



# **Line 514 Corridor Upgrade 500 & 230 Kilovolt Project**

**Virtual Community Meeting  
January 15, 2025**



## Para acceder al canal de interpretación en español en Webex:

Seleccione el ícono de Interpretación (globo terráqueo).

Elija Español como idioma.

Verifique que el audio del intérprete esté habilitado y, si lo desea, reduzca el volumen del audio original.

# AGENDA

- Introduction
- Overview of the Electric Grid and it's Growing Needs
- Project Overview
- Project Area/Map
- Project Timeline
- Project Simulations
- Questions and Answers
- How to Stay in Touch

# What this looks like for our communities.

We must upgrade and add new energy infrastructure in the Commonwealth to ensure reliable energy supporting residential homes, commercial buildings, data centers, and vital government services.

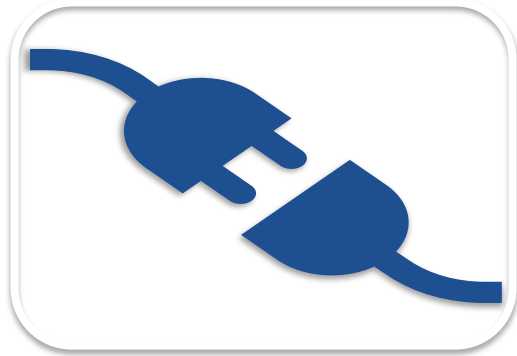
New electric infrastructure will improve reliability for all customers in the region, enable EV growth, and help distribute cleaner energy.

We are actively engaged with our customers and other stakeholders to develop solutions and provide benefits to residential, small business, national security, or homeland defense customers.

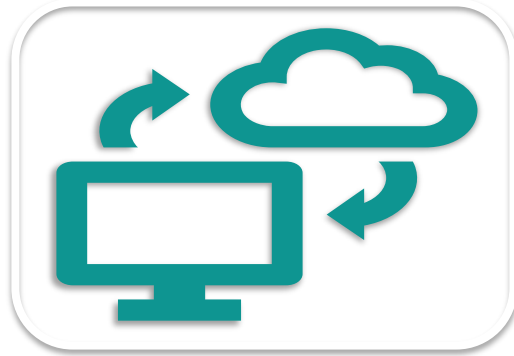


# The Energy Landscape is Changing

*Rapidly*



Electrification



*“Datafication”*



*“Greenification”*

# Reliable energy for every Virginian.

Electricity is fundamental to our region's **health, safety, and economic vitality.**

Hospitals, banks, national security, education, and businesses, large and small, rely on a **robust electric grid** to power their local operations and jobs.



# Key Regulatory Bodies



**FERC** – Exclusive jurisdiction to determine and regulate the reliability of the electric transmission grid



**NERC** – Regulatory authority to develop and enforce the mandatory reliability standards – criteria, data and methodology to evaluate and ensure the reliability of the bulk power system in North America



**PJM** – Regional transmission organization (RTO) that coordinates the movement of wholesale electricity in all or parts of 13 states and the District of Columbia; Virginia law mandates Dominion Energy's membership



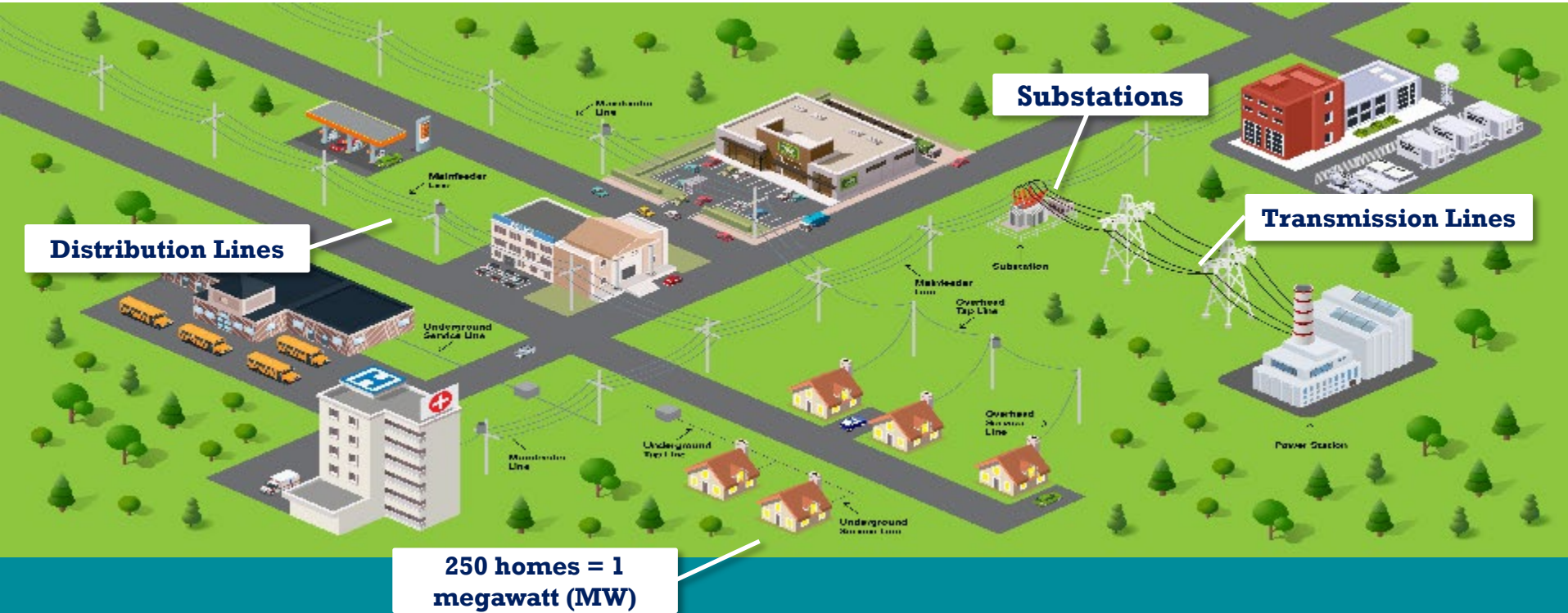
**State Regulators** – State Corporation Commission, Department of Environmental Quality, Department of Transportation, and others



**Local Governments** – Regulate local land use (substations); typically, electric transmission lines equal to or less than 138 kV

# Upgrading and investing in our energy infrastructure

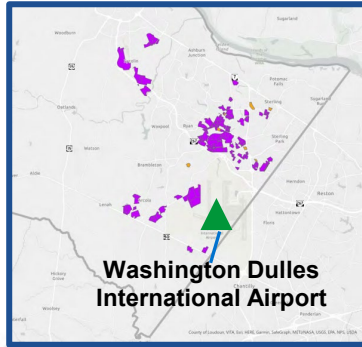
Sustaining reliable energy in Virginia



# Load Growth Across Virginia

**Northern Virginia boasts the largest data center market in the world.<sup>1</sup>**

## Loudoun County<sup>2</sup>



Data Center Alley

2020 → 2,518 MW<sup>4</sup>

2028 → 8,346 MW<sup>4</sup>

+231%

*Doubling of area substations*

## Central/Southside

2020 → 402 MW<sup>4</sup>

2028 → 2,953 MW<sup>4</sup>

+634%

*Quadrupling of area substations*

Publicly disclosed data center locations<sup>3</sup>    Data center locations in Loudoun County

<sup>1</sup><https://www.vedp.org/industry/data-centers>    <sup>2</sup>February 2022 Loudoun County Data Center Land Study

<sup>3</sup>Data Center locations provided by Data Center Hawk    <sup>4</sup>Includes Co-Op load projections

# Line 514 Corridor Upgrade

- Project area is in the Leesburg area of Loudoun County.
- The project will **rebuild existing transmission lines and add two new 500 kV transmission lines and a new 230 kV transmission line** within an **existing 3.5-mile-long transmission corridor** to enhance the electricity delivery capacity and reliability of the electric grid.
- These lines and structures will run from the Potomac River for approximately 3.5 miles south to an existing substation near the Luck Stone Quarry.
- Project will take place **in existing right of way**, except for a small area in an industrial zone by a substation.
- The new transmission lines will utilize **monopole structures** that are taller than the existing structures to limit corridor expansion.
- This project involves coordination with other utilities for their lines north of the Potomac River.



# Project Timeline

## Q4 2025

- Project Announcement
- Direct engagement with stakeholders in project area



## January 2026

- In-person open house on 1/13/26 (The National Conference Center)
- Virtual community meeting 1/15/26 (will be recorded as well)



## March 2026

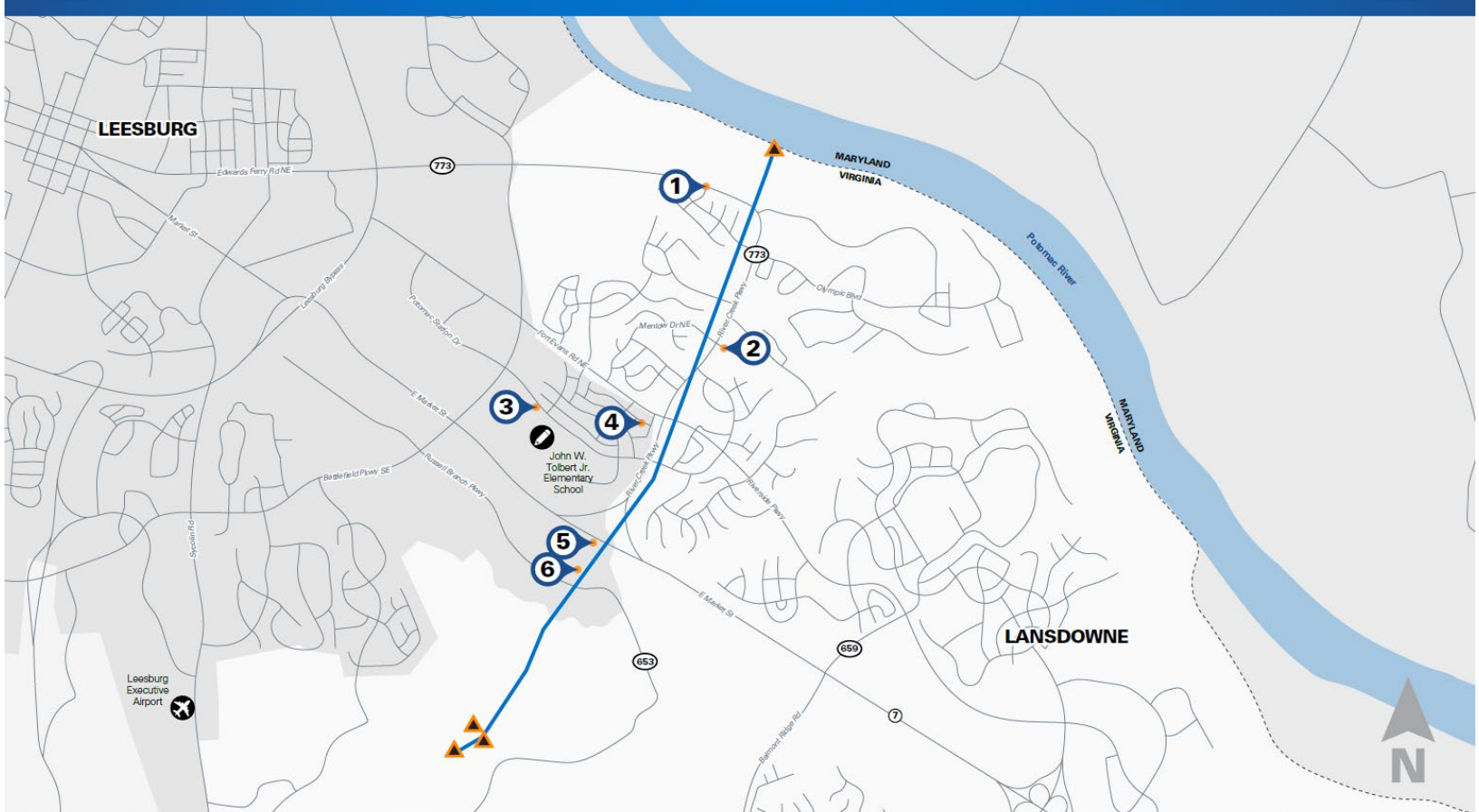
- Project filed with Virginia State Corporation Commission

NOTE: Virginia SCC reviews and approvals typically take about a year. Construction for this project is planned for 2027-2030.

# LINE 514

Corridor Upgrade Project

-  EXISTING SUBSTATIONS
-  TRANSMISSION LINES TO BE REBUILT/BUILT
-  PHOTO LOCATION
-  STATE BOUNDARY



# LINE 514

Corridor Upgrade Project

## SIMULATION 1

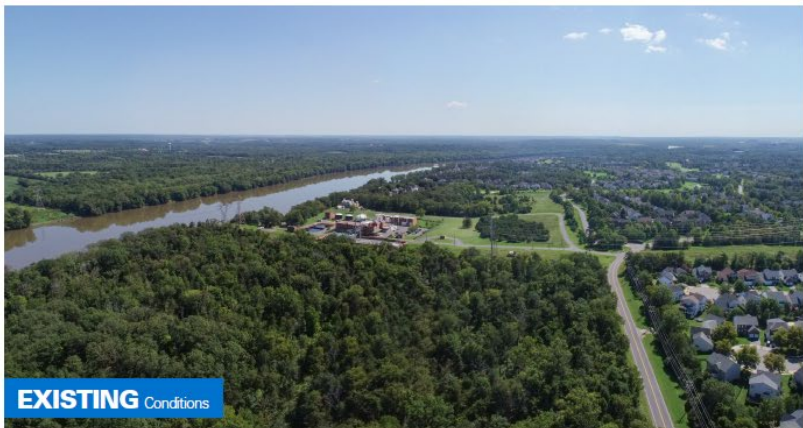
Looking Southeast from an elevation of 448 feet on Edwards Ferry Road NE.

9/7/21 • 11:53 am

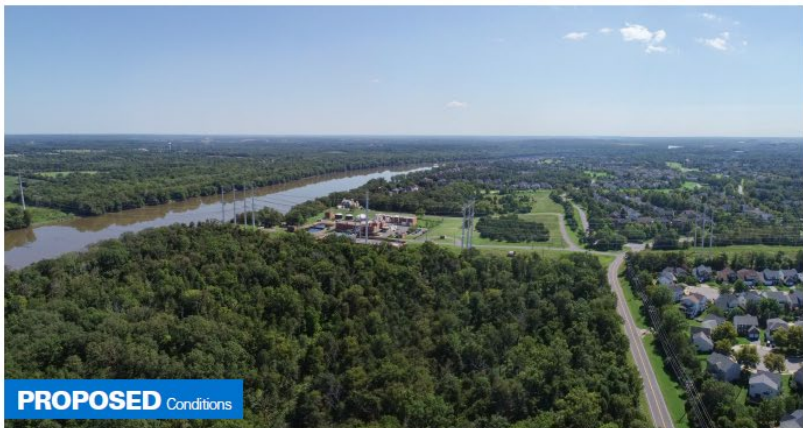


-  EXISTING SUBSTATION
-  TRANSMISSION LINES TO BE REBUILT/BUILT
-  PHOTO LOCATION

Photo simulations are for discussion purposes only. Final design is subject to change pending public, engineering, and regulatory review.



**EXISTING** Conditions



**PROPOSED** Conditions



# LINE 514

Corridor Upgrade Project

## SIMULATION 2

Looking Northwest from the corner of Teaberry Drive and Colston Court.

9/7/21 • 12:59 pm



TRANSMISSION LINES  
TO BE REBUILT/BUILT



PHOTO LOCATION

Photo simulations are for discussion purposes only. Final design is subject to change pending public, engineering, and regulatory review.



**EXISTING** Conditions



**PROPOSED** Conditions

# LINE 514

Corridor Upgrade Project

## SIMULATION 3

Looking Southeast from Potomac Station Drive  
near John W. Tolbert Jr. Elementary School.

9/8/21 • 11:09 am



TRANSMISSION LINES  
TO BE REBUILT/BUILT

PHOTO LOCATION

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purposes only. Final design is subject  
to change pending public, engineering,  
and regulatory review.



**EXISTING** Conditions



**PROPOSED** Conditions

# LINE 514

Corridor Upgrade Project

## SIMULATION 4

Looking East from Invermere Drive NE.

9/7/21 • 1:31 pm



TRANSMISSION LINES  
TO BE REBUILT/BUILT

PHOTO LOCATION

Photo simulations are for discussion purposes only. Final design is subject to change pending public, engineering, and regulatory review.



# LINE 514

Corridor Upgrade Project

## SIMULATION 5

Looking Northeast from the corner of Rivercreek Parkway and Market Street.  
9/7/21 • 2:22 pm



— TRANSMISSION LINES TO BE REBUILT/BUILT

📍 PHOTO LOCATION

Photo simulations are for discussion purposes only. Final design is subject to change pending public, engineering, and regulatory review.



**EXISTING** Conditions



**PROPOSED** Conditions

# LINE 514

Corridor Upgrade Project

## AERIAL RENDER 6

Looking Southeast from an elevation of  
196 feet on Crosstrail Blvd.  
8/20/24 • 2:40 pm



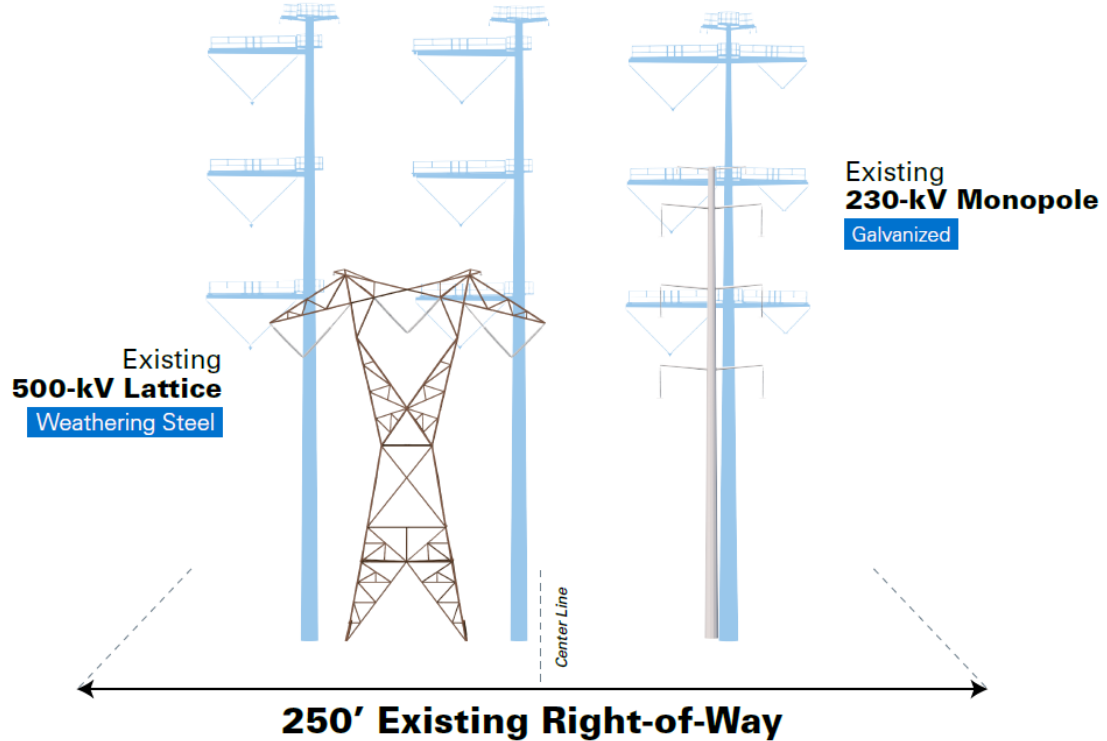
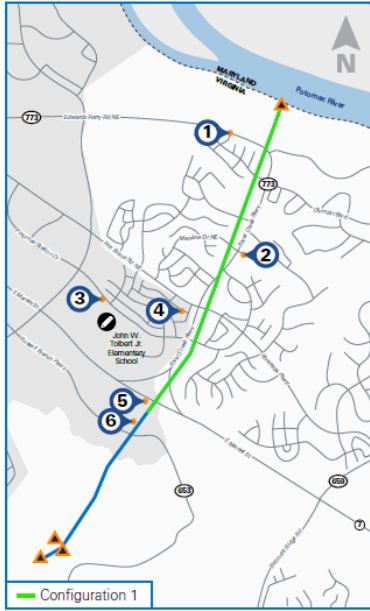
TRANSMISSION LINES  
TO BE REBUILT/BUILT

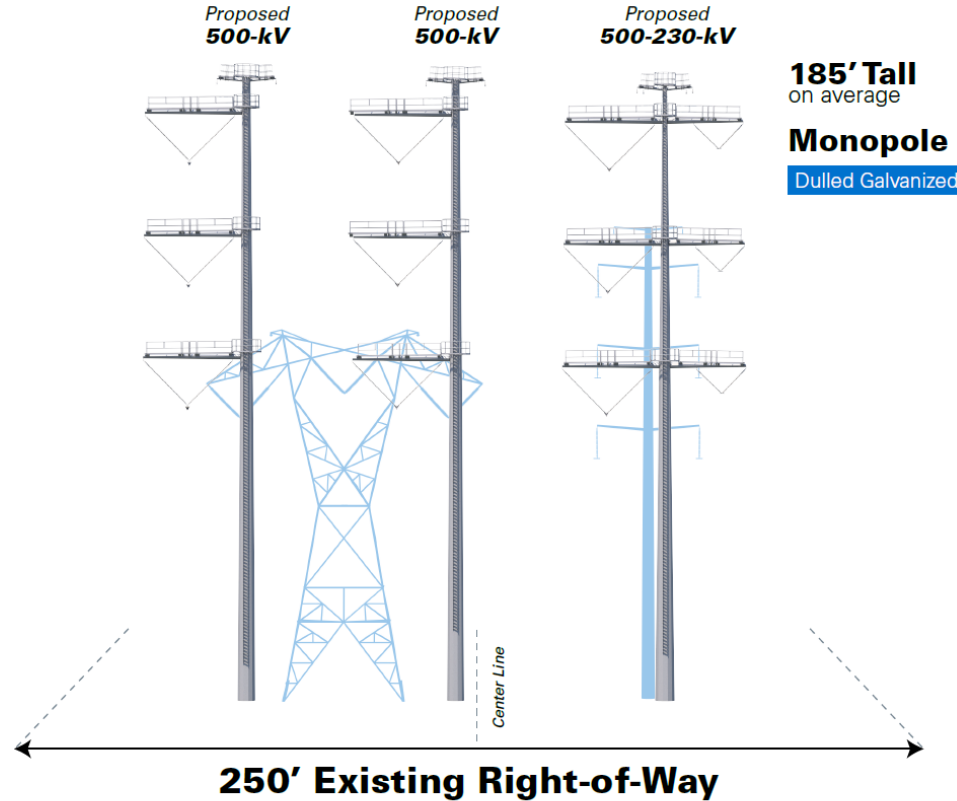
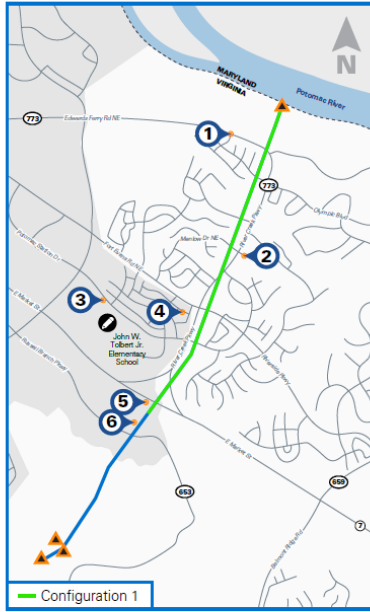
PHOTO LOCATION

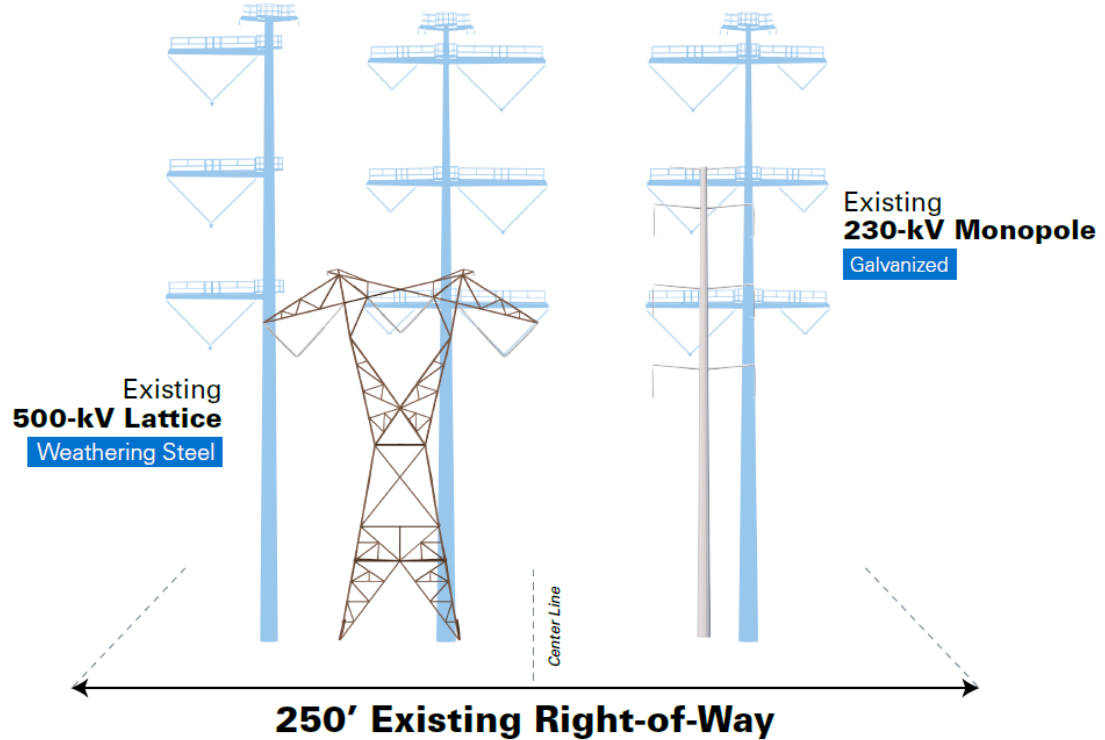
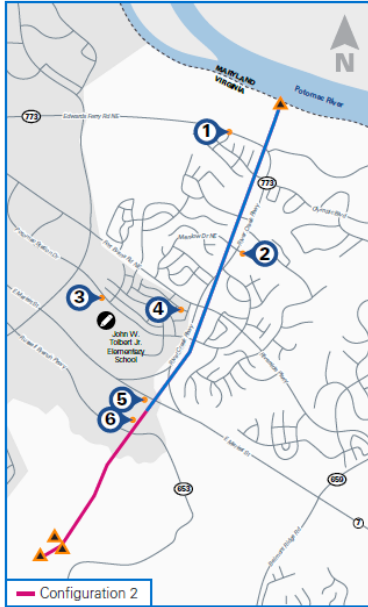
Aerial render are for discussion  
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and regulatory review.

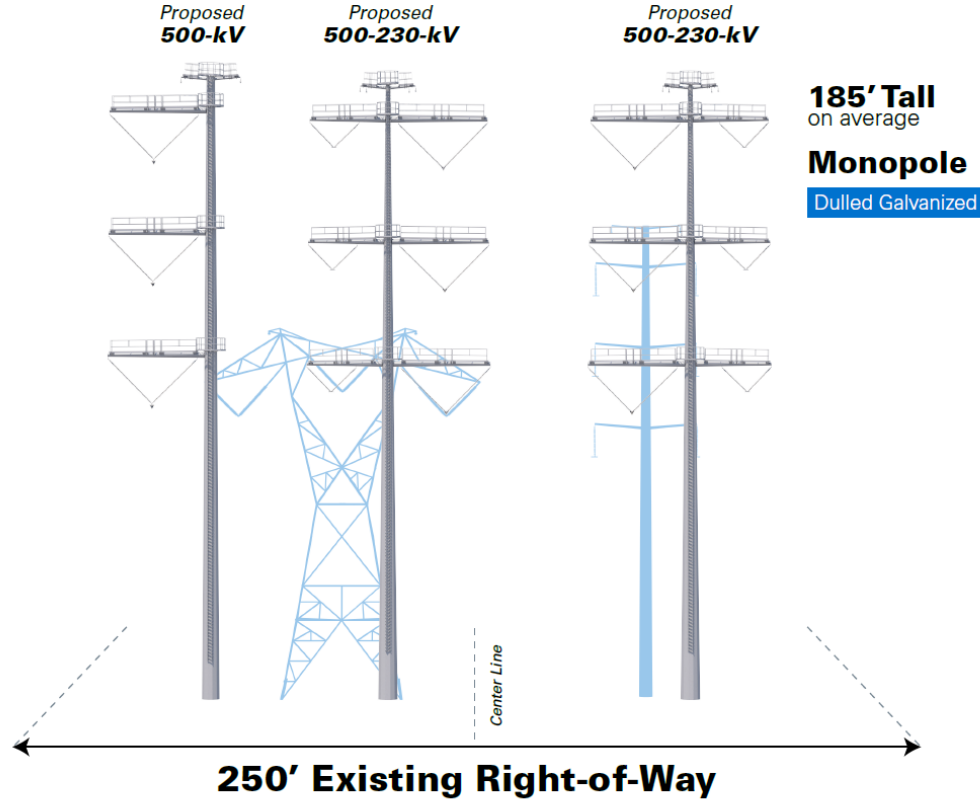
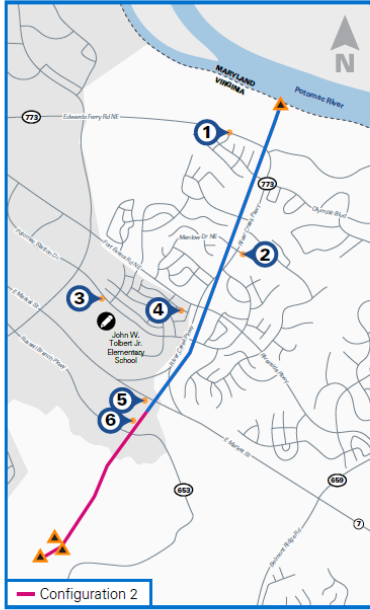


**PROPOSED** Conditions









# GeoVoice

View visual simulations on a map and you can sign up to provide comments about the locations that matter to you. For example, you can add details about natural or historic resources in your community or more information related to your specific property.

The screenshot displays the GeoVoice web application interface. At the top, there is a navigation bar with the Dominion Energy logo, the text "NORTHERN Virginia Projects", and a "Select Project" dropdown menu. Below the navigation bar is a search bar with the placeholder text "Search location...". The main area is a satellite map of Leesburg, Virginia, showing various project locations marked with blue icons. A yellow line highlights a specific project route. On the left side, there is a legend titled "LEGEND" with a list of project names and "View" buttons. The legend items are:

- Loudoun County
- Pluto Substation
- Towerview Substation
- Evergreen to Mills B
- Aviator to Takeoff
- Twin Creeks to Apollo
- Aspen to Golden
- Golden to Mars
- Wishing Star to Mars
- Altair
- Line 227
- Line 514 Corridor
- Nimbus
- Farmwell
- DTC
- Aviator
- Park Center
- Goose Creek
- Fairfax County

The map shows various landmarks and locations, including Leesburg, Virginia, and the Potomac River. The interface is designed for users to view and interact with project locations on a map.

[DominionEnergy.com/Line514](https://DominionEnergy.com/Line514)

# Committed to public engagement.

Dominion Energy takes our responsibility seriously to provide our customers with **safe, reliable, and secure energy.**

We're **committed** to exploring all options to address any concerns regarding these needed projects.

We're meeting with local government leaders, businesses, and the communities we serve to share our plans and **listen** to their feedback.



# Q&A

# Stay Informed

Information about project and engagement opportunities are posted on our project website:

[DominionEnergy.com/Line514](https://www.dominionenergy.com/Line514)

The screenshot shows the Dominion Energy website interface. At the top, there is a dark blue navigation bar with the Dominion Energy logo on the left, and links for 'Location - VA', 'Support', 'Search', and a yellow 'Sign In' button on the right. Below this is a secondary dark blue bar with menu items: 'Pay My Bill', 'Start, Stop or Move', 'Outage or Emergency', 'Save Energy & Money', and 'Products & Services'. The main content area is white and features a breadcrumb trail: 'About / Delivering Energy / Electric Projects / Power Line Projects'. The title 'Line 514 Corridor Upgrade' is prominently displayed. A paragraph of text follows, stating the company's commitment to reviewing and analyzing energy infrastructure. Below the text is a horizontal menu with four items: 'Overview', 'Community Engagement', 'Legal', and 'Maps and Simulations'. The 'Overview' item is currently selected and underlined. A vertical 'Feedback' button is located on the right side of the page. At the bottom right of the screenshot, the Dominion Energy logo is visible again.

**Dominion Energy**

Location - VA Support Search Sign In

Pay My Bill Start, Stop or Move Outage or Emergency Save Energy & Money Products & Services

About / Delivering Energy / Electric Projects / Power Line Projects

## Line 514 Corridor Upgrade

At Dominion Energy, we are committed to continually reviewing and analyzing our energy infrastructure to provide the most safe and reliable electric service. This project will address aging electric transmission infrastructure in Loudoun County while adding power and increasing reliability in the region.

Feedback

Overview Community Engagement Legal Maps and Simulations

### Overview

The Line 514 Corridor Upgrade project will replace aging equipment, provide additional power to the region due to growing economic development, and help maintain overall grid reliability. The original purpose of this project was to replace outdated structures and conductors; however, through the

**Dominion Energy**

# Stay In Touch

**Email: [powerline@dominionenergy.com](mailto:powerline@dominionenergy.com)**

**Phone: 888.291.0190**

**[DominionEnergy.com/Line514](https://www.dominionenergy.com/Line514)**

**Thank  
you!**