August 21, 2015

The Honorable Jason D. Bellows  
3rd District  
Chair, Board of Supervisors  
8311 Mary Ball Road  
Lancaster, VA 22503

Dear Chairman Bellows:

I would like to take this opportunity to reiterate Dominion Virginia Power’s (Dominion) plans for the Norris Bridge 115kV reliability project.

We first briefed Lancaster County in September 2014 and continued to provide periodic updates through the winter and spring of 2015 leading up to our Virginia Marine Resource Commission (VMRC) and Army Corps of Engineers permit submission in April, as well as in early summer. We fully communicated our plans through conceptual engineering and into detailed engineering as specifications progressed. During all of our engagement it seemed there were no concerns with our approach. I appreciate the call by you and some in the community now for this project to be submerged; however, it is not as simple as you purport.

This is a reliability project; electric transmission lines – the life line of the distribution network residents and businesses rely on for their quality of life and economic viability – are not infrastructure that should be left to chance. Submerging a transmission line does not provide any operational, maintenance, or reliability benefits and unduly adds risk into the system by prolonging outages due to the increase in restoration time.

First, we understand how important the waterways are to the community. Providing safe and reliable electricity to the area in an environmentally friendly, cost-effective manner has and continues to be Dominion’s steadfast commitment.

Second, Dominion considered all factors before proceeding with our plan to replace an existing overhead transmission line with similar overhead transmission facilities, built to current practices and regulations.

Project Overview:

 Dominion currently operates an overhead 115kV transmission line that crosses the Rappahannock River that is partially attached to the Norris (Route 3) Bridge. This transmission line provides critical electric service to supply bulk electricity to Lancaster County and is one of two primary sources of electric power to the lower Northern Neck peninsula. This transmission line has been in operation since 1962 and is nearing its end-of-life and needs to be replaced.

Dominion is planning to rebuild approximately two miles of this existing transmission line at the point that it crosses the Rappahannock River. The project will replace the existing seven wood structures that are currently in the water and remove the 14 bridge attachments. The line will be upgraded and relocated onto 10 steel structures with concrete foundations spanning the river approximately 100 feet from the bridge. The alignment will remain on the bridge’s east side. Rebuilding the line to meet current standards and
clearances will reduce vulnerabilities of an aging line lessening the risk of outages – this will help maintain reliability and reduce the restoration time in the event of an outage.

Project Considerations:

Transmission projects are rarely straight forward and require delicate balance between considerations. Some factors include effects to the transmission grid, environment, landowners, current easements and leases, project completion date, construction complexity, and costs. As you are familiar in balancing the County’s projects and budget, there is always a dichotomy between priorities and project scope and what constituents, and in our case – ratepayers, are willing to pay for.

This project is no different. Above all, providing reliable, safe and cost-effective electricity lays the foundation in which projects are developed. The Norris Bridge project has additional dynamics including, but not limited to, impact to Baylor Grounds, private oyster leases, significant environmental concerns to the submerged aquatic vegetation and impacts to abutting landowners.

Submerged vs. Overhead:

By the very nature of the geography of the Northern Neck, electrically, it is on an island. If the transmission system suffers an outage, there is no adequate distribution backup to keep electricity flowing – a real and unacceptable risk we are unwilling to subject the community to. As mentioned previously, a rebuilt, relocated overhead transmission line across the Rappahannock River provides the most economical, reliable, and long-term electric service option for the region.

It is worth mentioning the other dynamics that come with submerging a transmission line.

- Baylor Grounds and private oyster leases – Vacating Baylor Grounds is not an action we take lightly considering its importance to the watermen in the area. In fact, the Commonwealth rightly protects this designation with General Assembly oversight, review by the Attorney General, and ultimate approval from the Governor. The legislative process affirms that a project subject to vacating Baylor Grounds is necessary and reasonable and its benefits are justifiable to take such an action. The legislative process is the first oversight checkpoint, but vacating Baylor Grounds is not an endorsement in and of itself; it allows for the strict permitting process to begin and the appropriate agencies to begin their review and ultimate evaluation of the project.

When planning the project, our goal was to minimize or avoid impacts to oystering in the area by asking the Commonwealth for the minimum easement through the Baylor Grounds and to engineer the line to avoid the private oyster leases.

Construction methods used to submerge the line would be more impactful in terms of requiring more acreage be removed from the Baylor Grounds and unavoidable disturbance to private oyster beds.

- Environmental concerns – Unlike constructing overhead structures by placing pilings every 600’ or so, submerged construction will be more impactful to the riverbed and aquatic resources by running through every inch of tidal wetlands, subaqueous bottom, submerged aquatic vegetation, and affect water quality due to turbidity.
Our engineering plans result in no impact to tidal wetlands, minimal disturbance to the subaqueous bottom, no impact to the submerged aquatic vegetation, and minimal turbidity. The VMRC confirmed this in their permit approval discussion.

In addition, if there are issues in a submerged line, it will need to be pulled from beneath the riverbed onto a barge for repairs, again creating a disruption to the environment in the same manner as during construction.

- Landowner impacts – Our current plans do not require any additional easements or burdens to property owners that abut our existing right of way in Middlesex and Lancaster Counties. The alignment over land remains unchanged as a result of good engineering planning.

An underground option would require two transition stations, one on each side of the river, in order to facilitate the aboveground/underground orientation. These stations would require about two to three acres in each of Middlesex and Lancaster and potential additional right of way easements from landowners.

- Remain attached to the bridge – In addition to our reliability concerns, the project also addresses operational and maintenance efficiencies and maintains a safe work environment for Dominion and VDOT crews. Rebuilding the transmission line still attached to the bridge either in its current alignment – which won’t meet current Army Corps of Engineer regulations, federal clearance standards and company best practices – or stringing the wires underneath the bridge roadbed – which, among other things, doesn't resolve the maintenance issues or coordination efforts with VDOT to ensure the safety of our respective crews, or that the bridge was not originally engineered to accommodate such an alignment – does not accomplish all the issues that we set out to address in this project.

Our current plan to remain off the bridge’s east side also provides flexibility for VDOT in the future. In our discussions with VDOT, we understand that, although they do not have any current plans to replace the Norris Bridge, if they were, our transmission line alignment would not impact their ability to do so. If, for instance, we were able to string the wires under the bridge roadbed now and VDOT set out to replace the bridge in the future, we would be in the same situation as we are today and asking ratepayers again to pay for work that should have been better planned for.

**Project Costs:**

Electric transmission costs are passed along to Dominion’s ratepayers. Our business activities are driven by our responsibility to those ratepayers by being prudent with our expenditures. This does not mean that we are spendthrift by doing the bare minimum but we put forward the very best solution that is in the best interest to the reliability of the transmission grid and the reasonable costs that we believe our ratepayers are willing to spend for that reliability.

As I believe you have mentioned in some of your recent remarks, in 2006, the General Assembly commissioned a Joint Legislative Audit and Review Commission (JLARC) report on the feasibility and cost associated with undergrounding transmission lines. In short, it finds “that while technologies are available to place transmission lines underground, underground lines are typically four to ten times more expensive than overhead lines.” It goes on to state that, “the SCC has rarely supported the use of underground lines, primarily due to cost and reliability concerns.”
The JLARC study, in part, led to additional research on underground construction techniques and associated costs through five pilot projects. The SCC was required to issue annual reports on those projects, which culminated in 2014 and confirmed the JLARC findings.

Our high-level estimate to submerge this project would be four to five times more expensive than constructing it overhead. Our previous experience leads us to believe that the actual costs would result in even a larger difference due to the unknown variables that typically present themselves during construction and the redundancy that will need to be added to maintain reliability.

It is hard to justify to a ratepayer in another county the increase in their utility bill to cover costs associated with a project that does not gain any additional reliability benefit to the system. In a time when every dollar matters and we have customers barely making ends meet, I could not in good conscious ask them to shoulder the burden of paying for the subjective aesthetics of a few.

The technology is available to submerge the transmission line and to engineer it to the reliability standards that our customers expect. This comes at a high cost with potentially greater impact to the Baylor Grounds and certainly more environmental impacts, and permitting and construction length delays. All the while, the Northern Neck is exposed to aging infrastructure and a less reliable system otherwise.

Our plans provide for adequate, secure and dependable electric service at a reasonable cost for addressing aging infrastructure of an existing overhead transmission line.

Thank you for allowing me to briefly explain our position. In addition, we have now satisfied all of our permitting review requirements through the VMRC and Army Corps of Engineers and have obtained all the necessary permit approvals to begin our construction activities. If you have any questions or would like for members of the project team to provide another presentation to the County, please do not hesitate to contact James Beazley, Greg Mathe or me. I trust the meeting on August 25 will be valuable time spent and we look forward to attending.

Sincerely,

Bob McGuire
Dominion Virginia Power
Director, Electric Transmission Project Development and Execution

cc: The Honorable Ryan McDougle, Senate of Virginia
    The Honorable Margaret Ransone, Virginia House of Delegates
    The Honorable Keith Hodges, Virginia House of Delegates
    Board of Supervisors, Lancaster County
    Board of Supervisors, Middlesex County
    Mr. Frank Pleva, Lancaster County
    Mr. Matt Walker, Middlesex County