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May 23, 2013

VIA ELECTRONIC FILING

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

RE: Application of Virginia Electric and Power Company For Approval and Certification of Electric Facilities: Surry-Skiffes Creek 500 kV Transmission Line; Skiffes Creek-Wheaton 230 kV Transmission Line; and Skiffes Creek 500 kV-230 kV-115 kV Switching Station

Case No. PUE-2012-00029

Dear Mr. Peck:

Enclosed for filing in the above-captioned proceeding is the **Public (Redacted) Version** of the Post-Hearing Brief of Appalachian Voices, Chesapeake Climate Action Network, and the Virginia Chapter of the Sierra Club (collectively, "Environmental Respondents"). This brief is being filed electronically on the Commission's Electronic Document Filing system. Pursuant to 5 VAC 5-20-170 of the Rules of Practice and Procedure of the State Corporation Commission, a confidential and extraordinarily sensitive version of this filing is being made under seal, under separate cover.

If you should have any questions regarding this filing, please call me at (434) 977-4090.

Sincerely,



Angela Navarro
Southern Environmental Law Center

cc: Parties on Service List
Commission Staff

COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION

APPLICATION OF)
)
 VIRGINIA ELECTRIC AND POWER)
 COMPANY)
) Case No. PUE-2012-00029
 For approval and certification of electric facilities:)
 Surry-Skiffes Creek 500 kV Transmission Line,)
 Skiffes Creek-Wheaton 230 kV Transmission Line, and)
 Skiffes Creek 500 kV-230 kV-115 kV Switching Station)

POST-HEARING BRIEF OF ENVIRONMENTAL RESPONDENTS

Pursuant to the Hearing Examiner’s directive at the close of the evidentiary hearing on April 18, 2012 in the above-captioned docket, Appalachian Voices, Chesapeake Climate Action Network, and the Virginia Chapter of the Sierra Club, (collectively, “Environmental Respondents”), by counsel, submit this Post-Hearing Brief on Virginia Electric and Power Company’s (“Dominion” or the “Company”) application for approval and certification of the Surry-Skiffes Creek 500 kV Transmission Line, Skiffes Creek-Wheaton 230 kV Transmission Line, and Skiffes Creek 500 kV-230 kV-115 kV Switching Station (collectively, the “Project”).

I. INTRODUCTION.

On June 11, 2012, the Company filed an application for approval and certification of the Project pursuant to Virginia Code § 56-46.1 and § 56-265.1 *et seq.* (the “Application”). The Company requests approval of the Project in order to address the potential violation of mandatory North American Electric Reliability Corporation (“NERC”) Reliability Standards in the North Hampton Roads Load Area. The Company’s Application states that the need for the proposed Project is being driven by

continued load growth in the North Hampton Roads Load Area over the past 10 years. Application at 3. Further, the Company's 2011 Integrated Resource Plan ("IRP"), which was filed and approved by the Commission, included plans to retire Yorktown Power Station ("Yorktown") Unit 1 and Chesapeake Energy Center ("Chesapeake") Units 1 and 2 by 2015. Application at 3-4. The Company's Application states that these retirements accelerated the need for the Project from the summer of 2019 to the summer of 2015 to maintain compliance with NERC Reliability Standards. Application at 4. The Company updated its analysis when developing the 2012 IRP, and now plans to retire Yorktown Units 1 and 2 and Chesapeake Units 1 through 4 by December 31, 2014. *See* Transcript of Hearing dated April 9, 2013 through April 18, 2013 ("Tr.") at 220; Exhibit 110, Rebuttal Testimony of Glenn A. Kelly (filed March 14, 2013), at 8. The Company states that these accelerated retirements subsequently increased the need for the Project. *See* Tr. at 20-21; *see also* Exhibit 31, Direct Testimony of Peter Nedwick (filed June 11, 2012), at 12-13.

The Company based its decision to retire these heavily-polluting coal-fired units at Yorktown and Chesapeake – the oldest of which came online more than 60 years ago, at the close of the Truman administration – on an analysis of the cost to comply with current and long-delayed environmental regulations required by federal statute or court order, including the Mercury & Air Toxics Standards ("MATS"), National Ambient Air Quality Standard ("NAAQS") for Sulfur Dioxide, NAAQS for Ozone, the Cross State Air Pollution Rule ("CSAPR") and the Clean Air Interstate Rule ("CAIR"), Federal Carbon Dioxide Regulations, Coal Combustion Byproducts ("CCB"), Clean Water Act Section 316(b), and Effluent Limitation Guidelines. *See* Application at Appendix, pages 8-9; *see*

also Exhibit 31 at 22-23. The Company's Application and pre-filed direct testimony supported the planned retirements, demonstrating that retrofitting these coal-fired units would be the most costly option for ratepayers and would fail to fully address the potential NERC Reliability Violations.

At the direction of the Hearing Examiner, and in response to the recommendations offered in the pre-filed testimony of John W. Chiles on behalf of the Staff of the State Corporation Commission ("Staff"), the Company performed additional studies that evaluated preserving generation at Yorktown through a combination of three transmission and generation alternatives as well as a generation-only alternative. The additional studies analyzed whether such alternatives would address the potential NERC Reliability Violations and at what cost. *See* Exhibit 130, Rebuttal Testimony of Scot C. Hathaway (filed March 14, 2013), at 6-7. The results of these studies further support the conclusion that retaining generation at Yorktown would be an economically imprudent planning decision. *See id.* at Rebuttal Schedule 1.

There are fair questions to be asked about the proposed Project, its impacts, and alternatives that may address the potential NERC Reliability Violations. For example, the Company failed to meaningfully examine potential demand-side management ("DSM") alternatives targeted to the North Hampton Roads Load area. Such analysis should evaluate whether a combination of transmission and targeted DSM options could address the potential NERC Reliability Violations while reducing the impact of the Project on historic resources along the James River, including the Colonial Parkway, Carter's Grove, and Jamestown Island.

While Environmental Respondents take no position on the siting of the transmission line, we subscribe to the view that all reasonable alternatives should be evaluated and the costs and risks of such alternatives should be weighed. An analysis of the alternative options that the Company has evaluated reveals that the ratepayer costs at issue in this docket would increase significantly if the Company reversed course and decided to pursue options that would extend the life of coal-fired generation at Yorktown or Chesapeake. Accordingly, Environmental Respondents respectfully request that the Commission direct the Company to preserve its plan to retire all coal-fired generation at Yorktown and Chesapeake by December 31, 2014.

II. THE ANALYSIS UNDERLYING THE COMPANY'S PLANS TO RETIRE THE COAL-FIRED UNITS AT YORKTOWN AND CHESAPEAKE IS REASONABLE.

The Company developed its analysis of potential generation retirements through the IRP process. *See* Tr. at 219; Application at 3. The retirement decisions are based on an evaluation of the cost to ratepayers of coal-fired generation, including an analysis of retrofitting, repowering, or retiring coal-fired units to comply with pending and finalized environmental regulations. *See* Application at Appendix, pages 8-10. The comparative cost of these options supports the Company's decision to retire Yorktown Units 1 and 2 and Chesapeake Units 1 through 4.

The Company's plan to retire the coal-fired units at Yorktown and Chesapeake lowers the cost and risk profile of the Company's resource mix, benefitting ratepayers as well as the Company. Environmental Respondents initially raised concerns about the possible continued operation of the Yorktown and Chesapeake coal-fired units based on the economics of environmental compliance costs in the Company's 2009 IRP docket.

See generally Corrected Testimony of William Steinhurst, 2009 IRP Proceeding, PUE-2009-00096 (pre-filed April 1, 2010; admitted into evidence June 8, 2010). Dominion's 2009 IRP failed to incorporate environmental compliance costs associated with its existing coal-fired generating units, and did not analyze the risks and uncertainties of continuing to operate these outdated, coal-fired units.

Environmental Respondents raised these and other concerns in the proceeding on the 2009 IRP, and requested that the Commission direct Dominion to make a compliance filing to cure the Company's failure to evaluate coal-fired retirements during the planning period. *See* Corrected Testimony of William Steinhurst. Although the Commission did not order a compliance filing, it did find that "the issues raised by the Environmental Respondents relating to ... proposed environmental control standards, such as, for example mercury, *may have merit and should be considered by the Company in its future IRPs...*" Final Order, 2009 IRP Proceeding, PUE-2009-00096, at 6 (Aug. 6, 2010) (emphasis added).

In response to the Commission's Order on the 2009 IRP, the Company's 2011 IRP contained a more accurate consideration of the environmental compliance needs of the Company's existing coal-fired generating fleet. *See* Tr. at 1608 (stating that the Company looked at "at the entire portfolio of at-risk units," which included 3,000 megawatts ("MW") of generation). Of all of these units, the Yorktown and Chesapeake units had the least amount of control equipment already installed. *See id.* The 2011 IRP evaluated compliance costs associated with retrofitting the Yorktown and Chesapeake units with new environmental control equipment, repowering the units with natural gas or converting the units to burn biomass, or retiring the units from service. *See* Virginia

Electric and Power Company's Integrated Resource Plan Filing, *2011 IRP Proceeding*, PUE-2011-00092, at 20-23 (Sept. 1, 2011). Based on this analysis, the 2011 IRP included plans to retire Chesapeake Units 1 and 2 and Yorktown Unit 1 by 2015, Chesapeake Units 3 and 4 by 2016, and Yorktown Units 2 and 3 by 2022. *See id.* at 23. The Company subsequently updated this analysis during the development of the 2012 IRP, and the filings in this docket reflect the Company's current plans to retire Yorktown Units 1 and 2 and Chesapeake Units 1 through 4 by December 31, 2014. *See, e.g.*, Exhibit 110 at 8.

The Company's analysis of the compliance costs associated with current and pending environmental regulations, which was set forth in the 2011 IRP and updated in the 2012 IRP, underscores why the retirement of the coal-fired units at Yorktown and Chesapeake is a prudent planning decision and must continue on schedule. The Company analyzed the capital expenditures required to bring each the Yorktown and Chesapeake coal-fired into compliance with the following environmental regulations: MATS, NAAQS for Sulfur Dioxide, NAAQS for Ozone, CSAPR and CAIR, CCB, Clean Water Act 316(b), and Effluent Limitation Guidelines. *See Application at Appendix, pages 8-9.*

The Company stated that the timeline for the Yorktown and Chesapeake retirements is driven by the compliance dates for the MATS rule. *See Tr.* at 1601-1602 (“[The Mercury and Air Toxics Standard] is the regulation that determines the date of the retirements, the first regulation that requires us to spend a significant amount of capital.”); Exhibit 110 at 8. The final MATS rule, issued by EPA in response to a federal court order, *New Jersey, et al. v. EPA*, 517 F.3d 574 (D.C. Cir. 2008), was published in the *Federal Register* on February 16, 2012 and requires that units achieve compliance by April 16, 2015. *See 77 Fed. Reg.* 9304. To comply with the rule, the Company has

determined that each of the Yorktown and Chesapeake coal-fired units will require the installation of very expensive baghouses and scrubbers. *See* Tr. at 1602; Exhibit 110 at Rebuttal Schedule 2, page 2.

The MATS rule includes language providing guidance to state agencies on the availability of a limited 1-year extension for the installation of pollution controls. *See* 77 Fed. Reg. at 9407. The rules require the Company to submit a compliance extension request to the Virginia Department of Environmental Quality (“DEQ”) setting forth that the “need arose due to circumstances beyond reasonable control of the owner or operator.” *See* 40 C.F.R. 63.6(i)(4)(i)(C); *see also* Exhibit 103, Rebuttal Testimony of Pamela Faggert (filed March 14, 2013), at 7. EPA’s Office of Enforcement and Compliance Assurance (“OECA”) may also issue a one-year extension of the MATS compliance deadline, but this request also requires that the Company provide a plan for complying with MATS. *See* Memo from Cynthia Giles, EPA to EPA Regional Administrators (Dec. 16, 2011). And, of course, even if DEQ or EPA granted the Company an extension, it would only delay compliance with MATS by a year. Therefore, the Company must have a plan for compliance in place that would include either investing in very expensive control equipment before the summer of 2015, when the units will be needed to meet reliability issues, or retiring the units and developing an alternative option. As discussed further below, the Company’s decision to forego the capital expenditures at Yorktown and Chesapeake and to retire the units instead was based on a reasonable assessment of the economics of installing the requisite control technology to comply with the MATS rule by 2015, in addition to the cost to comply with various additional environmental regulations in the 2015-2022 timeframe.

The second environmental regulation driving the Company's decision to retire the Yorktown and Chesapeake coal-fired units is the cost of compliance with the Clean Water Act Section 316(b) rule. Pursuant to a settlement agreement, EPA is required to finalize the rule by June 27, 2013. See Second Amendment to Settlement Agreement Among the Environment Protection Agency, Plaintiffs in Cronin, et al. v. Reilly, 93 Civ. 314 (LTS) (SDNY), and Plaintiffs in Riverkeeper, et al. v. EPA, 06 Civ. 12987 (PKC) (SDNY). The Company expects that the rule will require the installation of intake screens or variable speed drives by 2021 and cooling towers by 2022 for the Yorktown and Chesapeake units. See Exhibit 110 at Rebuttal Schedule 2, page 2. The Company's analysis shows that cooling towers are [BEGIN EXTRAORDINARILY SENSITIVE]

[REDACTED]

[REDACTED]

[REDACTED] [END EXTRAORDINARILY SENSITIVE]. See Exhibit 110C, Confidential Rebuttal Testimony of Glenn A. Kelly (filed March 14, 2013), at Rebuttal Schedule 2, page 2.

In addition, the Company's analysis concluded that the coal-fired units at Yorktown and Chesapeake would require additional control equipment to comply with the finalized Sulfur Dioxide NAAQS as well as pending Ozone NAAQS, Effluent Limitation Guidelines, and CCB regulations. To comply with the finalized Sulfur Dioxide NAAQS by the 2018 compliance timeline, Yorktown Units 1 and 2 and Chesapeake Units 1 through 4 will require the installation of scrubbers or DSI (if these control technologies are not already installed pursuant to the MATS rule). See Exhibit 110 at Rebuttal Schedule 2, page 2. To comply with the pending Ozone NAAQS, which

the Company anticipates will be finalized in July 2014 with a compliance timeline between 2017 and 2018, Yorktown 1 and 2 and Chesapeake 1 and 2 would require the installation of selective catalytic reduction. *See* Exhibit 110 at Rebuttal Schedule 2, page 2. To comply with Effluent Limitation Guidelines, which EPA proposed last month and must finalize by April 2014 pursuant to the terms of a consent decree, the Yorktown and Chesapeake units will require water treatment upgrades. *See id.* Finally, to comply with CCB regulations, which will be finalized later this year, the Company expects that it will incur capital expenditures at Chesapeake associated with moving the facility to dry handling of coal ash and potentially closing the wet ash ponds. *See id.*

To summarize these compliance costs, the Company expects that the total capital expenditures that would be required for Yorktown Units 1 and 2 to comply with all of these environmental regulations will be [BEGIN EXTRAORDINARILY SENSITIVE] [REDACTED] [END EXTRAORDINARILY SENSITIVE]. *See* Exhibit 110C at Rebuttal Schedule 2, page 2. The Company expects that total capital expenditures will be [BEGIN EXTRAORDINARILY SENSITIVE] [REDACTED] [END EXTRAORDINARILY SENSITIVE] for Chesapeake Units 1 and 2 and [BEGIN EXTRAORDINARILY SENSITIVE] [REDACTED] [END EXTRAORDINARILY SENSITIVE] for Chesapeake Units 3 and 4. *See id.* Based on these very significant costs to retrofit the coal-fired units at Yorktown and Chesapeake, the Company made a reasonable determination that retrofitting the units is not an economical alternative. Tr. at 1608 (“[Yorktown and Chesapeake] were the ones that bubbled to the top, if you would, that they needed the most equipment and were the most at risk.”).

In addition, the Company's assessment of these compliance costs does not include the cost to comply with potential federal carbon dioxide regulations. While the Company's analysis acknowledges the likelihood that a cap and trade program would be implemented by 2023, the cost to comply with such a program was not factored into the Company's total capital expenditure figures. *See* Exhibit 110 at Rebuttal Schedule 1, page 5. The Company also did not examine a scenario where carbon costs would be applied earlier than 2023. *See id.*

Further, the Company's evaluation did not include an assessment of additional costs associated with continuing to operate these coal-fired units, including fixed and variable operations and maintenance ("O&M") costs. *See* Tr. at 1613 ("A plant like at Yorktown has very high O&M expenses compared to a combined cycle, because there's more employees at a coal-fired plant and they're much smaller."). As such, it is reasonable to assume that the Company has underestimated and undervalued the risks of continuing to operate Yorktown Units 1 and 2 and Chesapeake Units 1 through 4 as outdated, coal-fired units. Based on the analysis described above, and the potential for additional costs that the Company has failed to account for in its analysis, retiring these units is unquestionably the most cost-effective solution for ratepayers.

III. THE COMPANY'S ADDITIONAL STUDIES DEMONSTRATE THAT PRESERVING GENERATION AT YORKTOWN UNITS 1 AND 2 IS NOT A PRUDENT PLANNING DECISION.

The Company's Application and pre-filed testimony supported the planning decision to retire Yorktown Units 1 and 2 by December 31, 2014. On January 11, 2013, Staff witness John W. Chiles filed written testimony in which he suggested that the Company conduct additional studies, including assessing "whether preserving the

existing generation at Yorktown (via retrofitting) would eliminate the ultimate need for any of the proposed transmission upgrades to supply the North Hampton Roads load area in the vicinity of the proposed Skiffes Creek Switching Station." See Exhibit 79, Prefiled Testimony of John W. Chiles (filed Jan. 11, 2013), at 34. On January 30, 2013, the Hearing Examiner issued a ruling directing Dominion to conduct additional studies to look at alternatives consisting of constructing 230 kV underground lines, rebuilding 230 kV lines in the area, a combination of 230 kV transmission with retention of or new generation at Yorktown, and a stand-alone generation option at Yorktown. The results of these studies reveal that preserving generation at Yorktown through a combination of transmission and generation options or through a stand-alone generation option would be a wasteful and unnecessarily expensive option for ratepayers. See Exhibit 110 at 23 ("None of these generation combinations were selected in the 2012 Plan based on their cost-effectiveness.")

The first combination alternative that the Company analyzed was an underground 230 kV hybrid single circuit plus 1,008 MW and 1,449 MW of Yorktown generating capacity in 2015 and 2021, respectively ("Alternative A"). The Company's analysis revealed that Alternative A would require repowering Yorktown Unit 2 to gas and oil (157 MW) and retrofitting Yorktown Unit 3 with a baghouse (818 MW) to comply with MATS. See Exhibit 110 at 19. The Company's analysis of the cost to meet the 2015 requirement for these generation options is \$350 million, with an additional cost to meet the 2021 generation requirement of [BEGIN EXTRAORDINARILY SENSITIVE] [REDACTED] [END EXTRAORDINARILY SENSITIVE] to comply with anticipated Section 316(b) regulations at Yorktown Unit 2 and [BEGIN EXTRAORDINARILY

SENSITIVE] [REDACTED] [END EXTRAORDINARILY SENSITIVE] in additional firm gas transportation costs to relocate the planned 2019 combined-cycle to the Hampton Roads Load Area. *See id.* Therefore, the total generation cost would be \$927 million and the total generation plus transmission cost for Alternative A would be over \$1.2 billion. *See id.*; *see also* Exhibit 130 at Rebuttal Schedule 1.

The second combination alternative that the Company analyzed was an underground 230 kV hybrid double circuit plus 159 MW and 551 MW of generation at Yorktown in 2015 and 2021, respectively ("Alternative B"). *See* Exhibit 110 at 20. The Company's analysis revealed that Alternative B would require repowering Yorktown Unit 2 to gas and oil (157 MW) to meet the 2015 requirement at a cost of [BEGIN EXTRAORDINARILY SENSITIVE] [REDACTED] [END EXTRAORDINARILY SENSITIVE]. *See id.* To meet the 2021 generation requirement, the Company will incur an additional cost of [BEGIN EXTRAORDINARILY SENSITIVE] [REDACTED] [END EXTRAORDINARILY SENSITIVE] to comply with the anticipated Section 316(b) regulations at Yorktown Unit 2 and [BEGIN EXTRAORDINARILY SENSITIVE] [REDACTED] [REDACTED] [END EXTRAORDINARILY SENSITIVE] in additional firm gas transportation costs to relocate the planned 2019 combined-cycle to the Hampton Roads Load Area. *See id.* Therefore, the total generation cost would be \$677 million and the total generation plus transmission cost for Alternative B would be \$1.117 billion. *See id.*; *see also* Exhibit 130 at Rebuttal Schedule 1.

The third combination alternative that the Company analyzed was the rebuild of the existing James River crossing lines (230 kV) plus maintaining 552 MW and 505 MW of Yorktown generation in 2015 and 2021, respectively ("Alternative C"). *See* Exhibit

110 at 21. The Company's analysis revealed that Alternative C would require repowering Yorktown Unit 2 to gas and oil (157 MW) and retrofitting Yorktown Unit 3 with a baghouse (818 MW) to comply with MATS and the total cost to meet the 2015 requirement would be \$350 million. *See id.* To meet the 2021 generation requirement, an additional cost of [BEGIN EXTRAORDINARILY SENSITIVE] [REDACTED] [END EXTRAORDINARILY SENSITIVE] is incurred to comply with the anticipated Section 316(b) regulations at Yorktown Unit 2 and [BEGIN EXTRAORDINARILY SENSITIVE] [REDACTED] [END EXTRAORDINARILY SENSITIVE] in additional firm gas transportation costs to relocate the planned 2019 combined-cycle to the Hampton Roads Load Area. *See id.* Therefore, the total generation cost would be \$927 million and the total generation plus transmission cost for Alternative C would be \$1.071 billion. *See id.*; *see also* Exhibit 130 at Rebuttal Schedule 1.

Finally, the Company analyzed a stand-alone generation alternative at Yorktown without additional transmission facilities that would electrically resolve the potential NERC Reliability Violations. *See* Exhibit 110 at 21. The Company's analysis revealed that this alternative would require retrofitting Yorktown Unit 1 (159 MW) to continue burning coal, repowering Yorktown Unit 2 to gas and oil (157 MW), and retrofitting Yorktown Unit 3 with a baghouse (818 MW) to comply with MATS. *See id.* at 22. The total cost to meet the 2015 generation requirement is \$633 million. *See id.* To meet the 2021 generation requirement, an additional cost of [BEGIN EXTRAORDINARILY SENSITIVE] [REDACTED] [END EXTRAORDINARILY SENSITIVE] is incurred to comply with the anticipated Section 316(b) regulations at Yorktown Units 1 and 2 and [BEGIN EXTRAORDINARILY SENSITIVE] [REDACTED] [END

EXTRAORDINARILY SENSITIVE] in additional firm gas transportation costs to relocate the planned 2019 combined-cycle to the Hampton Roads Load Area. *See id.* Therefore, the total generation cost would be \$1.345 billion for the stand-alone generation option. *See id.*; *see also* Exhibit 130 at Rebuttal Schedule 1.

As depicted in Mr. Hathaway's Rebuttal Schedule 1, the combination generation and transmission alternatives and the stand-alone generation alternative represent the most costly options for the Company. *See* Exhibit 130 at Rebuttal Schedule 1. Further, Mr. Kelly noted in his rebuttal testimony that "the analysis only considered the incremental capital and firm gas transportation costs required to provide the Yorktown generation. It did not consider the future fuel costs and benefits of one option against the other or the additional labor and material costs required to operate these units because at this time it is not known precisely how often these units would be required to run for reliability under the various scenarios." *See* Exhibit 110 at 19. As such, it is reasonable to assume that the additional alternatives that would preserve generation at Yorktown will be even more costly than the Company's analysis revealed. *See* Tr. at 1613 (stating that the generation cost could be higher because the Company did not factor in fuel costs and other expenses to run the plant, like O&M expenses). The most cost-effective option for the Company's ratepayers is to retire the Yorktown units and develop alternatives – including targeted investments in energy-efficiency and distributed solar resources – to address the potential NERC Reliability Violations.

IV. THE COMPANY FAILED TO MODEL TARGETED DEMAND SIDE MANAGEMENT PROGRAMS TO ADDRESS THE PROJECTED GROWTH IN DEMAND.

The Company's Application notes that the need for the proposed Project is being driven by continued load growth in the North Hampton Roads Load Area over the past ten years. Application at 3. The Company's load projections based on the 2012 PJM Load Forecast indicate that load will grow an additional 351 MW between 2012 and 2021. *See id.* While the Company has analyzed the reliability issues resulting from this expected increase in demand, the Company has failed to develop DSM programs targeted to the North Hampton Roads Load Area that could help to alleviate some of the reliability issues driven by increased demand and the planned unit retirements.

Dominion offered the testimony of Steven Herling, Vice President of Planning for PJM, Interconnection, L.L.C., to describe how DSM resources are integrated into the planning process. *See* Exhibit 92, Rebuttal Testimony of Steven R. Herling (filed March 14, 2013), at 7 ("DSM and energy efficiency resources are integrated into the RTEP when they have bid into and cleared an RPM Base Residual Auction ("BRA") or a subsequent Incremental Auction."). However, DSM resources are only included in the capacity auctions once Dominion submits them to PJM. *See* Tr. at 1408 ("Demand response energy efficiency programs come to us from the providers of those resources through our RPM, reliability pricing model auction."). The Company's analysis revealed that DSM resources "were not sufficient to resolve the violations of mandatory NERC Reliability Standards... related to the Yorktown retirements and PJM considers it unlikely that sufficient amounts of these resources can be implemented to offset the need for additional transmission capability into the area." *See id.* Yet the Company has

significant potential to grow DSM resources within the Dominion Zone. *See, e.g.*, Tr. at 1410 (stating that the 62 MW of DSM that was made available in the Dominion Zone during the 2011 system peak was a “small number.”).

In fact, Mr. Herling stated that “PJM’s planning processes recognize that many of the generation-based and DSM-based alternatives, if targeted, verifiable, and implemented on time and in the right areas of the PJM Region, address identified system reliability issues.” Exhibit 92 at 9; *see also* Tr. at 1409 (“We do put out a pretty significant body of information to the market to provide or incentivize further development, and that has happened in the past where we will recommend a transmission upgrade. Subsequently, we will see new generation development or additional demand response development, and we’ll reevaluate the need and -- you know, if the need has changed, then we will modify our recommendations.”). While the Company could have developed targeted DSM programs to address the reliability issues that PJM identified, the Company’s Application and filings demonstrate that the Company failed to provide such programs to PJM, and failed to even analyze whether such programs could be used in combination with transmission alternatives to alleviate the NERC Reliability Violations.

In addition, this Commission approved a Company-owned distributed solar generation program that would allow the Company to construct and operate distributed solar generation facilities on constrained or high load growth circuits. *See Final Order, Solar DG Program*, PUE-2011-00117 (Nov. 28, 2012). The Company should analyze whether these previously approved solar facilities, in combination with additional distributed solar energy resources and expanded DSM options, could help address the

NERC Reliability Violations. Rather, the Company limited the role of low-cost, low-risk DSM resources by assuming a fixed level of DSM in its analysis and failed altogether to evaluate the role of distributed solar generation.

V. CONCLUSION.

Ultimately, the Company's analysis in this proceeding demonstrates that tremendous capital expenditures will be required to retrofit the coal-fired units at Yorktown and Chesapeake to comply with current and pending environmental regulations. While the Company did not incorporate all of the compliance costs, such as carbon costs associated with potential greenhouse gas regulations, the Company's analysis ultimately demonstrates that the planned retirements of these decades-old, heavy polluting coal-fired units lowers the cost and risk profile of Dominion's resource mix, which benefits ratepayers over the long-term.

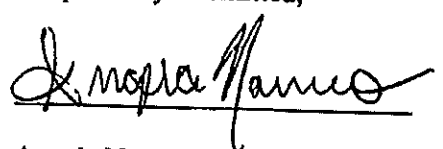
Further, the additional studies that the Company performed regarding preserving generation at Yorktown through an evaluation of a combination of transmission and generation options and a stand-alone generation option at Yorktown revealed that preserving generation at Yorktown would be an unnecessarily expensive option for the Company's ratepayers. Each of these scenarios contains costs that are substantially higher than any of the transmission alternatives that Dominion analyzed.

For the foregoing reasons, Environmental Respondents respectfully request that the Commission, in deciding the outcome of this proceeding, take the following actions:

1. Preserve the Company's plan to retire all of the coal-fired units at Yorktown and Chesapeake by December 31, 2014; and

- 2. Reject the alternative options that would require extending the life of coal-fired generation at Yorktown.

Respectfully Submitted,



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DATED: May 23, 2013

CERTIFICATE OF SERVICE

I hereby certify that the following have been served with a true and accurate copy of the foregoing by electronic mail and by deposit in the U.S. Mail, first class, postage prepaid:

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