: Any other
3	questions?
4	MR. ROUSSY: No questions from Staff.
5	HEARING EXAMINER SKIRPAN: Any
6	redirect?
7	MR. WATTS: Just one.
8	
9	EXAMINATION
10	BY MR. WATTS:
11	Q. Just to clarify the record, in response
12	to questions from Mr. Ledbetter regarding the
13	change in allocation effect on your calculation
14	for the Chickahominy alternative?
15	A. Yes.
16	Q. I understood you to say that I was
17	hearing him say 14 times and you saying 14 cents,
18	and I'm trying to make some sense of that. Could
19	you straighten that out for me?
20	A. Yes. Rather than the penny difference
21	between the Chickahominy alternative which
22	produced a 22-cent rate or monthly bill impact to
23	a residential customer
24	Q. Right.
25	A versus the 21 cents for 500 kV

1 Q. Yeah. 2 -- if the Company had to go back to Α. 3 PJM, receive approval and an alternative 4 allocation method was employed, that 22 would go to 35 cents. That differential now from the 5 proposed project is 14 cents. 6 7 It was my understanding that 8 Mr. Ledbetter was saying the penny is increasing 9 by 14 times to 14 cents. That is how I think I 10 interpreted his statement. 11 I don't disagree that the penny is 12 going 14 times greater to be 14 cents. 13 I didn't understand that distinction, Q. and I just wanted to clarify it. Thank you. 14 15 Α. Right. 16 MR. WATTS: That's all I have. 17 HEARING EXAMINER SKIRPAN: Thank you. 18 You may be excused. MS. LINK: The Company calls -- recalls 19 20 Elizabeth Harper. 21 22 23 24 25

1	ELIZABETH HARPER
2	was sworn and testified as follows:
3	EXAMINATION
4	BY MS. LINK:
5	Q. Are you the same Elizabeth P. Harper
6	who provided testimony on direct and supplemental
7	direct?
8	A. I am.
9	Q. Do you have with you a document
10	entitled, "Rebuttal Testimony of Elizabeth P.
11	Harper," consisting of 30 typed payments of
12	questions and answers and six rebuttal schedules
13	which was filed in a public version only in this
14	proceeding on March 14th, 2013?
15	A. I do.
16	Q. Was that document prepared by you or
17	under your supervision?
18	A. Yes.
19	Q. Do you have any corrections or
20	additions to that document?
21	A. I do have one.
22	Q. Correction?
23	A. Yes, one correction that I found last
24	night. I'm sorry.
25	Page 19, Line 6, the second word the

1	
1	second time you see the word "power" should be
2	substituted for the word "transmission." So it
3	reads "permits the flow of power at transmission
4	voltages." That's all.
5	Q. With that correction, if I were to ask
6	you the questions appearing in your rebuttal
7	testimony, would you provide the same answers here
8	today?
9	A. Yes, I would.
10	Q. And do you wish to sponsor that
11	document as your rebuttal testimony in this
12	proceeding?
13	A. Yes.
14	MS. LINK: Your Honor, may we have
15	Ms. Harper's rebuttal testimony marked for
16	identification.
17	HEARING EXAMINER SKIRPAN: I'll mark
18	her rebuttal testimony as Exhibit Number 118.
19	MS. LINK: Thank you, Your Honor.
20	HEARING EXAMINER SKIRPAN: And it's
21	admitted subject to cross.
22	(Exhibit Number 118 is placed in the
23	record.)
24	MS. LINK: Thank you.
25	BY MS. LINK:

1	Q. Ms. Harper, were you have you been
2	able to examine a new routing variation as
3	illustrated through Mr. Whittier's Exhibit 69?
4	A. Yes.
5	Q. What are the environmental impacts for
6	the alternatives set forth in Mr. Whittier's
7	Exhibit 69?
8	A. Well, as I understand it, this route
9	would be a new 230 kV line from Surry to Whealton.
10	There would be no Skiffes station. And the part
11	at the river would be under the river. It would
12	be an underground line.
13	So the routing portion of it on land is
14	the same, basically, as what we are proposing. So
15	it's the change of going under the water that
16	makes the difference.
17	When they construct a line under the
18	water, what I understand is that a 230 kV single
19	circuit would require three pipes, and that
20	requires six platforms in the river.
21	Those platforms would require
22	approximately 230 piles. Some of those piles are
23	piles that are installed to guide to guide the
24	pipe onto these platforms. Other of those piles
25	would be piles that would actually hold the

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1	platforms in place. Some of these piles would be
2	to a depth of 120 feet.
3	These platforms would be in the river
4	for 24 months or more, making it something more
5	than just a temporary construction impact.
6	In addition to the platforms
7	themselves, as Witness Allen discussed, you would
8	also have where they bring the pipes and the
9	cable up onto these platforms and they splice the
10	cable and they weld these pipes, you then have to
11	take this and lay it back down onto the
12	riverbottom, and that has to be trenched in. And
13	I understand that there would be nine trenches,
14	and those trenches are approximately 15 feet deep,
15	900 feet long, about 4 feet wide.
16	So this part of the river has the
17	historical contaminant ketone in it that has been
18	there for some time, and it's found in the
19	sediments. There's also some sign of PCBs in
20	parts of the river. So when you're doing this
21	trenching and when you eventually have to remove
22	these six platforms and remove these piles, just
23	pull them up from and some of them are at a
24	depth of 120 feet, then there is a disturbance of
25	the riverbottom, and those sediments are kicked

1	up, and those sediments could be redistributed
2	downriver.
3	So it's not so there is impact to
4	from construction of an underground line across
5	the James River.
6	Q. Did you also examine Mr. Whittier's
7	variation that he presented in his Exhibit 71?
8	A. Yes.
9	MS. LINK: Your Honor, we have an
10	exhibit to hand out.
11	Your Honor, we've just handed out a
12	series of maps. It's entitled, "Whittier
13	Variations to Alternative C, Exhibit 71." May
14	we have an exhibit number for this?
15	HEARING EXAMINER SKIRPAN: I'll mark
16	this as Exhibit Number 119.
17	(Exhibit Number 119 is placed in the
18	record.)
19	BY MS. LINK:
20	Q. Ms. Harper, can you please walk us
21	through this exhibit and what it shows?
22	A. This
23	Q. And I'm sorry to interrupt. I have
24	hand numbered very quickly on the bottom right to
25	help us along with this process, but other folks

1	may want to also do the same, the page numbers.
2	A. This is 13 pages of aerial maps showing
3	the route from Chuckatuck across the river to the
4	Whealton substation.
5	Mr. Allen testified that if an
6	additional 230 kV line were built in this
7	corridor, that the right-of-way would need to be
8	expanded.
9	The route starts at Chuckatuck, which
10	is in Isle of Wight County, and really the
11	first almost all of the first five pages show a
12	somewhat rural area where the right-of-way could
13	be expanded and an easement could may be able
14	to be obtained.
15	But then you get to Page 5, and going
16	on into Page 6, where you see we're beginning to
17	get constraints along the right-of-way. You have
18	homes and perhaps some business there, too. A
19	little further north from Eagle Harbor Parkway, I
20	believe that might be a residential area, because
21	I see a pool, so they might be apartments.
22	Q. Is that on Page 6, Ms. Harper?
23	A. Yes, that's on Page 6.
24	So expanding the right-of-way through
25	this area would be very difficult. It would

1	require, possibly, that homes would be taken.
2	An option to expanding the right-of-way
3	in this area would be really to create a whole new
4	corridor for a new 230 that would simply go around
5	this area of constraint.
6	Then, on Page 7, you would come back to
7	the existing river crossing, and you see there,
8	there's a wide expanse of wetlands there on the
9	south side of the river.
10	Now, the next several pages are the
11	river crossing itself, and a 230 kV line would be
12	parallel to the existing lines and require the
13	appropriate permits for that.
14	Coming up on the north side of the
15	river, you enter into the City of Newport News.
16	Q. And I'm sorry, Ms. Harper, to
17	interrupt, but Page 11 we're on now?
18	A. That is Page 11.
19	Right there at the shore is what they
20	call Huntington Beach. It appears to be a public
21	beach. You can see that there is parking.
22	There's some piers or perhaps boat docks there. A
23	little further inland, there are tennis courts.
24	So this area is an area that is owned
25	by the City of Newport News, and of course to get

1	additional easement there, again, we would have to
2	hope that the City of Newport News would work with
3	us, since we would not have the power of
4	condemnation.
5	From this point forward, as noted by
6	Whittier, the right-of-way becomes constrained,
7	and even he had said that it might such a line
8	proposal might need to be underground.
9	So somewhere in this area around
10	Huntington Beach, we would need to find a terminal
11	location to take the line underground.
12	Q. Ms. Harper, we're back on Page 11 and
13	still talking about the terminal location?
14	A. Right. And that terminal location
15	would need to be somewhere soon after we cross the
16	river because, on Page 12 and 13, you will see
17	that again the right-of-way becomes very
18	constrained, and an overhead line probably would
19	not work there. And I think 12 and 13 basically
20	speak for themselves.
21	Then coming on Page 13, coming to
22	the Whealton substation, if the line is
23	underground, of course then you need another
24	terminal station to bring the line overhead.
25	The Whealton substation, as you can

1	see, is itself a very small station without room
2	for expansion, because it is in a residential
3	neighborhood. So, again, that terminal station
4	could not be within the Whealton substation and
5	would need to be at some point on this line prior
6	to coming into the Whealton substation.
7	In addition to the constraints, of
8	course this is basically a new route, we would
9	need to come back to the Commission with an
10	application. And prior to that application being
11	made, we would have to go through the process of
12	open houses, of talking to state agencies about
13	impacts, in order to prepare the application.
14	Then, of course, we'd have to go
15	through the whole approval process again through
16	the Commission. So it really would be starting
17	over completely with a new project.
18	Q. And since this was just presented to
19	you on Monday, have you been able to do even a
20	preliminary assessment of environmental impacts of
21	this Alternative C?
22	A. Not really. Not really. We know that
23	we have the wetlands and we have the river
24	crossing, and it would be just a matter of
25	figuring out those lengths and what those are

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1	compared to perhaps other opportunities.
2	Q. All right.
3	A. One more thing. If we had to purchase
4	the new easement, of course that in itself takes a
5	tremendous amount of time for this much easement.
6	It's a long process. That's all.
7	MS. LINK: Your Honor, we'd move the
8	admission of Exhibit 119.
9	HEARING EXAMINER SKIRPAN: It's in.
10	BY MS. LINK:
11	Q. Turning to another topic, Ms. Harper,
12	do you recall being asked, on the second day of
13	the hearing, April 10th, about a zoning letter
14	that you that was dated April 4th, sent to you
15	and you received on April 8th?
16	A. Yes. I'm sorry. I'm searching for it
17	now.
18	Q. That's all right. I'll give you a
19	moment.
20	A. This is the zoning letter?
21	Q. The zoning letter
22	A. Okay.
23	Q that was dated April 4th
24	A. Yes.
25	Q and you received on April 8th.

1 Α. Yes. 2 MS. LINK: Your Honor, for clarity of 3 the record, that was marked Exhibit 40 earlier 4 in this proceeding. BY MS. LINK: 5 6 And do you recall, Ms. Harper, 0. 7 Mr. Rogers asking you what action Dominion had 8 taken with regard to the opinion of the zoning administrator that a special use permit was 9 10 required for this site? Do you recall that 11 question? 12 Α. Yes. 13 MR. ROGERS: Your Honor, I'm going to 14 the object to the line of questioning. Yes, 15 indeed, I did, but this isn't new. This is 16 something that was asked at the time, that was 17 subject to recross by Dominion, and Dominion 18 is going back over the same ground. I think 19 we've done this many times. 20 MS. LINK: Your Honor, if I could ask 21 my next question, which is her answer, and 22 then we will introduce something new. 23 HEARING EXAMINER SKIRPAN: I'm hoping 24 it will go somewhere new. 25 MR. ROGERS: Yes, sir.

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1	HEARING EXAMINER SKIRPAN: We'll do it
2	one more time.
3	MS. LINK: It will certainly go
4	somewhere.
5	BY MS. LINK:
6	Q. Ms. Harper, you recalled your answer,
7	which was, "Well, we just received it on Monday.
8	No action has been taken"?
9	A. Correct.
10	Q. Has some action been taken on that
11	letter since April 10th?
12	A. Yes. After I received the letter, I
13	turned it over to our attorneys, and the Company
14	has responded.
15	Q. All right. And we have a letter to
16	respond in response that we'd like to hand out.
17	Ms. Harper, what's been handed out is a
18	letter dated April 18th, 2013, to Jason Purse, the
19	zoning administrator of James City County. Do you
20	see that?
21	A. Yes.
22	Q. And this is a letter that you asked
23	your attorneys to prepare in response to the
24	zoning administrator letter of April 4th?
25	A. Correct.

1	MS. LINK: Your Honor, may we have this
2	letter marked?
3	HEARING EXAMINER SKIRPAN: I'll mark it
4	as Exhibit Number 120.
5	MS. LINK: Your Honor, we move the
6	admission of Exhibit 120 into the record.
7	MR. ROGERS: Your Honor, I'm going to
8	object to the letter, first because it does
9	state legal conclusions in it.
10	As noted in the Virginia Supreme Court
11	rules, lay witnesses/expert witnesses are not
12	supposed to be giving opinions on legal
13	conclusions.
14	Plus, I believe that this Hearing
15	Examiner is going to be requesting briefs on
16	this very issue. This letter seems to be a
17	part of Dominion's brief, and they want to get
18	that in twice. I don't think the letter goes
19	to any probative value, other than the fact
20	that Dominion has taken an action in
21	responding. That's been testified to by the
22	witness. The rest of this is legal argument.
23	MS. LINK: May I briefly respond? Oh,
24	I'm sorry.
25	HEARING EXAMINER SKIRPAN: Yes.

1	MS. LINK: My brief response to the
2	response of Mr. Rogers is that the original
3	letter from the zoning administrator certainly
4	expresses legal opinion, and it was allowed
5	into this record. It cites Lexis opinions, as
6	well, and so it cites legal opinion, as
7	well.
8	And Ms. Harper testified no action had
9	been taken. We believe, for completeness of
10	this record, since action has been taken since
11	that time, that our response should be allowed
12	in.
13	MR. ROGERS: If I may briefly respond
14	to the issue. If the zoning administrator's
15	opinion didn't contain legal references, it
16	wouldn't be complete. It has to be a part of
17	a zoning administrator's opinion. So that's
18	not legal argument.
19	This legal argument from counsel of
20	Dominion is legal argument better stated in a
21	Dominion brief. And if the purpose is to say
22	they responded, I have no objection to
23	Ms. Harper saying they responded.
24	HEARING EXAMINER SKIRPAN: I'm going to
25	allow it in, but you know, for the sole

1	purpose of showing that they responded, and as
2	I've said many times, I'm solely looking to
3	the briefs in this case for the legal
4	arguments.
5	(Exhibit Number 120 is placed in the
6	record.)
7	MS. LINK: Thank you, Your Honor. I
8	believe Mr. Gary has some surrebuttal.
9	
10	EXAMINATION
11	BY MR. GARY:
12	Q. Good morning, Ms. Harper.
13	A. Good morning.
14	Q. Ms. Harper, were you in the courtroom
15	when Mr. Russell Seymour of the James City County
16	Economic Development Authority stated that the EDA
17	would be willing to sell a utility corridor, an
18	easement, to Dominion at market price for a
19	right-of-way across the EDA property between the
20	James River and the Surry-Skiffes Creek switching
21	station?
22	A. Yes, I was.
23	Q. Is the Company now evaluating a
24	potential route through the EDA property?
25	A. We are.

1	Q. AND are you familiar with the major
2	components of a transmission line easement that
3	Dominion would require to build that 500 kV line?
4	A. Yes.
5	Q. Would you explain to us what are the
6	major components of a transmission line easement?
7	A. A transmission line easement really
8	guarantees that we have assurance that we have
9	sufficient easement to support the construction of
10	the line, that that easement is at a reasonable
11	cost, that that easement allows us ingress and
12	egress, both for the construction and the
13	operation and maintenance of the line, and that we
14	have the right to clear and maintain the
15	rights-of-way.
16	Q. At this point, Dominion doesn't have
17	certainty as to all of those provisions in an
18	easement with EDA. Is that correct?
19	A. Not at this time.
20	MR. GARY: Thank you. Your Honor, that
21	completes my surrebuttal questions, and
22	Ms. Harper is available for cross-examination.
23	HEARING EXAMINER SKIRPAN: Thank you.
24	
25	

1	EXAMINATION
2	BY MR. QUINAN:
3	Q. Good morning, Ms. Harper. Mike Quinan,
4	BASF Corporation.
5	A. Good morning.
6	Q. I just wanted to ask you about were
7	you in the courtroom when Mr. Waltz, and this goes
8	back some in this hearing, Mr. Waltz from BASF was
9	on the stand and testified about his understanding
10	of where Dominion and BASF are in terms of
11	placement of the line or the need for right-of-way
12	along BASF Drive?
13	A. I was.
14	Q. Okay. And what Mr. Waltz said was
15	well, in actually another BASF witness's
16	testimony, Mr. Romeo, he requested that if the
17	existing right-of-way along BASF Drive is going to
18	be used for the line at issue in this case and if
19	that requires expansion of the Dominion
20	right-of-way, that it be expanded to the west,
21	that is, away from BASF Drive, so that the tree
22	border could be preserved and so the BASF's
23	ability to upgrade BASF Drive itself could be
24	preserved.
25	And what Mr. Waltz recited was his

1	understanding was that Dominion was agreeable to
2	that, except that if he wasn't prepared to
3	agree if it required moving the right-of-way
4	beyond the BASF property onto some other property
5	owners.
6	Is that an accurate recitation of where
7	the Company, Dominion, and BASF are at this point?
8	A. It is.
9	Q. And you understood BASF's position is
10	that they prefer to go to the west, even if you
11	have to go on somebody else's property?
12	A. Yes. And actually, I believe that
13	there would be room to expand the right-of-way
14	without going on to someone else's property.
15	Q. Okay.
16	A. I believe there is the additional
17	20-foot width.
18	MR. QUINAN: Those are all the
19	questions I have. Thank you, Ms. Harper.
20	HEARING EXAMINER SKIRPAN: Thank you.
21	MR. LEDBETTER: Your Honor, for the
22	convenience of the parties, may I request that
23	two documents be distributed at this time,
24	rather than just one, just so we can get it
25	all distributed at once?

1	HEARING EXAMINER SKIRPAN: Sure.
2	MR. LEDBETTER: Thank you, sir.
3	
4	EXAMINATION
5	BY MR. LEDBETTER:
6	Q. Good morning, Ms. Harper.
7	A. Good morning.
8	Q. I'm David Ledbetter. My wife, Judy,
9	and I are participants in the case. I'm
10	representing us. We live in Charles City, as you
11	may recall. It's nice to see you again.
12	A. It's nice to see you too.
13	Q. Thank you. I have questions concerning
14	two easements along the alternate route, both in
15	Charles City County. The first of those there
16	are typed documents. The easiest way to
17	distinguish between them is one is typed and one
18	is not.
19	In the public witness proceedings
20	earlier in this case, in January, Ms. Sherri
21	Bowman of Charles City testified as to the
22	property that I will represent to everyone is the
23	subject of this easement. This is the heirs of
24	the Lebius Bowman property, which happens to be
25	immediately adjacent to my property on the
1	

1	northeast portion of my property and in a middle
2	of the portion of the right-of-way.
3	Ms. Bowman's testimony was that there
4	were six heirs on this heirs' parcel that had not
5	signed this document, two whom she identified as
6	Elizabeth B. Brown and a James H., also known as
7	Skunk Bowman. And I'm sure you'll remember that
8	if you heard her testimony.
9	A. I think I do now, now that you bring it
10	up.
11	Q. I have carefully examined the document,
12	and I'm sure she would like for me to first
13	correct, for everyone's benefit if you will
14	take a look with me at Page 3 of the document,
15	which I will now put on the screen, going over to
16	Page 4, I've looked at the list of names on those
17	two pages, and in fact I see an Elizabeth Bowman,
18	and I also see a Mr. James H. Bowman. And so I'm
19	Mr. James H. Bowman, by the way, is the third
20	from the bottom on the first page.
21	MR. LEDBETTER: Your Honor, I'm not
22	going to belabor the Court. I do not
23	specifically remember and didn't want to mark
24	my copy of the document as to Elizabeth
25	Bowman, but it's there. I will just alert

1	everyone to the fact that for the
2	clarification of the record, we need to we
3	need to note that.
4	BY MR. LEDBETTER:
5	Q. My question to you, Ms. Harper, is
6	whether or not you're aware of any recorded
7	document, recorded with the Circuit Court Clerk in
8	Charles City, that would reflect whether or not
9	the other four individuals named by Ms. Bowman,
10	Mr. Allen Bowman, Lillian L. Howard, O.P. Lemmens
11	and let's see. I've got both oh, I'm sorry.
12	Otha Brown, Allen Bowman, Lillian Howard and O.P.
13	Lemmens. Were any of them actually, ultimately,
14	executed an easement in Virginia Power's favor
15	with respect to that heirs' parcel? Are you aware
16	of any such easement document?
17	A. I do not know.
18	Q. The only other question I have
19	concerning that document is back on Page 1, and
20	it's just to sort of set an understanding and a
21	stage for something. I'm going to just quickly
22	point with a pen to the lower portion of the first
23	page of the document. You'll see language there
24	relating to the purposes of the easement and the
25	rights bestowed.

1	I note that in addition to transmission
2	and other distributing distribution of electric
3	power, it's also noted there that it would be
4	available for natural gas, oil or petroleum
5	products and gases or substances which can be
6	transported through pipeline.
7	Is that language, to the best of your
8	knowledge, if you feel sufficiently informed,
9	typical of the easements that were obtained in the
10	early '70s for the alternate right-of-way?
11	A. I'm not sure.
12	Q. Is it
13	A. I'm not that familiar with those
14	easements.
15	Q. Is it language which you've seen
16	frequently in modern easements that Virginia Power
17	has obtained for transmission lines?
18	A. I have seen that language before. I
19	cannot characterize it as to which we have
20	easements
21	Q. Sure.
22	A going back to the early 1900s, at
23	least, and they change over the years, of course,
24	and I cannot characterize as to when that
25	particular type of language was used, whether it

was used just in the '70s or it has been used 1 2 across the board throughout the -- since we've 3 been obtaining the easements. 4 Q. Okay. 5 MR. LEDBETTER: Your Honor, may I request that these be identified as exhibits 6 7 and that they be admitted, subject to cross? 8 HEARING EXAMINER SKIRPAN: The typed document will be given Exhibit Number 121, and 9 the written will be Exhibit 122. 10 11 MR. LEDBETTER: Thank you. 12 HEARING EXAMINER SKIRPAN: And if there 13 are no objections, they're in subject to 14 cross. 15 (Exhibit Numbers 121 and 122 are placed 16 in the record.) 17 MR. LEDBETTER: Thank you, Your Honor. 18 BY MR. LEDBETTER: 19 Finally, Ms. Harper, just a couple of Ο. 20 questions concerning this second deed. It's handwritten, an earlier deed. 21 22 You can compare the date. It's 23 consistent with some testimony also presented in 24 January by Mr. Tom Fenton, who represented at the 25 time that -- let me see if I've got his title

1	correct here. The executor of the Avery Cemetery
2	Trust Fund and identifying the transfer of lower
3	Holly Hill, sold in 1906. And in connection with
4	that transfer, he noted that there was an
5	nonconveyance of a cemetery on that property.
6	Are you familiar with that Holly Hill
7	property and its location within the alternate
8	right-of-way?
9	I would identify it as being the
10	property on which the Chickahominy Wildlife
11	Management Area now rests.
12	A. Yes.
13	Q. Thank you. If you would take a look at
14	this Exhibit Number 122, I have highlighted on my
15	copy a portion of language which was quoted in
16	Mr. Fenton's testimony in January relating to that
17	nonconveyance of the cemetery. And I'll quote
18	from something that will make it a little bit
19	easier to read, briefly, or
20	MR. LEDBETTER: Does everyone feel
21	that Your Honor, do you feel it's
22	sufficiently legible that it need not be read?
23	HEARING EXAMINER SKIRPAN: Okay. Go
24	ahead and read it.
25	MR. LEDBETTER: Yes. Thank you.

1	Are to have and hold the said land
2	herein described with the appertinent
3	instruments, except the graveyard, reserving
4	it for burial purposes of the families of the
5	party of the first and we could not get the
6	copy because of the bound document. The first
7	part is what we would represent we believe is
8	the language there.
9	BY MR. LEDBETTER:
10	Q. My question to you, Ms. Harper, is
11	whether you're aware of any document, in
12	particular, anything subsequently filed with the
13	Clerk of the Circuit Court of Charles City County,
14	which would in any way release or convey that
15	nonconveyance of the cemetery from that family?
16	A. I am not.
17	Q. And that would include an easement
18	document favoring Virginia Power? You're not
19	aware of one?
20	A. I am not.
21	Q. Have you received any correspondence
22	from Mr. Fenton concerning this easement?
23	A. I believe that we did.
24	Q. Have you responded to it, to the best
25	of your knowledge, or has anyone in the Company

responded to it? 1 2 I do know that we did Α. I do not know. 3 ask for some investigation into the background of 4 this easement --5 All right. Q. 6 Α. -- from our real estate group. 7 Ο. Do you know the results of that investigation at this time? 8 9 I believe they just pulled up the Α. 10 easement and the previous title work that had been done in the '70s. 11 12 All right. But so far as you know, 0. 13 there was no document that reflected a conveyance 14 of the cemetery that was held back in the 15 conveyance in 1906? 16 Α. No. 17 MR. LEDBETTER: Thank you very much for 18 your testimony. 19 20 EXAMINATION BY MR. ROGERS: 21 22 Good morning, Ms. Harper. Leo Rogers, Ο. 23 County Attorney in James City County. 24 Α. Good morning. 25 Please bear with me as I gain Ο.

1	familiarity with this process.
2	I do wish to first ask you some
3	questions that you did testify to today.
4	Were you present in the courtroom when
5	Mr. Whittier testified earlier this week?
6	A. Yes, I was.
7	Q. And were you present in the courtroom
8	during the testimony that occurred subsequent to
9	that, the testimony of the Dominion witnesses on
10	Tuesday and Wednesday of this week?
11	A. Yes.
12	Q. Ms. Harper, I'd like to direct your
13	attention to Exhibit 119, the route study that was
14	prepared. When did you prepare that route study?
15	A. These are the the aerial maps?
16	Q. Exhibit 119, yes.
17	A. I believe we had NRG I believe NRG
18	prepared these for us the night before last.
19	Q. Excuse me. The night before last?
20	A. Yes.
21	Q. Is it normal to be able to do a routing
22	study in, say, 24 hours?
23	A. Well, we certainly don't claim to have
24	done a routing study.
25	Q. This certainly isn't a routing study

1	which would try to come up with the least
2	impactful route, is it?
3	A. No, it is not. We're simply because
4	because the right-of-way would need to be
5	expanded for another 230 kV line, we thought it
6	was pertinent for the Commission to understand
7	what the existing right-of-way was like.
8	Q. Who asked to have this pictorial
9	demonstration prepared?
10	A. I did.
11	Q. Were you requested by anybody to make
12	that this pictorial you asked NCR. Is that
13	correct?
14	A. NRG.
15	Q. Oh, I'm sorry. NRC?
16	A. No. NRG.
17	Q. NRG?
18	A. NRG.
19	Q. As I said, I'm learning in this
20	process. NRG. Okay. You're the one that asked
21	NRG. Did anyone make that request of you to do
22	this pictorial demonstration of the Whittier
23	routing?
24	A. I think that the project team thought
25	that it would be helpful for the Commission.
1	

Okay. And I'm looking for the 1 0. 2 instruction of any individual in particular. Are 3 you telling me it was a team decision? MS. LINK: Your Honor, I object. 4 It is -- it is a team 5 THE WITNESS: 6 decision. 7 MR. ROGERS: Thank you. Your Honor, 8 I'm not sure what the objection would have 9 been, but I'm very willing to listen to it. 10 MS. LINK: Her answer has been given. 11 I withdraw my objection, unless there's 12 another question asking the same question. So 13 let's see. 14 HEARING EXAMINER SKIRPAN: We'll let 15 the next question take care of itself. 16 MS. LINK: Thank you. MR. ROGERS: Thank you, Your Honor. 17 18 BY MR. ROGERS: 19 Have you received a copy of Exhibit 0. 20 Number 74 from county attorney -- I'm sorry, 21 County Administrator Robert Middaugh making an 22 offer to purchase the land or make a swap for the 23 land? 24 А That is the letter dated April 10th 25 that you showed me Monday?

1	Q.	Yes, and you indicated you hadn't seen
2	it?	
3	Α.	On Monday, I had not seen it. When you
4	first show	ved it to me, it was the first time.
5	Q.	Yes.
6	Α.	Since then, I received it by e-mail
7	Monday aft	ernoon, and then yesterday we received
8	it by U.S.	Mail, and it was postmarked Monday,
9	April 15th	1.
10	Q.	Thank you. I do really want to go back
11	with one o	question on your previous oral testimony.
12		You were describing the underwater
13	route on t	the James River to Ms. Link, correct, and
14	some poter	ntial environmental impacts? Do you
15	recall tha	at?
16	Α.	Yes.
17	Q.	You indicated you were present in the
18	courtroom.	Were you present in the courtroom for
19	the testim	nony of Mr. Thomasson?
20	Α.	Yes, I was.
21	Q.	Do you recall his testimony that the
22	route unde	er the York River was directionally
23	drilled?	
24	Α.	Yes, I do.
25	Q.	Thank you. Now getting to your
1		

1 rebuttal testimony. I'm looking at page -- I'm just going 2 3 to follow along mostly with your testimony. I'm 4 looking at Pages 20 and 21. Your job is truly to mitigate impacts of proposed lines. 5 6 Isn't it true that the engineers really 7 determine those projects and whether or not they 8 satisfy the NERC standards? 9 Let's turn to Page 20 and 21 of your 10 testimony where you talk about that. Lines 20 11 through 23, and on Page 21, it's lines 8 through 12 9. 13 First of all, my job is not to mitigate Α. 14 impacts. My job is to find and compare routes and 15 try to choose the best route that meets all the 16 needs of the Company. 17 Included in that is mitigation from 18 environmental impacts, but that is one of the -one of the things but not the only thing that we 19 need to consider when routing a route. 20 21 Now, was there another part of the 22 question I was supposed to answer? 23 0. Yes. The other part of the question 24 was that the routes were determined by the 25 engineers, in terms of meeting electrical needs

1	and NERC standards?
2	MS. LINK: Your Honor, before the
3	response, I do believe we went through this
4	extensively on direct. I don't know that
5	there's anything new being asked here of
6	Ms. Harper.
7	MR. ROGERS: Do you wish for me to
8	respond, as I've given page references to the
9	rebuttal testimony?
10	HEARING EXAMINER SKIRPAN: It is in
11	it is part of her testimony.
12	MS. LINK: Okay.
13	MR. ROGERS: I'm not trying to
14	summarize testimony and ask questions, which I
15	could see as objectionable. I'm actually
16	going to be trying to give page and line
17	references as I move along.
18	BY MR. ROGERS:
19	Q. The engineers, they're the ones who
20	determine the routes and whether or not they meet
21	the NERC standards. Isn't that true?
22	A. The engineers do not determine the
23	route, unless it is a case where it is a
24	constrained area.
25	For instance, if we were in an urban
1	

1	area and we were planning a route within streets
2	with a lot of utilities, I would give a lot of the
3	routing leeway to the engineers, but planning
4	asked us to determine a route between Point A or
5	B. They determine the electrical need. We come
6	in. We determine the study area, and we review
7	the possibility of routes and do the comparisons.
8	And engineering is on the same team
9	that helps us understand the size of the
10	structure, what type of structure would be needed
11	for the electrical need, or the construction or
12	the construction
13	Q. Is your answer yes or no
14	A the mode of
15	Q to the question?
16	A construction.
17	Q. I asked you, pretty much, the engineers
18	are dictating the point of origin and then the
19	point of termination?
20	A. The planning engineers, yes, are saying
21	that we need to begin at a load source and bring
22	that load source to a certain area.
23	Q. I'm trying to move this along.
24	HEARING EXAMINER SKIRPAN: In a hope to
25	move this along, what I'm hearing is a

1	disconnect between the questions and the
2	answer in that you're referring to when you
3	refer to a route, she looks at the point at
4	routes between two points.
5	The engineers, as I've understood the
6	testimony, pick the points, which is what
7	you're considering as picking the route.
8	That's the way I'm hearing it anyway.
9	BY MR. ROGERS:
10	Q. Have you studied the underwater routing
11	of the James River, or have you relied on
12	engineering reports from Dominion which assert
13	that it does not work?
14	A. We did not formally include an
15	underwater route in the routing report.
16	Since the routing report was prepared,
17	though, and in response to questions by the
18	Commission to look at an underwater line, we have
19	had to consider that.
20	Now, I do rely because an underwater
21	line is so is really a very technical sort of
22	construction, I do rely on our transmission line
23	engineers to help me understand the best way to
24	locate that in the river.
25	Q. Thank you, Ms. Harper. I would like

1	you to look at Page 7, lines 3 through 6 of your
2	testimony.
3	In recommending the above water
4	crossing of the James versus the tremendously
5	impactful Chickahominy route, it's your testimony
6	that it's Dominion's responsibility to, quote
7	responsibility of Dominion to it says, quote,
8	responsibility to minimize adverse impacts.
9	Is that accurate?
10	A. To minimize adverse impacts, to the
11	Q. It's Dominion's
12	A extent possible.
13	Q responsible to do so?
14	A. Yes, to the extent possible.
15	Q. If there's an engineering solution that
16	can be built that meets NERC standards by placing
17	the line underneath the James, would that then be
18	your recommended impact, because it would be least
19	impactful as opposed to an above-water crossing?
20	A. And in this case, I do turn to the
21	engineers to determine
22	Q. I'm sorry. I'm going to try to phrase
23	this question another way.
24	A. Okay.
25	Q. Let's assume, from the engineering

1	standpoint, it's met. Let's assume that it's
2	feasible. Let's make all those assumptions. It
3	meets NERC requirements. You're not qualified to
4	speak about that. Okay. That placing of the line
5	under the river. Would you then recommend placing
6	a line under the river because it is less
7	impactful than a line above the river?
8	A. Some sometimes that that would be
9	the the case.
10	Q. Moving along, Page 7, Line 8 through
11	12. Are you familiar with the process for
12	determining consistency with an adopted
13	comprehensive plan?
14	A. The County's process? Not necessarily.
15	Q. Are you familiar with the State process
16	or the process in James City or any other
17	jurisdiction for determining consistency with a
18	comprehensive plan?
19	A. Not necessarily.
20	We always when we in previous
21	cases where we have had to go for special use for
22	a substation to the locality, they are required to
23	find that that project is in accord with their
24	comprehensive plan. I'm not exactly sure always
25	what they consider. I have never been turned down
	-

1	for that.
2	Q. You've never been turned down for a
3	special use permit then?
4	A. Correct.
5	Q. Okay. Now, with regard for this SUP
6	process that you go through for determining
7	consistency, there's, first, a memoranda from
8	Staff, there is then a recommendation from the
9	planning commission, and then there's a decision
10	by the governing body. Is that correct?
11	A. I believe that is usually the way, yes.
12	It's very similar to the SUP process. It's a
13	separate but similar process.
14	Q. Do you know that are you aware that
15	it is the decision of a governing body of a
16	locality to determine consistency with the
17	comprehensive plan?
18	A. When they have authority for that
19	for that approval, yes.
20	MR. ROGERS: I'm sorry. I did not ask
21	that latter part of the question. I would
22	request that that be struck.
23	MS. LINK: Your Honor, the witness
24	should be entitled to answer the question in
25	the way she intended to. There is no basis to

strike her answer if he didn't like the 1 2 answer. 3 MR. ROGERS: No, Your Honor. It's not 4 that I don't like the answer. The answer was 5 not responsive to my question but was one of 6 Dominion's talking points that Ms. Harper just 7 expressed. 8 MS. LINK: Your Honor --9 HEARING EXAMINER SKIRPAN: I'm qoing to 10 overrule your objections to the answer. Ι 11 mean, it seems responsive to the questions in 12 my hearing. 13 MR. ROGERS: Thank you. 14 BY MR. ROGERS: 15 Page 9, Line 7 and 8 -- I'm sorry. 0. 16 Page -- yes, Page 9, lines 7 and 8. There's 17 questions about the Captain John Smith National 18 Historic Trail. I'm going to be referring to 19 that, as my colleague, Mr. Ledbetter, as the Captain John Smith Trail, for the sake of 20 21 simplicity. You indicate that it is difficult to 22 23 avoid the Captain John Smith Trail, don't you, and 24 the impacts on the Captain John Smith Trail and 25 the James River?

1	A. Correct. The trail is almost 3,000
2	miles long.
3	Q. Wouldn't placing the line under the
4	water avoid the impacts to the Captain John Smith
5	Trail and to the James River?
6	MS. LINK: Your Honor, before this
7	question gets answered, Mr. Rogers, in his
8	first question, says, you state it's difficult
9	to avoid the impacts to the Captain John Smith
10	Trail. I think it's important for the if
11	he's going to cite the testimony, she says at
12	Line 9, Page 9, Unfortunately, it's very
13	difficult to avoid the Captain John Smith
14	Chesapeake National Historic Trail, as it is
15	approximately 3,000 miles long, not
16	necessarily avoid impact to it.
17	MR. ROGERS: Your Honor, I referred the
18	witness particularly to the lines in the
19	report. She's perfectly capable of reading it
20	and not needing the spin of counsel or the
21	interpretation of this Court or me or anyone.
22	If I used "avoid" or it's within her
23	testimony to be able to say what she's going
24	to say. She does not need coaching by
25	counsel.

1	HEARING EXAMINER SKIRPAN: Well, I'm
2	going to overrule the objection. I mean,
3	unless he reads it word-for-word, he's going
4	to paraphrase it. The witness, in her answer,
5	can correct it and may respond, and that one
6	didn't seem too bad to me.
7	MS. LINK: Thank you, Your Honor.
8	BY MR. ROGERS:
9	Q. Wouldn't placing the line under the
10	river avoid the impacts to the Captain John Smith
11	Trail and to the James River?
12	A. Well, there are parts of the John Smith
13	Trail not all parts of the John Smith Trail are
14	equal, and I think that report that Mr. Street
15	Q. Ms. Harper, I did not ask you to
16	A submitted to us
17	MS. LINK: Your Honor
18	Q to evaluate the impacts
19	MS. LINK: could the witness
20	Q of the entire
21	MS. LINK: be permitted to
22	Q Captain John Smith Trail.
23	MS. LINK: answer the question?
24	Q. I'm asking you one question. Wouldn't
25	it you said it's difficult to avoid it.

1	Wouldn't placing it under the water, under the
2	river be a method to avoid the impacts to the
3	trail and the river? Don't tell me about a
4	3,000-mile trail
5	A. And I am telling you that not all parts
6	of the John Smith Trail are pristine. And the
7	John Smith Trail has transmission lines over it
8	now, so not all parts of it
9	MR. ROGERS: Your Honor
10	THE WITNESS: require that
11	MR. ROGERS: it's a very simple yes
12	or no question.
13	HEARING EXAMINER SKIRPAN: Well, I'm
14	not sure it's a simple yes or no question, but
15	the answer wasn't responsive to the question.
16	I mean, I would I would hope that the
17	witness could at least respond to the question
18	first, and if they need to supplement further,
19	that would be permitted, but the question was
20	whether that would avoid the would avoid
21	impacts. That wasn't answered.
22	So if you could answer that.
23	MS. LINK: Perhaps counsel could
24	restate the question.
25	MR. ROGERS: Thank you.

MS. LINK: Or could repeat the 1 2 question. BY MR. ROGERS: 3 4 I think this is the third or fourth Ο. 5 time I'm asking the same question. 6 You talked about the difficulty of 7 avoiding impacts on the Captain John Smith Trail 8 and the James River. Wouldn't placing the line underwater avoid those impacts? 9 10 Placing the line under the water would Α. 11 avoid viewshed impacts to special areas of the 12 John Smith Trail. But again, Your Honor, not all 13 parts of the John Smith Trail require that amount 14 of preservation. 15 MR. ROGERS: I'm going to go with that. 16 HEARING EXAMINER SKIRPAN: I'm glad 17 you're going with that. 18 MR. ROGERS: I'm not going to go any 19 further on it. I don't think we're going to 20 get anywhere. I understand that talking --21 MS. LINK: Motion to strike the 22 comment, Your Honor. 23 MR. ROGERS: Excuse me, Counsel. Ιf 24 there's an objection, will you please stand up 25 and state it?

1	MS. LINK: Your Honor, I don't believe
2	that the rules of this Commission require that
3	anytime counsel speak, that they stand up.
4	HEARING EXAMINER SKIRPAN: That's
5	correct.
6	MS. LINK: And I move to strike
7	Mr. Rogers' comments regarding this witness's
8	testimony.
9	HEARING EXAMINER SKIRPAN: I'm actually
10	going to allow it.
11	BY MR. ROGERS:
12	Q. Ms. Harper, would you please turn to
13	Page 16 of your report where you begin your
14	analysis of the Skiffes Creek switching station?
15	You've already answered my question, in
16	that you've applied for over 50 SUPs and you've
17	never been turned down. Is that correct?
18	A. There is one exception, and that is in
19	Fauquier, the Morrisville switching station.
20	Q. Did you apply for that special use
21	permit?
22	A. Yes, we did.
23	Q. I'm sorry. No. No. We have pronoun
24	trouble here.
25	Did you apply for a special use permit

1	in 1972 from Fauquier County?
2	A. No, sir.
3	Q. Thank you. Was a special use permit
4	applied for in the Fauquier County case?
5	A. Yes, it was.
6	Q. Thank you. Do you normally get a
7	comment letter from the planning staff of the
8	jurisdiction regarding your proposed project?
9	A. We do, occasionally, regarding a
10	transmission line. They will have comments,
11	particularly to the DEQ, and that is included in
12	the DEQ report.
13	Q. With regard to the special use permit
14	applications that you filed, does the planning
15	staff of the jurisdiction normally give you an
16	initial comment letter indicating what they see as
17	impacts of the special use permit?
18	A. Prior to our filing? Our no.
19	Q. You have never received a comment
20	letter from the planning staff as to address what
21	impacts you will need to be addressing?
22	A. Not
23	Q. In your other 50
24	A. Not prior to meeting with the county
25	and preparing the application.
1	

1	Q. After you've met with the county and
2	after you've made the special use permit
3	application, is it normal to get comments from the
4	planning staff identifying impacts of the project?
5	A. Yes. The planning staff will prepare a
6	report to the planning commission and later to the
7	board of supervisors
8	Q. Do you recall
9	A concerning that application.
10	Q. Do you recall getting a letter from
11	Leanne staff comments, I should say, not a
12	letter, from Leanne Reidenbach dated March 30th,
13	2012, asking describing the analysis of the
14	proposed 500 kV line through James City County,
15	the Skiffes Creek alternative?
16	And if I may, I can show you, this is a
17	copy of those staff comments?
18	A. Yes.
19	Q. Do you have a
20	MR. ROGERS: I would like to introduce
21	this, Your Honor, eventually, so I would ask
22	that the witness do you have a copy of it?
23	THE WITNESS: Not with me.
24	HEARING EXAMINER SKIRPAN: I'll mark
25	this as Exhibit 123.

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(Exhibit Number 123 is placed in the 1 2 record.) 3 MR. ROGERS: Thank you, Your Honor. 4 BY MR. ROGERS: Ms. Harper, I'd like to refer your 5 0. attention in particular to the Skiffes Creek 6 7 switching station, the comments for which are 8 found on Pages 2 and 3. 9 For the sake of showing them, I'm just 10 going to rip mine and see if we can put them all 11 up at the same time. 12 Do you see those five bullets? 13 Α. Yes, I do. 14 Without regard to Dominion Virginia Ο. 15 Power's legal position, what part of these five 16 comments could Dominion Virginia Power not 17 accomplish? 18 Could Dominion Virginia Power apply for 19 a special use permit? That's the first bullet. 20 Could we? Α. 21 Q. Yes. 22 If we had the time, yes, we could. Α. 23 Q. Thank you. I do want to identify that 24 this letter was sent to you back in March of 2012. 25 Bullet Number 2, the Switching Station

1	is I don't want to read it. Does Dominion
2	Virginia Power have a problem with complying with
3	the Staff comment in Bullet Number 2?
4	A. She's I'm not sure what the question
5	is. She's making some statements.
6	Q. These are identifying
7	A. She's not asking for anything. Are you
8	
9	Q. These are identifying impacts of
10	projects?
11	A. Yes.
12	Q. Would Dominion Virginia Power be able
13	to address these impacts through the special use
14	permit process?
15	A. Well, she brings up the residential
16	neighborhoods, and we intend to leave to only
17	use a small portion of the property, 14 acres of
18	the 52, and leave the rest wooded so there would
19	be visual barrier.
20	Then she says, furthermore, the height
21	of the structures may have a visual impact, and
22	there may not be anything we can do about the
23	height of the structures.
24	Q. Isn't it a normal process in the
25	special use permit process that you obtained in
1	

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1	the past, isn't it normal for those processes to
2	have conditions to a special use permit that may
3	provide for either coloring, screening, fencing,
4	buffering?
5	A. Yes.
6	Q. Let's go to condition Staff comment
7	Number 3. Is it possible for Dominion to comply
8	with Staff Comment Number 3?
9	A. Yes. In fact, I believe I address this
10	in my testimony, saying that we will do everything
11	we can to comply with the zoning regulations
12	concerning setbacks and the noise and the
13	Q. I'm not disagreeing with you at all.
14	I'm just going down them one by one. In fact, I
15	think you've already complied to some extent with
16	Bullet Number 4. Hasn't a Phase 1 archeological
17	already been done for the
18	A. Yes, Phase 1 and Phase 2.
19	Q. Phase 1 and Phase 2?
20	A. Right. Yes.
21	Q. So there's no problem with Bullet
22	Number 4.
23	Ms. Harper, how about Bullet Number 5?
24	Does that serve an impediment to Dominion Virginia
25	Power's application for a special use permit?

1	A. No, it does not.
2	Q. Is there any of these conditions which
3	indicate that James City County is predisposed
4	then to the denial of your special use permit, or
5	is this more like the other 50-plus special use
6	permits where you're likely to achieve an
7	approval, provided that you mitigate these
8	impacts?
9	A. No. This letter does not imply that we
10	would be turned down.
11	Q. Thank you, Ms. Harper.
12	HEARING EXAMINER SKIRPAN: Do you wish
13	to admit it?
14	MR. ROGERS: I'm sorry?
15	HEARING EXAMINER SKIRPAN: Do you wish
16	that it be admitted?
17	MR. ROGERS: Oh, I'm sorry. Yes, Your
18	Honor, I do wish to have that letter admitted.
19	Thank you very much.
20	HEARING EXAMINER SKIRPAN: It's in.
21	BY MR. ROGERS:
22	Q. Ms. Harper, I'm going to turn your
23	attention to Page 18, lines 9 through 11. On
24	lines 9 through 11 on Page 18, you question the
25	need for obtaining a special use permit or
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1	respond, actually, I should say on the next few
2	pages for the need for obtaining a special use
3	permit. Is that right?
4	A. Yes.
5	Q. And in that, you refer to Commission
6	guidelines, do you not, in pages 18 through about
7	halfway through 20?
8	A. Correct.
9	Q. You also refer to Virginia Code
10	Sections 56-46.1 and the Virginia Utilities
11	Facilities Act. Is it your opinion I'm sorry.
12	Let me take that back.
13	Is it your testimony that transmission
14	lines clearly include switching stations? The
15	proposed switching stations that are associated
16	with the transmission line, it's clearly included?
17	A. It's clearly included in the
18	guidelines, the SCC guidelines for submittal of
19	applications.
20	Q. Which guidelines are you referring to?
21	Are you referring to the ones that were dated
22	May 1991?
23	A. Yes, I am.
24	Q. And do you have a copy of it there?
25	A. I do have a copy of it. Yes, I do.

1	Q. Now, this is not a legal opinion,
2	because you're indicating it's clearly in them.
3	Is that correct?
4	A. Correct.
5	Q. And if it's clearly in there, then no
6	analysis is needed. As I hark back to nearly a
7	quarter century from law school, that would
8	indicate that it's clear and that anybody can
9	identify it. Is that correct?
10	MS. LINK: Your Honor, at this point, I
11	think it's argumentative. You said several
12	times you looked to the briefs for the legal
13	opinion.
14	MR. ROGERS: I am cross-examining this
15	witness that she said it is clearly contained
16	in the guidelines in the code. I am going to
17	offer the guidelines on the code and ask her
18	to identify where it is clearly contained.
19	HEARING EXAMINER SKIRPAN: I understand
20	that you're going to do that.
21	BY MR. ROGERS:
22	Q. Ms. Harper, I also have a copy of the
23	Code of Virginia.
24	HEARING EXAMINER SKIRPAN: Well, let's
25	start let's just stick with the guidelines

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first, and then we'll --MR. ROGERS: Okay. HEARING EXAMINER SKIRPAN: -- go to BY MR. ROGERS: Can you identify where in those quidelines it clearly states, without interpretation, that a switching station is included in a transmission line? It clearly states in Item D that if --I'm sorry. Would you please identify -- I'll put it up on the screen for you. On Page 1 of the guidelines for minimum group requirements for applications --Page 1 or Page 2? Page 1. It's the types of applications. Now, you sort of have to work backwards, but if you look at Item D, it says that switching stations not associated with the

20 transmission line clearly separately need to be --21 Ο. I'm sorry. I did not see the word 22 "clearly" in D. Would you -- you're identifying 23 what is contained in Paragraph D.

24 What is contained in Paragraph D of 25 these quidelines that clearly show that a

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1	switching station is included?
2	A. It says that switching stations not
3	associated with the line need to be submitted to
4	the Commission for approval. Therefore, in
5	reading Item A, "Applications for Transmission
6	Lines," means that those applications for
7	transmission lines include the switching stations
8	and the substations.
9	And in section I believe it's
10	Section 2, Part C, of the guidelines, that's where
11	you find "Describe and furnish plan drawings of
12	all new substations, switching stations and
13	underground facilities associated with a proposed
14	project."
15	Q. And does that say that a switching
16	station is part of a transmission line?
17	A. No, it does not say that.
18	Q. Okay. I'm going to refer you to the
19	Virginia Code which was identified in those
20	sections. I have, for your convenience, tagged
21	the code sections referenced and the Virginia
22	Utilities Facility Act. Excuse me. Not to the
23	first page of the act.
24	MR. ROGERS: The witness could be given
25	a copy of the code, as well.

1	BY MR. ROGERS:
2	Q. Ms. Harper, are you familiar with those
3	code sections that you referenced both in your
4	direct testimony and your rebuttal testimony?
5	A. I am.
6	Q. Can you show me where in the Code of
7	Virginia it clearly states that switching stations
8	are included as part of a transmission line?
9	A. It clearly states that approval of a
10	transmission line shall be deemed to satisfy the
11	requirements in Section F, and it is the opinion
12	of the Company that the switching station is a
13	transmission line.
14	Q. Is it the opinion of the Company. Is
15	that correct? That's your testimony?
16	A. Yes.
17	Q. But there's nowhere that it clearly
18	states in the Code of Virginia that a switching
19	station is a transmission line, does it is it?
20	A. It does not say that in words, but the
21	function
22	Q. That would be subject of a legal
23	interpretation. Would you agree?
24	HEARING EXAMINER SKIRPAN: Clearly, but
25	we've allowed I think we have the gist of
1	

where she was pointing. 1 2 MR. ROGERS: One last question on this 3 point, Your Honor. 4 HEARING EXAMINER SKIRPAN: Okay. 5 MS. LINK: Your Honor --6 BY MR. ROGERS: 7 Ο. Isn't this really a legal determination for the hearing officer, the Commission and this 8 Court and not for you, as the person who is the 9 10 right-of-way manager for Dominion Resources? 11 This is clearly for the interpretation Α. 12 and review of the Commission. However, it does 13 impact the permitting process, and it does impact 14 the project. So it's relevant for me to have an 15 opinion about it. Not a legal opinion, but an 16 opinion. Thank you, Your Honor. 17 MR. ROGERS: 18 And I do not need to submit sections of the 19 Virginia Code. 20 HEARING EXAMINER SKIRPAN: Yeah. 21 Please don't. 22 MR. ROGERS: Other than that, I don't 23 have no further questions for this witness, but if I may have my Code book back. 24 25 MR. SMITH: Your Honor, we have no

questions of Ms. Harper. 1 2 HEARING EXAMINER SKIRPAN: Any redirect? 3 MS. LINK: Yes, Your Honor. 4 5 6 EXAMINATION 7 BY MS. LINK: 8 Ο. Ms. Harper, in response to 9 cross-examination from Mr. Rogers, he asked you 10 several questions with regard to the switching 11 station. Do you recall that? 12 I do. Α. 13 And he brought up a letter or analysis Q. 14 that -- dated March 30th, 2012. I believe it's 15 been marked Exhibit 123. Do you recall that? 16 Α. Yes. And I believe you stated -- since 17 0. 18 March 30th of 2012, has there been additional 19 information provided --20 MR. ROGERS: I'll move to object to the 21 question. I mean, right off the bat "has 22 there been." She's providing the answer to 23 the witness. It's bound to be a leading 24 question. 25 MS. LINK: She can say no.

1	HEARING EXAMINER SKIRPAN: That was
2	pretty close to a yes or no question. I'm
3	going to allow it. I'll overrule the
4	objection.
5	BY MS. LINK:
6	Q. Since March 30th, 2012, has there been
7	additional information that you have or that the
8	planning team, project team at Dominion has
9	received from the County that has caused it to
10	MR. ROGERS: Objection, Your Honor.
11	Now, not only is there going to be intro to
12	it, but now she's going to talk about
13	causation and opinion. This is clearly a
14	leading question that's going to contain the
15	answer.
16	HEARING EXAMINER SKIRPAN: I'm going to
17	overrule that.
18	MR. ROGERS: Okay.
19	HEARING EXAMINER SKIRPAN: Go ahead.
20	MS. LINK: If I might I keep getting
21	interrupted every five questions, so I might
22	have it read back where I was.
23	THE WITNESS: May I go ahead and
24	respond?
25	MS. LINK: That would be fine.

1	THE WITNESS: Since that letter that
2	was provided just prior to our filing the
3	application, James City County has submitted
4	testimony, and that testimony has caused us
5	some concern, the testimony particularly of
6	the county administrator and the planning
7	staff who characterized the line and the
8	substation as not being as being
9	incompatible with the comprehensive plan. And
10	they discuss the station having extensive
11	impacts and even suggest that there may be no
12	way to mitigate that.
13	In addition, just at this hearing, the
14	James City County counsel, the discussion
15	about the switching station has implied that
16	denial of a special use permit would stop the
17	construction of the line.
18	BY MS. LINK:
19	Q. And what is the Company's concern about
20	the schedule? I believe you said, and the
21	schedule we have here.
22	A. That's right. Well, there's certain
23	unique issues for this. We're not asking that
24	every switching station or every substation be
25	considered in this opinion. We're asking that

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1	it's just for this project.
2	And in this case, we do have the
3	timeline, and a very condensed timeline. The
4	construction of the 500 kV line and the station
5	needs to begin about in October, so that we can
6	have that part of the project complete by the end
7	of 2014 so that then we can start on the
8	construction of the 230 kV line and have it all
9	complete prior to the retirements of the
10	generation units.
11	The Company has spent a significant
12	amount of time just on the site in determining the
13	substation layout, so that is only really just
14	recently available to us.
15	If we file the site plan this month,
16	that in and of itself is about a four-to-six-month
17	process which would put us in about that October
18	time frame.
19	For most cases, you would file a
20	special use permit prior to the site plan, which
21	again is a four-to-six-month process, if we would
22	be lucky, which
23	MR. ROGERS: Your Honor, I'm going to
24	object.
25	A puts the approval

1	MR. ROGERS: This is outside the scope
2	of the cross-examination, and it goes to the
3	process where it's talking about Dominion's
4	timing. I didn't ask any questions about
5	Dominion's timing.
6	MS. LINK: Your Honor, at what point is
7	it appropriate to consistently interrupt the
8	witness with an objection? The objection
9	should be made to the question, not to the
10	answer.
11	MR. ROGERS: The objection is the that
12	witness is giving a narrative answer that's
13	outside the scope of the cross-examination.
14	To ask the broad question and have the witness
15	speak ad nauseam about a topic that was not
16	addressed on cross-examination is
17	objectionable.
18	MS. LINK: The objection was made to
19	the question. It was overruled. She is
20	providing her answer. This is redirect.
21	HEARING EXAMINER SKIRPAN: I think
22	she's responding she's responding to the
23	document that you put in about which is
24	about and there were many questions about
25	the process of and whether or not it would be

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1	possible to comply. So I find it within the
2	scope of the rules, what was asked. So you
3	can continue your answer.
4	THE WITNESS: Actually, I was finished.
5	HEARING EXAMINER SKIRPAN: Okay.
6	BY MS. LINK:
7	Q. Ms. Harper, you indicated the
8	testimony the prefile testimony that was filed
9	in December from the County directing you to
10	the County administrator's testimony in this
11	proceeding. I won't read it. I'll ask you to
12	read it and become familiar with it. Please tell
13	me when I can turn the page.
14	A. Okay. All right.
15	Q. So do you understand Mr. Middaugh's
16	testimony from last week to be consistent with the
17	position they've set forth in their pretrial
18	testimony, with regard to this issue?
19	MR. ROGERS: Objection. I think that's
20	a matter for the Court whether it's consistent
21	with prefiled testimony. It's asking the
22	witness to give an opinion on what
23	Mr. Middaugh's response was to the hearing as
24	opposed to what was prefiled. I object to it
25	based on relevance.

1	MS. LINK: I'm not asking this
2	witness has testified it was the prefiled
3	testimony that caused concern and the request
4	made to this Commission for the legal opinion,
5	and I'm asking if the testimony he gave last
6	week she believes is consistent with the
7	prefiled testimony.
8	THE WITNESS: I believe it is
9	consistent.
10	HEARING EXAMINER SKIRPAN: I'll allow
11	that.
12	As I listen to all this, I'm still
13	trying to figure out how this fits into the
14	legal to the legal distinction or ruling
15	that will be required to be made, whether the
16	Commission has jurisdiction to make this. And
17	I understand that this is all background, but
18	
19	MS. LINK: Your Honor, if I may briefly
20	respond on that. I know Mr. Watts set forth
21	the different positions in the
22	HEARING EXAMINER SKIRPAN: I'll wait
23	for your briefs on that. I'm just it's
24	just I was just making a comment that we
25	spent a lot of time on what I would consider

background, and I'm hoping the briefs will 1 2 cover how this is relevant to the analysis 3 that has to be made. MS. LINK: Thank you, Your Honor. 4 I'm moving to another area of the 5 6 cross-examination of Ms. Harper. 7 BY MS. LINK: 8 0. Mr. Rogers asked you with regard to this sentence on Page 19 of your testimony, and I 9 10 believe the way he was interpreting this is he was 11 stating that you state the Commission's 12 quidelines, this long title, and then you 13 shorthanded it as "transmission filing 14 quidelines." You say, Under the Commission's guidelines, they clearly include. 15 16 Do you see that? 17 Α. I do, yes. 18 And you also understood Mr. Rogers to 0. 19 read that to mean your statement that the 20 quidelines and the code sections clearly include. 21 Do you recall that? 22 Α. Yes. 23 MS. LINK: And just for clarification of the record, Your Honor. 24 25 Ms. Harper, please review these lines 0.

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1	that I am pointing to.
2	A. Uh-huh, yes.
3	Q. And I'm pointing to the same guideline
4	document that I believe you also have, but please
5	also review the lines I'm pointing to now, which
6	is, for the record, the cover of the guidelines
7	and the title of the guidelines.
8	Do you see that, Ms. Harper?
9	A. Yes.
10	Q. And are those words the same or
11	different?
12	A. The same.
13	Q. Thank you.
14	MS. LINK: I have no further redirect.
15	HEARING EXAMINER SKIRPAN: Thank you.
16	You may be excused. We'll take a ten-minute
17	break.
18	(Break in proceedings.)
19	MS. LINK: The Company recalls Doug
20	Lake.
21	HEARING EXAMINER SKIRPAN: We'll wait
22	for everybody to get back.
23	MS. LINK: Oh, okay. Sorry.
24	HEARING EXAMINER SKIRPAN: That's okay.
25	MS. LINK: Your Honor, before we mark

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1	Mr. Lake's testimony, just a question. Do
2	your records indicate that Exhibit 66 has been
3	admitted into the record?
4	HEARING EXAMINER SKIRPAN: Yes.
5	MS. LINK: Thank you.
6	
7	DOUGLAS J. LAKE
8	was sworn and testified as follows:
9	EXAMINATION
10	BY MS. LINK:
11	Q. Are you the same Douglas J. Lake who
12	provided testimony on direct in this proceeding?
13	A. Yes.
14	Q. Do you have with you a document titled,
15	"Rebuttal Testimony of Douglas J. Lake,"
16	consisting of 20 typed pages of questions and
17	answers and one rebuttal schedule which was filed
18	in a public version only in this proceeding on
19	March 14th, 2013?
20	A. Yes.
21	Q. Was that document prepared by you or
22	under your supervision?
23	A. Yes, it was.
24	Q. Do you have corrections or additions to
25	that document?

1 No, I don't. Α. 2 If I were to asking you the questions 0. 3 appearing there, would you provide the same answers here today? 4 5 Α. Yes. 6 Ο. And do you wish to sponsor that 7 document as your rebuttal testimony in this 8 proceeding? 9 Α. Yes. 10 MS. LINK: Your Honor, may we have 11 Mr. Lake's rebuttal testimony marked? 12 HEARING EXAMINER SKIRPAN: I'll mark 13 his rebuttal testimony as Exhibit Number 124. Thank you, Your Honor, and 14 MS. LINK: 15 if we could --16 HEARING EXAMINER SKIRPAN: It's 17 admitted subject to cross. 18 (Exhibit Number 124 is placed in the 19 record.) 20 MS. LINK: Thank you. Mr. Gary has 21 some questions. 22 23 EXAMINATION 24 BY MR. GARY: 25 Good morning, Mr. Lake. How are you? 0.

б

1	see what can be seen and what distances and how
2	much of something, in particular, if we're looking
3	at transmission line structures.
4	And actually we do it quite often when
5	we don't have access to a particular area. It's
6	like a desktop methodology that we can use very
7	accurate in determining what can be seen, how much
8	can be seen.
9	So when we saw the new alignment
10	when I saw the new alignment that Mr. Allen
11	provided, I had my office do a line-of-sight
12	profile, just like we've done other line-of-sight
13	profiles from Carter's Grove, to determine what we
14	would see, which towers would be seen and how much
15	of those towers could be seen from Carter's Grove.
16	Q. Mr. Lake, let me pass out that
17	line-of-sight study you did.
18	MR. GARY: I'll have this identified,
19	Your Honor. Can we have this marked as an
20	exhibit?
21	HEARING EXAMINER SKIRPAN: I'll mark it
22	as Exhibit 125.
23	(Exhibit Number 125 is placed in the
24	record.)
25	MR. GARY: Thank you, Your Honor.

1	BY MR. GARY:
2	Q. Mr. Lake, is Exhibit 125 that was just
3	handed out the line-of-sight study that you had
4	just mentioned in your testimony?
5	A. Yes, it is.
6	Q. And could you just explain very quickly
7	what the depiction on this Exhibit 125 is,
8	specifically?
9	A. Sure. The box the rectangle in the
10	upper left-hand corner shows a depiction of the
11	route, in this case, Variation 4 that Mr. Allen
12	presented from Surry across the river to James
13	City County.
14	The lines that you see coming from a
15	larger square up near the top, that larger square
16	is basically a depiction of a blown-up area to the
17	right, but the very small square where all the
18	orange lines originate is Carter's Grove house,
19	and what I asked our GIS staff to do is to do a
20	line-of-sight profile for each of the towers.
21	Now, Mr. Allen provided to NRG the
22	location, a very precise location, geographic
23	points X, Y determinate coordinates of each one of
24	the tower locations and the height of each tower,
25	so we could very easily, from the point just in

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1	front of the house, make a connection with each
2	one of those tower locations and then determine
3	what would be visible from the house, through or
4	around the trees down by the river. We've heard
5	testimony about the opening in the trees and other
6	trees blocking views at Carter's Grove.
7	And if you move over to the right,
8	thank you, that square is essentially a blown-up
9	area, a zoomed-in area, if you will, of the
10	Carter's Grove house and the lines going the
11	line of sights going to each one of the individual
12	towers. And the towers are named I'm sorry,
13	labeled, and they correspond to the tower numbers
14	that are shown over to the left.
15	And you can see where some of those
16	lines are intercepting trees and forests, and
17	others go through the cleared area, and then,
18	again, others are again intercepted.
19	So the purpose of this diagram was to
20	see and determine which structures could be seen
21	from Carter's Grove, how much of that structure.
22	In other words, if it was all viewed visible or
23	maybe just the upper half, and also at what
24	distance it was being viewed at.
25	Then, if you go down below, each one of
1	

1	the tower profiles is presented. To the left
2	indicates or represents the Carter's Grove house
3	location, and then to the right, as you can see,
4	is a representation of each one of the towers and
5	the distance of that tower location from the
6	viewing point.
7	And in some cases, the trees are
8	blocking the view, you can see. And in other
9	cases, the trees are not blocking it, and you have
10	a clear view.
11	The data, by the way, for the trees and
12	the tree height that we used was digital light art
13	data obtained from the College of William and
14	Mary. It's very accurate in terms of getting
15	instead of just estimating tree height, getting
16	the actual height of the vegetation in the area.
17	Q. Thank you. This line-of-sight study
18	lines up with Exhibit 101, which was from
19	yesterday, this is Mr. Twiss's visualization, his
20	photo simulation?
21	A. Yes. We did that simulation I'm
22	sorry. We did the line-of-sight profiles, and
23	once we could determine we were hoping, you
24	know, that this variation would push the tower
25	back and push the line back, reorient the towers

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1	such that maybe it would reduce the views of the
2	towers from the Carter's Grove. And once we saw
3	that three clearly it determined from the
4	line-of-sight profile that three of the towers
5	would now be visible, and there were only two and
6	a half towers visible prior to that on the prior
7	alignment, we decided that Dominion decided to
8	have Truescapes do a simulation.
9	And in order for Truescapes to do that
10	simulation, we provided Truescape the exact same
11	digital coordinate information and the tower
12	height that Dominion provided to us, so that it
13	would all be the same data that was being used.
14	And this clearly represents that. You
15	can see three towers and all of three towers.
16	Q. Thank you, Mr. Lake.
17	MR. GARY: Your Honor, I'd like to move
18	Exhibit 125 into evidence, and Mr. Lake is
19	available for cross-examination.
20	HEARING EXAMINER SKIRPAN: 125 is in.
21	
22	EXAMINATION
23	BY MR. QUINAN:
24	Q. Good morning, Mr. Lake. Michael Quinan
25	again for BASF.

1	A. Hi. How are you doing.
2	Q. Good. I hope you are.
3	Is Dominion's assessment of visual
4	impacts, was that done solely based on the visual
5	simulations that were prepared, or did Dominion
6	take into consideration, you know, actually
7	visiting the area, going to the site, looking at
8	the river, looking at the property?
9	A. Yes. When we prepared our visual
10	assessment, I personally went to each one of the
11	areas, including Carter's Grove. I've been to
12	Carter's Grove and stood right next to the porch.
13	So, you know, obviously there's no
14	structures in view now, but we could see the
15	landscape and see the views.
16	I actually also participated in some of
17	the photo simulation data collection, the photo
18	taking and that sort of thing.
19	Q. The visual simulations were done from
20	how many viewpoints? From one viewpoint on
21	Carter's Grove. Correct?
22	A. No. That's not correct. There were
23	several viewpoints from Carter's Grove.
24	First, to answer your first question,
25	was that for the entire project, how many

1	viewpoints?
2	Q. Yes.
3	A. Seventeen viewpoints, I believe.
4	Q. Okay.
5	A. And many of those were relative to the
6	Chickahominy alternative, and then the rest were
7	relative to the Surry to Skiffes alternative or
8	the proposed ground.
9	Q. Do you know how many were relative to
10	the Surry to Skiffes proposal?
11	A. About nine.
12	Q. Okay.
13	A. And that doesn't include the ones that
14	were ten, including this last one that Mr. Gary
15	just presented. That was presented by Mr. Twiss
16	yesterday.
17	Q. I thought the visual simulations from
18	Carter's Grove were all done from the stairs on
19	what's been described as the front of the house,
20	the river side of the house. Is that correct?
21	A. Is that correct that you thought that
22	or
23	Q. No. Is that correct that that is true?
24	A. No, that's not entirely accurate. We
25	had to do visual assessments to support and

1	under the direction of Ms. Harper, to support the
2	DHR's review of the project.
3	So we had to do visual assessments at
4	the back of the house, looking out toward the
5	Skiffes station and also looking down to the south
б	and east toward the alignment across BASF's
7	property.
8	Q. Okay.
9	A. So we wanted to do that primarily to
10	see if, and document, whether or not the towers
11	would be able to be seen basically all around the
12	house.
13	Q. All right. Let me rephrase the
14	question then. The visual simulations of the
15	river of the river view from Carter's Grove
16	were all done from the same point on the stairs on
17	the front of the house?
18	A. No, not exactly. There were two other
19	simulations done, one from the field down if
20	you look at that picture right there, if we can
21	use that as a reference, about halfway down
22	between the house and the river and off to the
23	right, out of sight out of view in that
24	picture, in the middle of what I believe was a
25	cornfield or an agricultural field, there was a

1	viewpoint taken there that looked out to the
2	river, and then another viewpoint from the
3	shoreline that looked out.
4	And again, they were submitted to the
5	DHR for documentation of the structure locations.
6	Q. Were they submitted to the State
7	Corporation Commission?
8	A. Yes.
9	Q. Well, the point I'm trying to make is
10	how many towers you see and which towers are
11	visible and which towers are screened by
12	vegetation will depend on where you're standing on
13	the Carter's Grove property?
14	A. That's correct.
15	Q. That was the simple point I was trying
16	to make. And those are all the questions I have.
17	Thank you.
18	A. Sure.
19	
20	EXAMINATION
21	BY MR. LEDBETTER:
22	Q. Thank you, Mr. Lake. I'm David
23	Ledbetter, representing myself and my wife in the
24	matter.
25	A. Good morning.
1	

Q. I just have one very quick questi	ion
2 about this document. Actually, it's a littl	le too
3 large, but I'll put one part of it up here.	
4 A. You can zoom.	
5 Q. It's just this. I didn't readily	y note
6 a horizontal scale on this depiction, and I	just
7 wanted to ask if you could clarify for us	- the
8 vertical scale is listed in feet on the heig	ght of
9 the towers?	
10 A. Uh-huh.	
11 Q. But this is not a proportional so	cale,
12 is it, since we're talking about, you know,	
13 between a mile and a mile and three-quarters	s on
14 these distances, so	
15 A. That's correct.	
16 Q I just wanted to clarify that	anyone
17 looking at this shouldn't assume that they c	could
18 infer from this how tall the towers would lo	ook.
19 Correct?	
20 A. That's correct.	
21 Q. Thank you.	
22 A. And at the bottom I might add,	, at
23 the bottom of the title, it indicates that t	there's
24 a vertical exaggeration of five.	
25 Q. Okay. I'm sorry. I missed that.	•

1	A. Yeah. But you were asking about the
2	horizontal scale.
3	Q. Yeah.
4	A. The horizontal scale is not depicted,
5	but it is indicated for each one of the towers the
6	distance from the viewpoint.
7	Q. Exactly, but in order to get a true
8	proportional, it would have to be a far wider
9	document. Correct?
10	A. That's right.
11	MR. LEDBETTER: Thank you.
12	
13	EXAMINATION
14	BY MR. ROGERS:
15	Q. Good morning, Mr. Lake. Leo Rogers,
16	County Attorney with James City.
17	A. Good morning.
18	Q. On Page 5 of your rebuttal testimony,
19	you speak about the zoning of the property and
20	your opinion of the James River in that area.
21	I'll refer you to that.
22	A. Yes.
23	Q. Have you had an opportunity to study
24	the James City County comprehensive plan for this
25	area?
1	

1 No, I haven't. Α. 2 Have you had a chance to study the 0. 3 James City County zoning ordinance? 4 Α. No. Are you familiar with the requirements 5 0. in Chesapeake Bay -- I understand you're from 6 7 Minnesota. Do you know about the Chesapeake Bay Preservation Ordinance? 8 9 Somewhat, in relation to the other Α. 10 projects that I've worked on for Dominion in this 11 area, and for this project. 12 Then you're aware, under the Chesapeake Ο. 13 Bay ordinance, that a buffer is required from a 14 resource which would be the upper most part of a 15 waterbed 100 feet landward. Is that correct? 16 Α. Are you --17 0. The Resource Protection Areas. 18 You're talking about Resource Α. 19 Protection Areas? 20 Q. Yes, sir. 21 In a -- for a project that's regulated Α. under that guideline, yes. 22 23 Ο. Are you aware that every part of James 24 City County is under the Chesapeake Bay protection 25 area?

1	A. No, I wasn't aware that every part was,
2	but I am aware that it applies to James City
3	County.
4	Q. Are you familiar with what a Resource
5	Management Area is under the Chesapeake Bay
6	ordinance?
7	A. No.
8	Q. The entire part of James City County is
9	a Resource Management Area.
10	A. Yes.
11	Q. A buffer of a Resource Protection Area
12	is only provided from the resources. Is that
13	correct?
14	A. I'm sorry. Could you repeat that?
15	Q. Are you aware with the familiarity
16	between what a Resource Management Area is and a
17	Resource Protection Area is under the Chesapeake
18	Bay laws?
19	A. I know what a Resource Protection Area
20	is, but as I just stated, I'm not familiar with
21	the Resource Management Area, other than the fact
22	of where the designations are, which are covered
23	in our routing study.
24	Q. Are you familiar with James City
25	County's landscape ordinance?
1	

1	A. No.
2	Q. Are you familiar with the buffering
3	requirements between redevelopment, development
4	and lands of inconsistent uses?
5	A. No, I'm not.
6	Q. So if there was a development or
7	redevelopment of the property in this area, you
8	wouldn't be familiar with how it would be
9	developed in James City County, would you?
10	A. The local permitting excuse me. The
11	local permitting and zoning are not part of the
12	scope of my work. That would come under Elizabeth
13	Harper's work.
14	Q. Are you aware that James City County
15	has a purchase of development rights and green
16	space program that was approved by our voters in a
17	bond referendum where James City County buys up
18	these open space areas, vista views and buffers
19	along scenic and historic byways and rivers?
20	MS. LINK: Your Honor, at this point, I
21	believe Mr. Lake has made it clear the local
22	permitting and zoning
23	MR. ROGERS: I'm not talking about
24	MS. LINK: are not part of the scope
25	of his work.

1	MR. ROGERS: permitting, Your Honor.
2	HEARING EXAMINER SKIRPAN: He does talk
3	about the zoning and how this is an industrial
4	area and it's encouraging industrial
5	development, so I see these as relevant.
6	MR. ROGERS: Thank you, Your Honor. I
7	have switched from zoning to the acquisition
8	of real property.
9	BY MR. ROGERS:
10	Q. Are you familiar at all with the James
11	City County purchase of development rights program
12	and green space program which segregates money
13	through the budget and also has a bond referendum
14	approved by the citizens of the county to acquire
15	green spaces, to acquire PERC development rights
16	and vistas along scenic and historic byways,
17	highways and to protect historic views?
18	A. I am not let's see.
19	Q. Yes or no?
20	A. I think that that question pertains to
21	real estate, and that's not part of the scope of
22	my work. We don't do real estate acquisition.
23	Q. One last question then to follow up on
24	your testimony. The land in that area that you're
25	identifying that's industrial, most of it is

1	undeveloped. Is that correct?		
2	A. Are you talking about the BASF property		
3	only, or the Economic Development Authority		
4	property, or all of it?		
5	Q. I'm sorry. Let's try that area of the		
6	county where you identified is zoned industrial.		
7	A. Yes.		
8	Q. The vast majority of that is		
9	unimproved. Is that correct?		
10	A. To be able to accurately answer that,		
11	I'd have to look at some aerial photos. I have		
12	seen		
13	Q. That's fine. Oh, I'm sorry.		
14	A. May I finish my answer?		
15	HEARING EXAMINER SKIRPAN: Go ahead,		
16	finish.		
17	THE WITNESS: In my review of the area,		
18	there's quite a bit of development in that		
19	area, particularly that zoned industrial area.		
20	There's areas that are brownstone, such		
21	as the Dow Chemical area, that were developed		
22	and now aren't, but they're still in a		
23	developed state with concrete platforms and		
24	other consideration.		
25	There's a Wal-Mart Distribution Center		
1			

1	in the Green Mount industrial area that's			
2	currently being developed now. There's the			
3	Sanifill landfill area and the mines, the			
4	Branscome mining area. And they, I believe			
5	are all within the industrial area there,			
6	SO			
7	BY MR. ROGERS:			
8	Q. Is it your testimony that there is a			
9	landfill in southern James City County?			
10	A. There is land owned by Santi by a			
11	landfill I believe it's a landfill company			
12	adjacent to the Wal-Mart Distribution Center.			
13	Q. And if that's true, that there's a			
14	landfill down there, that would be visual from the			
15	aerial photographs, wouldn't it?			
16	A. Not necessarily oh, from the aerial			
17	photographs?			
18	Q. Yes.			
19	A. It depends on what stage of development			
20	it's in. It does. If the landfill has been			
21	reclaimed, it may not be obvious from an aerial			
22	photograph.			
23	Q. So it's your testimony that there's a			
24	closed landfill in James City County, or is it			
25	your testimony that you really don't know?			

1	Α.	My testimony is that there's land owned	
2	by a landf	ill development company in that	
3	industrial zoned area.		
4	Q.	Thank you. You mentioned the term	
5	"brownstone." I'm not familiar with that, in the		
6	description of the BASF property. What is a		
7	brownstone?		
8	Α.	Brownstone is an area typically an	
9	industrial	area that's been developed and is in	
10	the position to be redeveloped in another manner.		
11	Q.	Similar to a brownfield then?	
12	Α.	I'm sorry?	
13	Q.	It's similar to a brownfield	
14	development?		
15	Α.	Yeah, a brownfield.	
16	Q.	Okay. In a redevelopment of the BASF	
17	site, that	is not an actively used manufacturing	
18	site, is it?		
19	Α.	To my knowledge, it's not actively used	
20	now.		
21	Q.	So a redevelopment of the BASF site	
22	would have	to comply with all those provisions of	
23	zoning, Ches Bay, the County's buffering and		
24	landscaping requirements, wouldn't it?		
25	Α.	I'm not local permitting is not in	

1	the scope of my work here.
2	Q. You identified the Wal-Mart
3	Distribution Center which is located close to
4	Route 60 in lower James City County. Is that
5	visible from James River or from any of the
6	historic sites?
7	A. Did you say from the James River or any
8	of the I can't answer for the historical sites.
9	I would have to speculate on that.
10	And from the James River, unless I were
11	to get in a boat and travel around to all parts of
12	the James River, I wouldn't be able to answer that
13	question.
14	Q. Are you aware there's been no testimony
15	here indicating that the Wal-Mart Distribution
16	Center is a facility that's visible from any of
17	the historic sites or from the James River?
18	A. I'm sorry. Could you repeat that?
19	Q. Are you aware there's been no testimony
20	here that indicates that the Wal-Mart Distribution
21	Center is visible from any historic sites or from
22	the James River?
23	A. That there has not been testimony?
24	Q. Any testimony to that effect
25	whatsoever.

1	A. I accept that.
2	Q. And how about any of the other
3	development? You mentioned the James River
4	Commerce Center. Are you aware if there's been
5	any testimony that the James River Commerce Center
6	is visible from historic sites or from the James
7	River?
8	MS. LINK: Your Honor, I'm going to
9	object to this line of questioning. Whether
10	there has been any testimony, I believe it
11	would require Mr. Lake to have been here for
12	every moment of the hearing.
13	He perhaps could ask has he heard any
14	testimony on it, rather than asking Mr. Lake
15	to make representation for the entire record
16	if there's been any.
17	MR. ROGERS: I'm going to say what my
18	question was. Are you familiar with any
19	testimony. I didn't use the word "heard." I
20	said are you familiar with any testimony here.
21	HEARING EXAMINER SKIRPAN: I'll allow
22	that.
23	THE WITNESS: No.
24	BY MR. ROGERS:
25	Q. Okay. Isn't it true that you

1	commissioned a study to be done by Truescape?
2	A. Yes.
3	Q. And your determination of impacts was
4	based on those voter?)voted determinations done by
5	Truescape?
6	A. In part.
7	Q. Referring to Page 9 now well,
8	actually referring to your entire rebuttal
9	testimony, you do not mention impacts on the
10	Captain John Smith Historic Trail in your rebuttal
11	testimony, do you?
12	A. No, I believe I don't.
13	Q. Would you agree that the impacts on the
14	Captain John Smith Historic Trail and the James
15	River and thereby the scenic and historic sites
16	can be mitigated by putting a transmission line
17	under the James River?
18	A. Certain aspects of construction under
19	the river let me back up.
20	Construction of the facilities under
21	the river could mitigate certain aspects of the
22	impacts associated with an overhead line, but
23	there are many other impacts that could affect the
24	James River associated with underwater
25	construction. Not only the James River but the

1	historic John Smith Trail, as well, associated
2	with construction underwater.
3	As you are aware, the trail is used for
4	recreational use and for many other uses, canoeing
5	and boat use and scenic, obviously.
6	Construction of a line, as I I would
7	refer back to Mr. Thomasson's testimony, would
8	involve not only directional drilling and and a
9	location, depending on where you started the drill
10	and where you ended the drill of above-ground to
11	below-ground transition stations.
12	So if those stations were located near
13	the river, they would the views of those
14	stations would have to be mitigated in some way.
15	Then you've got in addition to the
16	directional drill process itself, you need
17	splicing barges out in the river. And depending
18	on the various scenarios, that would indicate the
19	number of splicing barges. In some cases six, in
20	some cases nine, depending on the number of
21	circuits and the number of pipes that were put
22	across.
23	Those barges would have to be in place
24	for approximately two years to finish the
25	construction of the project. So at a minimum

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1	and there are a number of pilings that have to be
2	installed. Not all pilings are associated
3	directly with stabilization of the barge, but also
4	to support the cables as they go from the barge
5	down into the water, and the conduit, 8-inch
6	wide 8-inch diameter pipeline.
7	So what you have, if you can picture
8	that in your mind across the river, would be up to
9	nine different barges, three across and then three
10	across and then three more across, with pilings
11	going off both directions, supporting an elevated
12	pipeline that transitions between the barge
13	location and underground, for a large distance.
14	And that would be in place for almost
15	two years, so I think that would be, I would say a
16	significant visual impact and also an impediment
17	to recreational uses within the trail for that
18	time.
19	In addition to that temporary impact
20	but significant impact, you've got the situation
21	involved that was described very adequately by
22	Ms. Harper and also by Company Witness Thomasson
23	associated with the trenching that would be
24	involved.
25	Q. I'm going to ask you to stop there

1	since I'm talking about the historic Captain John
2	Smith Trail and not the issues involved with
3	trenching or environment.
4	A. But I think it's relevant that if you
5	re-suspend sediments in that trail, you're going
6	to be affecting the quality of that trail.
7	Q. Are these temporary measures that you
8	say would be in place, the barges?
9	A. On a time span, they'd be considered
10	more than temporary. Two years would be they
11	are temporary, but they're long-term temporary.
12	They're moderately temporary.
13	In terms of impact, you generally
14	describe things as short-term temporary, long term
15	but temporary and then long-term permanent. These
16	would be long term but temporary.
17	Q. But for generations in the future, it
18	would still preserve the scenic and historic views
19	of the founding of this country, or as Dr. Horn
20	put it, the alpha and omega of the British Empire
21	in America, wouldn't it?
22	A. I'm sorry. Could you repeat that
23	question?
24	Q. Yes. What I'm asking is for
25	generations to come, it would still preserve the

1	scenic and historic views of the James River for
2	the founding of this country, or as Dr. Horn put
3	it, the alpha and omega of the British Empire in
4	America?
5	A. I don't know about the alpha and omega
6	of the British Empire. I can't I can't respond
7	to that, but in terms of long-term visual
8	assessment, I think there would be less visual
9	impact, obviously, if the transmission line was
10	underground, under the water than it would be
11	Q. Are you aware that the James River is a
12	transportation corridor, as referenced in your
13	testimony and Ms. Harper's?
14	A. Yes.
15	Q. And that there are barges that are on
16	the James River on occasion I happen to live on
17	the James River. I can tell you there are barges.
18	A. Do you see
19	Q. Are you aware of that?
20	A. Do you see a lot of them?
21	Q. I'm sorry. We shouldn't do that.
22	A. No. I'm sorry.
23	Q. I invite you to my house anytime to
24	look for yourself.
25	Are you aware that there are barges

1	that
2	A. Yes.
3	Q travel the James River. Are any of
4	these barges that you mentioned, will they be in
5	excess of, what is it, 298 feet in height or will
б	be up to 398 feet in height?
7	A. I'm not I'm not familiar with the
8	size of the barges there.
9	Q. Any barge you've ever seen that's
10	398 is it 298? The size of these towers.
11	Barges are pretty low-lying structures, aren't
12	they?
13	A. Yes. And then you have tugboats
14	pushing them or pulling them, which are bigger
15	structures and
16	Q. Like a tugboat?
17	A. Yes.
18	MR. ROGERS: That's all the questions I
19	have for this witness.
20	HEARING EXAMINER SKIRPAN: Any other
21	questions?
22	MR. GARY: Briefly, Your Honor.
23	
24	
25	

2 BY MR. GARY: 3 Q. Mr. Lake, you were asked by Mr. Roger 4 about the development in the area that's zoned 5 industrial around the BASF property and up to th 6 Skiffes switching station. 7 A. Yes. 8 Q. Is this the area you're referring to? 9 A. Could you zoom that out a little bit? 10 I'm sorry. Yes. Thank you. 11 Q. And is it this where the Branscome 12 property is that you were mentioning, and the 13 Sanifill? Is this the areas you were talking 14 about? 15 A. Yes. 16 Q. And this is where you believe it's 17 developed in this area?
4 about the development in the area that's zoned 5 industrial around the BASF property and up to th 6 Skiffes switching station. 7 A. Yes. 8 Q. Is this the area you're referring to? 9 A. Could you zoom that out a little bit? 10 I'm sorry. Yes. Thank you. 11 Q. And is it this where the Branscome 12 property is that you were mentioning, and the 13 Sanifill? Is this the areas you were talking 14 about? 15 A. Yes. 16 Q. And this is where you believe it's
 industrial around the BASF property and up to the Skiffes switching station. A. Yes. Q. Is this the area you're referring to? A. Could you zoom that out a little bit? I'm sorry. Yes. Thank you. Q. And is it this where the Branscome property is that you were mentioning, and the Sanifill? Is this the areas you were talking about? A. Yes. Q. And this is where you believe it's
 6 Skiffes switching station. 7 A. Yes. 8 Q. Is this the area you're referring to? 9 A. Could you zoom that out a little bit? 10 I'm sorry. Yes. Thank you. 11 Q. And is it this where the Branscome 12 property is that you were mentioning, and the 13 Sanifill? Is this the areas you were talking 14 about? 15 A. Yes. 16 Q. And this is where you believe it's
 A. Yes. Q. Is this the area you're referring to? A. Could you zoom that out a little bit? I'm sorry. Yes. Thank you. Q. And is it this where the Branscome property is that you were mentioning, and the Sanifill? Is this the areas you were talking about? A. Yes. Q. And this is where you believe it's
 Q. Is this the area you're referring to? A. Could you zoom that out a little bit? I'm sorry. Yes. Thank you. Q. And is it this where the Branscome property is that you were mentioning, and the Sanifill? Is this the areas you were talking about? A. Yes. Q. And this is where you believe it's
 A. Could you zoom that out a little bit? I'm sorry. Yes. Thank you. Q. And is it this where the Branscome property is that you were mentioning, and the Sanifill? Is this the areas you were talking about? A. Yes. Q. And this is where you believe it's
10I'm sorry. Yes. Thank you.11Q. And is it this where the Branscome12property is that you were mentioning, and the13Sanifill? Is this the areas you were talking14about?15A. Yes.16Q. And this is where you believe it's
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<pre>14 about? 15 A. Yes. 16 Q. And this is where you believe it's</pre>
15 A. Yes.16 Q. And this is where you believe it's
16 Q. And this is where you believe it's
17 developed in this area?
18 A. Some of those areas are. If you look
19 through the green shading, for example, the
20 Branscome, Inc., area, you can see the cleared
21 development going on underneath that. If people
22 can see through that the green in the lower
23 right-hand corner.
24 MR. ROGERS: Your Honor, I don't
25 believe this is a good photo simulation sinc

1	it's been colored to show development, and I
2	believe that for the purposes excuse me.
3	Let me stand. For the purposes of showing
4	development in this area, it misrepresents
5	what exists there. A better view would be an
6	aerial photograph without the coloring, if
7	such exists.
8	HEARING EXAMINER SKIRPAN: I believe
9	there have been exhibits that do that.
10	MR. ROGERS: Yes, sir.
11	HEARING EXAMINER SKIRPAN: But I agree
12	that the color makes it difficult.
13	MR. GARY: Well, it's all I had, Your
14	Honor.
15	HEARING EXAMINER SKIRPAN: Other than
16	this is what different parcels are.
17	BY MR. GARY:
18	Q. And this confirms what your testimony
19	was, Mr. Lake, that there is development in this
20	industrial area?
21	A. Yes.
22	MR. GARY: Okay. No further questions,
23	Your Honor.
24	HEARING EXAMINER SKIRPAN: Thank you.
25	You may be excused.
1	

1	MR. GARY: Your Honor, we'd call
2	Dr. Wolverton.
3	
4	MARVIN L. WOLVERTON
5	was sworn and testified as follows:
6	EXAMINATION
7	BY MR. GARY:
8	Q. Please state your name, position of
9	employment and business address.
10	A. Marvin L. Wolverton, emeritus associate
11	professor at College of Business Administration,
12	Department of Finance, Insurance and Real Estate,
13	Washington State University. I currently reside
14	in an office at my home at 3502 Bachelor Gulch in
15	Leander, Texas.
16	Q. Thank you. Dr. Wolverton, do you have
17	with you a document entitled, "Rebuttal Testimony
18	of Marvin L. Wolverton," consisting of 30 typed
19	pages of questions and answers, an appendix A and
20	eight rebuttal schedules which were filed in a
21	public version only in this proceeding on
22	March 14, 2013?
23	A. Yes.
24	Q. Was that document prepared by you or
25	under your supervision?

1	A. It was prepared entirely by me.
2	Q. Do you have any corrections or
3	additions to that document?
4	A. I do not.
5	Q. If I were to ask you the questions
6	appearing in this testimony, would your answers be
7	the same or similar today?
8	A. They would.
9	Q. Do you wish to sponsor that document as
10	your rebuttal testimony in this proceeding?
11	A. Yes.
12	MR. GARY: Your Honor, can we have his
13	testimony marked as an exhibit?
14	HEARING EXAMINER SKIRPAN: I'll mark
15	his rebuttal testimony as Exhibit Number 126.
16	(Exhibit Number 126 is placed in the
17	record.)
18	MR. GARY: Thank you, Your Honor.
19	BY MR. GARY:
20	Q. Now, Dr. Wolverton, are you familiar
21	with the live testimonies of the witnesses of the
22	BASF Corporation in this proceeding on April 11
23	and 12, 2013, specifically the live testimony of
24	Mr. Henderson and Mr. Gruelle?
25	A. Yes.
1	

	0 0
1	Q. Are you familiar with Mr. Gruelle's
2	oral testimony where he states that you
3	misunderstood the purpose of his report?
4	A. I am.
5	Q. Did you misunderstand what Mr. Gruelle
6	was presenting in this proceeding?
7	A. No. Although he represented his report
8	as not having been an appraisal during his live
9	testimony, it is in fact an appraisal.
10	By his own admission in his testimony,
11	an appraisal is an opinion of value. The
12	definition of an appraisal as an opinion of value
13	is also contained in the Uniform Standards for
14	Professional Appraisal Practice, also known as
15	U-S-P-A-P or commonly pronounced USPAP, which is
16	the law of the land for the practice of appraisal
17	throughout the United States.
18	On the fourth page of Mr. Gruelle's
19	report, he clearly expresses an opinion of value.
20	While he terms it an opinion of impact, he comes
21	to a conclusion of an impact on value, which is in
22	fact a value opinion.
23	Regardless of the terminology
24	Mr. Gruelle may prefer to adopt, his report is an
25	appraisal. For the reasons I discussed in my

1	rebuttal testimony, the appraisal he performed
2	does not conform to professional appraisal
3	standards, and my critique remains valid.
4	Q. Dr. Wolverton, do you recall
5	Mr. Henderson's and Mr. Gruelle's explanation of
6	how Mr. Henderson determined the value of the BASF
7	property to be \$45 million?
8	A. Yes. Mr. Henderson states in his
9	testimony that he based his \$45 million market
10	value estimate on a 2004 proposal from Marriott
11	Corporation for developing 1,000 timeshare units
12	on the property, valuing the land at \$60,000 per
13	unit, pad ready.
14	Mr. Gruelle also testifies that the
15	\$45 million value is derived from the same 2004
16	information, including a \$15 million cost to get
17	the site pad ready.
18	Q. And do you recall Mr. Henderson
19	referring to that as a future value?
20	A. Yes, I do.
21	Q. Now, does the \$45 million value opinion
22	result from an appropriate method for determining
23	the value of the BASF site?
24	A. No, it does not. In order to estimate
25	a value for the BASF site for the purpose that

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1	Mr. Gruelle states in his appraisal, an appraiser
2	would need to discount the prospective future
3	value estimate to its present value.
4	By way of example, a reasonable present
5	value estimate, based on the \$45 million future
6	value and assuming a seven-year development time
7	horizon, would be approximately \$11.2 million.
8	This computation is based on a 22 percent discount
9	rate, which is within an appropriate range for a
10	speculative real estate development of this
11	nature.
12	While this could be viewed as a more
13	realistic present amount based solely on the time
14	value of money and the associated development
15	risk, the real estate market and the timeshare
16	market are different now and less supportive of
17	development less support of the development
18	envisioned by Marriott in 2004.
19	Q. Now, Dr. Wolverton, why do you believe
20	the real estate market is currently less
21	supportive of this type of development?
22	A. It is well known that the general real
23	estate market has recently gone through and is
24	just now recovering from a severe downturn.
25	The timeshare market has weakened, as

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1	well, over the last five to six years. Consistent
2	with the broader downturn in the real estate
3	market, there has been a significant downturn in
4	total sales revenue in the timeshare market.
5	Q. And do you recall Mr. Henderson
6	testifying to the weakened real estate market?
7	A. Yes. He referred to it as a
8	correction, and he also testified to the current
9	financing conditions, which he characterized as
10	problematic access to capital.
11	Q. And should you consider the condition
12	of the market at the time of the valuation?
13	A. Absolutely.
14	Q. Why is that relevant to a valuation
15	opinion, and specifically to the \$45 million value
16	opinion adopted by Mr. Gruelle in his report?
17	A. Excuse me for a minute. I'm having
18	problems with the pollen in Richmond. My eyes are
19	watering.
20	HEARING EXAMINER SKIRPAN: What pollen?
21	THE WITNESS: Taking the weaker real
22	estate market and timeshare markets into
23	account, in addition to a more challenging
24	financing environment, it seems unreasonable
25	to conclude that a \$45 million prospective

1

future value opinion is representative of

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2 today's land value for the use envisioned by Marriott in 2004. 3 Market conditions have changed, and 4 what Marriott might have paid for a pad-ready 5 6 site in 2004 bears little relationship to what 7 they might be willing to pay today, assuming 8 they would be interested at all, given the 9 large scale of the project and current 10 timeshare market conditions. BY MR. GARY: 11 Dr. Wolverton, Mr. Gruelle testified 12 Ο. 13 the other day that your confusion about his 14 appraisal led to your criticism about the use of 15 present value versus future value. Do you agree with that? 16 No, I do not. The manner in which he 17 Α. 18 incorporated the future value into his appraisal report was inappropriate. This is for the reasons 19 we have just discussed. 20 21 Among others, he did not discount the 22 future value to a present value figure. He did 23 not consider that the valuation was based on information applicable to 2004, which is most 24 25 likely not applicable to his appraisal date of Huseby, Inc. www.huseby.com 4860 Cox Road, Suite 200, Glen Allen, VA 23060 (804) 755-4200

1	November 12, 2012.
2	Q. Now, Mr. Gruelle testified as to the
3	support for his diminution percentages being
4	conversations with various real estate
5	professionals, industry literature, his experience
6	in what he called the other day paired sales.
7	Does that lead to a valid damages
8	estimate in this proceeding?
9	A. No. In my opinion, these techniques
10	are not sufficient.
11	The answer to this question is really
12	rooted in his opinion of highest and best use,
13	which is the land is best analyzed as a mixed use
14	development project.
15	Assuming for the moment that his mixed
16	use, highest and best use conclusion is actually
17	valid, the appropriate measure of damages would
18	have been the present value of the property under
19	the proposed development scenario with
20	MR. QUINAN: Your Honor, I am going to
21	object, both to the question and the answer,
22	to the extent that they're characterizing
23	Mr. Gruelle's report and testimony as stating
24	damages.
25	He did not present his report and it

1	has not been presented to this Commission as
2	stating damages in the nature of the damages
3	that would be sought in a condemnation
4	proceeding.
5	I think his testimony will speak for
6	itself about what he intended it to be, but I
7	think the question and the answer
8	mischaracterized Mr. Gruelle's testimony.
9	MR. ROGERS: And Your Honor, I do not
10	have an objection here, but it's apparent that
11	the witness is testifying from notes. It may
12	be helpful if we all had a copy of those notes
13	so that we could follow along.
14	MR. GARY: Your Honor, as far as what
15	Mr. Gruelle said, he said the other day the
16	question was: Mr. Wolverton's fourth
17	criticism is that you failed to provide
18	critical evidence supporting your value
19	diminution percentages. Again, would you
20	comment.
21	And he goes on for that's at
22	transcript 742. And he goes on for many
23	paragraphs, talking about paired sales,
24	including a 20-acre lot and other things, all
25	of which led to his testimony as to why that's
1	

1	the appropriate way to measure damages in this
2	proceeding.
3	What Dr. Wolverton is saying is that's
4	not an appropriate way to measure damages in
5	this proceeding or any other proceeding.
6	HEARING EXAMINER SKIRPAN: I just
7	don't I'm struggling with the word
8	"damages."
9	MR. GARY: Well, his testimony was that
10	the beginning with the \$45 million future
11	value opinion, that damages were anywhere
12	between 25 and 50 percent or 22 and a half
13	million dollars in this proceeding.
14	Whatever he offered that for, we have a
15	right to rebut.
16	MR. QUINAN: I'm struggling with the
17	same word you are, Your Honor. His testimony
18	speaks for itself. He clearly was not
19	testifying about the damages that would be
20	recoverable in a condemnation proceeding. I
21	don't believe he used the word "damages."
22	I guess the transcript could prove me
23	wrong, but that's the nature of my objection,
24	is I think his testimony has been
25	mischaracterized.

 Mr. Quinan. The problem is it does speak for itself and it speaks erroneously, and our witness is to explain why it does. HEARING EXAMINER SKIRPAN: Well, this is just the word the use of the word "damages." I'm not sure that that's in there. MR. GARY: That was the way HEARING EXAMINER SKIRPAN: It refers to it as impacts on it. I think I can figure it out. I can look back at what it was. And as to the notes MR. ROGERS: I would request that we get a copy maybe after the direct so that it would help us with the cross so we'd know exactly what script he's reading from. MR. GARY: Your Honor, that's our notes to go with surrebuttal. It's going to be in the transcript. You can read it there. I'm not giving you a copy of my notes. It's attorney-client information, and I'm not giving it to you. MR. ROGERS: Your Honor, I don't see the purpose of attorney-client privilege here, 	1	MR. GARY: I don't disagree with
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24 the purpose of attorney-client privilege here,	22	giving it to you.
	23	MR. ROGERS: Your Honor, I don't see
	24	the purpose of attorney-client privilege here,
25 as the witness is reading those notes	25	as the witness is reading those notes

reading from those notes in his testimony.
That is not attorney-client privilege.
MR. GARY: Well, Your Honor, we do
this I mean, this is the way you prepare
rebuttal testimony. We don't have to go
ad lib for everything we do here.
HEARING EXAMINER SKIRPAN: Which is the
general practice to do that. I mean, you've
heard this testimony. You can ask him to
repeat it.
MR. ROGERS: I could ask him for a copy
of his notes.
MR. GARY: Your Honor, we just don't do
that here. If you want to start that
practice, it goes everywhere in here.
Everybody brings in notes to the proceeding.
MR. ROGERS: I'm not saying that they
don't bring in notes or not or come up there,
but he is apparently reading answer to
question from notes. If he's doing that and
reading the questions or reading the
answers that have been provided for him, we
should also be entitled to see what those
answers are.
HEARING EXAMINER SKIRPAN: I don't know

1	that the answers have been provided to him.
2	MR. GARY: They're his answers,
3	absolutely.
4	HEARING EXAMINER SKIRPAN: Right. I'm
5	not going to have him hand out copies of
6	whatever his notes are.
7	BY MR. GARY:
8	Q. Dr. Wolverton, let's move on to the
9	next question on this.
10	A. I didn't finish the answer to this one.
11	Q. Please finish your answer. I'm sorry.
12	A. Can I back up a sentence or two so it's
13	in context?
14	Q. Yes, sir.
15	A. Assuming for the moment that his mixed
16	use, highest and best use conclusion is actually
17	valid, the appropriate measure of damages would
18	have been the present value of the property under
19	the proposed development scenario, with or without
20	the proposed transmission lines.
21	I would have expected to see three
22	proposed development scenarios, one with no
23	transmission line, one showing how the property
24	could best be configured to accommodate Variation
25	1, and one showing how the property could best be

1	configured to accommodate Variation 3, along with
2	market analyses and discounted cash flow models
3	for each scenario, demonstrating the present value
4	under each scenario.
5	I'm going to replace the word "damages"
6	with monetary valuation impact should have been
7	measured as the value differences between the
8	scenarios.
9	Furthermore, regardless of how or where
10	Mr. Gruelle obtained his percentages, they were
11	applied to an unsupported future value opinion.
12	Q. Now, Dr. Wolverton, one final question
13	on this subject. Mr. Waltz stated in his live
14	testimony that Variation 1 route are you
15	familiar with that?
16	A. Yes.
17	Q would be what he's called a
18	nonstarter for mixed-use development. Do you
19	agree with that statement?
20	A. No, I do not. Assuming, solely for the
21	purpose of your question, that BASF could ever
22	sell this property for mixed-use development, over
23	the years, I have analyzed many mixed-use
24	developments having easements of this type,
25	developed or planned for development as mixed-use

1 master plans. 2 Examples that come to mind include 3 Summerland, Providence, and Kyle Canyon Gateway in 4 the Las Vegas area. Other exemplars include Val Vista Lakes in Mesa, Arizona; Rancho Vistoso in 5 6 Tucson, Arizona; and Snowqualmie Ridge in the 7 Seattle, Washington, area. In each case, streets, parks, parking 8 9 lots, retention ponds, walking trails and/or other 10 common area elements were positioned within the 11 master plans to minimize the impacts of transmission corridors. 12 13 Okay. Now, Dr. Wolverton, let's move Q. 14 to the World Heritage process for just a minute. 15 Are you familiar with the oral 16 testimony of James Horn, Virginia City County, presented on April 11, 2013? 17 18 Α. Yes, I am. 19 Dr. Horn acknowledged in his oral 0. testimony than for historic sites, the 20 introduction of modern intrusions was a 21 22 compromise. Do you agree with that testimony? 23 There's often a tradeoff between Α. Yes. 24 modern development and historic preservation. 25 In your opinion, does that tradeoff or Ο.

2 3
compromise affect the ultimate selection of the
Historic Triangle as a World Heritage site?
A. I've seen these sorts of tradeoffs or
concessions to modern development at the World
Heritage sites, and those on the tentative list, I
have personally visited.
Based on my research, I do not believe
the Surry route, in and of itself, would prevent
the Historic Triangle from the World Heritage
tentative list consideration.
Q. Now, Dr. Horn did not agree with your
opinion that the likelihood of the Historic
Triangle being designated as a World Heritage site
is, quote, statistically low, which is what you
had testified to in your rebuttal. He stated that
he could not address what kind of statistical
approach you would use.
Can you explain what type of
statistical approach you did use?
A. Yes. Initially, let me emphasize that
my opinion regarding the likelihood of acceptance
has nothing to do with the historic significance
or relative merits of the Historic Triangle.
Rather, my opinion of likelihood is derived solely
from the enrollment process based on empirical

1 evidence.

2	Firstly, 14 of 34 applicants to the
3	current tentative list actually made it onto the
4	list. That represents a tentative list
5	application success rate of 40 percent.
6	Secondly, as of the year 2008, the
7	United States had made no nominations since 1994.
8	In the four-year time frame following 2008, the
9	United States did nominate one site,
10	Papahanaumokuakea Marine National Monument, which
11	was recently enrolled as a World Heritage site.
12	As of 2013, this equates to one
13	successful enrollment in two decades, representing
14	an empirical probability of actual World Heritage
15	enrollment from the tentative list, in any given
16	year, of 5 percent, which is 1 in 20.
17	Therefore, the joint probability of an
18	event defined as inclusion on the tentative list
19	and eventual enrollment in any given year was
20	5 percent times 40 percent or 2 percent over the
21	most recent two decades, and that does not take
22	into account that Virginia already has two sites
23	on the tentative list.
24	So the process in and of itself
25	supports the statement in my prefiled testimony
1	

1	regarding a statistically low likelihood.
2	Q. Now, Dr. Wolverton, are you familiar
3	with Dr. Kelso's oral assessment of the Alamo
4	experience as being an example of what can happen
5	to a historical site with regard to modern
6	intrusions?
7	A. Yes.
8	Q. Does Dr. Kelso's testimony go to the
9	point you made in your direct testimony about the
10	surroundings of the Alamo?
11	A. Yes. My intention was to show that the
12	San Antonio emissions, including the Alamo, which
13	are currently on the U.S. tentative list for World
14	Heritage site nomination demonstrate that highly
15	visual modern intrusions do not necessarily
16	disqualify a site from World Heritage
17	consideration.
18	Further, the amount of impact for
19	modern intrusions on the Alamo Plaza is, in my
20	opinion, much greater than the impact the proposed
21	transmission lines would have on the Historic
22	Triangle.
23	MR. GARY: Thank you, Dr. Wolverton.
24	Your Honor, can we move Dr. Wolverton's
25	testimony into the record subject to cross,

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1	and he is available for cross.
2	HEARING EXAMINER SKIRPAN: Yes. It is
3	in subject to cross.
4	Any questions?
5	MR. QUINAN: Yes. Good morning,
6	Dr. Wolverton.
7	MR. ROGERS: Your Honor, I should note
8	that's it's about 11:50. I don't know when we
9	want to take a lunch break. I would note that
10	we do not have transcripts of Mr. Wolverton's
11	testimony. He admitted that he is testifying
12	from notes. It is the best evidence that we
13	have of what he's going to say and our best
14	preparation for cross-examination.
15	HEARING EXAMINER SKIRPAN: I think you
16	just heard it. You just heard his testimony.
17	MR. ROGERS: I did.
18	HEARING EXAMINER SKIRPAN: Okay. And
19	we'll break for lunch when we have completed
20	the cross-examination of this witness.
21	
22	EXAMINATION
23	BY MR. QUINAN:
24	Q. Hi, Dr. Wolverton. I'm Mike Quinan.
25	I'm representing BASF Corporation in this

1	proceeding.
2	A. Good morning.
3	Q. I understand that Mr. Gruelle
4	characterizes his report as a consulting report,
5	but you disagree and you characterize it as an
6	appraisal report. Correct?
7	A. That's correct.
8	Q. Okay. And I just wanted to ask, the
9	rules that you talk about in your rebuttal
10	testimony and you've mentioned on the stand, you
11	said it's U-S-P-A-P. It's commonly referred to as
12	USPAP?
13	A. That's correct.
14	Q. What does USPAP stand for?
15	A. Uniform Standards of Professional
16	Appraisal Practice.
17	Q. And those rules are broken into
18	different sections or chapters?
19	A. Yes, they are.
20	Q. Okay. And there is a chapter that
21	relates specifically to consulting reports. Is it
22	Chapter 5?
23	A. Appraisal consulting reports, yes.
24	Q. Okay.
0 5	

25 A. Section 5.

1 Section 5? Q. 2 Α. Statement 5, actually, is the way it's 3 officially named in USPAP. 4 You apply the rules from the other 0. 5 sections to Mr. Gruelle's report to reach your conclusion that it's inappropriate. Correct? 6 7 Α. Not completely. 8 Ο. But you do refer to rules from other 9 sections? 10 I refer to rules from other sections Α. 11 because, in my opinion, it's inappropriate to put 12 a different label on an appraisal report so that 13 you can sidestep those sections. 14 That gets us back to your disagreement 0. 15 about the characterization of whether it's a 16 consulting report or an appraisal? 17 Α. Yes. 18 My only other questions relate to a 0. 19 statement you make on Page 7 of your rebuttal 20 testimony. 21 Bear with me while I find that. Okay. Α. 22 I'm on Page 7. 23 The sentence begins on Line 3, but I'm Ο. 24 going to just point to you on Line 5 there where 25 you say that "In reality, there is little, if any,

	<u> </u>
1	impact on property value associated with
2	high-voltage transmission lines."
3	That's your testimony. Correct?
4	A. Line 6?
5	Q. It starts at the end of Line 5. "In
6	reality, there is little, if any, impact on
7	property value associated with high-voltage
8	transmission lines."
9	That's your testimony. Correct?
10	A. Based on the research that I refer to
11	in the introduction to that statement, yes.
12	Q. Your position is that generally
13	transmission lines do not affect property values?
14	A. My position is that the research shows
15	that there is little, if any, impact.
16	Q. Is your opinion that the research is
17	not correct, or do you disagree with the research?
18	A. No. I agree with the research.
19	Q. So that is your opinion?
20	A. That is my opinion my opinion is
21	based on what the research is what the research
22	shows. I have not analyzed the impact at this
23	particular site. I have not developed an analysis
24	of this site.
25	Q. That's what I was going to ask you

1	about. It's your opinion that that statement is
2	generally true?
3	A. It's generally true in the research.
4	There's very little peer-reviewed research that
5	finds much in the way of an impact.
6	Q. Now, impact on a particular piece of
7	property would need to take into account the
8	specifics and the circumstances unique to that
9	particular piece of property. Correct?
10	A. Yes.
11	Q. And of course, if a transmission line
12	would actually interfere with the ability to use
13	or develop the property, then it would impact the
14	value of the property. Correct?
15	A. It might.
16	MR. QUINAN: Those are all the
17	questions I have. Thank you, Doctor.
18	HEARING EXAMINER SKIRPAN: Any other
19	questions for this witness?
20	MR. LEDBETTER: No, Your Honor.
21	MR. SMITH: Nothing from Staff, Your
22	Honor.
23	MR. ROGERS: Something from the County,
24	yes, Your Honor.
25	HEARING EXAMINER SKIRPAN: Okay.
1	

1	EXAMINATION
2	BY MR. ROGERS:
3	Q. Mr. Wolverton, I was looking at your
4	appendix that indicates that you're a retired
5	appraiser from Texas. Is that correct?
6	A. That's a gross simplification.
7	Q. I'm sorry. I was looking at the MIA.
8	What does that mean?
9	A. Missing in action.
10	Q. I'm sorry. MAI. Did I MAI. What's
11	an MAI? MAI, right.
12	A. It used to mean Member Appraisal
13	Institute. About 20 years ago, the Appraisal
14	Institute merged with the Society of Real Estate
15	Appraisers, and they no longer attach any meaning
16	to it whatsoever, other than MAI.
17	It's just a designation that they
18	offer, and it's no longer an acronym standing for
19	something else.
20	Q. But it means you're an appraiser?
21	A. That means I'm a member of the
22	Appraisal Institute.
23	Q. And R-E-T, does that mean retired?
24	A. Excuse me?
25	Q. Behind that, it says R-E-T. Does

1	that
2	A. I retired from the Appraisal Institute
3	effective this year, subject to wrapping up one
4	assignment that involves some perhaps some
5	appraisal opinions, and this assignment doesn't
6	really fall under the umbrella of appraisal work.
7	Q. Are you a licensed appraiser in Texas
8	currently?
9	A. I am.
10	Q. Are you a licensed appraiser in
11	Virginia?
12	A. I am not.
13	Q. Have you ever appraised property in
14	Virginia?
15	A. No.
16	Q. Are you being paid by Dominion to be
17	here today?
18	A. Yes.
19	Q. And how are you familiar with the real
20	estate market in the Historic Triangle?
21	A. My familiarity with the real estate
22	market in the Historic Triangle is based solely on
23	what I've read and heard in this case.
24	Q. In your opinion, when you're giving an
25	opinion of value, as you mentioned earlier if I

1	misstate this, please correct me, but with regard
2	to counsel's questions and your notes, you
3	indicated that that would constitute an appraisal,
4	wouldn't it?
5	A. I'm not giving an opinion of value.
6	Q. I'm sorry. Let's go back. The
7	question from counsel was related to giving an
8	opinion of value. When you give an opinion of
9	value, it's your opinion that that constitutes an
10	appraisal. You're referring to Mr. Gruelle's work
11	at that point?
12	A. It's my opinion, and it's also the
13	definition of an appraisal in USPAP.
14	Q. You did not perform an appraisal in
15	this case, did you?
16	A. I did not.
17	Q. Now, it's with that background that you
18	indicate that the impacts on real estate values
19	this is on Page 5. In the Historic Triangle, the
20	impact on real estate values of the proposed 500
21	transmission line will have no impact or little to
22	no impact.
23	I'm looking at Page 5 of your
24	testimony, so it says what it says.
25	A. Can you point me to which line?

1	Q. Yes, sir. Page 5, basically Line 17
2	through 19.
3	A. Yes. Okay.
4	Q. So you've been retained by Dominion to
5	provide an opinion on the impact of real estate
6	values. Isn't that correct?
7	A. The impact on real estate values, yes.
8	Q. Is that real estate impact specific to
9	the Historic Triangle of James City County?
10	A. It's specific to the proposed 500 kV
11	transmission line, which part of which is in
12	James City County, as I understand it, and part of
13	which is in Surry County.
14	Q. So it's your opinion that the 500 kV
15	switching line which crosses the James River and
16	properties in James City County would not have an
17	impact on real estate values in the Historic
18	Triangle?
19	A. That's a fairly strong statement, and
20	that would not be accurate. If you want my
21	opinion, I'll be happy to state it.
22	Q. No thank you, if it's stated otherwise
23	in your testimony.
24	You also state as to your purpose that
25	there's no impact on the current effort of World

Page 1	798
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1	Heritage site designation for the Historic	
2	Triangle.	
3	A. I don't recall that statement. If you	
4	want to point me to it, I can certainly would	
5	be happy to agree with it, if it is in fact in my	
6	testimony.	
7	Q. I'm, again, referring to the testimony	
8	that you just identified for counsel about the	
9	probabilities that having power lines was not	
10	going to impact the designation of a World	
11	Heritage site?	
12	A. So you're talking about my live	
13	testimony today?	
14	Q. And your rebuttal testimony.	
15	A. Where in my rebuttal testimony are you	
16	referring to?	
17	Q. I actually believe it's in several	
18	places, but if you look at the top of Page 7,	
19	you'll see it there.	
20	I also discussed the purpose of the	
21	selection of the World Heritage site and why the	
22	proposed project will have no impact on the	
23	current effort of the Historic Triangle, so to	
24	have the Historic Triangle selected as a World	
25	Heritage site.	

1	It's then later discussed in your	
2	testimony where you talk about probabilities.	
3	A. That's a correct statement. I had	
4	Q. Let's talk about probabilities for a	
5	moment, because we can all play with numbers, but	
6	what you have is there's been one U.S. application	
7	in the last 20 years for a World Heritage site	
8	designation, according to your testimony. Is that	
9	right?	
10	A. Actually, it's not an application.	
11	It's a nomination. And it's made by the National	
12	Park Service to UNESCO. There's been one	
13	nomination in the past 20 years off of the current	
14	tentative list.	
15	Q. Would you then, also from a statistical	
16	standpoint based on that nomination, say there's a	
17	100 percent chance of approval based on nomination	
18	by the National Park Service when it goes through	
19	the process?	
20	A. No, I would not.	
21	Q. You would not. Now, there's been one	
22	nominated, and it was approved?	
23	A. It doesn't follow necessarily that each	
24	nomination by each member state will be approved.	
25	Q. In the last 20 years, there's been one?	
1		

the United States have been successful Q. Thank you. A that does not mean that the as I understood your statement, that that nomination automatically implies success. Q. On Page 7, Line 20 I was only talking statistically, by the way. On Page 7, Line 22, in order to gain some familiarity, you indicate that you made a site visit to the project area. Is that right? A. Yes. Q. Now, I might be looking at this from a grammatical standpoint, but you indicated that you made a site visit. Was there more than one? A. I was only here one time. Q. Okay. During that time you were here, did you have an opportunity to speak with any of the folks who were seeking World Heritage designation, like Dr. Jim Horn? A. No. Q. How about Dr. Bill Kelso? A. No.	1	Α.	While 100 percent of the nominations by
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23A.No.24Q.How about Dr. Bill Kelso?	21	Α.	No.
24 Q. How about Dr. Bill Kelso?	22	Q.	Colin Campbell?
	23	Α.	No.
25 A. No.	24	Q.	How about Dr. Bill Kelso?
	25	Α.	No.

1 Anyone at all familiar with the 0. 2 historic sites in the Historic Triangle? 3 Α. No. So it is not your opinion that the --4 0. you have no information whatsoever as to the 5 6 merits of the nomination process, application 7 process, whatever you want to call it, of the Historic Triangle as a World Heritage site? 8 9 I think my testimony is pretty clear in Α. 10 What I state, it's based solely on that regard. 11 the process and does not speak to the relative 12 merits. 13 I really do want to go to your 0. 14 testimony. As you go to Page 8, you just say 15 things like generally speaking, based on research 16 and literature. So your information is in a 17 general sense. Is that correct? 18 Once again, I don't see the statement Α. 19 that you're -- could you point me to the line, 20 please? 21 0. I'm sorry. I didn't have a chance to 22 prepare this with you in advance, but it's on Page 23 8, Line 15 through 17. 24 Α This statement has nothing to do with 25 World Heritage.

1	Q. Does it have on what basis are you	
2	making your determination for the World Heritage	
3	site designation for the Historic Triangle?	
4	A. I'm sorry. I don't understand that	
5	question. My determination of the World Heritage	
6	site designation, in what regard?	
7	Q. The probability that this area could be	
8	designated as a World Heritage site designation.	
9	It begins on Page 15 of your testimony.	
10	You start to describe the process on Page 16. You	
11	give probabilities throughout that testimony, as	
12	well.	
13	Is that based on research and	
14	literature?	
15	A. I'm sorry. It's a long page. What	
16	line are you referring to?	
17	Q. It's actually several pages throughout	
18	your testimony.	
19	A. Okay.	
20	Q. Is your determination of the	
21	probability of World Heritage site designation	
22	based on research and literature rather than	
23	anything specific about the Historic Triangle?	
24	A. This really falls into two areas, two	
25	separate areas. My statements about likelihood	

1	are strictly based on the process, which I just
2	went through in my rebuttal testimony.
3	Q. Let's go with that process for just a
4	second. You're saying
5	A. Can I finish my answer?
6	Q. Please.
7	A. The other side of the coin is whether
8	or not modern intrusions, in and of themselves,
9	prohibit consideration for their tentative list.
10	That was done not through a statistical
11	process, but by looking at other properties that
12	I'm aware of on the tentative list to assess the
13	extent to which they experience modern intrusions.
14	Q. But it is your testimony that it's a
15	difficult process, and the probability of getting
16	inclusion on the World Heritage site is a remote
17	possibility from a statistical standpoint. Isn't
18	that correct?
19	A. Well, that's what the empirical
20	evidence says, and the fact of the matter is that
21	they've moved the goalpost for the United States,
22	as it were. It's going to be more difficult for
23	the United States in the future than it has been
24	in the past.
25	Q. Thank you, Dr. Wolverton. Mr.

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1	Wolverton, I'm sorry.
2	HEARING EXAMINER SKIRPAN: Is that it?
3	MR. ROGERS: That's it.
4	HEARING EXAMINER SKIRPAN: Any other
5	questions? Any redirect?
6	MR. GARY: No redirect, Your Honor.
7	I'm sorry. One question.
8	
9	EXAMINATION
10	BY MR. GARY:
11	Q. Dr. Wolverton, you said you just
12	retired from the Appraisal Institute. How long
13	had you been a member?
14	A. Oh, man. I'm trying to remember when I
15	was designated. I think it was in 1975. That
16	would be longer than I care to think about.
17	MR. GARY: That's fine. Thank you. No
18	further questions.
19	HEARING EXAMINER SKIRPAN: Thank you.
20	You may be excused. We'll take a lunch break
21	until about 1:15.
22	(Break in proceedings.)
23	MR. GARY: Your Honor, we call
24	Ms. Taylor.
25	
1	

1	CATHY TAYLOR
2	was sworn and testified as follows:
3	EXAMINATION
4	BY MR. GARY:
5	Q. Good afternoon. Would you please state
6	your name, position of employment, and business
7	address?
8	A. My name is Cathy Taylor. I'm the
9	director of the Electric Environmental Services
10	Department for the Company. My address is 5000
11	Dominion Boulevard, Glen Allen, Virginia, 23060.
12	Q. Did you have do you have with you a
13	document entitled, Rebuttal Testimony of Cathy
14	Taylor, consisting of nine typed pages of
15	questions and answers, which was filed in a public
16	version only in this proceeding on March 14th,
17	2013?
18	A. I do.
19	Q. Was that document prepared by you or
20	under your supervision?
21	A. Yes, it was.
22	Q. Do you have corrections or additions to
23	that document?
24	A. No, I do not.
25	Q. If you were to be asked the questions

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1	appearing in that document, would your answers be
2	the same or substantially similar today?
3	A. Yes, they would.
4	MR. GARY: Your Honor, can we have
5	Ms. Taylor's testimony marked, please?
6	HEARING EXAMINER SKIRPAN: I'll mark
7	her testimony as Exhibit Number 127.
8	MR. GARY: Thank you.
9	HEARING EXAMINER SKIRPAN: And it's
10	admitted subject to cross.
11	(Exhibit Number 127 is placed in the
12	record.)
13	MR. GARY: Thank you, Your Honor.
14	BY MR. GARY:
15	Q. Ms. Taylor, are you familiar with the
16	live testimonies of the witnesses for the BASF
17	Corporation in this proceedings on April 11, 2013,
18	specifically the testimonies of Mr. Waltz and
19	Mr. Burrows?
20	A. Yes, I am.
21	Q. Do you agree with Mr. Burrows'
22	statement that Dominion doesn't understand the
23	environmental issues associated with Variation 1?
24	A. No, I do not. We reviewed in
25	preparation for the testimony, the July 29th, 2011

1	Roux report prepared for BASF that talks about the
2	remedy that he addresses in his testimony. We've
3	also reviewed comments made by DEQ prior to that
4	particular remedy being approved by DEQ as well as
5	available information on the status of the site
6	under RCRA 2020.
7	Q. Are you familiar with the testimony of
8	Mr. Burrows that the positioning of that one tower
9	in Area 4C is an engineering challenge but that
10	they would work with Dominion on that?
11	A. Yes, I am.
12	Q. Do you have any comments on that
13	testimony?
14	A. Yes, I do. Mr. Burrows in his
15	testimony says that they're willing to work with
16	us on the location of the tower and that it could
17	be placed outside of the capped landfill.
18	He goes on to state, however, he raises
19	the concern that placement of the trench could not
20	be made without potentially impacting the
21	foundation of the tower. The distance from the
22	planned location of the tower to the tributary is
23	100 feet. There should be more than enough space
24	to safely place the tower in that area, as well as
25	configuration of the trench in that area.

1	Q. Now, is that opinion both as to the
2	lattice tower as well as a monopole?
3	A. Yes, it is.
4	HEARING EXAMINER SKIRPAN: Mr. Gary,
5	can I ask a real quick question? Since we're
6	on this.
7	That 100 feet, is that at low tide,
8	high tide or average?
9	THE WITNESS: I don't believe that the
10	tide impacts that tributary, but I don't know
11	the answer to your question.
12	HEARING EXAMINER SKIRPAN: Thank you.
13	BY MR. GARY:
14	Q. Ms. Taylor, Mr. Burrows asserts that
15	the Variation 1 right-of-way would render one of
16	their remedies for what they call the Area 4C
17	their phytoremediation plat plot?
18	A. Yes.
19	Q. And he says that putting the
20	right-of-way there is at best ineffective and at
21	worst useless, with respect to the effect on the
22	remediation in that area. Do you agree with that?
23	A. No, I do not. As I mentioned, part of
24	our review prior to this testimony was a review of
25	the focussed corrective measures report that was

1	prepared by Roux Associates for BASF, and in that
2	report well, let me take a step back.
3	Mr. Burrows in his testimony states
4	that he estimates that 25 to 30 percent of the
5	phytoremediation plot would be in the
6	right-of-way, and we've stated in our testimony
7	that their planned hybrid poplars were not
8	could not be used in that area. That means that
9	there would be 70 to 75 percent of the
10	phytoremediation area that could have poplars
11	placed in that area.
12	The Roux report goes on to state that
13	their plan is that after a year's time, if there
14	are at least 80 percent of the hybrid poplars
15	still living and surviving, that they would not
16	replace those.
17	In addition to that, the report also
18	provides a long list of alternatives that can be
19	used for phytoremediation. Among those plants
20	listed are some native grasses that would be
21	compatible with management of the right-of-way.
22	Q. And those compatible vegetation would
23	essentially take the place of the hybrid poplars?
24	A. They could also serve to phytoremediate
25	that area.

1	Q. Now, Mr. Waltz and Mr. Burrows both
2	referred to a 2020 deadline to complete the
3	remediation. Do you have any comment on that
4	testimony?
5	A. I certainly can. In his testimony,
6	Mr. Burrows makes reference to he's not really
7	sure what prompted the RCRA 2020 program. The
8	2020 RCRA program and RCRA stands for the
9	Resource Conservation Recovery Act. It's the act
10	that EPA uses to regulate areas where waste had
11	been placed and caused and if they have caused
12	contamination, then there's a correction action
13	program.
14	In that particular case, they set in
15	this Vision 2020 Program some goals that they
16	wanted to try to accomplish for sites that were
17	contaminated, and included in those these
18	programs in the State of Virginia have been
19	delegated to DEQ for implementation.
20	And there are four stated goals. One
21	is that site assessments have been conducted on
22	the site. Second is that the human health
23	exposures are under control at at least 95 percent
24	of the sites, and migration of the contaminated
25	groundwater is under control at at least

1	95 percent of the sites, and construction of the
2	final remedy is complete at at least 95 percent of
3	the sites.
4	And in the case of BASF, documentation
5	on DEQ's website and EPA Region 3's website
6	indicates that the current health exposure is
7	under control and that the contaminated
8	groundwater is under control, although there's
9	additional work obviously that needs to be done in
10	the final remedy, so that the open issue is the
11	construction of the final remedy.
12	Q. And you understand they have a plan for
13	that?
14	A. My understanding is that they have a
15	plan for that and that that plan has been approved
16	by DEQ.
17	MR. GARY: Thank you, Ms. Taylor.
18	Your Honor, Ms. Taylor is available for
19	cross-examination.
20	HEARING EXAMINER SKIRPAN: Thank you.
21	
22	EXAMINATION
23	BY MR. QUINAN:
24	Q. Ms. Taylor, I'm Mike Quinan
25	A. Hi.

1	Q representing BASF in this
2	proceeding. And mr. Burrows isn't here now, but
3	were you present when he was testifying?
4	A. I actually listened to his testimony on
5	the live feed.
6	Q. Okay. He testified, as I recall, that
7	the greatest risk to the remediation on the site
8	if a transmission line is constructed on the
9	Variation 1 route is not the location of the
10	tower, although he does address that. It's the
11	loss of the it's the fact that the right-of-way
12	would be constructed through the phytoremediation
13	area.
14	And I think you just testified that in
15	fact it would be constructed through the
16	phytoremediation area.
17	A. That's correct.
18	Q. His testimony was that constructing the
19	right-of-way through the phytoremediation area
20	would essentially undo or prevent the effect of
21	the phytoremediation, because the hybrid poplars
22	and other taller species could not be located in
23	the right-of-way.
24	You just talked about the fact that the
1	Tou Just curred about the fact that the

1	hybrid poplars are still alive after a certain
2	period that would be acceptable?
3	A. The Roux report indicates that they
4	would not be replaced.
5	Q. They weren't talking about that
6	20 percent that would be gone being missing in a
7	straight line right through the middle of the
8	hydro of the phytoremediation area, were they?
9	A. They were addressing the total
10	phytoremediation area.
11	Q. All right. Also, you talked about the
12	2020 deadlines and the fact that there is right
13	now an approved plan.
14	In light of the implementation of that
15	approved plan to date, human health hazards in
16	groundwater contamination are on track to be
17	brought under control. Correct?
18	A. That's correct.
19	Q. But if the phytoremediation which is an
20	element of that approved plan becomes ineffective
21	or is not able to be used, then another entirely
22	new plan would need to be developed for
23	remediating the site. Correct?
24	A. That's what Mr. Burrows testified. My
25	testimony is that I don't agree with that

1	testimony, because when I look at information
2	that's contained in the Roux report, first of all,
3	it says that he testified that it's all based
4	on a water balance, there's a certain amount of
5	water that needs to be retained in that area or
6	uptake through the plants.
7	The Roux report further states that if
8	you only have the uptake of 80 percent of those
9	poplars, that that's acceptable if you wouldn't
10	replant those areas. Furthermore, it gives other
11	options for phytoremediation that would also have
12	a similar sort of uptake and remediation activity
13	in that area.
14	So it suggests to me that to
15	characterize that phytoremediation area as
16	ineffective, it's not consistent with the Roux
17	report. And in addition to that, I think it's
18	important to look at what you've proposed as a
19	total remedy. First of all, you've got the
20	phytoremediation area.
21	In addition to that, there's also the
22	compost trench that's going to give further
23	treatment. You have also have a contingency in
24	your plan to do further collection of groundwater
25	and treatment if needed.

1	So I think the important thing is
2	whether or not that remediation remedy overall can
3	still be effective with having the right-of-way
4	planted with alternative phytoremediation areas,
5	and I believe that it can be.
6	Q. All of those elements are part of the
7	currently approved Roux plan?
8	A. That's correct.
9	Q. And including as a sort of a central
10	element the phytoremediation?
11	A. Yes. That's part of the approved plan.
12	Q. So if the phytoremediation goes away or
13	is proven ineffective, then the approved plan is
14	no longer functioning. Right?
15	In other words, it's not going to be up
16	to Dominion or even BASF to say, oh, don't worry
17	about the phytoremediation going away. It's going
18	to be up to DEQ to say there's an element of your
19	approved plan that's not missing, and it's going
20	to be up to DEQ to say what has to happen from
21	than point forward?
22	A. I don't think that there's any that
23	the proposal to put the right-of-way through the
24	phytoremediation makes the phytoremediation area
25	go away. It still allows a large number of

1	poplars to be planted in that area to do the work
2	that you want it to do.
3	And in addition to that, you still have
4	the other remedies, and ultimately it's whether or
5	not it accomplishes your goals, which are to
6	reduce the amount of zinc that's going into the
7	tributaries and reducing the amount of
8	remediation of contamination, excuse me.
9	Q. Ultimately, that's going to be up to
10	DEQ?
11	A. Certainly.
12	Q. And also, you've heard Mr. Burrows'
13	explanation about why a right-of-way through the
14	middle of the phytoremediation interferes with the
15	functioning of the phytoremediation. You just
16	disagree with him on that point?
17	A. I think that there's information that
18	you've already submitted to DEQ that would say
19	that to characterize it as ineffective isn't
20	consistent with what you've submitted.
21	Q. And that's the 80 percent number that
22	you cited?
23	A. Yes, as well as the opportunity to
24	substitute plants in that right-of-way area.
25	Q. And you disagree with Mr. Burrows about

1	what kind of plants would be necessary to be
2	effective?
3	A. No, I don't disagree about what type of
4	plants would be necessary to be effective. What
5	I've stated is that your report indicates that
6	there are a number of types of plants that can be
7	effective in that area.
8	Q. Did you hear Mr. Burrows testify on the
9	stand that the hybrid poplars are too tall given
10	Dominion specifications to and you agree with
11	him
12	A. Yes.
13	Q to be located in the right-of-way.
14	Correct?
15	A. Yes.
16	Q. Did you hear him testify that the
17	native species that would need to go in there as a
18	replacement would need to be even taller trees?
19	A. There are native grasses that are part
20	of the list of acceptable plants. My
21	understanding, and I believe Mr. Brucato that is
22	going to talk after me can speak to this more, but
23	those are also deep-rooted plants that can also
24	have similar and, in fact, your report says
25	that can also be used for phytoremediation.

1	Q. What was the Roux report that you
2	referred to? What is the date of that?
3	A. It is July 29th, 2011, I believe. It's
4	what you provided on discovery, in discovery.
5	Q. In discovery, we provided the entire
6	administrative record. Correct? There were
7	voluminous documents provided in discovery
8	A. Yes.
9	Q with regard to environmental
10	remediation?
11	A. Yes. This particular report is the
12	Focused Corrective Measures Study Report.
13	MR. McROBERTS: I have no further
14	questions. Thank you.
15	HEARING EXAMINER SKIRPAN: Any
16	questions?
17	MR. LEDBETTER: No, Your Honor.
18	HEARING EXAMINER SKIRPAN: Staff?
19	MR. SMITH: Nothing. Thank you.
20	MR. ROGERS: No.
21	HEARING EXAMINER SKIRPAN: Any
22	redirect?
23	MR. GARY: Yes, Your Honor. Very
24	briefly.
25	
1	

1	EXAMINATION
2	BY MR. GARY:
3	Q. Ms. Taylor, is this the Roux report
4	that you just cited to?
5	A. Yes, that's the report I was making
6	reference to.
7	Q. Let me take you to Page 28 and see if
8	this helps clear things up. This is a section of
9	the report on Page 28, it's talking about the
10	phytotechnology cover. Do you recognize this?
11	A. Yes, I do.
12	Q. And I have yellowed here the one hybrid
13	species which is what Mr. Burrows had mentioned on
14	the site?
15	A. That's correct.
16	Q. And when you talk about other examples
17	of flora that could work on this site, I have also
18	yellowed down here examples of native grasses and
19	so forth. Is this what you're talking about with
20	other things could be planted that are lower in
21	the right-of-way?
22	A. Yes. This is the reference in the
23	report I was making.
24	MR. GARY: Your Honor, we don't have
25	this to put in as an exhibit. We could, or we

1	can just read that one sentence in. That's
2	all we really need, just to show other
3	examples of the types of vegetation that can
4	be on the right-of-way.
5	MR. QUINAN: I don't have objection to
6	him reading it.
7	HEARING EXAMINER SKIRPAN: Okay.
8	That's fine.
9	BY MR. GARY:
10	Q. Ms. Taylor, will you just read the
11	sentence that begins with "examples of"? I can't
12	pronounce the words.
13	A. Well, I'm hesitating because I don't
14	think I can pronounce all the words either.
15	"Examples of native trees to be
16	considered include pignut hickory, red oak, white
17	oak, loblolly pine, and Virginia pines. Examples
18	of native grasses to be considered include upland
19	bent grasses, red fescue, big bluestem,
20	switchgrass, Indian grass, Atlantic coastal panic
21	grass, Lanceleaf coreopsis, and Black-eyed Susan."
22	MR. GARY: Thank you.
23	No further questions, Your Honor.
24	MR. QUINAN: Your Honor, can I ask
25	counsel to put that back up just for a moment?
1	

1	Just to make sure that, since we're not
2	putting it in, there are just a couple of
3	sentences in the proximity of that that I'd
4	also like to read.
5	HEARING EXAMINER SKIRPAN: That's fine.
6	Can we just mark this one page and put it in?
7	MR. QUINAN: That's fine.
8	MR. GARY: Your Honor, why don't we
9	mark the first page, so we know what it is.
10	HEARING EXAMINER SKIRPAN: Okay.
11	MR. GARY: We'll mark Page 27, and
12	we'll give it to all the parties probably
13	after today. I don't think we'll get it done
14	today.
15	HEARING EXAMINER SKIRPAN: Okay. I'll
16	reserve Exhibit Number 128 for that.
17	(Exhibit Number 128 will be a
18	late-filed exhibit.)
19	MR. GARY: Thank you.
20	MR. SMITH: Your Honor, if Mr. Gary
21	could make the cover page.
22	HEARING EXAMINER SKIRPAN: He would.
23	MR. GARY: Yeah. We'll make two pages,
24	the cover page and that one.
25	HEARING EXAMINER SKIRPAN: You may be

1 excuses. 2 MR. GARY: Your Honor, we call 3 Mr. Brucato. 4 5 MICHAEL BRUCATO 6 was sworn and testified as follows: 7 EXAMINATION 8 BY MR. GARY: 9 Please state your name, position of 0. 10 employment, and business address. Α. 11 I'm Michael Brucato, supervisor of the 12 Transmission Forestry Session, in the 13 Transmission -- Electric Transmission Business Unit for Dominion Virginia Power. My office is at 14 2501 Grayland Avenue, Richmond, Virginia. 15 16 Do you have with you a document Ο. 17 entitled, Rebuttal Testimony of Michael Brucato, 18 consisting of ten typed pages of questions and answers and one rebuttal schedule, which was filed 19 20 in a public version only in this proceeding on March 14th, 2013? 21 22 Α. I do. 23 0. Was that document prepared by you or 24 under your supervision? 25 Α. It was.

1	Q. Do you have any corrections or
2	additions to that testimony?
3	A. No.
4	Q. If I were to ask you the questions in
5	that testimony, would your answers be the same or
6	similar today?
7	A. Yes.
8	MR. GARY: Your Honor, may we mark
9	Mr. Brucato's testimony?
10	HEARING EXAMINER SKIRPAN: I'll mark
11	his testimony as Exhibit Number 129.
12	MR. GARY: Thank you, Your Honor.
13	HEARING EXAMINER SKIRPAN: And it's
14	admitted subject to cross.
15	(Exhibit Number 129 is placed in the
16	record.)
17	MR. GARY: Thank you.
18	BY MR. GARY:
19	Q. Now, very briefly, Mr. Brucato, are you
20	familiar with the testimony of Vernon Burrows, on
21	behalf of BASF Corporation, in this proceeding on
22	April 11th, 2013?
23	A. Yes, I am.
24	Q. Mr. Burrows asserts that Variation 1
25	would render one of his remedies for what he calls

1	Area 4C, the phytoremediation plot, at best
2	ineffective and at worst useless.
3	From your point of view, can you tell
4	me if you have any comments on that?
5	A. I have an observation. In Mr. Burrows'
6	testimony, he never mentioned the low-growing
7	species that were mentioned in that same report as
8	being effective for the same purpose, those
9	low-growing species that were mentioned during
10	Company witness Taylor's testimony.
11	Q. And would they be those species that
12	were in what has now been marked but not entered
13	yet as Exhibit 128 we just talked about for the
14	Roux report?
15	A. Right. Right. There was a big
16	bluestem. There was coreopsis, Black-eyed Susan,
17	special species that are perfectly compatible on
18	the transmission right-of-way but seemed to be
19	completely being ignored by Mr. Burrows in his
20	testimony. When I heard his testimony, that was
21	what occurred to me.
22	Q. And if Dominion Virginia Power were to
23	use the right-of-way on Variation 1, would
24	Dominion Virginia Power plant one or more of those
25	species in the right-of-way?

1	A. We easily could. It's an excellent
2	they're all excellent species to get established
3	on the right-of-way, as part of our integrated
4	vegetation management system, our selected
5	vegetation management, where we strive to
6	eliminate the tall-growing species from the
7	right-of-way and allow species that can flourish
8	on the right-of-way to do so.
9	MR. GARY: Thank you, Mr. Brucato.
10	Your Honor, Mr. Brucato is available
11	for cross-examination.
12	HEARING EXAMINER SKIRPAN: Thank you.
13	
14	EXAMINATION
15	BY MR. McROBERTS:
16	Q. Mr. Brucato, on that one point, you
17	were here when I was just discussing it with
18	Ms. Taylor, as well. Correct?
19	A. Correct.
20	Q. And you're referring to and relying
21	upon the same page from the Roux report that was
22	made Exhibit 128?
23	A. Yes.
24	Q. The only other questions I had for you,
25	I wanted to clarify some terminology on which

1	there's been a little bit of confusion.
2	In Mr. Burrows' testimony, he
3	requested one of the right-of-way maintenance
4	policies he requested was no clearcutting on the
5	right-of-way.
6	In your rebuttal testimony, you said
7	Dominion can't agree to that because your
8	understanding is that clearcutting meant removing
9	all the tall, mature trees. Correct?
10	A. Right.
11	Q. If I told you that by clearcutting the
12	right-of-way what Mr. Burrows intended or we
13	don't have to talk about what he intended. Let me
14	just give you a substitute understanding what have
15	that means. That means mowing it down to a lawn.
16	And what BASF is asking for here I think is
17	consistent with what you say elsewhere in your
18	testimony, that the right-of-way could be
19	maintained as on Page 9 you use the words
20	"diverse meadow-like plant community," and on Page
21	8, you said that, "Although a scalloped edge that
22	comes in and out is not possible, that it could be
23	maintained to provide a more feathered
24	appearance."
25	A. Correct.

1	Q. Okay. I think then what we have here
2	is just a failure to connect, in terms of the
3	phraseology. What BASF is asking for in saying
4	they'd like Dominion to make a commitment to no
5	clearcutting is no mowing it down to a lawn, but
6	it would in fact permit a diverse meadow-like
7	planned community and have a right-of-way that
8	reflected a more feathered appearance, then your
9	testimonies on that point are consistent?
10	A. A couple of comments on that.
11	Q. Okay.
12	A. First of all, start about the
13	clearcutting. At the time of clearing, whatever
14	the determined width is, if it ends up being
15	150 feet or 130 feet, we will go in there and cut
16	down all of the trees on that right-of-way.
17	Q. Right.
18	A. That's what I referred to, is when
19	people think of clearcutting, they think of
20	logging where you cut down all the trees. We will
21	definitely at the time of clearing be cutting down
22	all the trees.
23	In addition to that, we will use
24	selective herbicide applications in order to
25	eliminate the root systems of those trees, because

1	most of the hardwoods will sprout back and
2	outcompete everything else, and it would just be
3	an ongoing, never-ending cycle.
4	The way you establish the kind of
5	right-of-way I described, the meadow-like kind of
6	right-of-way, is you have to eliminate the
7	competition from the stump sprouts, from the trees
8	that were there when we cleared, it because they
9	can outcompete everything.
10	Q. Right.
11	A. And what you end up with is
12	right-of-way of brush, and that's a good term for
13	it, because it looks like a brush, with just thick
14	stems coming from those one or two species that
15	sprout well from the stump and outcompete
16	everything else. So you have to stop that.
17	But once we've stopped that, you're
18	absolutely right. We don't maintain right-of-ways
19	by repeatedly mowing anymore. We maintain them
20	through selective herbicide applications and
21	integrated vegetation management, which involves
22	some cutting, some mowing, but for the most part,
23	our goal is to establish what you talked about,
24	which is a meadow-like scrub-shrub, and also woody
25	stuff, not just grasses and forbs, but also

1	low-growing woody vegetation.
2	Q. Right. I think what we have, we
3	actually had the meeting of the minds here, and we
4	just didn't understand each other's language.
5	A. Right. But I run afoul sometimes when
6	I say, oh, yeah, we're going to have a selective
7	right-of-way
8	Q. Right.
9	A and then as soon as we go in there
10	and clear it, there's a lot of uproar, oh, you
11	lied, you cut off the trees down. Well, I want to
12	make it clear that we're going to cut all the
13	trees down.
14	Q. Now, there was another point which had
15	to do with originally Mr. Burrows suggested that
16	some of the right-of-way be maintained through
17	tree trimming, and you pointed out that that was
18	not acceptable to Dominion because what you want
19	are species that you don't have to worry about.
20	A. Exactly.
21	Q. Okay. And on that point, Mr. Burrows,
22	I think he was clear on the stand here agrees with
23	you now that he heard your explanation?
24	A. I did. I did hear a lot more that
25	agreed with me in his live testimony than in the

Page 1830

1 previous document.

2	Q. And then the only other issue I think
3	we have is herbicides because Mr. Burrows
4	initially asked for no herbicides. You pointed
5	out that Dominion does use herbicides, in fact,
6	some herbicides that are manufactured by BASF.
7	I know that Mr. Burrows' concern is
8	that if the right-of-way is being developed in an
9	area where there is actually active environmental
10	remediation going on, there may be more than your
11	standard issue questions about herbicides.
12	And so I think what BASF would want
13	there is simply to have a commitment from Dominion
14	that it would work with BASF not to use herbicides
15	in a way that would damage the remediation
16	efforts. Is that fair?
17	A. That's fair. I mean, I don't mind I
18	enjoy talking about our integrated vegetation
19	management program, as you can probably tell
20	already, but, sure, we use low-volume foliar
21	applications of products that are not soil active,
22	or very limited soil activity. We apply them to
23	the foliage as much as possible. Some may drip on
24	the ground but a very tiny amount.
25	You're talking about once we've

1	gotten established the kind of right-of-way that
2	we want, with the plant community on the
3	right-of-way that we want to see, we're using
4	30-gallons of mix per acre, and that's less than
5	5 percent product. The rest is water.
6	And most of the products that we use
7	break down very quickly in a matter days, in some
8	cases months, but they don't remain in the soil
9	very long. It wouldn't bother me at all to keep
10	BASF informed on what products we use. That way
11	you'd know what to look for.
12	Q. And you'd work with BASF if certain
13	products did interfere with remediation efforts to
14	find another way to get the job done?
15	A. If there was a product that had some
16	by-product in it that would interfere with the
17	readings and so forth. There's lots of products
18	out there, some of them made by BASF that we can
19	use.
20	MR. QUINAN: Okay. Those are all the
21	questions I have. Thank you, Mr. Brucato.
22	HEARING EXAMINER SKIRPAN: Any other
23	questions of this witness?
24	MR. LEDBETTER: No, sir.
25	MR. ROGERS: No, sir.

1	HEARING EXAMINER SKIRPAN: Any
2	redirect?
3	MR. GARY: No redirect.
4	HEARING EXAMINER SKIRPAN: Thank you.
5	You may be excused.
6	MR. WATTS: The Company recalls Scot
7	Hathaway.
8	HEARING EXAMINER SKIRPAN: Before you
9	begin, looking back through my list of
10	exhibits, the only one that I'm unsure about
11	is Exhibit Number 74.
12	MS. LINK: Your Honor, if you'll give
13	us one moment.
14	HEARING EXAMINER SKIRPAN: Sure.
15	MR. ROGERS: That's the letter from the
16	county administrator. It's been testified to
17	that the offer has been received. We offer it
18	to the Hearing Officer, but if there's an
19	objection
20	HEARING EXAMINER SKIRPAN: Well, we had
21	kind of held out there was no objection.
22	We had held that one until that person was on
23	the stand.
24	Is there any objection to that going in
25	at this time?

No, Your Honor. 1 MS. LINK: She indicated that she received it by e-mail that 2 3 day. 4 HEARING EXAMINER SKIRPAN: It wasn't 5 clear to me that we had actually put it in the 6 record, and I just wanted to cover that. It's 7 in now. 8 9 SCOT C. HATHAWAY 10 was sworn and testified as follows: 11 EXAMINATION 12 BY MS. LINK: 13 Are you the same Scot C. Hathaway who Q. 14 provided testimony on direct? 15 Α. T am. 16 Do you have with you a document Ο. 17 entitled, Rebuttal Testimony of scot C. Hathaway 18 consisting of 19 types pages of questions and answers and one rebuttal schedule which was filed 19 20 in a public version only in this proceeding on March 14th, 2013? 21 22 Α. I do. 23 Q. Was that document prepared by you or 24 under your supervision? 25 Α. It was.

1	Q. Do you have any corrections?			
2	A. I do. I have two. On Page 7, Line 6,			
3	strike "between 3 and 7 times" and replace it with			
4	"between approximately 2.4 and 7.8 times."			
5	And then a second change on Page 8,			
6	Line 4, strike "99 percent" and replace it with			
7	"98 percent."			
8	Q. All right, sir. With those			
9	corrections, if I were to ask you the questions			
10	appearing there, would you provide the same			
11	answers here today?			
12	A. I would.			
13	Q. And with those questions, do you wish			
14	to sponsor that document as your rebuttal			
15	testimony in this proceeding?			
16	A. I do.			
17	MS. LINK: Your Honor, may we have			
18	Mr. Hathaway's rebuttal marked for			
19	identification?			
20	HEARING EXAMINER SKIRPAN: I'll mark			
21	his rebuttal as Exhibit Number 130, and it's			
22	in subject to cross.			
23	(Exhibit Number 130 is placed in the			
24	record.)			
25	MS. LINK: Thank you, Your Honor, and			

1	Mr. Hathaway is available for cross.	
2	MR. QUINAN: No questions.	
3	MR. LEDBETTER: No questions.	
4	MR. McROBERTS: I'm up.	
5		
6	EXAMINATION	
7	BY MR. McROBERTS:	
8	Q. Good afternoon, Mr. Hathaway.	
9	A. Good afternoon.	
10	Q. How does it feel to be the last witness	
11	with the last cross?	
12	A. I like to think last but not least.	
13	Q. Okay. Fair enough. Were you invited	
14	to a meeting between York County representatives	
15	and seven Dominion representatives, including Evar	
16	Emrum (ph) on February 21, 2013, in which was	
17	discussed repowering the Yorktown power plant	
18	using natural gas and transporting natural gas to	
19	Yorktown in liquefied form from Cove Point,	
20	Maryland?	
21	A. I was not.	
22	Q. Are you aware that such a meeting	
23	occurred?	
24	A. I heard about it yesterday during the	
25	hearing. I believe what we heard yesterday was in	

	— — — — — — — — — — — — — — — — — — — —	
1	reference to that meeting.	
2	Q. Is Dominion Virginia Power planning to	
3	generate power from wind offshore at Virginia	
4	Beach?	
5	A. I believe the Company is assessing	
6	offshore wind power options.	
7	Q. I believe I read somewhere that they	
8	said they were committed to do that. Is that a	
9	fair description?	
10	A. They are assessing those options, and I	
11	think there are some cost struggles, but as they	
12	work through those cost struggles and it looks to	
13	be a viable technology, the Company will move	
14	forward on that basis.	
15	Q. I'd like to mark for identification	
16	purposes this document here entitled, PJM	
17	Generator Interconnection. W3-043 Pendleton 230	
18	kV. Feasibility Study Report. And at the bottom	
19	it says, PJM Interconnection 2011, all rights	
20	reserved, and it's dated January 2011.	
21	Mr. Hathaway, do you see that?	
22	A. I see it, yes.	
23	Q. Are you familiar with this?	
24	A. No.	
25	Q. Is this a study of generating wind	
1		

1	energy off of the shore of Virginia Beach and		
2	transported to Virginia Beach in 230 kV form? Do		
3	you want to review it and see?		
4	A. I would need to do that, yes.		
5	Q. Yes, please.		
6	HEARING EXAMINER SKIRPAN: While he's		
7	reviewing it, I'll go ahead and mark it as		
8	Exhibit 131.		
9	(Exhibit Number 131 is marked and later		
10	in the proceedings withdrawn.)		
11	MS. LINK: Are there copies?		
12	MR. McROBERTS: I apologize. Yes.		
13	MS. LINK: And, Your Honor		
14	MR. McROBERTS: While you're at it,		
15	I'll hand out the second one, too, and that		
16	way we'll save some time.		
17	MS. LINK: Your Honor, I imagine there		
18	will be a move for admission at some point of		
19	this document, and there has been no relevance		
20	established for it to this proceeding.		
21	MR. McROBERTS: I can certainly		
22	establish relevance as well as foundation,		
23	Your Honor.		
24	THE WITNESS: I've already got it.		
25	HEARING EXAMINER SKIRPAN: There's a		

2 MR. McROBERTS: There are two differ 3 ones. One is a system impact study report.	ent
3 ones. One is a system impact study report.	
4 The other is a feasibility study report for	
5 the same PJM docket number W3-043.	
6 THE WITNESS: Short of reading the	
7 entire document, I do see on Page I see	the
8 pages aren't numbered. It looks like it wo	uld
9 be Page I'm sorry. Page 2, where it say	S
10 that, Queue W3-043 is an IC 500-megawatt,	
65-megawatt capacity, offshore wind	
interconnection request?	
BY MR. McROBERTS:	
14 Q. Yes. What is that?	
15 A. I'm sorry?	
16 Q. What is an IC interconnection reques	t?
17 A. Well, judging IC is defined as th	е
18 interconnection customer.	
19 Q. You see on the first page that, I gu	ess
20 it is Page 1, this is published by PJM	
21 Interconnection. Is that right?	
22 A. Yes, I see that, down at the bottom.	
23 MR. McROBERTS: I'd like to introduc	е
24 this into evidence.	
25 MS. LINK: Your Honor, we	

1	MR. McROBERTS: 131 and 132.	
2	MS. LINK: We've been introducing much	
3	with regard to LNG yesterday. I guess today's	
4	topic will be offshore wind. We object for	
5	the same reasons as yesterday.	
6	MR. McROBERTS: And we believe it goes	
7	directly to need. I can establish more	
8	foundation if needed, but I believe it's	
9	apparent that this provides if you read it,	
10	it delivers power to Virginia Beach and South	
11	Hampton Roads, which has been a linchpin of	
12	the Company's case.	
13	HEARING EXAMINER SKIRPAN: I'm going to	
14	permit it to be entered.	
15	(Exhibit Number 132 is marked and later	
16	in the proceedings withdrawn.)	
17	BY MR. McROBERTS:	
18	Q. The same question regarding Exhibit	
19	132, PJM Interconnection, same docket number	
20	W3-043, system impact study report by PJM	
21	Interconnection.	
22	Mr. Hathaway, the same project, to	
23	bring wind energy from offshore into Virginia	
24	Beach into the grid? If you need, you can look on	
25	Page 2, under General. I believe that's a good	

description of the project. 1 2 MS. LINK: Your Honor, counsel has 3 handed the witness two documents he says he's 4 never seen before. If he could give him some 5 time to at least gain some familiarity, rather than directing him to the pages that he wants 6 7 him to --8 HEARING EXAMINER SKIRPAN: Do you have any more that you're planning on giving him? 9 10 MR. McROBERTS: I have just one more 11 document. 12 HEARING EXAMINER SKIRPAN: Is it 13 related to the offshore wind? 14 MR. McROBERTS: It is directly to 15 offshore wind, but it is a different project. 16 These both are the same project. 17 HEARING EXAMINER SKIRPAN: How much 18 time would you need to look at these, to be 19 able to answer his questions? 20 MR. McROBERTS: I was really just 21 planning on putting it into evidence, Your 22 Honor, without asking too many questions about 23 it. 24 THE WITNESS: I quess it depends on the 25 level of detail of his questions.

HEARING EXAMINER SKIRPAN: Okay. Well, qo ahead. BY MR. McROBERTS: Looking on Page 2, Mr. Hathaway, the Ο. interconnection points for this would be Pendleton 230 kV substation with a secondary interconnection point at Fentress 230 kV substation. Do you see that on Page 2, under the paragraph marked General? I see a reference to Pendleton. Α. Ι don't see one to Fentress. Which agreement are you in? The feasibility study report. Q. I'm sorry. I thought we were --Α. If you look back in Exhibit 131, that's Ο. where I was referring to. I apologize. I had skipped documents on you. Α. Where are we? Page 2 of Exhibit 131, the feasibility Ο. study report for the wind project off of the City

21 of Virginia Beach.

22 A. Okay.

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Q. Do you see that it provides power to a
primary interconnection point at Pendleton 230 kV
substation and a secondary at Fentress 230 kV

1	substation?		
2	A. I see those references.		
3	Q. Is 230 kV the means by which the		
4	Company is planning, you said, to provide wind		
5	energy into the grid?		
6	A. I don't believe I said that.		
7	Q. I'm asking you that question. Is that		
8	the kV at which the Company is planning to provide		
9	wind energy into the grid?		
10	A. I don't know how to respond to that		
11	question. The voltage level will be at the level		
12	at which the customer brings the energy to our		
13	system.		
14	Q. So the Company has stated no preference		
15	as to what level of energy, the feasibility of		
16	what level of energy?		
17	A. Not to my knowledge. This is a process		
18	that is PJM administers. It's a three-part		
19	process. You've got a feasibility study report		
20	and I may not get the sequence right. You've also		
21	got a system impact study, and finally you've got		
22	a facility study.		
23	It all eventually leads to an		
24	interconnection service agreement which it's at		
25	that point that the project becomes real in the		

1	eyes of PJM, and they've got binding obligations,	
2	performance obligations that they must perform	
3	under. Neither of these agreements are at that	
4	point.	
5	MR. McROBERTS: Okay. Other than	
6	moving these into evidence, I don't have any	
7	further questions about these, Your Honor.	
8	HEARING EXAMINER SKIRPAN: They're in.	
9	(Exhibit Number 133 is placed in the	
10	record.)	
11	MR. McROBERTS: One more.	
12	HEARING EXAMINER SKIRPAN: And I'll	
13	note the objection to them.	
14	THE WITNESS: I'm sorry. I did just	
15	also notice, I guess their requested	
16	in-service date is August 31 of 2017.	
17	BY MR. McROBERTS:	
18	Q. Turning your attention to the next	
19	question, the document I'm showing you right now,	
20	Mr. Hathaway, is entitled, 2012 NCTPC-PJM Joint	
21	Interregional Reliability Study. It was prepared	
22	by PJM Interconnection, Duke Energy Carolinas,	
23	Progress Energy Carolinas. This is dated	
24	January of 2013.	
25	Do you see that, Mr. Hathaway?	

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I see it, yes. 1 Α. 2 Q. Are you familiar with this study? 3 Α. No. 4 If you wish to review it for a moment Ο. 5 to familiarize yourself with it, Mr. Hathaway, I certainly can wait. I really just have two 6 7 questions for you on it. It's a 30-page document. Is there a 8 Α. section you can point me to? 9 10 If you can just read the executive 0. 11 summary, I think that will suffice, for my first 12 question anyway. 13 It's a page and a half? Α. 14 Yes, sir. 0. 15 HEARING EXAMINER SKIRPAN: We'll take a 16 ten-minute break to give you time to take a look at it. 17 18 THE WITNESS: Can I use the break for other purposes, as well, Your Honor? 19 20 HEARING EXAMINER SKIRPAN: We'll make 21 it 15 then. 22 (Break in proceedings.) 23 BY MR. McROBERTS: 24 Mr. Hathaway, have you had a chance to Ο. 25 take a look at the executive summary, page and a

_			
1	half, of this 2012 NCTPC-PJM Joint Interregional		
2	Reliability Study that's I believe marked as		
3	Exhibit 133?		
4	A. I have, and I have some comments.		
5	Q. Well, I have really just one question		
6	about this. This study of reliability from I		
7	guess in this case hypothetical injections of		
8	voltage from wind does, in fact, involve Dominion		
9	Virginia Power system in some means. Doesn't it?		
10	A. I'm sorry. Hypothetical injection of		
11	voltage? I'm afraid I don't understand the		
12	question.		
13	Q. Well, that's what it says here in the		
14	report.		
15	Turning your attention to Page 3, where		
16	it talks about the integration of 3,000 to		
17	10,000 megawatts of offshore wind in North		
18	Carolina and Virginia, obviously it would take		
19	transmission upgrades.		
20	Is this something that Dominion		
21	Virginia Power is aware of?		
22	A. Based on my review of the economic		
23	summary and some experience I've got, the		
24	economics of offshore wind are extremely		
25	challenged. That's why this report has a		
	-		

1	hypothetical basis to it, and it's effectively a			
2	public policy study. It's I believe been			
3	commissioned by various entities.			
4	I didn't see that it involved any			
5	developers of any type, any parties who might be			
б	willing to invest capital.			
7	You made reference to the second page			
8	of the executive summary. There I note that it			
9	references 1 to 2 billion dollars in transmission			
10	upgrades that would be required to support much of			
11	this wind, one of which and if you go to Page			
12	26, it does reference a Surry to Chickahominy 500			
13	kV line which would be required to support this			
14	hypothetical public policy study of offshore wind			
15	opportunities.			
16	That Surry to Chickahominy 500 kV line			
17	would be a new 500 kV line from our Chickahominy			
18	substation to Surry which would involve a crossing			
19	of the James River.			
20	Q. I guess my question is, is the			
21	intention of that to carry power away from the			
22	peninsula or to it? In other words, an			
23	interconnection with PJM to carry power sold by			
24	Dominion Virginia Power to the PJM grid, or is it			
25	intended to actually bring power to serve the			

peninsula? 1 2 Α. I'm sorry. I don't understand the 3 question. 4 Well, isn't it true that if there is 0. excess power available in the Dominion Virginia 5 6 Power system, it can be sold? 7 Α. I'm struggling with the question. PJM administers a market by which bids and offers are 8 9 settled on a day ahead and realtime basis. So PJM 10 administers the capacity market, the energy market, the ancillary services market. So it is 11 12 PJM that clears the market. Again --13 The question is, does Dominion Virginia 0. 14 Power sell excess power to other folks that may 15 want it? 16 We offer our energy, our capacity into Α. 17 the market, and to the extent that energy and 18 capacity clears the market, it is sold on that 19 basis. 20 Q. Okay. Turning to Page 15 of Exhibit 21 133, scenario Number --22 Which one is 133? Α. 23 It's marked as Exhibit 133. Q. 24 Α. That's the --25 Reliability study we're discussing Ο.

1	right now, d	dated January 2013. Page 15 talks	
2	about the th	hird scenario. It actually models	
3	three different scenarios.		
4	-	This one shows an injection of	
5	6,000 megawa	atts into the Dominion zone of PJM. Is	
6	that correct? That's what it says on the page.		
7	Correct?		
8	A	You're making reference to the	
9	schematic?		
10	Q. (Correct. That's what it shows?	
11	A. 1	Where does it show that?	
12	Q. (On Page 15.	
13	Α.	Yeah, I have no	
14	Q	There's two arrows pointing at	
15	PJM/Dominio	n. One has an arrow pointing at it	
16	with 4,500 r	megawatts injection, and the other has	
17	1,500 megawa	atts. Is that correct?	
18	A. 1	Without a thorough review of the	
19	document, I	've got no context on which to draw	
20	conclusions. I see the schematic. I see the		
21	arrows.		
22	Q. 2	And I've accurately described it?	
23	Α.	Yes.	
24	Q. (Okay. Those are all my questions.	
25	ľ	MR. McROBERTS: I'd like to move these	

into evidence at this time. 1 2 HEARING EXAMINER SKIRPAN: It's in. 3 Thank you very much, MR. McROBERTS: 4 Mr. Hathaway. Thank you, Mr. Hearing Examiner. 5 6 MR. ROUSSY: Just a couple questions, 7 Your Honor. 8 9 EXAMINATION 10 BY MR. ROUSSY: 11 Good afternoon, Mr. Hathaway. Matt 0. 12 Roussy. I represent the Commission Staff. 13 Α. Good afternoon. 14 I didn't jot the page numbers on top, 0. 15 but do you recall receiving two study documents 16 during cross-examination by James City County, both of which I believe have the W3-043 identifier 17 18 on the coverage page? Do you see those? 19 Α. Yes. 20 Q. Do you know whether that generation 21 remains under active development? Is it still in 22 the active PJM queue, do you know? 23 I am unaware of any wind projects that Α. 24 remain active in the PJM queue off the Virginia 25 Coast.

1	Q.	Okay. I've printed off something just
2	a few minu	tes ago from upstairs. Do you see where
3	it says	this is a print-off from the PJM
4	website.	At the top it says, "Generation queues
5	withdrawn.	п
6		There's a lot of wind on here on the
7	right side	. Do you see this little wind turbine
8	picture th	at I've pointed to?
9	Α.	I do. Thank you.
10	Q.	Okay. Do you see the same W3-043
11	identifier	in the left-hand column on the first
12	page of th	is document?
13	Α.	Yes.
14	Q.	And does it say Pendleton 230 kV?
15	Α.	It does.
16	Q.	And do the 50 megawatts of energy and
17	65 megawat	ts of capacity also correspond
18	Α.	They do, yes.
19	Q.	to the numbers you see there?
20	Α.	Yes.
21	Q.	There's no circle for interconnection
22	ISA up at	the top. If we follow that down,
23	there's no	circle there. There's a black circle
24	right befo	re it for underneath the facilities
25	study colu	mn.
1		

1	Does this indicate to you that W3-043
2	is in PJM's active queue or that it was withdrawn?
3	A. It suggests that it's inactive. In
4	fact, as you work your way to the right, it lists
5	a withdrawal date of August 16th, 2011.
6	Q. August 16th, 2011. So not too far
7	after this June 2011 study was received by the
8	developer?
9	A. That's correct.
10	Q. And the developer in this case, was
11	that Dominion Virginia Power?
12	A. Not to my knowledge.
13	Q. Okay. We have an agreement here that's
14	referenced in the exhibit that speaks of Apex
15	Offshore Wind, LLC. Do you say that?
16	A. Yes, I do.
17	Q. Does that suggest that the developer of
18	this W3-043 project was Dominion Virginia Power or
19	someone else?
20	A. Someone else.
21	MR. McROBERTS: Your Honor, if I can
22	rise to say, it's been introduced into
23	evidence, but at this point obviously if it's
24	been withdrawn, it has really no relevance to
25	the matter, we would have to have it

1 withdrawn. 2 MR. ROUSSY: I want to make sure the 3 record is clear if it's -- either way. MS. LINK: We would support the 4 withdrawal. 5 HEARING EXAMINER SKIRPAN: It's one of 6 7 the few withdrawn exhibits --8 MR. McROBERTS: Let's leave it in, Your Honor, for whatever it may be worth, and we'll 9 10 leave it there. Thank you. 11 MS. LINK: Your Honor, if it's helpful, 12 I have an exhibit that we can put in to note 13 that it's been withdrawn, or Mr. Roussy can 14 introduce his, either way. 15 HEARING EXAMINER SKIRPAN: Why don't we 16 go ahead and withdraw it. I think it would be 17 cleaner, if that's your wish, if the offer 18 still stands. 19 MR. McROBERTS: You know, I think at 20 this point, yeah, I'm happy to have it 21 withdrawn. That's fine. 22 HEARING EXAMINER SKIRPAN: Thank you. 23 BY MR. ROUSSY: 24 Mr. Hathaway, a few minutes ago you Ο. 25 spoke, and I'm going to paraphrase here, so I'm

1	probably not going to get it exactly right, but I
2	think you said something to the effect of the
3	economics of offshore wind being challenged.
4	Do you recall something along those
5	lines?
6	A. I do.
7	Q. Are the economics that Dominion has
8	found challenging with respect to offshore wind
9	only the transmission-related costs that are
10	discussed in this, of the type that are discussed
11	in this 2012 NCTPC study, or does the generation
12	component of offshore wind also present challenges
13	from an economic standpoint?
14	A. From what I've read from publicly
15	available documents, the construction costs
16	associated with offshore wind is horrific. The
17	operations and maintenance costs are very high,
18	and that offshore wind has costs that rival
19	nuclear facilities. They're very, very expensive.
20	MR. ROUSSY: No further questions, Your
21	Honor.
22	HEARING EXAMINER SKIRPAN: Any
23	redirect?
24	MS. LINK: Your Honor, just to be clear
25	for the record, the withdraw of exhibits, that

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applies to Exhibits 131 and 132? 1 2 HEARING EXAMINER SKIRPAN: Yes. 3 MS. LINK: Thank you. 4 5 EXAMINATION 6 BY MS. LINK: 7 Ο. Very briefly, Mr. Hathaway. Will you take a look at Exhibit 133 that Mr. McRoberts 8 9 showed you. It's the --10 Α. I got it. 11 And he was on Page 15 in the schematic. 0. 12 Α. Yes. 13 In Scenario 3. If you look to the left Q. 14 of that, what is the time period for which this 15 hypothetical situation was studied? 16 Α. It lists the date 2027 Summer. 17 0. So what does that indicate to you? 18 It would suggest to me that it was a Α. 19 hypothetical scenario that could exist in the 20 Summer of 2027. Thank you. Your Honor, we 21 MS. LINK: 22 have no further redirect of this witness. 23 HEARING EXAMINER SKIRPAN: Thank you. 24 MS. LINK: That concludes the Company's 25 rebuttal.

1	And we had put Ms. Erdreich's testimony
2	into the record already. Correct?
3	HEARING EXAMINER SKIRPAN: Yes. You
4	may be excused.
5	THE WITNESS: Thank you.
6	MR. GARY: Your Honor, two things.
7	First is we did reproduced Exhibit 128, which
8	is the two sheets from the Roux report, and
9	I'll hand those out now, Exhibit 128.
10	Your Honor, the other point I would
11	like to raise is that, as you know we've been
12	discussing since the opening bell in this
13	hearing a very significant issue to Dominion,
14	which is the availability of a reasonable and
15	comprehensive overhead easement across the
16	EDA's property if Variation 3 or 4 were to be
17	selected by the Commission as the preferred
18	route.
19	Mr. McCoy the other day said that
20	solving the easement issue was significant,
21	based on the testimony we had heard, and then
22	Ms. Harper this morning described the
23	necessary components to the need to be
24	included in an easement that would be
25	acceptable to build a 500 kV transmission

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1 line.

2 As you know, we've gained access to the 3 property, and we've got a crew out there and they're studying it, and we hope to have an 4 easement sort of laid out as soon as possible 5 6 which would accommodate Dominion's interest as 7 well as the EDA's interest to have the 8 easement as far north on their property as 9 possible.

10 What we'd like to do is present to them 11 very soon an executable easement which would of course be conditioned on the Commission 12 13 having selected Variations 3 or 4. And we'd 14 like to reserve an exhibit to submit that 15 fully-executed easement here a week before the 16 brief is due in order to give some assurance to us and EDA and BASF and Your Honor and the 17 18 Commission that we've got a line that's 19 constructible.

Now, Variation 3 and 4 is dependent upon having that overhead easement in place at a reasonable time, and we think that will allow us to three or four weeks or whatever Your Honor is going to give us for briefs to get at it, get the easement done and put that

Page 2	1857
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certainty we have or don't have, if we can't get an easement, at that point in time. So I think the next exhibit would be 134, by my count, and so we'd like to reserve that, if we may. HEARING EXAMINER SKIRPAN: Any comments? MR. QUINAN: Your Honor, from BASF's perspective, one, we don't have a problem with reserving a number for a late-filed exhibit, but I don't want the fact that we're doing that to indicate that this is a determinative if the easement is executed, Variation 3 or 4 is a go; but if it isn't, it's not a go, because I don't know what complexities may arise in the course of negotiating the details of an easement when their route hasn't been approved I mean, there are a lot of Questions. What you already have on the record is a clear commitment from the EDA to provide the right-of-way necessary to use that Variation 3 route. Whether or not they can work out the fine details of an easement before a brief is	1	issue aside so our briefs can reflect the
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10 perspective, one, we don't have a problem with 11 reserving a number for a late-filed exhibit, 12 but I don't want the fact that we're doing 13 that to indicate that this is a determinative 14 if the easement is executed, Variation 3 or 15 4 is a go; but if it isn't, it's not a go, 16 because I don't know what complexities may 17 arise in the course of negotiating the details 18 of an easement when their route hasn't been 19 approved I mean, there are a lot of 20 questions. 21 What you already have on the record is 22 a clear commitment from the EDA to provide the 23 right-of-way necessary to use that Variation 3 24 route. Whether or not they can work out the	8	comments?
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20 questions. 21 What you already have on the record is 22 a clear commitment from the EDA to provide the 23 right-of-way necessary to use that Variation 3 24 route. Whether or not they can work out the	18	of an easement when their route hasn't been
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23 right-of-way necessary to use that Variation 3 24 route. Whether or not they can work out the	21	What you already have on the record is
24 route. Whether or not they can work out the	22	a clear commitment from the EDA to provide the
	23	right-of-way necessary to use that Variation 3
25 fine details of an easement before a brief is	24	route. Whether or not they can work out the
	25	fine details of an easement before a brief is

1	due I don't think changes any of that.
2	So, no objection, but I want to be
3	clear that it's not a thumbs-up, thumbs-down,
4	it gets done, if it doesn't get done the
5	route's not buildable.
6	HEARING EXAMINER SKIRPAN: How about if
7	we do it this way. We'll talk about, say, a
8	couple weeks before briefs are due that you
9	would provide either the executed or agreed
10	upon right-of-way or language or provide an
11	update as to where you are.
12	MR. GARY: That's fine, Your Honor.
13	I'd be happy to do that.
14	HEARING EXAMINER SKIRPAN: Would that
15	be acceptable?
16	MR. ROGERS: Yes, Your Honor.
17	MR. QUINAN: It's acceptable with us.
18	We think the record is more than adequate.
19	There are a lot of uncertainties that have to
20	be resolved after a certificate is granted. I
21	think this one is so much further than many
22	others.
23	HEARING EXAMINER SKIRPAN: I just
24	didn't want it to look like just because there
25	wasn't anything filed, then there's no telling

1 of where the process is. 2 MR. OUINAN: That's fine. 3 MR. GARY: Your Honor, the report would come from us and from EDA to show where we 4 5 are? 6 HEARING EXAMINER SKIRPAN: I would hope 7 they would do it jointly. 8 MR. ROGERS: I think we can. If we're working on the easement, we should be able to 9 10 file a joint report. 11 MR. GARY: Thank you. 12 MR. ROGERS: I may not be able to get 13 an EDA meeting in whatever the gap is. 14 That's exactly the kind of MR. OUINAN: 15 detail that I'm not aware of, Your Honor. 16 MR. GARY: Your Honor, quite frankly, 17 that's our concern, that we're not going to 18 get a meeting, we're going to be out of town, 19 weeks and months and years are going to go by. 20 And we've got to get this done. 21 MR. QUINAN: I just don't think it should be a pass-fail test within the next --22 23 MR. ROGERS: That's not. 24 HEARING EXAMINER SKIRPAN: I agree it's 25 not pass-fail. Just let me know where you

1 are. 2 And the scheduling for briefs. Since 3 the transcripts should be, we're fairly 4 current on those and will be provided quickly enough, that shouldn't impact the briefing 5 6 schedule. Do I hear four weeks? 7 MR. McROBERTS: Your Honor, speaking 8 for the James City County attorney who will be 9 out of town a significant portion of that 10 time, that is a difficult time frame for us. 11 And just so I can be aware, is this a situation where Dominion files a brief and 12 13 then we respond? 14 HEARING EXAMINER SKIRPAN: Oh, no. The 15 way it will work is that everyone files a 16 brief on the same day. And then I write my 17 report, and then everyone gets to file 18 comments on my report to the Commission. 19 MR. McROBERTS: I was aware of the 20 comments part. It was the brief that --21 HEARING EXAMINER SKIRPAN: So the brief 22 is to help me in working through the legal 23 arguments and for my report. I saw six --MR. GARY: Can I throw out a date of 24 25 Friday the 24th, which is right before

1	Memorial Day, so we can get it to you close of
2	business on the 24th?
3	MR. McROBERTS: The 24th would be fine
4	for James City County.
5	MR. QUINAN: That works for BASF.
6	MR. McROBERTS: Just in time for
7	summer, you get to write a report.
8	HEARING EXAMINER SKIRPAN: That's
9	right. I'll be in New Jersey that day. It's
10	my daughter's graduation.
11	MR. ROGERS: Congratulations.
12	MS. LINK: Congratulation.
13	HEARING EXAMINER SKIRPAN: That's fine.
14	MR. GARY: On that basis, Your Honor,
15	we'll try to get you a report on the status of
16	the easement by Friday, May the 10th? Is that
17	okay?
18	MR. QUINAN: Why don't you give
19	yourself until the 17th.
20	HEARING EXAMINER SKIRPAN: Yeah, why
21	don't you give yourself until the 17th.
22	MR. GARY: Okay. Thank you.
23	HEARING EXAMINER SKIRPAN: So May 17th
24	for the report, which I'll reserve Exhibit
25	Number 134.

1	(Exhibit Number 134 is reserved.)
2	MR. GARY: Thank you, Your Honor.
3	HEARING EXAMINER SKIRPAN: Is there
4	anything further to come before the
5	Commission?
6	If not, I thank everyone for their
7	participation in this and the work you put
8	into it, and we'll stand adjourned. Thank
9	you.
10	(Whereupon, the hearing was concluded
11	at 2:39 p.m.)
12	
13	* * * * *
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1	COMMONWEALTH OF VIRGINIA AT LARGE, to wit:
2	I, Rhonda D. Tuck, RPR, CRR, Notary Public
3	in and for the Commonwealth of Virginia at Large,
4	and whose commission expires May 31, 2016, do
5	certify that I was the court reporter at the
6	aforementioned proceedings and that the foregoing is
7	a true, correct, and full transcript of the
8	proceedings herein.
9	I further certify that I am neither
10	related to nor associated with any counsel or party
11	to this proceeding, nor otherwise interested in the
12	event thereof.
13	Given under my hand and notarial seal at
14	Charlottesville, Virginia, this 19th day of April
15	2013.
16	
17	a a start
18	Landan /ull
19	
20	Rhonda D. Tuck, RPR, CRR, Notary Public
21	Commonwealth of Virginia at Large
22	Notary No. 224847
23	
24	
25	

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** *	1775:5	1754:15	1823:22
\$0.2	1776:15,25	1799:17	1023.22
1665:12	1780:10	1800:1	12 1683:16,
\$10 1665:3	<i>tc</i> o ooo		19 1711:11
\$102	\$60,000	1807:23	1772:23
1665:13	1774:12	1808:7	1778:1
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1664:20	0	101 1746:18	12.9
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	09.1	10th	120 1679:2,
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\$11.8		1687:11	6 1690:5
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\$18 1670:12	1783:25	1806:17	123 1720:25
\$181.9	1784:14	11.8	1721:1
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1	MR. WATTS: He was focusing on
2	pipelines, as opposed to
3	HEARING EXAMINER SKIRPAN: I understand
4	Mr. Lake's testimony was limited to that, but
5	what was in Mr. Thomasson's rebuttal testimony
6	goes through the process for installing the
7	transmission lines, which you are getting
8	ready which you had started to ask him to
9	repeat.
10	MR. WATTS: Well, I was attempting to
11	respond I'll withdraw the question.
12	HEARING EXAMINER SKIRPAN: Okay.
13	MR. WATTS: Excuse me a second.
14	BY MR. WATTS:
15	Q. During Mr. Rogers' cross-examination of
16	Mr. Lake, Mr. Rogers asked which is more
17	environmentally disruptive to the riverbed of
18	James River, construction of piles for an overhead
19	line or for directional drilling, and I'm asking
20	you to respond to that question because he was not
21	able to.
22	A. Okay. As I was trying to mention a
23	second ago, the underground transmission line
24	would require platforms out on the middle of the
25	river in order to splice the cables.

1 These platforms are a temporary work 2 space that are needed for various operations 3 throughout the course of construction. These platforms actually require piles to be driven into 4 the riverbed, as well, and which we haven't done 5 detailed engineering on this project, but I can 6 7 speak of prior experience, especially with the 8 recently completed Hayes-Yorktown project. And on that project, each platform had around 26 steel 9 10 piles that had to be driven into the riverbed. 11 In addition to that, there were also 12 additional piles that had to be driven in order to 13 support the pipe as it came out of the water onto 14 the platform. 15 So with the two types of piles that 16 needed to be driven, it's a total of 42 piles per platform, which, for the Alternative B project, as 17 18 we've described, will be a total of 378 piles that would need to be driven. 19 What is a little bit different from the 20 21 overhead is that once we're done with the 22 construction, those piles need to be pulled out, removed out of the riverbed. So that would be 23 definitely a different impact from the overhead 24 25 construction.

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1	In addition to that, once the splicing
2	of the cables has occurred, each one of those
3	splices has to be overboarded, which we've
4	explained that, you know, there's dredging of the
5	riverbed which is an additional environmental
6	impact.
7	Q. And how many platforms would there be?
8	A. For Alternative B, there would be nine
9	total platforms in the river.
10	MR. WATTS: That's all I have. The
11	witness is available for cross.
12	HEARING EXAMINER SKIRPAN: Any
13	questions?
14	MR. McROBERTS: No questions.
15	HEARING EXAMINER SKIRPAN: Any
16	questions at this time?
17	MR. McROBERTS: Yes, sir.
18	
19	EXAMINATION
20	BY MR. McROBERTS:
21	Q. On Pages 13 through 15 of your rebuttal
22	testimony, Mr. Thomasson, you talk about the
23	differences between the estimates by Mr. Whittier
24	and the Company regarding the LS Power proposal
25	and the project.

1	commissioned a study to be done by Truescape?
2	A. Yes.
3	Q. And your determination of impacts was
4	based on those voter?)voted determinations done by
5	Truescape?
6	A. In part.
7	Q. Referring to Page 9 now well,
8	actually referring to your entire rebuttal
9	testimony, you do not mention impacts on the
10	Captain John Smith Historic Trail in your rebuttal
11	testimony, do you?
12	A. No, I believe I don't.
13	Q. Would you agree that the impacts on the
14	Captain John Smith Historic Trail and the James
15	River and thereby the scenic and historic sites
16	can be mitigated by putting a transmission line
17	under the James River?
18	A. Certain aspects of construction under
19	the river let me back up.
20	Construction of the facilities under
21	the river could mitigate certain aspects of the
22	impacts associated with an overhead line, but
23	there are many other impacts that could affect the
24	James River associated with underwater
25	construction. Not only the James River but the

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1	historic John Smith Trail, as well, associated
2	with construction underwater.
3	As you are aware, the trail is used for
4	recreational use and for many other uses, canoeing
5	and boat use and scenic, obviously.
6	Construction of a line, as I I would
7	refer back to Mr. Thomasson's testimony, would
8	involve not only directional drilling and and a
9	location, depending on where you started the drill
10	and where you ended the drill of above-ground to
11	below-ground transition stations.
12	So if those stations were located near
13	the river, they would the views of those
14	stations would have to be mitigated in some way.
15	Then you've got in addition to the
16	directional drill process itself, you need
17	splicing barges out in the river. And depending
18	on the various scenarios, that would indicate the
19	number of splicing barges. In some cases six, in
20	some cases nine, depending on the number of
21	circuits and the number of pipes that were put
22	across.
23	Those barges would have to be in place
24	for approximately two years to finish the
25	construction of the project. So at a minimum

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1	and there are a number of pilings that have to be
2	installed. Not all pilings are associated
3	directly with stabilization of the barge, but also
4	to support the cables as they go from the barge
5	down into the water, and the conduit, 8-inch
6	wide 8-inch diameter pipeline.
7	So what you have, if you can picture
8	that in your mind across the river, would be up to
9	nine different barges, three across and then three
10	across and then three more across, with pilings
11	going off both directions, supporting an elevated
12	pipeline that transitions between the barge
13	location and underground, for a large distance.
14	And that would be in place for almost
15	two years, so I think that would be, I would say a
16	significant visual impact and also an impediment
17	to recreational uses within the trail for that
18	time.
19	In addition to that temporary impact
20	but significant impact, you've got the situation
21	involved that was described very adequately by
22	Ms. Harper and also by Company Witness Thomasson
23	associated with the trenching that would be
24	involved.
25	Q. I'm going to ask you to stop there

1	since I'm talking about the historic Captain John
2	Smith Trail and not the issues involved with
3	trenching or environment.
4	A. But I think it's relevant that if you
5	re-suspend sediments in that trail, you're going
6	to be affecting the quality of that trail.
7	Q. Are these temporary measures that you
8	say would be in place, the barges?
9	A. On a time span, they'd be considered
10	more than temporary. Two years would be they
11	are temporary, but they're long-term temporary.
12	They're moderately temporary.
13	In terms of impact, you generally
14	describe things as short-term temporary, long term
15	but temporary and then long-term permanent. These
16	would be long term but temporary.
17	Q. But for generations in the future, it
18	would still preserve the scenic and historic views
19	of the founding of this country, or as Dr. Horn
20	put it, the alpha and omega of the British Empire
21	in America, wouldn't it?
22	A. I'm sorry. Could you repeat that
23	question?
24	Q. Yes. What I'm asking is for
25	generations to come, it would still preserve the