
WELCOME!

The virtual community meeting will begin shortly.



Powering Your Every Day.SM

¿Habla español? Visite [DominionEnergy.com/Yadkin-Fentress](https://www.dominionenergy.com/Yadkin-Fentress) para solicitar estos documentos en español.

Yadkin – Fentress 500 kV Electric Transmission Line Project in the City of Chesapeake, Virginia

**Virtual Community Meeting
Tuesday, February 11, 2025
6:00 p.m.**



**Dominion
Energy®**

Meeting Information

- **WELCOME:** Thank you for joining us! This meeting is being recorded. Your audio will remain muted throughout the meeting.
- **PROJECT BRIEF:** As announced and filed with the Virginia State Corporation Commission in 2024, we are planning to replace 13.5 miles of an existing 500 kilovolt (kV) transmission line with two 500 kV lines between our Yadkin and Fentress substations in the City of Chesapeake, Virginia.
- **Q&A:** Please submit your questions through the [Q&A feature](#) in WebEx.

We are committed to working respectfully and being good neighbors in the communities we serve.



Project Team

Subject matter experts are here for you



Carrie
Communications



Frank
Project Manager



Dan
Line Engineer



Lane
Siting and Permitting



Melissa
Right of Way



Clif
Access



Jen
Forestry



Ginny
Environmental
Permitting



Butch
Construction



Steven
Structural Engineer

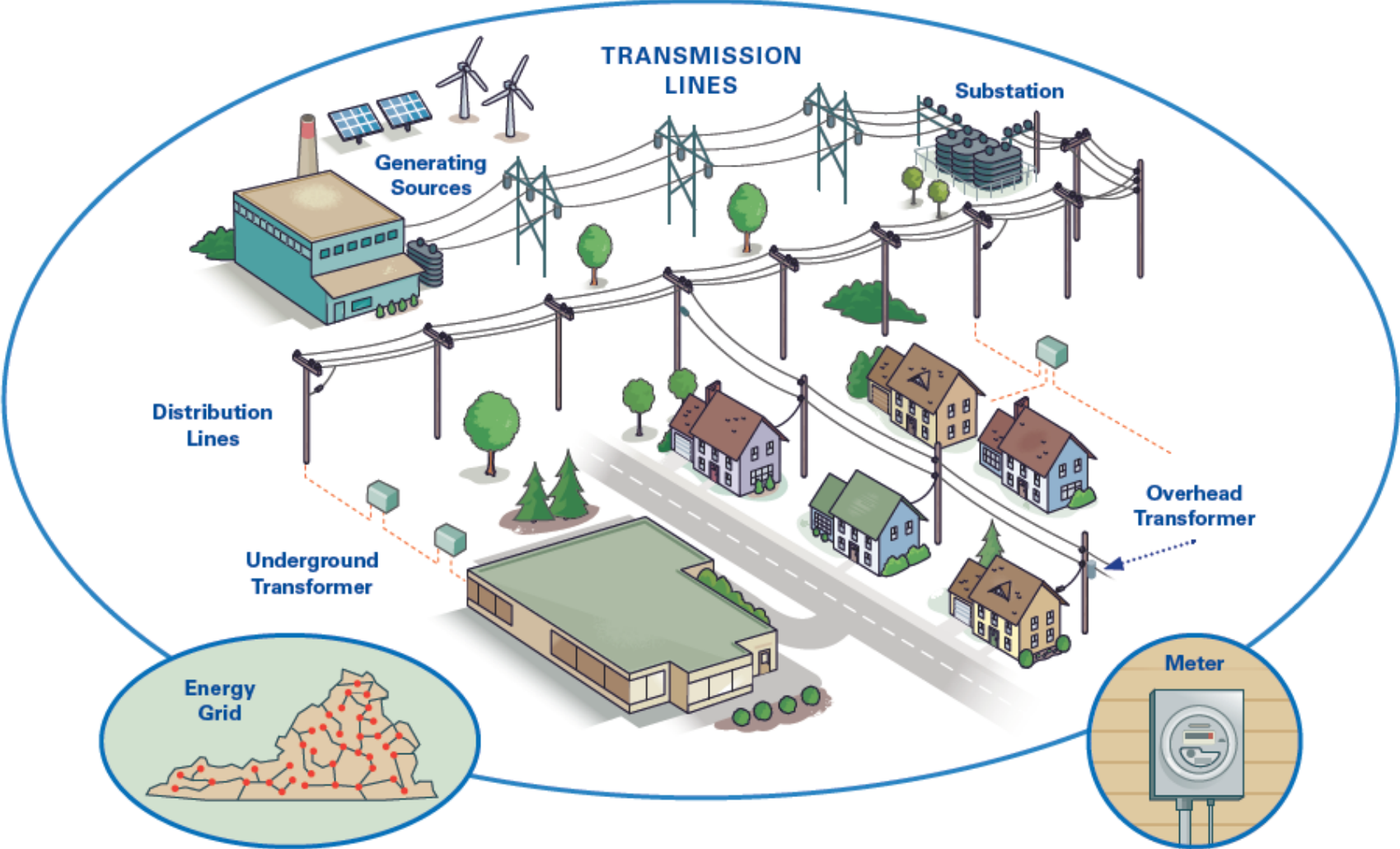
Safety Topic

Work Zones

- **Work zone perimeters help keep you safe**
 - Please do not enter work zones, which may be marked by cones, fencing, or other temporary barriers
 - Please keep an eye on kids and pets, especially when the work zone is in your yard
 - Follow any crew instructions or posted signage
- **Construction traffic**
 - There will be construction vehicles moving in and out of our construction entrances
 - In residential neighborhoods, please stay aware of traffic and move personal vehicles when necessary
 - Please follow flagger instructions during temporary traffic pauses

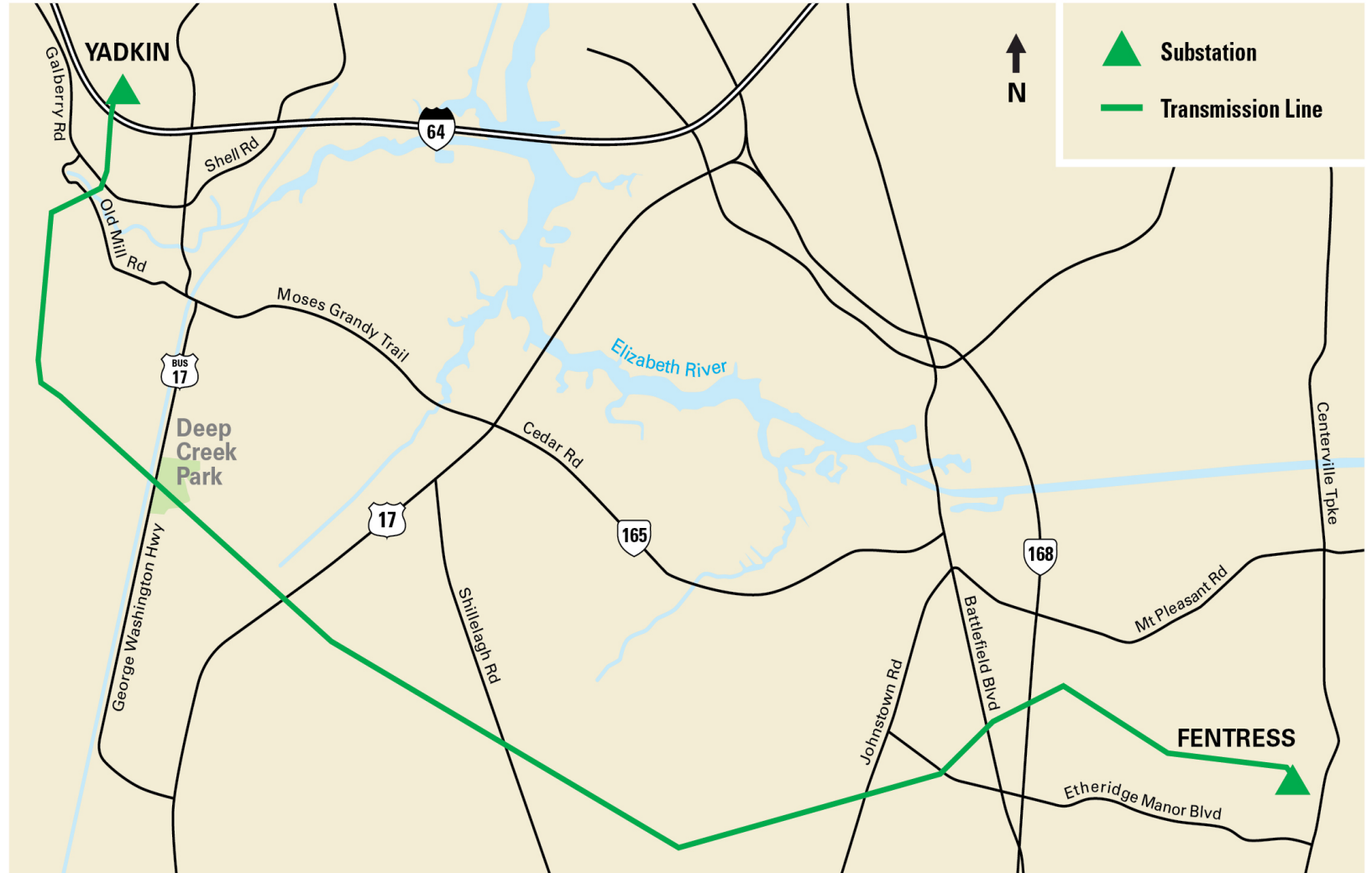


Electric Grid Overview



Project Overview

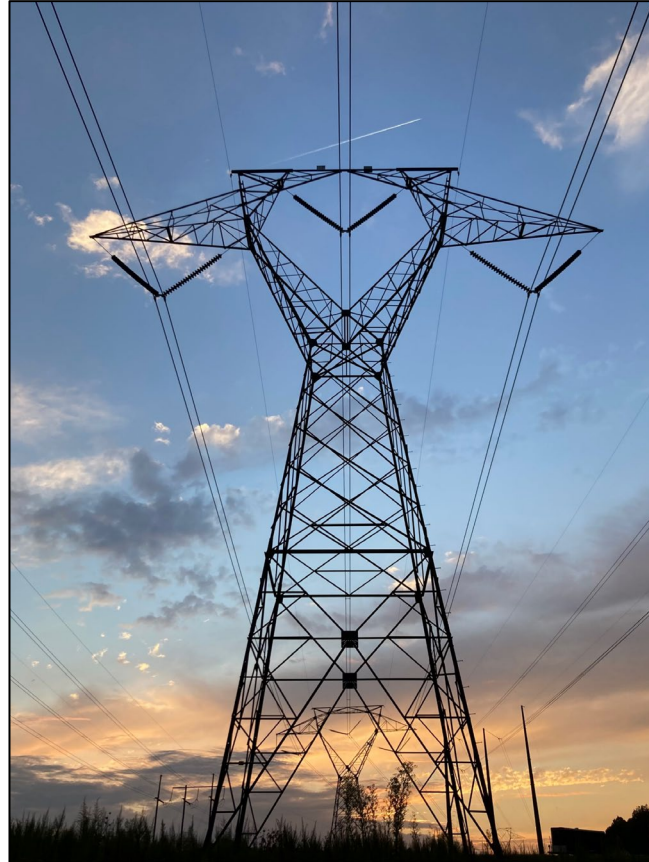
- **NEED:** To maintain structural integrity and reliability of the transmission system, and to integrate new electric generation with the transmission system
- **TO DO:** Replace the existing overhead single circuit 500 kV electric transmission line with two new overhead single circuit 500 kV transmission lines between our Yadkin and Fentress substations
- **QUICK FACTS:**
 - ~13.5 miles long
 - Propose to use existing maintained 150-foot-wide right of way
 - Rebuild Line #588 – end of life
 - New Build Line #5005 – new generation interconnection



Structures

Existing

- Weathering Steel Lattice
- Single-Circuit 500 kV (Line #588)
- Average structure height: 115 feet
- Built in 1975



Proposed

- Dulled Galvanized Steel Monopoles
- Single-Circuit, side-by-side 500 kV (Lines #588 & 5005)
- Proposed average structure height: 186 feet
 - Min height 175 FT
 - Max height 210 FT

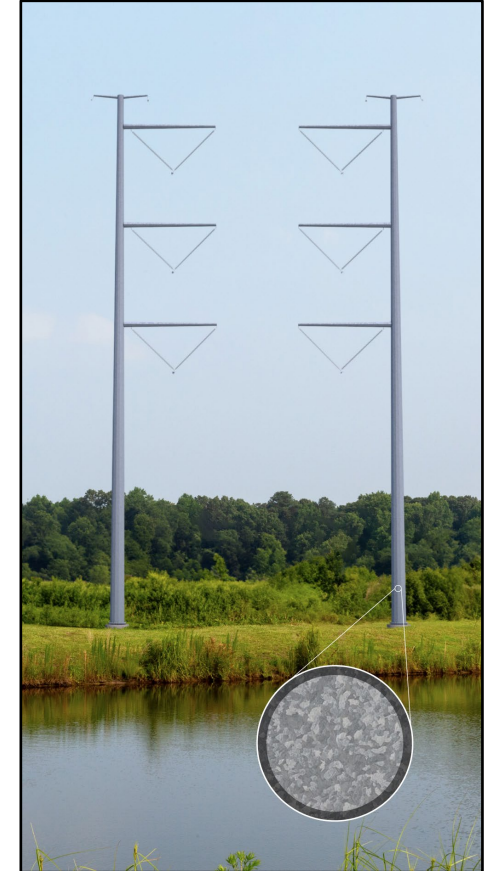


Photo Simulations

YADKIN TO FENTRESS Transmission Line Project

Viewpoint 1

Date: 6/29/2023 Time: 4:55 pm Viewing Direction: East
1 Viewpoint Location — Transmission Line



EXISTING CONDITIONS



PROPOSED CONDITIONS

Pre-Dulled Galvanized Steel

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

Photo Simulations

YADKIN TO FENTRESS Transmission Line Project

Viewpoint 2

Date: 6/29/2023 Time: 4:34 pm Viewing Direction: Southeast
2 Viewpoint Location — Transmission Line



EXISTING CONDITIONS



PROPOSED CONDITIONS

Pre-Dulled Galvanized Steel

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Photo Simulations

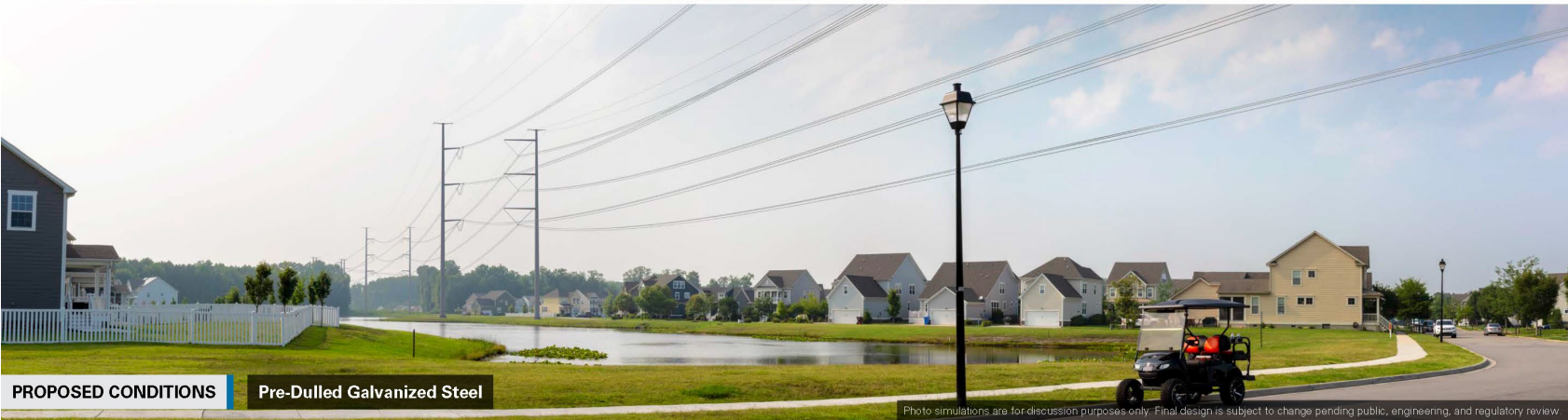
YADKIN TO FENTRESS Transmission Line Project

Viewpoint 3

Date: 6/29/2023 Time: 4:15 pm Viewing Direction: Northwest
Viewpoint Location Transmission Line



EXISTING CONDITIONS



PROPOSED CONDITIONS

Pre-Dulled Galvanized Steel

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Photo Simulations

YADKIN TO FENTRESS Transmission Line Project

Viewpoint 4

Date: 6/29/2023 Time: 4:02 pm Viewing Direction: Southeast
Viewpoint Location Transmission Line



EXISTING CONDITIONS



PROPOSED CONDITIONS

Pre-Dulled Galvanized Steel

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Photo Simulations

YADKIN TO FENTRESS Transmission Line Project

Viewpoint 5

Date: 6/29/2023 Time: 10:13 am Viewing Direction: Northwest
5 Viewpoint Location — Transmission Line



EXISTING CONDITIONS



PROPOSED CONDITIONS

Pre-Dulled Galvanized Steel



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

Photo Simulations

YADKIN TO FENTRESS Transmission Line Project

Viewpoint 6

Date: 6/29/2023 Time: 10:13 am Viewing Direction: Southeast
Viewpoint Location Transmission Line



EXISTING CONDITIONS



PROPOSED CONDITIONS Pre-Dulled Galvanized Steel

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

Photo Simulations

YADKIN TO FENTRESS Transmission Line Project

Viewpoint 8

Date: 6/29/2023 Time: 2:10 pm Viewing Direction: North
8 Viewpoint Location — Transmission Line



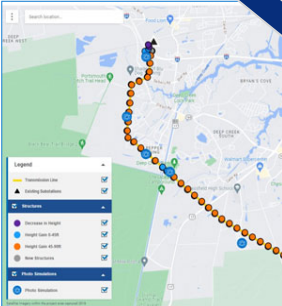
Interactive Project Map (GeoVoice)

Structure locations, types, and heights

Step 1:
Go to DominionEnergy.com/Yadkin-Fentress

Step 2:
Click on this link

Structure Comparison Tool

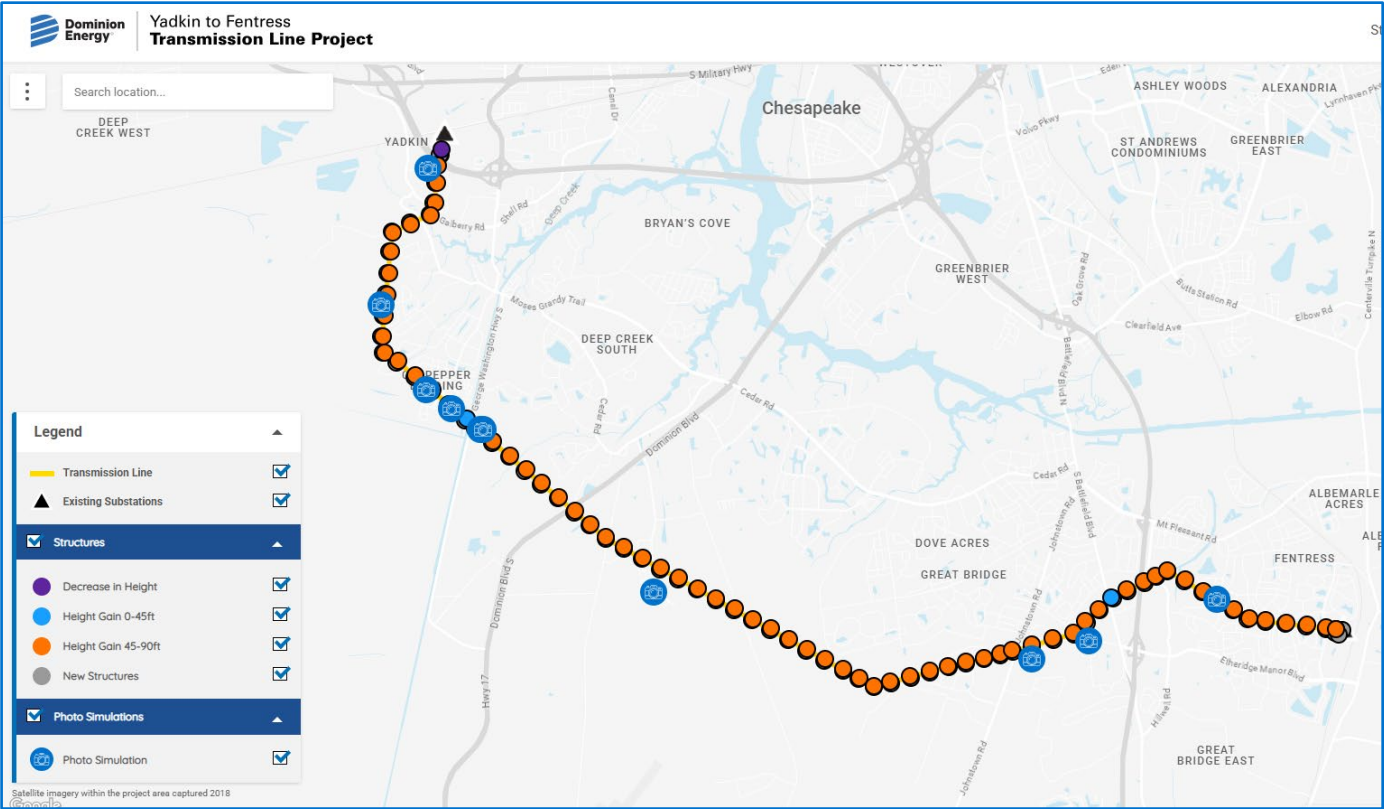


Explore The Yadkin-Fentress Interactive Structure Comparison Tool

- Use the address search to see structure locations in your area.
- View details about individual structures by clicking on structure location marker.
- View simulations of existing and proposed structures.

Click [HERE](#) for the GeoVoice link.

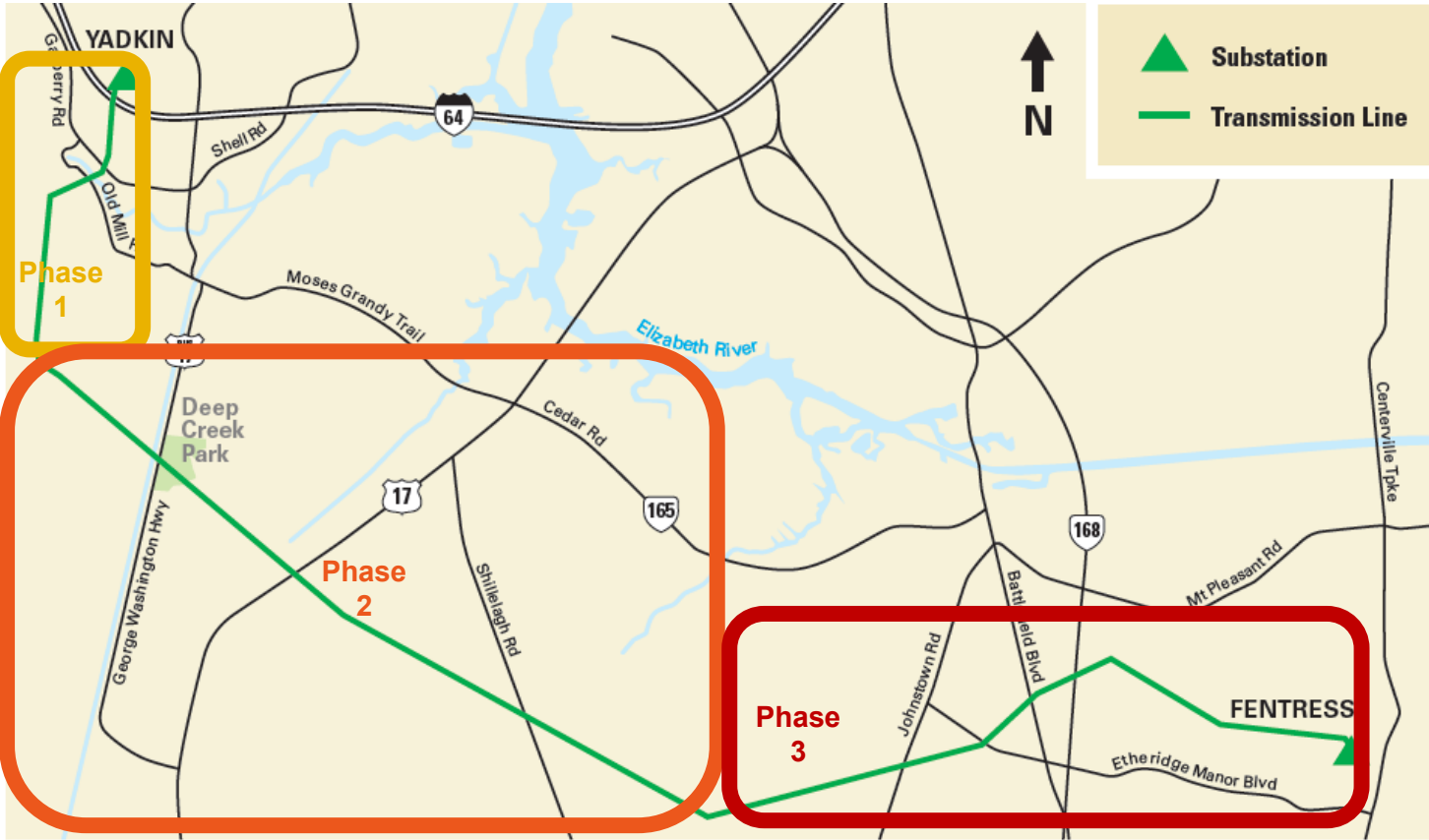
- Step 3:**
- Click on structure icons to view specific info.
 - Click on photo icons to see simulations.
 - Search by address to see what’s nearby.



Construction Schedule

*Pending final permits, weather and progress

Timeframe	Phase 1: Yadkin – Structure 196 (Weiss Lane)
Mid-Feb 2025 – mid-June 2025	Construction activities: <ul style="list-style-type: none">• Prepare access & remove danger trees• Clear the right of way of encroachments & temporarily remove fencing for access• Stake new structure locations• Demolish existing lattice towers• Install new foundations, poles and wires (both Lines 588 & 5005)• Finish Line 588 rebuild
Mid-June 2025 – Sept 2025	Continue building Line 5005 (foundations, poles, and wires) NOTE: Pending weather and progress, construction for Line 5005 may extend into late 2025. The right of way will be restored when construction is complete.
May 2026 – Nov 2026	Rebuild three transmission structures near Yadkin Substation and I-64 on Line 565.

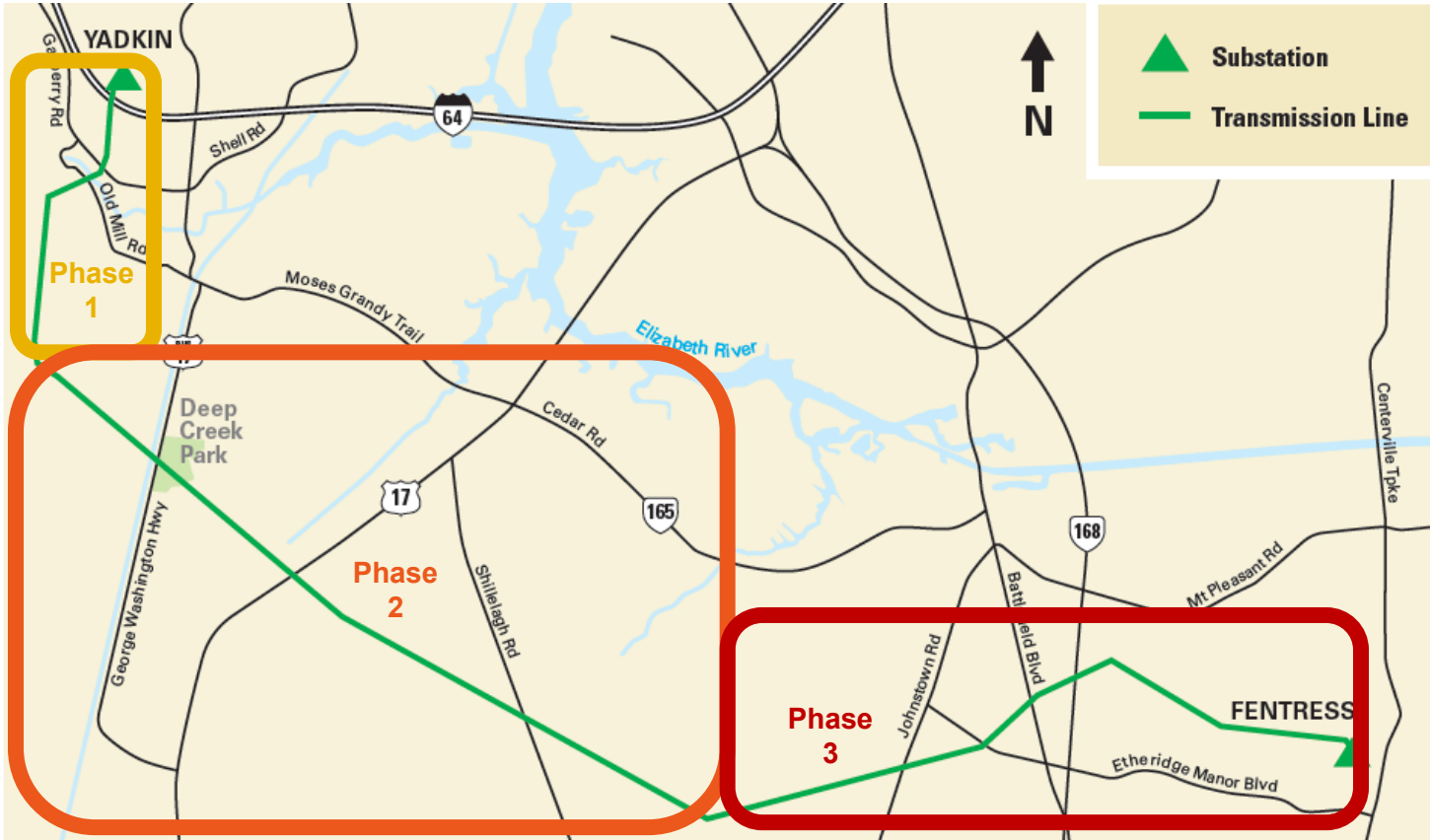


This map is intended to serve as a representation of the project area and is not intended for detailed engineering purposes.

Construction Schedule

*Pending final permits, weather and progress

Timeframe	Phase 2: Structure 197 (Appaloosa Trail) – 225 (Holmes Trail)
April 2025 – June 2026	<p>Construction activities:</p> <ul style="list-style-type: none">• Prepare access & remove danger trees• Clear the right of way of encroachments & temporarily remove fencing for access• Stake new structure locations• Demolish existing lattice towers• Install new foundations (both Lines 588 & 5005)• Install new poles and wires (build Line 588 first)• Finish Line 588 rebuild in June 2026
July 2026 – Dec 2026	<p>Finish building Line 5005 in Dec 2026. <i>The right of way will be restored after construction is complete.</i></p>

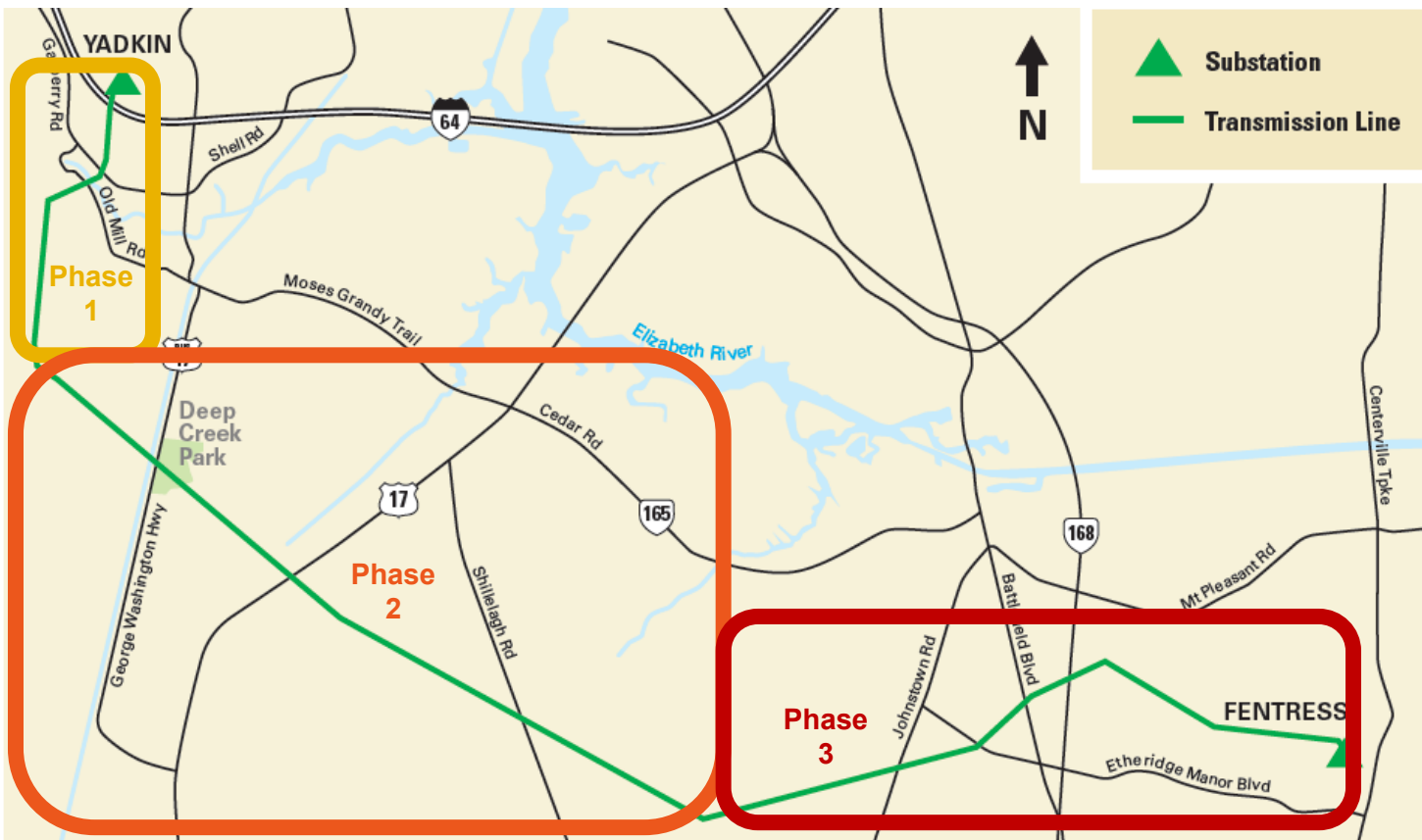


This map is intended to serve as a representation of the project area and is not intended for detailed engineering purposes.

Construction Schedule

*Pending final permits, weather and progress

Timeframe	Phase 3: Structure 226 (Holmes Trail) – Fentress
June 2025 – June 2026	Construction activities: <ul style="list-style-type: none">• Prepare access & remove danger trees• Clear the right of way of encroachments & temporarily remove fencing for access• Stake new structure locations• Demolish existing lattice towers• Install new foundations, poles and wires (both Lines 588 & 5005)• Finish Line 588 rebuild in June 2026
July 2026 – Dec 2026	Finish building Line 5005 in Dec 2026. <i>The right of way will be restored after construction is complete.</i>



This map is intended to serve as a representation of the project area and is not intended for detailed engineering purposes.

Construction Access

- Where possible, we will access the right of way using existing roads.
- Construction entrances and/or additional access roads may be temporarily installed.
- Fences may need to be temporarily removed for access.
- Timber supports beneath the mats help to minimize disturbance to the ground or surface below.
- Matted support systems provide access through wetlands, swamps, and other sensitive areas.



Construction Activities



- Installing access roads
- Preparing the site
- Handling and staging materials
- Installing foundations
- Erecting structures
- Stringing wires (conductor + fiber)
- Removing the original structures along the rebuilt line segment
- Restoring the right of way

Foundation Types on Yadkin – Fentress

All require a crane and hammer:

- **Vibratory Caisson** (hollow cylinder, no excavation) – *most common type on this project*
- **Pipe Pile** (excavate, set anchor bolt cage and pour concrete) – *least common type on this project*
- **Multipile/H-pile** (drive h-piles in ground, excavate and install rebar, and pour concrete) – *at 26 locations*

Vibratory Caisson



Pipe Pile



Multipile



Vibratory Caisson

- 8' – 9' wide, 50' – 65' deep
- Vibratory hammer on a crane installs the caisson, pausing three times to measure and align
 - If no tough soil layers to get through, caisson can be fully installed within minutes!
- Once installed, sand mixture may be poured inside the cylinder to mitigate standing water and mosquitos/bugs
 - No excavation, no concrete!
- Crane assembles the pole – base is secured to the caisson with anchor bolts
- Start to finish: as little as a day



Multipile Foundation

Necessary for higher load locations

- Large construction footprint
 - Buried when finished
- Install steel h-piles to depth
 - Several weeks with noise and vibration
- Excavate the square pit
- Install rebar and pour concrete
- Concrete cure time between pours
- Attach pole base to anchor bolt cage (above ground)
- Takes 45-60 days to build





VIBRATION MONITORING



Before and After Construction:

- Zone of influence: structures within 100 feet
- Survey accessible exteriors
- Ground level documentation of exterior using telephoto lens
- General mosaic photographs and detailed photographs of any observed distresses



During Construction:

- Seismograph monitors vibrations within the zone of influence
- Multiple seismographs may be used



In the event of vibration-induced property distress, property owners will be guided through the claims process for repairs.



What to expect during foundation installation

- **You may...**
 - Feel vibrations
 - Sense high or low frequency hums
 - Hear metal rattling or pounding from the worksite
 - See tall pieces of equipment at work
 - Hear concrete trucks beeping and frequently making deliveries
 - Delicate and elevated items in house may rattle
 - Windows and doors may shake
- **If you live near a multipile/h-pile foundation:**
 - There will be several weeks of hammer work to install steel beams into the ground
 - There will be *many* concrete delivery trucks
- **If you live near a vibratory caisson foundation:**
 - Although this is usually a *faster* installation method, it can be intense for the closest neighbors



**Noise and vibrations
will be monitored in
real time.**

What to expect during pole and line installation



Cranes help assemble the pole pieces.



Helicopter helps install lines.

Q&A

Please stand by as we compile your submitted questions.

Thank you for your patience!

Please submit your questions through the Q&A feature in WebEx.

IN PERSON OPEN HOUSE
Wednesday, February 12, 2025
5:00 p.m. – 7:00 p.m.

Drop by anytime during these hours

Chesapeake Conference Center
700 Conference Center Drive
Chesapeake, VA 23320

Thank you for your time!

Connect with us if you have questions or feedback:
888-291-0190
powerline@dominionenergy.com

¿Habla español? Visite [DominionEnergy.com/Yadkin-Fentress](https://www.dominionenergy.com/Yadkin-Fentress) para solicitar estos documentos en español.