



# **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.**

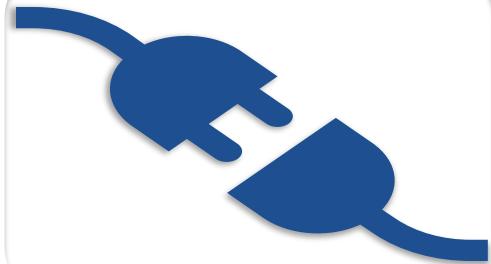
**New electric infrastructure will improve reliability for all customers in the region, enable EV growth, and help distribute cleaner energy.**

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.

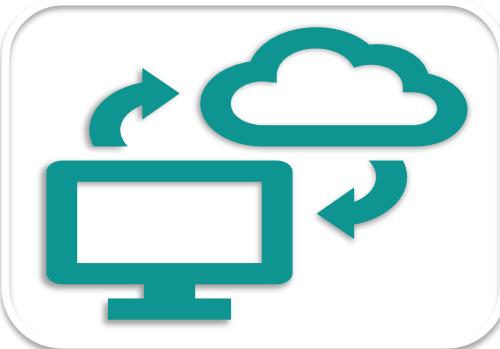


# The Energy Landscape is Changing

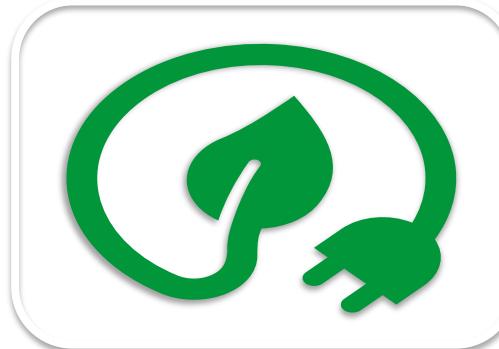
Rapidly



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



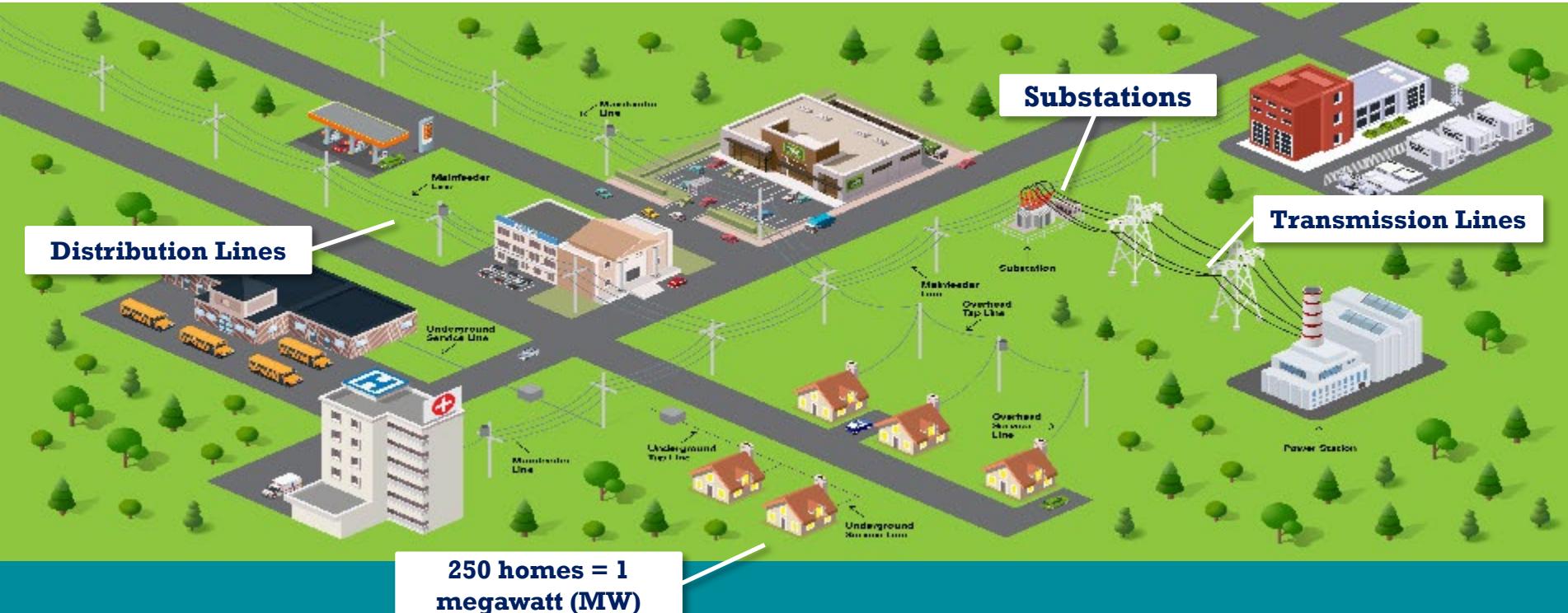
**State Regulators** – State Corporation Commission, Department of Environmental Quality, Department of Transportation, and others



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

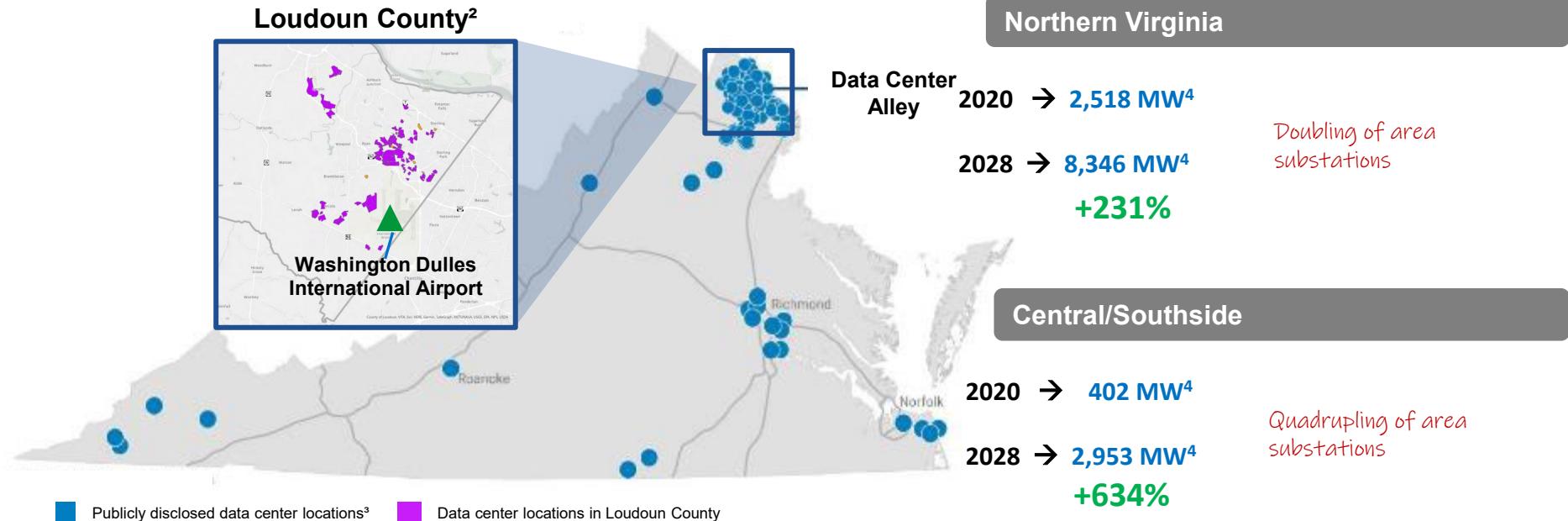
# Upgrading and investing in our energy infrastructure

Sustaining reliable energy in Virginia



# Load Growth Across Virginia

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

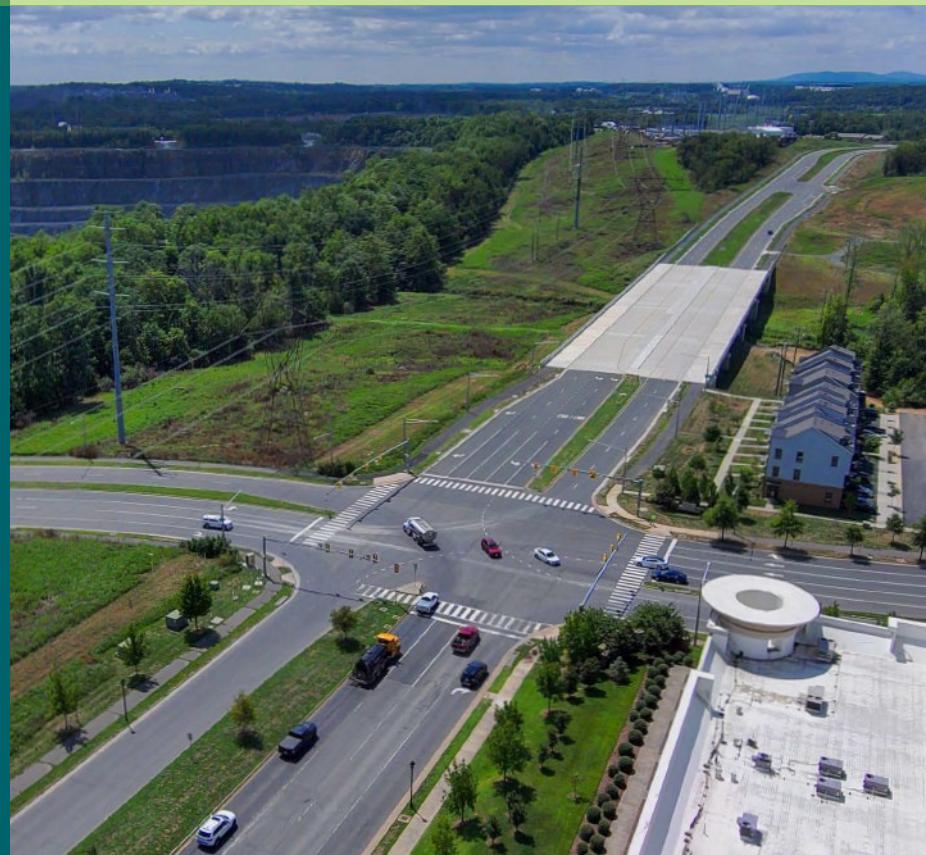


<sup>1</sup><https://www.vedp.org/industry/data-centers> <sup>2</sup>February 2022 Loudoun County Data Center Land Study

<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

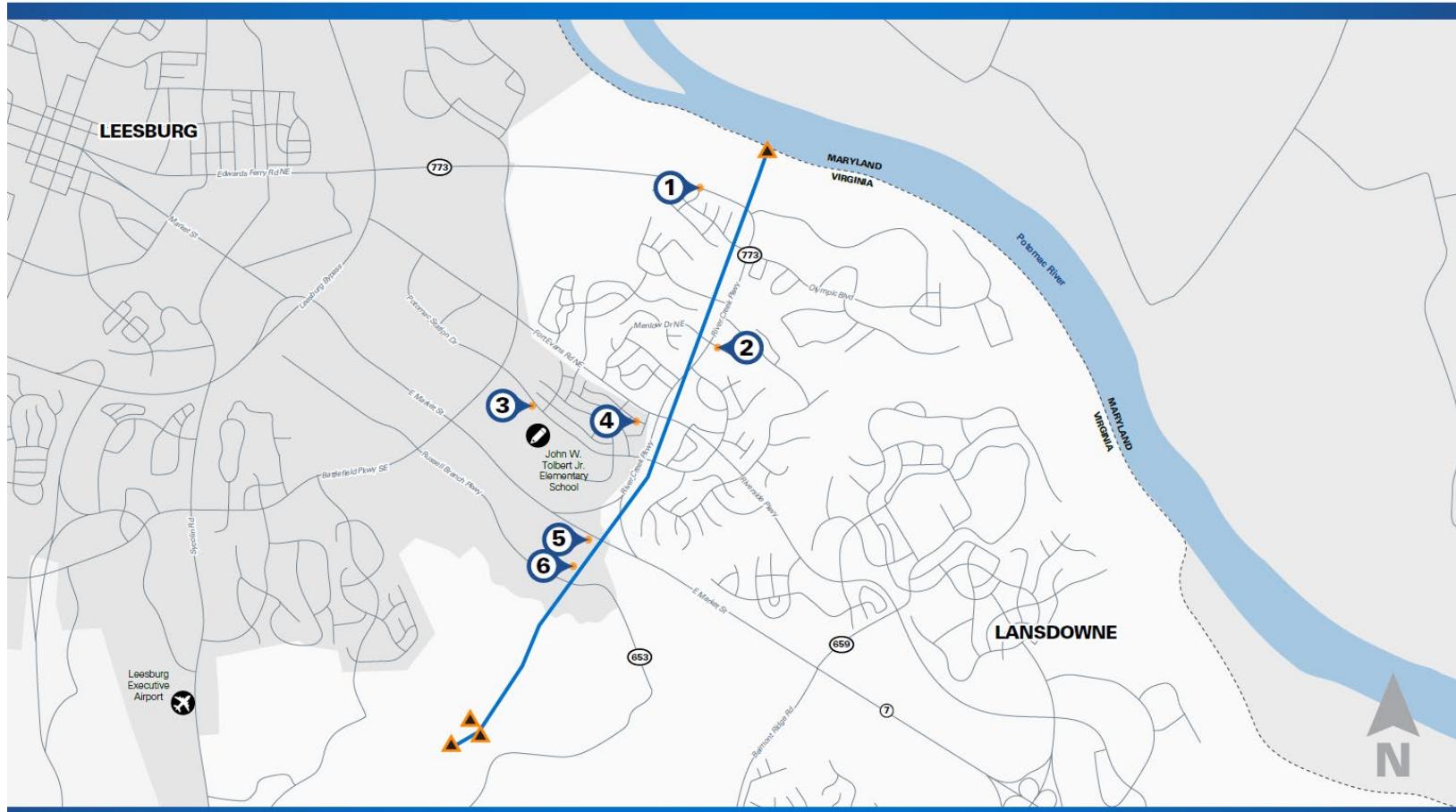
NOTE: Virginia SCC reviews and approvals typically take about a year. Construction for this project is planned for 2027-2030.

# 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 446 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.



# 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.



# 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

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 4

Looking East from Invermere Drive NE.

9/7/21 • 1:31 pm



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.



# LINE 514

Corridor Upgrade Project

## AERIAL RENDER 6

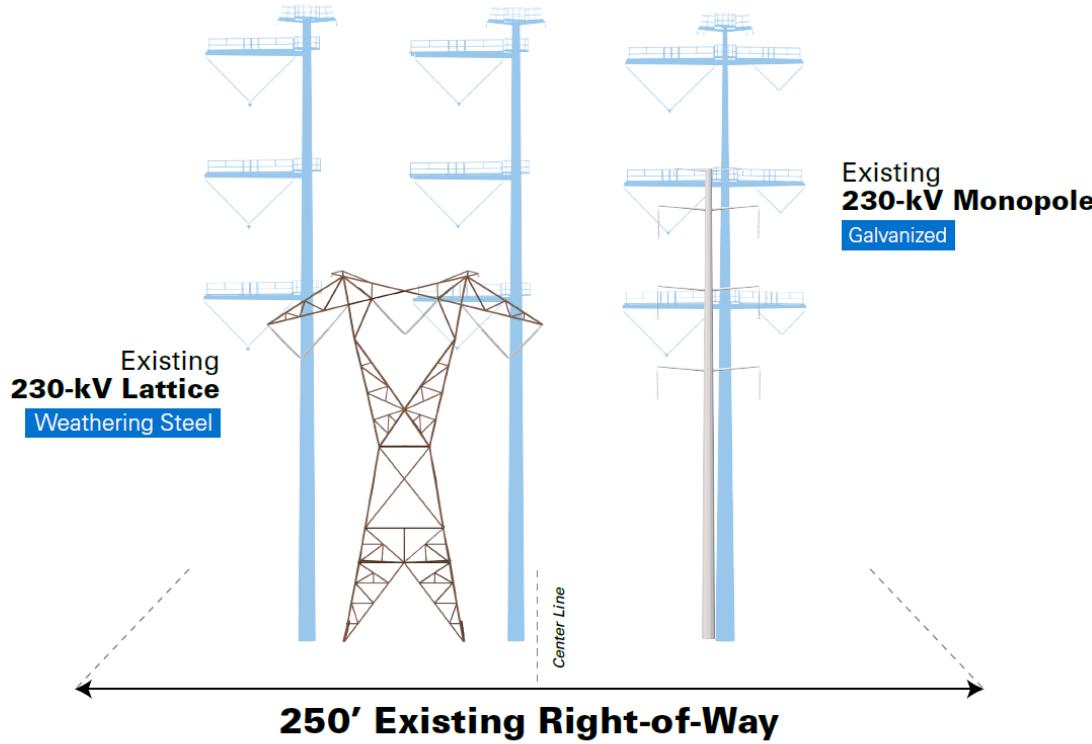
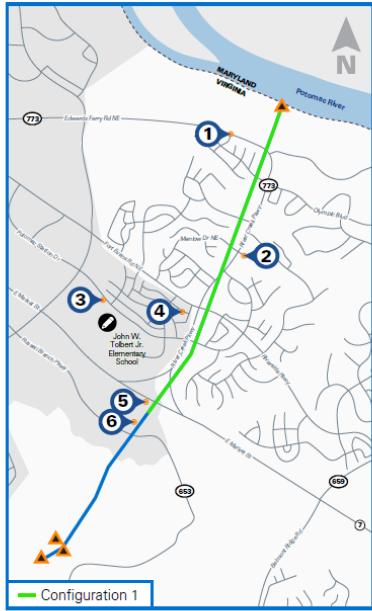
Looking Southeast from an elevation of 196 feet on Crostrail Blvd.  
8/20/24 • 2:40 pm

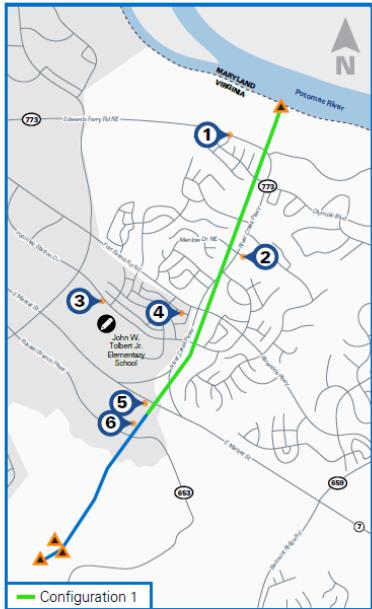


TRANSMISSION LINES  
TO BE REBUILT/BUILT  
PHOTO LOCATION

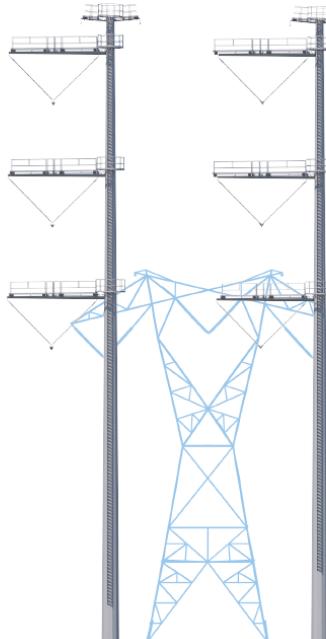
Aerial render are for discussion purposes only. Final design is subject to change pending public, engineering, and regulatory review.



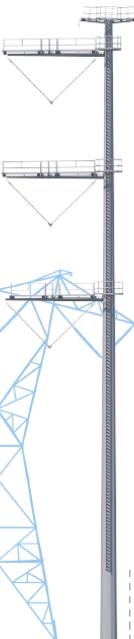




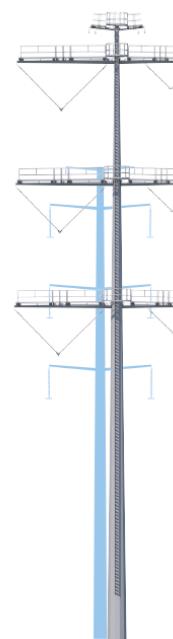
*Proposed  
500-kV*



*Proposed  
500-kV*



*Proposed  
500-230-kV*

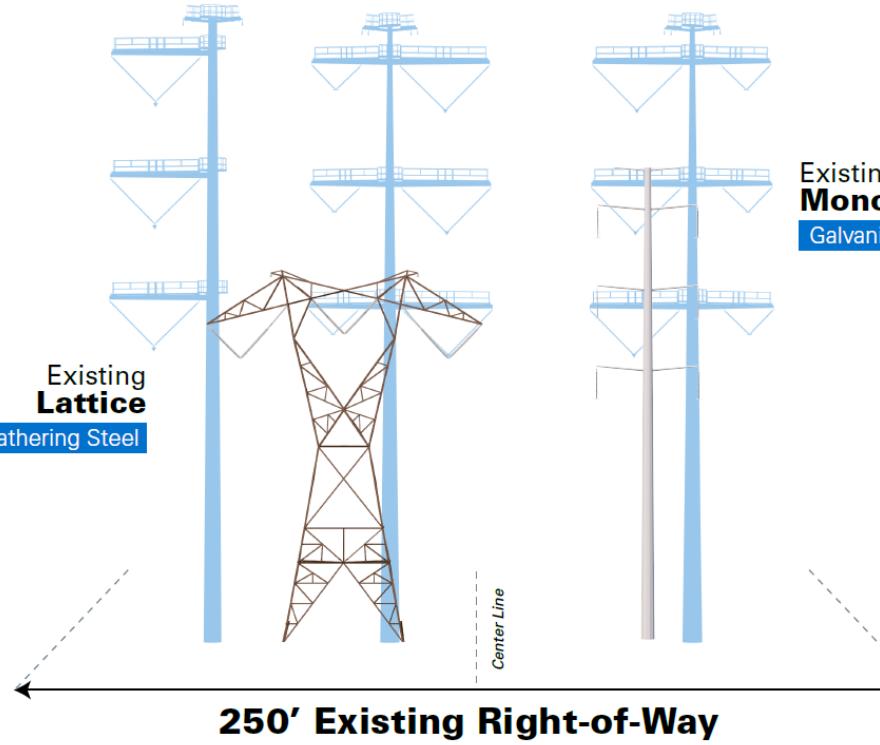
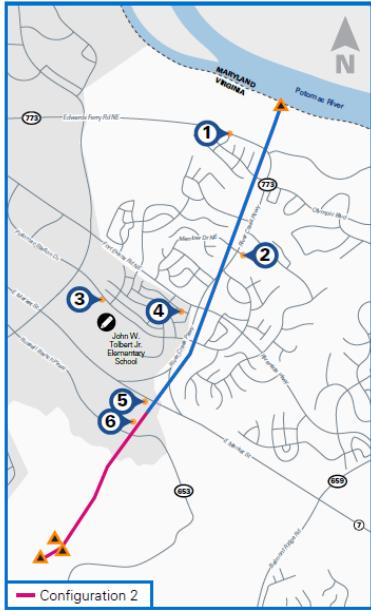


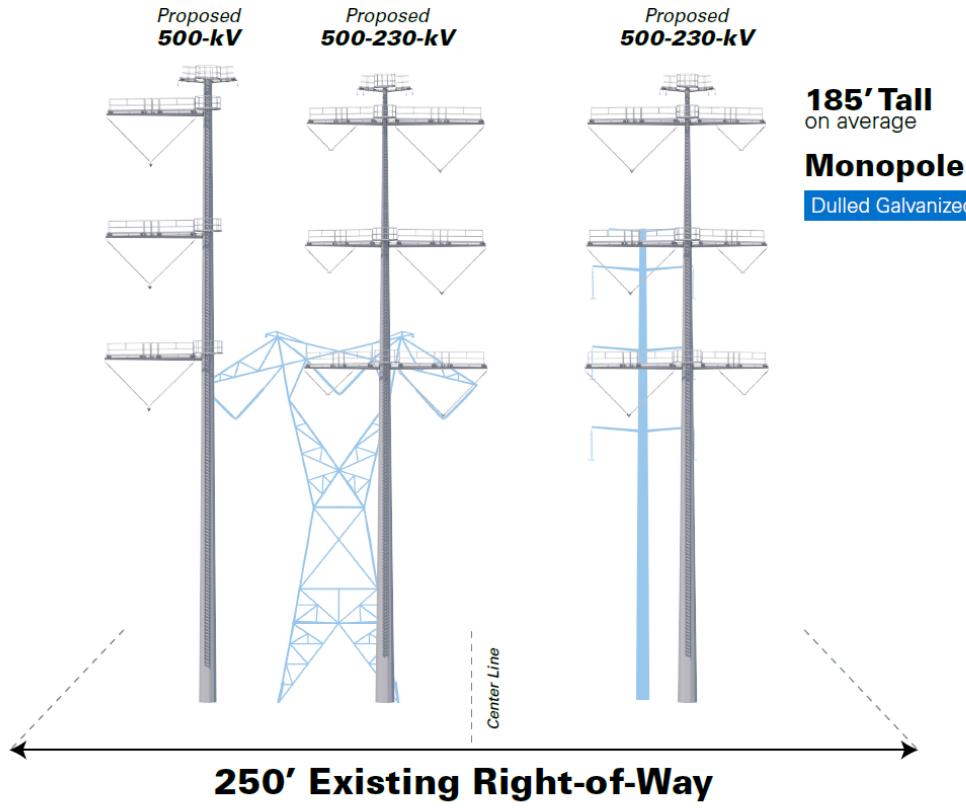
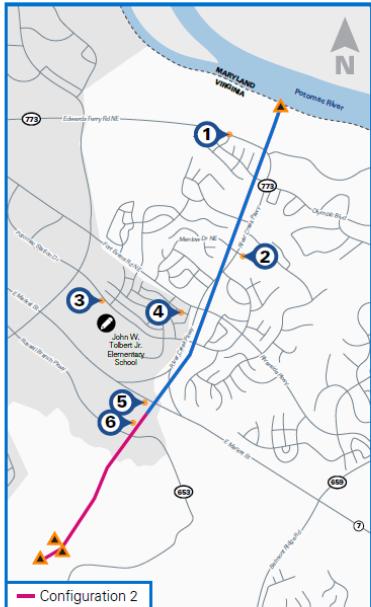
**185' Tall**  
on average

**Monopole**

Dulled Galvanized

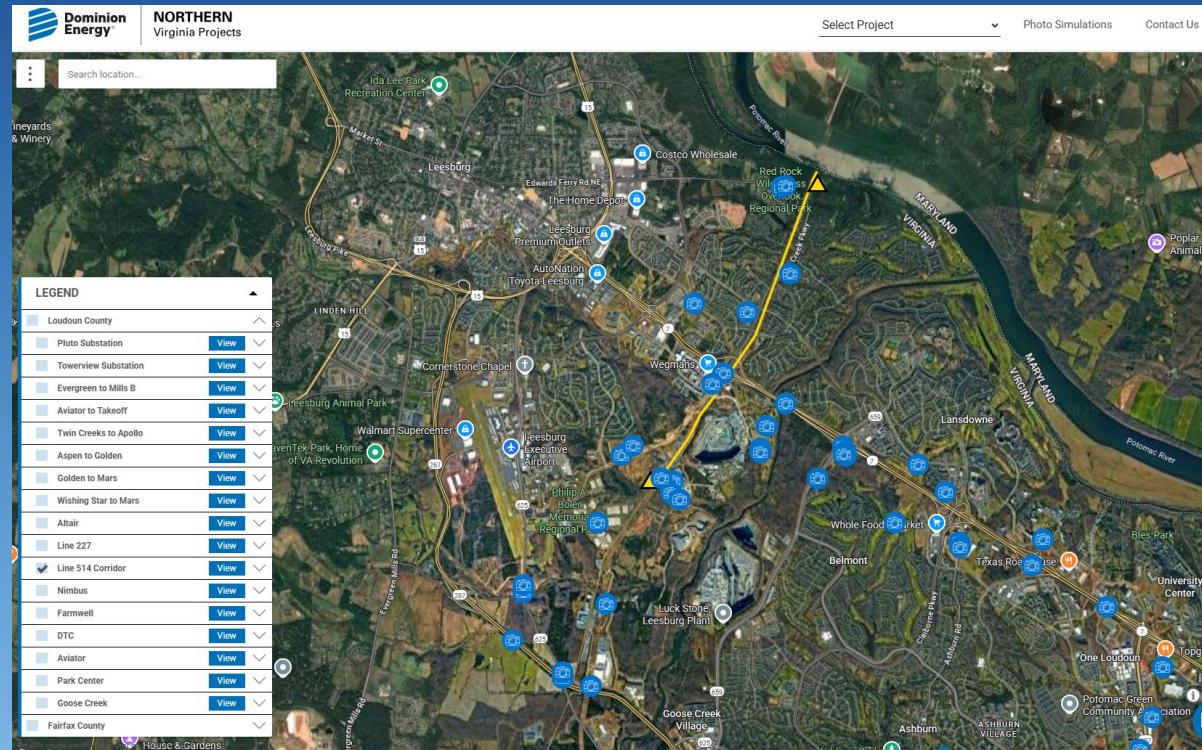
**250' Existing Right-of-Way**





# 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.



[DominionEnergy.com/Line514](http://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.

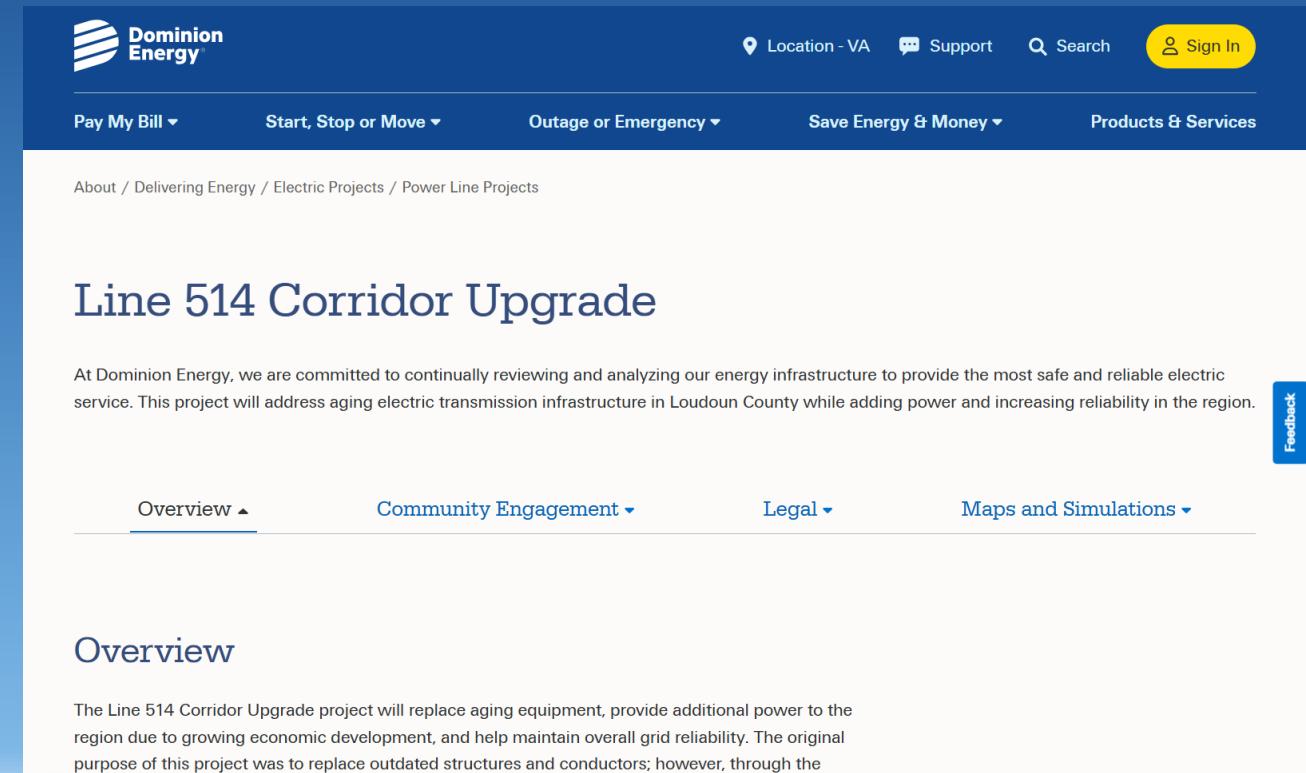


# Q&A

# Stay Informed

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

**DominionEnergy.com/Line514**



The screenshot shows the Dominion Energy website with a blue header. The header includes the Dominion Energy logo, a location selector for "Location - VA", a "Support" link, a search bar, and a "Sign In" button. Below the header is a navigation bar with links for "Pay My Bill", "Start, Stop or Move", "Outage or Emergency", "Save Energy & Money", and "Products & Services". The main content area has a breadcrumb navigation: "About / Delivering Energy / Electric Projects / Power Line Projects". The main title is "Line 514 Corridor Upgrade". Below the title, a paragraph states: "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." At the bottom of the page, there are tabs for "Overview", "Community Engagement", "Legal", and "Maps and Simulations".

**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.

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

# Stay In Touch

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Phone: 888.291.0190

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

# Thank you!