

Loudoun Reliability Engagement Group

First Meeting Executive Summary Report

The first meeting of the Loudoun Reliability Engagement Group was held on July 20, 2022, from 11:00 AM to 2:00 PM at Founders Hall in Ashburn, VA.

Member Organizations in Attendance

- Black History Committee of the Friends of Thomas Balch Library
- League of Women's Voters of Loudoun County
- Loudoun Coalition of Homeowners and Condominium Associations
- Loudoun County Department of Economic Development
- Loudoun County Fire and Rescue Department
- Loudoun County Preservation and Conservation Coalition
- Loudoun Wildlife Conservancy
- NAACP Loudoun Branch
- NAIOP
- NOVA Parks
- Piedmont Environmental Council

Absent Organizations

- Loudoun Chamber of Commerce
- Northern Virginia Technology Council
- VA Asian Chamber of Commerce
- Friends of the W&OD trail
- Rotary Club of Ashburn
- Loudoun Soil & Water Conservation District
- NVAR (Northern VA Realtors)
- Loudoun Preservation Society
- Metropolitan Washington Airports Authority (MWAA)
- Loudoun County Government – Equity Office

Dominion Energy Team

- Brendon Shaw, External Affairs Manager
- Greg Mathe, Manager, Electric Transmission Communications
- Greg Vozza, Power Engineer at MPR Associates
- Harrison Potter, Consulting Engineer - Transmission Planning
- James Young, Environmental Project Manager at HDR, On-Site Contractor for Dominion Energy Environmental Services (DEES)
- Jay Garrett, Manager of Electric Substations Engineering Projects
- Matthew Vinson, Engineer III
- Rob McIntyre, Regional Operations Manager
- Rob Richardson, Electric Transmission Communications Consultant
- Stan Blackwell, Director - Customer Solutions & Strategic Partnerships
- Kristi Moore, Senior Consultant at ERM
- Carla Picard, Partner at ERM

Meeting Summary

1. Why Are We Here?

Dominion Energy is committed to the community and the community engagement process. We have established the Loudoun Reliability Engagement Group (LREG) to provide a forum for community leaders representing diverse interests and perspectives to share their local knowledge of the area and potential constraints to developing new energy infrastructure.

Rob Richardson, Dominion Communications Specialist, mentioned two kinds of projects – one, in direct response to a new service request – you may have seen some of these if you live or work in Ashburn, connecting new, large customers to the grid. The second type of project is for reliability – backbone projects that help us keep up with overall growth in an area.

Rob clarified the distinction and difference between the two types of projects – smaller projects to connect significant growth to the grid – like a new mall. Then, there are larger projects for system protection for bulk transportation of electricity. There will be a need for both types of projects here in the next 5-10 years.

Rob said today we would provide some background, discuss the reliability challenges unique to Loudoun, and show you our planning process. We want to get everyone on the same playing field so we can answer your questions and exchange ideas from a place of shared understanding. He added that today is our first meeting of several, and we will get deeper into the specifics as we go. Dominion values your time, knowledge, and your participation in this process. Members were encouraged to ask questions and seek clarification throughout the process.

QUESTION	ANSWER
<i>What is the role of the LREG?</i>	Ask tough questions, challenge us, and share your organization’s feedback and perspective.

2. Project Communications & Outreach

Rob Richardson said Dominion Energy would host a series of meetings with this (LREG) group to encourage dialogue and facilitate answers to your questions.

Rob added that over the next few months, we would host in-person public open houses to provide an opportunity for the broader community to participate in the discussion. Participants will include Dominion’s subject matter experts, routing and siting experts, and others who will be available to answer questions posed by attendees.

A project webpage and email address will be launched to promote continued engagement and to provide up-to-date project-related information—additional opportunities for public input during the State Corporation Commission (SCC) process.

QUESTION	ANSWER
<i>Will we understand the demands Dominion is challenged to meet?</i>	Dominion’s planners use powerful models to study and evaluate the system to identify potential problems before they occur, based on North America Reliability Corporation (NERC) reliability criteria and standards. PJM (regional grid operator) uses similar models and performs its own evaluations to validate the need for additional infrastructure.

3. Project Need & Background

Greg Vozza discussed the overall need for the proposed project. He said Dominion Energy is committed to providing safe, reliable, and increasingly more sustainable energy. These proposed projects are critical for Dominion to continue to provide reliable power to all customers in Loudoun County and are for overall reliability from existing and projected energy demand, not from a new customer request.

Northern Virginia is growing exponentially, with the region comprising two-thirds of the state’s entire population. He added that Northern Virginia is a global hub for internet traffic. He said power generated from any source must be transported at high voltage over transmission lines. Once it gets to a substation, that voltage is lowered to a lower voltage that can be carried over distribution lines to schools, hospitals, businesses, and homes.

Dominion Energy is constantly projecting current capacity capabilities and future needs. Dominion also projects the grid’s ability to meet emergency peak energy demands. Greg mentioned that 1 MW of electricity is enough to power approximately 250 homes.

QUESTIONS	ANSWERS
<i>How many MWs of electricity does a data center use?</i>	Greg mentioned that 1 MW of electricity is enough to power approximately 250 homes. Data centers use approximately 60-100 MWs.
<i>When was the last time the energy infrastructure in Loudoun County was updated?</i>	Dominion Energy has routinely upgraded existing infrastructure over the past ten years. For example, Dominion upgraded the transmission lines along the W&OD trail. Dominion’s improvements are two-fold: in energy infrastructure technology and Dominion’s public engagement methods & techniques.
<i>Are data centers the primary driver of new electric demand?</i>	Yes, they are a significant driver, but not the only one. The region’s overall growth and additional customers also drive the need for new energy infrastructure.

<i>What is the average acreage of substation development?</i>	It varies depending on topography, presence of wetlands (usable area), and requirements for stormwater management, for example. To start, Dominion typically looks for 10-15 acres.
<i>Is Dominion legally obligated to provide power to all users? Is Dominion involved with local zoning and planning?</i>	Yes, Dominion is legally obligated to serve customers. Dominion conducts outreach to local authorities and advises customers on local planning and zoning.
<i>Are wind turbines in Loudoun County an option?</i>	Onshore wind only works in two locations in VA: on the shoreline and mountain tops. Neither are viable options because almost all mountains are federally protected, and the shoreline is resistant due to their dependence on tourism. That is why Dominion is building an offshore wind farm. There is minimal power generation in Loudoun County. The projects we are discussing today are not for power generation, just transmission to transport the power to the areas where it is needed.
<i>Are there no projects in the western part of Loudoun County?</i>	These reliability projects are focused on the eastern part of the county but do not preclude future separate projects in western Loudoun County.
<i>Loudoun County is reconsidering data centers; how does this factor into your projections?</i>	Dominion works with local officials and PJM to understand existing and future planning and needs. Electrons cannot tell if they are headed to a data center or your home. Dominion is obligated to address the electricity demand today and make prudent investments based on what is known for the near term.
<i>Is this project for new substation facilities?</i>	Both new substation and transmission line infrastructure.

4. Regulatory Process

James Young, Dominion Environmental Services, discussed the regulatory process. The State Corporation Commission has regulatory authority over all energy providers in Virginia. Any project above a certain kilovolt (kV) goes to the SCC for review and approval.

The SCC’s data-driven process balances project need, impacts, and costs for all energy projects. Beyond the SCC, each project generally has additional permitting and regulatory hurdles depending on the project details.

The SCC process provides multiple opportunities for public engagement, and all public engagement is submitted as a part of the application to the SCC. Groups can be part of the formal SCC process by applying to be included.

SCC review and approval can take nine months to up to 12 to 24 months for more complex projects. Routing considerations aim to minimize impact. Once the SCC approves a route, Dominion begins a deep dive into the specifics of the route.

QUESTION	ANSWER
<i>How does the SCC balance competing interests?</i>	Greg Mathe, Dominion Communications said, Dominion enumerates all the different impacts in our filings, then we use art and science to determine the route we feel best minimizes those impacts, based on the field studies, outreach, and discussions with landowners. We submit that route as our proposed route to the SCC. The SCC will look at all the data and make their independent interpretations. They may take our route, or they may choose a different route. There is no prescribed formula.

5. Routing Considerations

Jake Rosenberg, Routing Consultant, ERM, discussed why Northern Virginia is developing at an unprecedented rate. He said the area initially had cheap land and reliable energy, which made it attractive to data centers.

Jake used satellite imagery to show the dramatic growth of Loudoun County over time from 1984 to 2020. Due to this growth, things change very quickly in Loudoun County from a routing standpoint. Land use in Loudoun County is complex, and all open space in the county is spoken for.

Jake reviewed the routing process. He noted the process begins with a start and end point, and after layering land use constraints and opportunities, the remaining routing options are evaluated.

Jake said the team identifies a project area large enough to evaluate all routing alternatives. He noted that required engineering and construction techniques for specific routes must be considered. At the end of the process, a table is created listing all considerations for a specific proposed route.

Jake mentioned the importance of community input. He said it is an integral part of weighing data regarding impacts. Only through our interactions with the community can we begin understanding a community's character and vision, which helps us add quality to the effects we are asked to quantify in the routing study. Jake said that we prefer to collocate along roads, existing lines, pipelines, and other utilities; however, that is not always feasible.

What do we seek from public participation? If we accept for the moment that the project is necessary, tell us how it can be done in the least impactful manner. Environmental Justice communities and tribal interests are not always represented, so community engagement is critical.

QUESTIONS	ANSWERS
<i>Overhead lines should not be placed along Route 7; can they be underground?</i>	All route options are on the table because routing in the area is so difficult; however, the cost of undergrounding is tremendous and does not save on environmental ground disturbance.
<i>The county is building trails that will crisscross the entire county. Are those an option?</i>	We are familiar with the Emerald Ribbons system of trail easements to protect the scenic corridor. Dominion's easements could be shared with trails.
<i>What kind of line is on the W&OD trail?</i>	Double circuit 230kV with distribution in parallel.
<i>Please use the Loudoun County African American resource map as a constraint.</i>	Yes, we have that data and will show the known resources at future meetings.
<i>Can you explain the difference between NOVEC and Dominion?</i>	NOVEC only provides distribution level service to customers, while Dominion provides both transmission and distribution. Dominion provides transmission service to NOVEC.
<i>Can you explain the transmission structure choice?</i>	We have standard structures, but ultimately the structures are determined by the route constraints. Right of Way height, width, and new designs are used to meet new challenges.

Question and Answer Session

QUESTIONS	ANSWERS
<i>Is 2026 (completion date, see timeline slide) a hard SCC date [for this series of projects]?</i>	Yes, based upon PJM need.
<i>Does this project go before the Loudoun County Board of Supervisors for approval?</i>	SCC is the regulatory authority, and we conduct outreach with county supervisors.
<i>Will we discuss the project need?</i>	Yes. SCC and PJM also independently evaluate project need.
<i>Will any of these projects be reduced or go away?</i>	No, not based upon current growth projections.
<i>Will we see a proposed route before the application submission?</i>	The first application would be Loudoun South, the fall 2022 application. We will share and discuss routing for this project at our next meeting and a public community meeting before submitting the application to the SCC.

Key Takeaways

- For our next meeting, it would be beneficial to see full-sized maps of the areas in focus, with the existing lines and different layers of constraints, including the data from the African American historical database overlay.
- Would it be possible to create an interactive map so we could do our research or even crowd-sourced information on resources and assets in the study areas?
- We would also like to understand the full scope of the projects, timelines for project decisions, facilities under consideration, locations, etc.
- The group will look at routes at future meetings and offer opinions on routing options.
- Dominion will investigate the report of a new heron rookery in the wetlands near Loudoun Co. Pkwy.