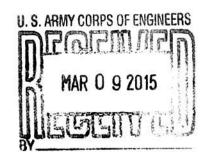
Dominion

Robert M. Blue
President
Dominion Virginia Power
An operating segment of
Dominion Resources, Inc.
120 Tredegar Street. Richmond, VA 23219

March 6, 2015

Col. Paul Olsen U.S. Army Corps of Engineers, Norfolk District 803 Front Street Norfolk, VA 23510



Dear Col. Olsen:

I am writing to update you on the implications of the ongoing uncertainty regarding the U.S. Army Corps of Engineers (COE) process for reaching a decision on Virginia Electric and Power Company's (Dominion) application for crossing the James River (NAO-2012-00080/13-V0408). In particular, I want to point out that any further delay could disrupt the reliability of electric service on the Peninsula.

I was very pleased that the U.S. Army Corps of Engineers called for a series of consulting parties meetings regarding this project, given the profound importance of the historic and cultural resources in the Historic Triangle of Virginia. But absent from that discussion was any concern for the very real reliability issues affecting several other jurisdictions on the Peninsula, including major industrial, federal and military installations. Their voices should not be ignored in this process.

We have an obligation to provide reliable service to our 285,000 customers on the Peninsula, and based upon the concerns detailed in the enclosed letter from Wade Briggs, project manager; key customers in the region face meaningful reliability issues in 2017 without completion of the Skiffes Creek Project.

Mr. Briggs requests in his letter to Mr. Steffey that a meeting between Dominion and COE should be arranged. I will make every effort to attend this meeting and hope you can join us as well

My thanks to you and your team for the continued focus and attention on this vital project.

Sincerely,

Robert M. Blue

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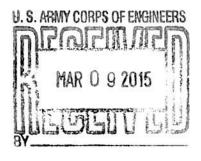
**Enclosures** 

Dominion Virginia Power 701 East Cary Street, Richmond, VA 23219 Mailing Address: P.O. Box 26666 Richmond, VA 23261 Web Address: www.dom.com



March 6, 2015

Mr. Randy L. Steffey Norfolk District, Corps of Engineers ATTN: CENAO-WR-R 803 Front Street Norfolk, VA 23510-1096



RE: NAO-2012-00080/13-V0408, Proposed Electric Power Transmission Line Known as the Surry-Skiffes Creek-Whealton Project, Application of Dominion Virginia Power

Dear Randy,

I am writing to update you on the implications of the ongoing uncertainty regarding the U.S. Army Corps of Engineers (COE) process for reaching a decision on Virginia Electric and Power Company's (Dominion) application for crossing the James River (NAO-2012-00080 / 13-V0408). In particular, I want to stress the gravity of further delay in a determination of Dominion's application and how it will disrupt the reliability of electric service on the Peninsula and the resulting consequences.

As you are aware, we have asked the COE on several occasions when we could expect an answer on our application and the response was always that a date could not be provided. That uncertainty has forced us to speculate as to timing in our communications with stakeholders and regulators, and as a result we have had to move the anticipated construction start date and projected in-service date several times. We have now concluded that it will not be possible to have this project in-service during 2016. Consequently, we are running perilously close to an unacceptable service reliability risk that is unprecedented in the modern era here in Virginia. On that point, I refer you to page 3 through 5 of the attached presentation which Scot Hathaway made to the COE and consulting parties on September 25, 2014. These slides depict the vast number of military and private industrial customers that will be affected by not having a replacement power source serving the Peninsula by April 2017, which includes numerous service interruptions during a typical 12-month period. During my nearly four decades of service with Dominion, only once has this Company implemented a service interruption of this type. I was personally involved in instituting such 'load reduction plan', and I assure you, it is not an event that is well received by the public and has extreme economic and social impacts and consequences.

I have managed some of the most complex and difficult electric transmission projects that this company has ever attempted. I have been successful in developing plans to ensure that these projects are completed on time and on budget. Based on my 38 years of experience, I do not have confidence this project can be completed before April 2017 (the final date the Yorktown units could operate if granted an Administrative Order by EPA) if we do not have an approved COE application by August 1, 2015. I would remind you that weather delays and other uncertainties are endemic in major construction projects, especially in the coastal regions, and that we have already reduced such contingencies in our schedule to a bare minimum.

My conclusion is based on the following premises, which reflect our Company's best efforts to compress all aspects of this project which are within our control.

- It will take 60 70 days to ramp down the two Yorktown units to prepare them for decommissioning to be in compliance with the EPA MATS rule by April 2017 assuming Dominion is granted an additional year (beyond the one-year extension to April 2016 already granted by the Virginia Department of Environmental Quality) to comply under an Administrative Order from the EPA.
- 2. Material procurement is within our control and has been fully completed for the project. We have accumulated over \$2.3 million in delay cost to date.
- 3. At considerable risk and cost to Dominion, we have taken an enormous step forward by soliciting bids and selecting a foundation contractor to install the foundations in the River for the 500kv Line. Holding on to these resources is not only costly but we run the risk of losing these people to other active projects outside of Dominion's control. We have not solicited bids for the overhead line work on the 500 and 230kV line portion of the project. That will take 60 days to bid and mobilize line contractors to begin construction.
- 4. We need one month for mobilization to begin construction of the 500kV line in the James River. The construction timeline for the 500 kV portion of the project will now take 15-16 months to complete for total of 16-17 month of construction. The time-of- year for the installation of the pile foundations will cause the schedule to extend because we will now be required to work in the winter of 2016. The installation of the pile foundation protective jacket cannot be completed in the original timeframe planned because the pouring of the grout between the protective sleeves and steel pile will be restricted by the water temperature and thereby will prolong the construction duration during the winter months.
- 5. We had planned to avoid working in the James River for two summer and fall construction periods to limit our exposure to severe weather events (Tropical storms and Hurricanes.) We are now forced to develop a construction sequence for the remainder of 2015 and 2016. This schedule assumes that normal weather patterns will prevail over the next two seasons. Should sustained winds occur over 30 miles-per-hour, the use of cranes to drive piles and set towers must halt for safety reasons. My experience working

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My conclusion is based on the following premises, which reflect our Company's best efforts to compress all aspects of this project which are within our control.

- It will take 60 70 days to ramp down the two Yorktown units to prepare them for decommissioning to be in compliance with the EPA MATS rule by April 2017 assuming Dominion is granted an additional year (beyond the one-year extension to April 2016 already granted by the Virginia Department of Environmental Quality) to comply under an Administrative Order from the EPA.
- 2. Material procurement is within our control and has been fully completed for the project. We have accumulated over \$2.3 million in delay cost to date.
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- on the river has shown during severe weather events, we could easily lose 3- 4 weeks of construction in the river to demobilize and re-mobilize construction resources. It is conceivable we could experience more than one severe weather event causing delays during the construction of the 500 kV line.
- 6. We feel confident that we can complete the Skiffes Creek Switchyard by April 2017 provided construction commences by the summer of 2015.
- 7. We have committed to an aggressive position on our construction sequence for the 230 kV line, and by overlapping certain sections of the line in construction and we feel confident that if we start by August 1, 2015, we can complete this portion of the project by April 2017 subject to the outages being approved by PJM. We cannot be confident of accomplishing this if construction begins later.

At this juncture, delaying commencement of construction beyond August 1, 2015, given the uncertainty of severe weather and its effects on construction, would likely force Dominion to comply with the MATS compliance deadline by retiring the Yorktown generating units without a transmission solution. Subsequently we would need to implement load shed plans in North Hampton Roads which would be unacceptable to everyone concerned.

I strongly urge that we have a meeting with the Army Corp of Engineers to further explain our concerns in this matter and to try to bring some much needed certainty to the end point for your review of our application.

Very truly yours,

Wade F. Briggs, Jr. PE

Project Manager III

Cc (via e-mail only):

Col. Owen, ACE
Tom Walker, ACE
Lynette Rhodes, ACE
Robert M. Blue, Dominion
Bob McGuire, Dominion
Charlotte McAfee, Dominion
Courtney Fisher, Dominion
Sharon Burr, Dominion
Kevin Curtis, Dominion
William L. Murray, Dominion

Lisa Booth, Dominion Rick Linker, Dominion Stephenie Harrington, Dominion Pamela Faggert, Dominion Cathy Taylor, Dominion Ann Loomis, Dominion Ronnie Bailey, Dominion Lisa Booth, Dominion Rick Linker, Dominion Stephenie Harrington, Dominion Pamela Faggert, Dominion Cathy Taylor, Dominion Ann Loomis, Dominion Ronnie Bailey, Dominion



### Surry – Skiffes Creek 500kV Line Skiffes Creek Switching Station Skiffes Creek – Whealton 230kV Line

September 2014

## **Agenda**

- Need Drivers
- **▶** Timing Consequences
- ▶ Thorough Review Process
- Best Option as Approved by PJM and Virginia SCC
- Construction Details
- Schedule Implications

### Surry Skiffes Creek 500kV

### Dominion Assigned Baseline Project with PJM Id

b1905.1 through b1905.9

#### Scope

- Build a new 7.7 mile Surry to Skiffes Creek 500kV line
- Build a new 20.25 mile Skiffes
   Creek Whealton 230kV line
- · Build a new Skiffes Creek 500 / 230kV switching station
- · Upgrade Surry, Whealton, and seven other substations



### **Background and Need**

- Dominion has been addressing reliability in Williamsburg/ Newport News area for years
  - Peninsula is geographically isolated with little generation
  - Sustained economic growth
- A 500 kV circuit to reinforce the Peninsula was initially identified as needed in 2019, independent of generation retirements
  - MATS compliance requires the retirement of Yorktown units 1 & 2 by April 2015, accelerating the need for a 500 kV circuit to be in service by summer 2015



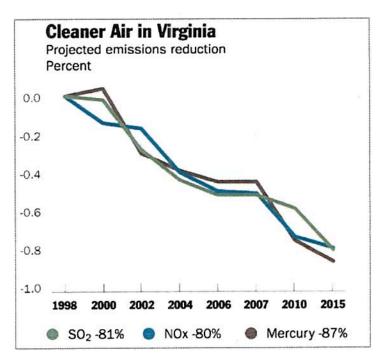
## **Consequences of Project Delays**

VA DEQ is authorized, and has granted, an extension of the retirement date for the Yorktown units for one year, until <u>April 2016</u>

EPA is only authorized to grant an extension of the retirement date for the Yorktown units through the Administrative Order Policy for

one additional year, until <u>April 2017</u>

- Without the Skiffes Creek projects in service, risks include
  - Required load-shed (rotating outages to customers in region)
  - Blackouts across the North Hampton Roads load area

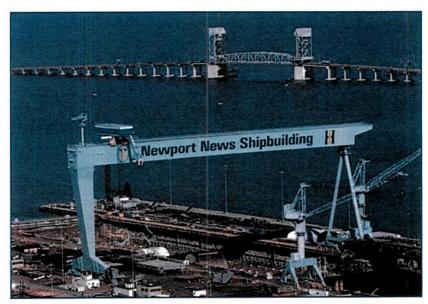


### **Key Regional Characteristics**

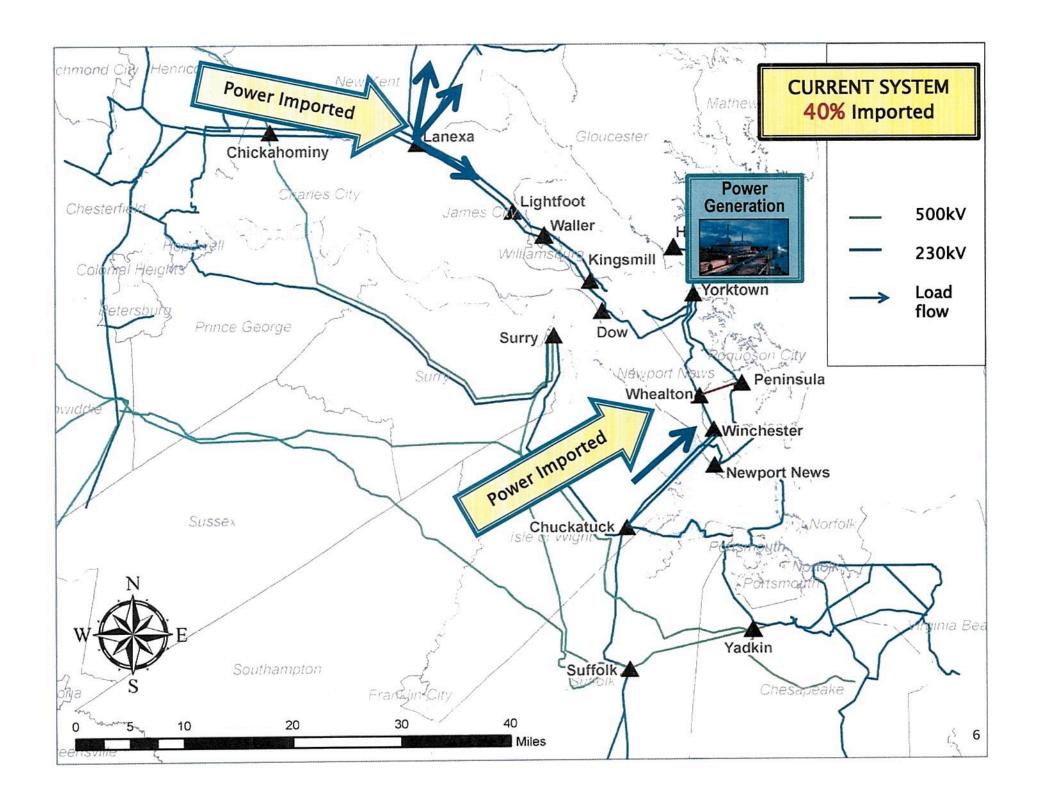
North Hampton Roads load area includes over 285,000

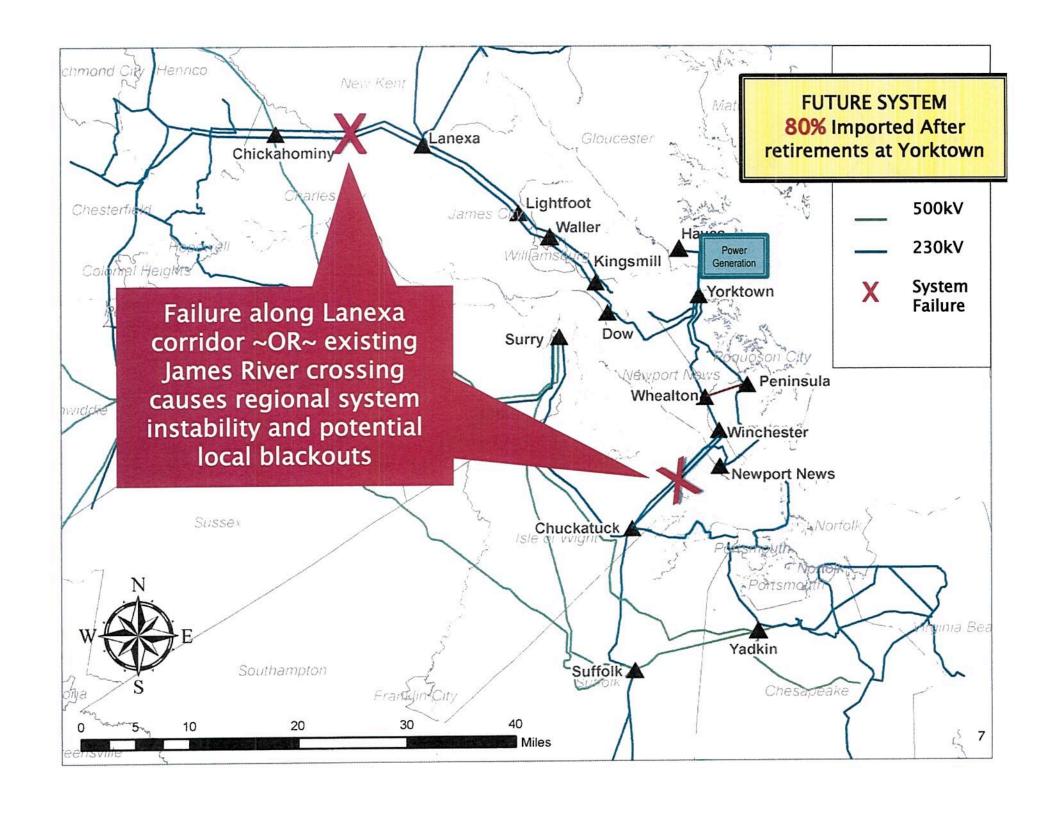
customers, including

- Newport News Shipbuilding
- Joint Base Langley-Eustis
- Yorktown Naval Weapons Station
- NASA
- Canon
- Anheuser-Busch & Busch Gardens
- Thomas Jefferson National Accelerator Facility
- Historic Jamestowne, Colonial Williamsburg
- College of William & Mary
- Christopher Newport University



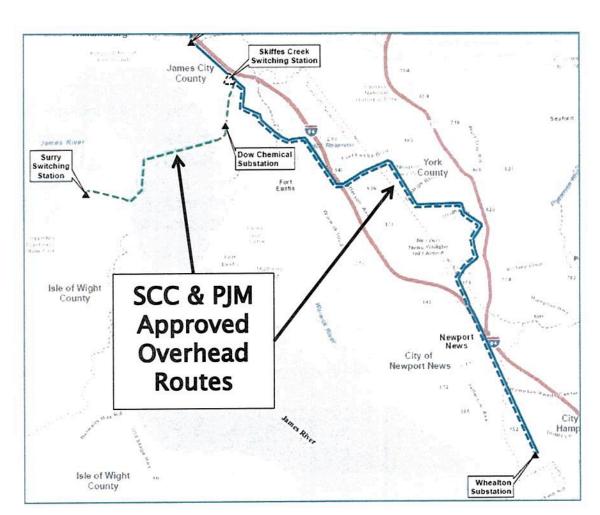
- 8% projected Regional Load Growth between 2015 and 2020
- Load area served by four 230 kV lines and local generation





# Project need accelerated to provide reliable power to North Hampton Roads load area following retirements at Yorktown

- Surry Skiffes Creek 500kV Line
- Skiffes CreekSwitching Station
- Skiffes Creek Whealton 230kV Line



## **Examples - Rejected Alternatives**

Alternatives Considered	Reasons for Alternative Rejection
Surry-Skiffes Creek Double Circuit 230 kV Line	<ul> <li>X Failed to resolve all the identified NERC criteria violations</li> <li>X Would increase the load on the already stressed 230 kV transmission system</li> </ul>
Chickahominy-Skiffes Creek Double Circuit 230 kV Line	<ul> <li>X Failed to resolve all the identified NERC criteria violations</li> <li>X It would not provide longer term relief to both stressed 230 kV system</li> </ul>
Chickahominy-Skiffes Creek 500 kV Line Through Lanexa Substation	<ul> <li>X Have significant routing impacts, including the acquisition of significant additional ROW and the taking of a significant number of homes</li> <li>X Failure to resolve a Category D outages</li> </ul>
Underground Surry-Skiffes Double Circuit 230 kV Line or 500 kV Line	<ul> <li>X Would not resolve all of the identified NERC criteria violations</li> <li>X Underground lines at 500 kV only installed in a few places around the world and none have been has been installed with the minimum required 2000 MVA capacity</li> </ul>
Isle of Wight-Newport News & Great Bridge and Surry 230 kV	<ul><li>X Failed to resolve all the identified NERC criteria violations</li><li>X Proposed new transmission facilities overload</li></ul>
Upgrade entire regional 230kV Network	<ul><li>X Failed to resolve all the identified NERC criteria violations</li><li>X Would not be feasible from a timeline perspective</li></ul>
James River Variation 2 James River Variation 3	X Dominion does not have the rights to exercise power of Eminent Domain over County property; ability to acquire the required easement through the IDA parcel was not possible
Generation Alternatives	<ul> <li>X Retrofit the Yorktown units to meet future environmental rules</li> <li>X Convert the units to burn oil or natural gas (insufficient gas infrastructure)</li> <li>X Replace with a new natural gas generating facility in the North Hampton Roads Load Area</li> </ul>

Plus numerous other alternatives considered but rejected during SCC Hearings

## Skiffes Creek Confirmed as the Best Solution



- ❖ PJM selected Surry-Skiffes Creek 500 kV line as the best solution to address the identified NERC criteria violations
- In its final order, the <u>Virginia SCC</u> wrote, "The Commission understands the importance of this case to the many people who cherish Virginia's historical and natural assets and to those who depend on the reliable electric service so critical to Virginia's economic strength, safety, and quality of life." The SCC found that based on the record of the case, the routes chosen for the project reasonably minimize adverse impact on scenic assets, historic districts and resources, and the environment.



### Surry - Skiffes Creek Line

- Work on the river crossing portion will be completed in the shortest time frame possible with minimal river bed disturbance
  - All foundation and tower erection work done off of barges
  - · Loading of equipment will occur off-site
  - Surry loading dock used for off-loading tower material
  - Construction duration approximately 13 months
- Increased sedimentation and turbidity will be minimal and, per NOAA, are not likely to effect Atlantic Sturgeon
- The Private Aid to Navigation application will be submitted and the Coast Guard will be notified
- No clearing or significant habitat alteration is required within threatened or endangered species habitat areas



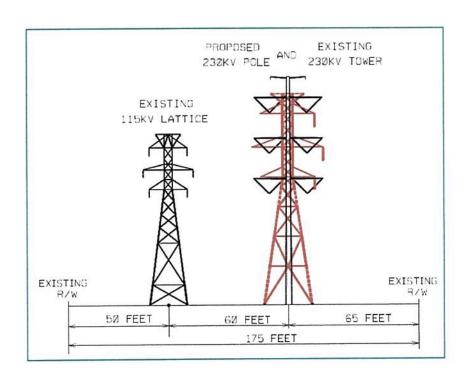
### **Skiffes Creek Switching Station**

- To be constructed on Dominion fee-owned property
- Construction will be concurrent with line construction, approximately 13 months

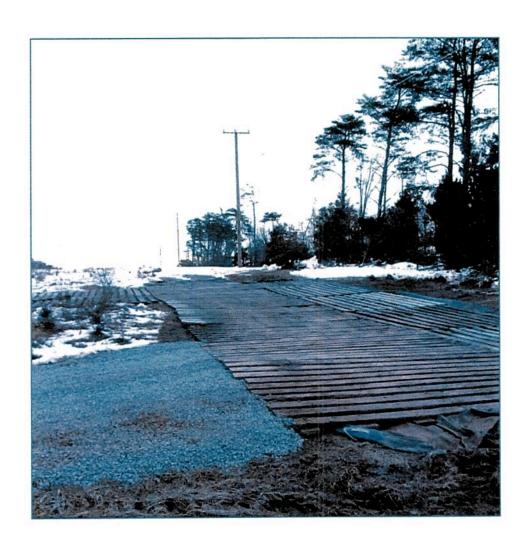
 Station will include physical security measures and non-climb fence

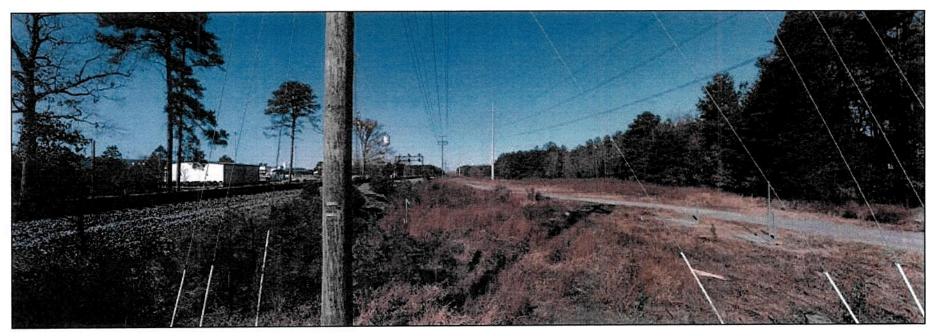


- Using existing transmission right-of-way is currently occupied by existing electrical circuits. Portions of this line will be replacing existing lattice steel tower structures with new monopoles to accommodate the old and new 230kv line. In other portions of the line we will install new conductor on the vacant side of existing monopoles.
- Project will be constructed in sections to maintain an acceptable level of service reliability
- Construction entrances 98% have been permitted and are existing ingress and egress points for the existing 230kv corridor
- Vehicle traffic impacts will be negligible to the region

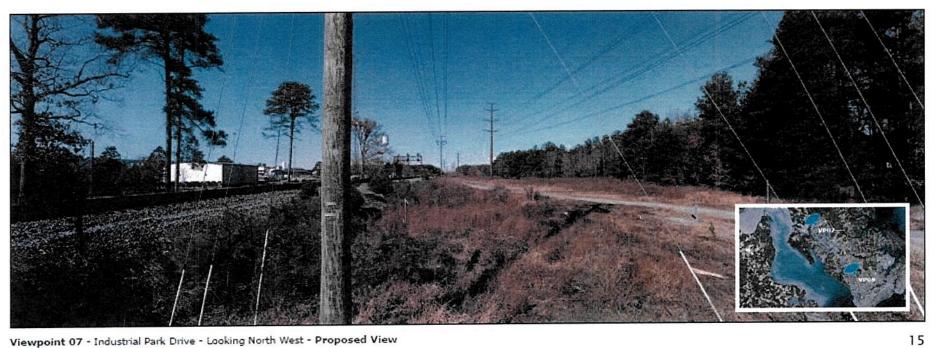


- E&S Compliance Dominion will employ a third party contractor to monitor E&S issues throughout the entire project ROW and they provide weekly reports to upper management
- Timber Mats will be used for construction travel ways and to establish construction pads at tower locations to minimize ROW impacts
- Dominion complies with all federal, state and local guidelines, DOE, SWIPP

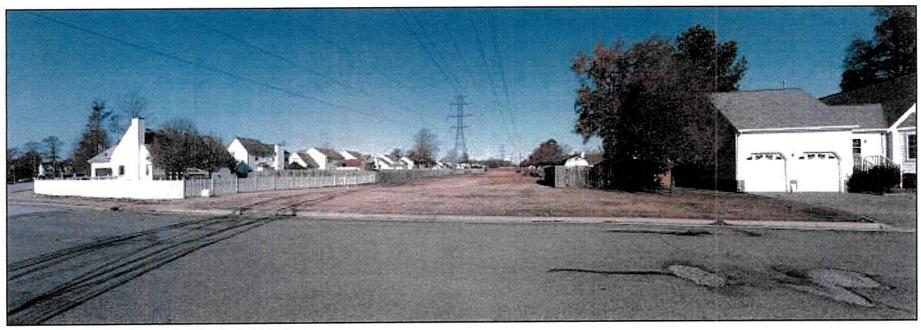




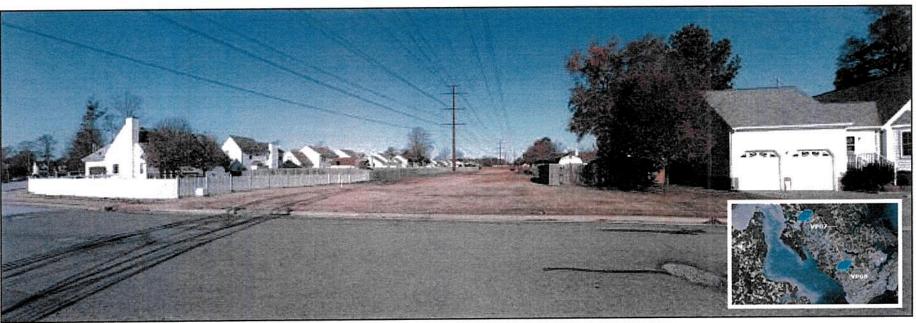
Viewpoint 07 - Industrial Park Drive - Looking North West - Existing View



Viewpoint 07 - Industrial Park Drive - Looking North West - Proposed View



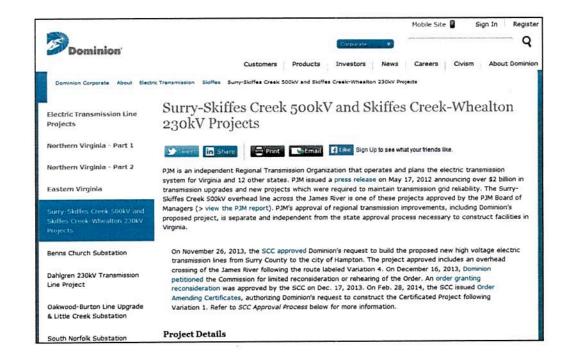
Viewpoint 08 - Devore Avenue - Looking North - Existing View



Viewpoint 08 - Devore Avenue - Looking North - Proposed View

### **Project Communications**

- Dedicated single-point-ofcontact throughout entire construction process
  - Pre-construction notices
  - Construction Updates
- Project website
   www.dom.com, search
   "Skiffes" for latest details and construction timeline
- Email: powerline@dom.com
- Toll-free line direct to project team 1-888-291-0190



### Schedule Implications

- EPA is only authorized to grant an extension for the Yorktown units through the Administrative Order Policy for one year, until <u>April 2017</u>
- Construction timelines are estimates subject to unknown delays
  - Weather delays
  - Planned outage delays
  - Environmental time-of-year delays
- Without the Skiffes Creek projects in service, risks include
  - Required load-shed (rotating outages to customers in region)
  - Blackouts across the North Hampton Roads load area

