# Meeting Virginia's Energy Needs





# **Electric Transmission Line Planning and Approval Process**

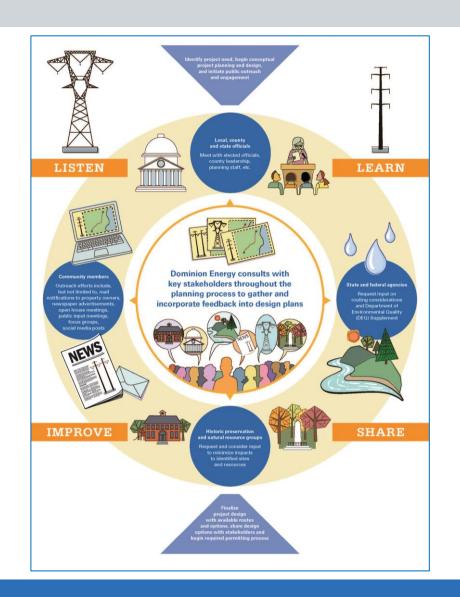


# Relationships

- Value what the community values
- Seek available mutual benefits

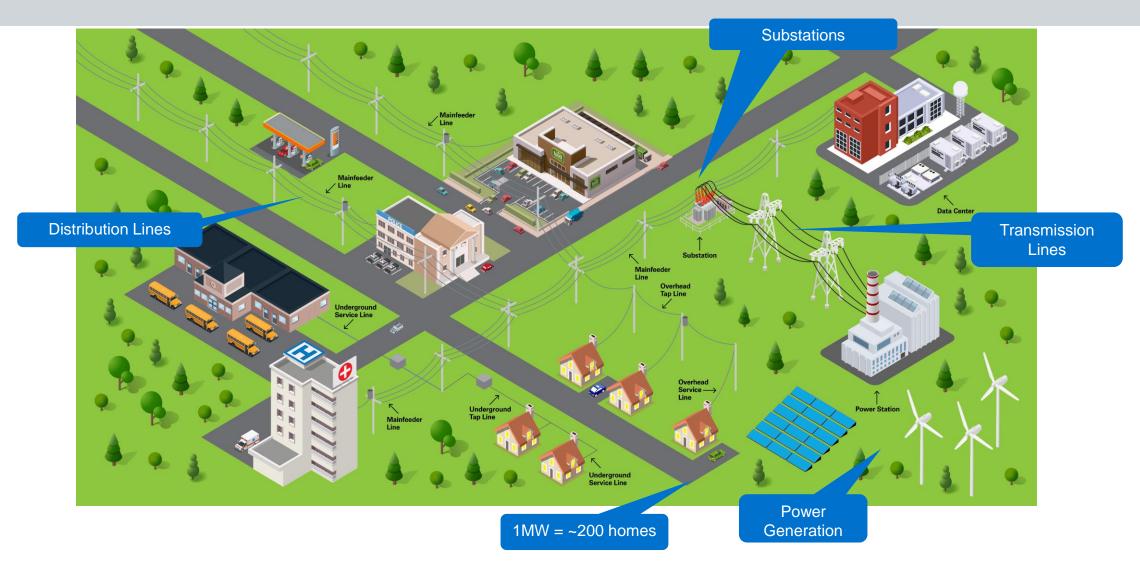
## **Trust**

- Discussion, connection and empathy
- Stakeholders' willingness to compromise



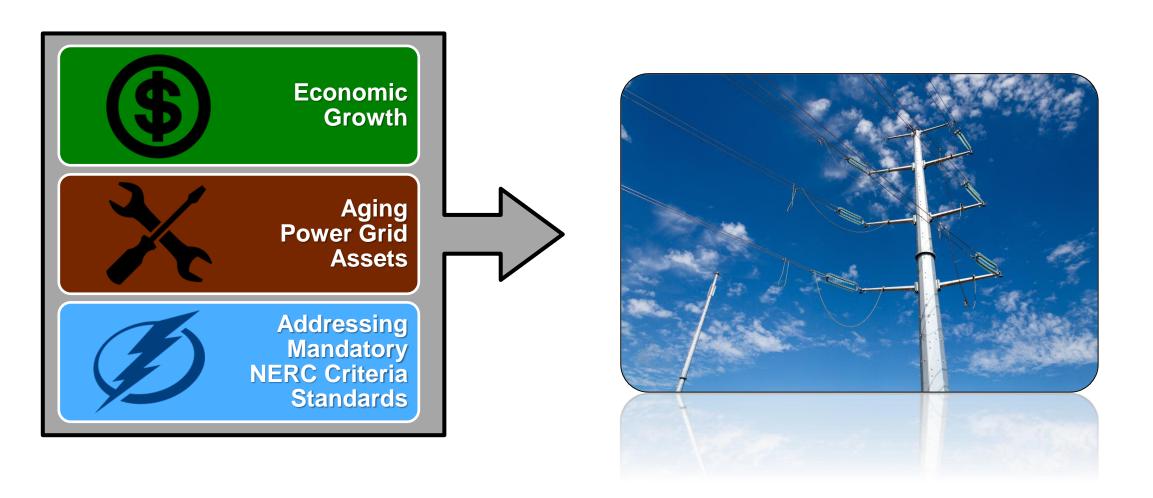
# The Grid and Obligation to Serve





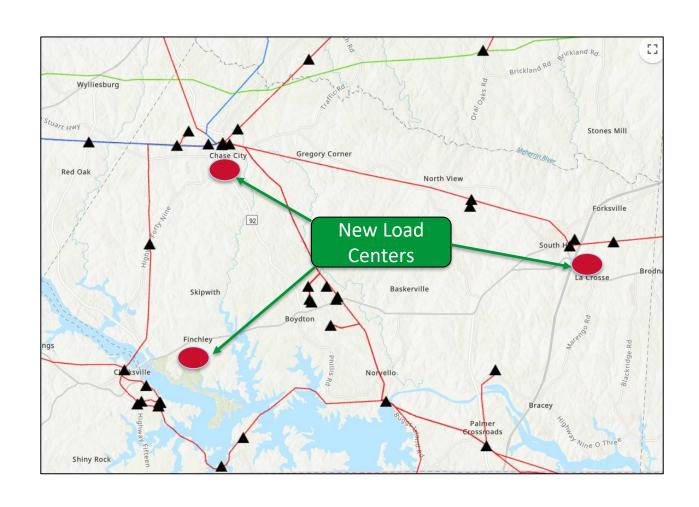
# **Forces Driving Infrastructure Need**





# **Current System**





# **Southside Infrastructure Enhancements Overview**





# South Hill Project Scope

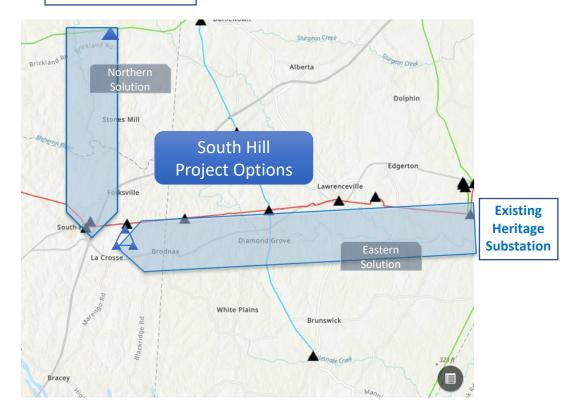


### Brunswick, Lunenburg, and Mecklenburg counties

### Project Scope

- Build two single-circuit 230 kV transmission lines parallel to one another on shared right of way into the South Hill/La Crosse areas
- Build three substations in South Hill/La Crosse
  - Build a connecting transmission line loop between the three proposed substations
  - Substations on data center property

# Proposed Unity Substation



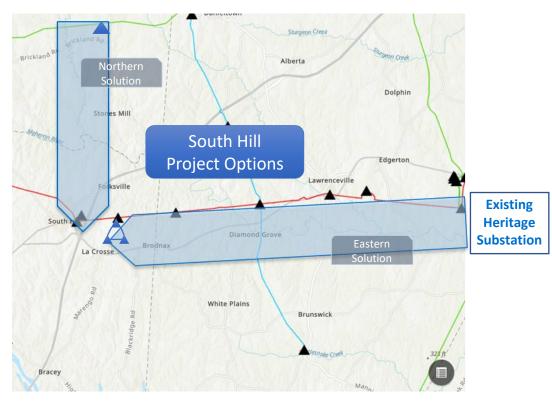
# South Hill Project Scope



### Brunswick, Lunenburg, and Mecklenburg counties

- Electrical Options (only building one of these options at this time – multiple routes within each option)
  - Eastern Solution: Expand the existing Heritage
     Substation (Brunswick County) and construct
     approximately 25 miles of new transmission line
     corridor partially co-located with our existing 115 kV
     right of way
  - Northern Solution: Build a new substation, Unity Substation, along our existing 500 kV line (Lunenburg County) and construct approximately 10 miles of new right of way
- Right of way needs
  - · ~120 feet wide

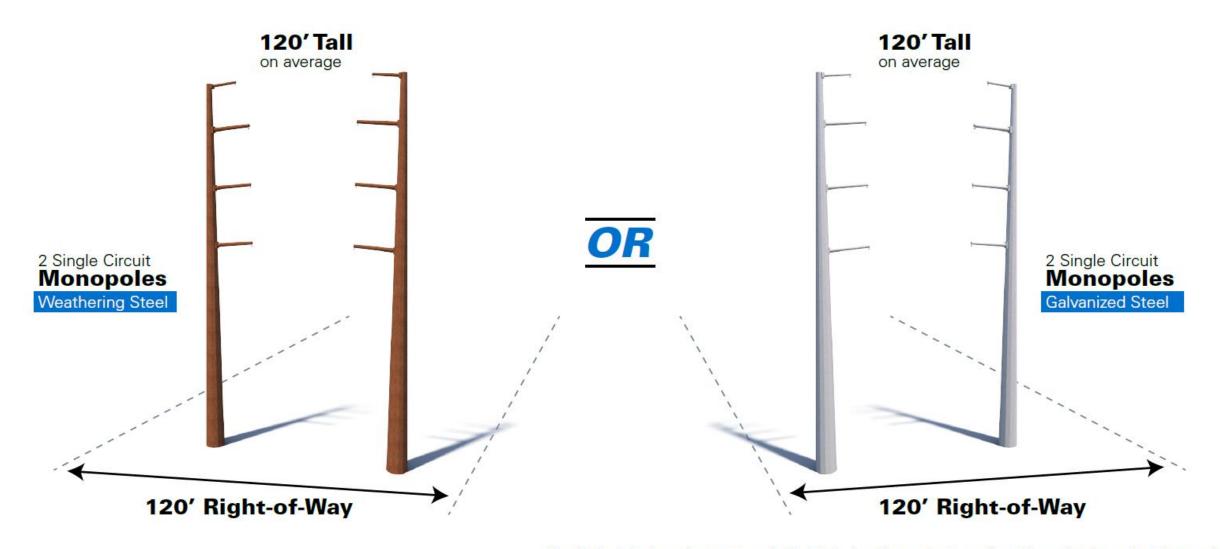
### Proposed Unity Substation



# **South Hill Typical Structures**

Eastern and Northern Solution



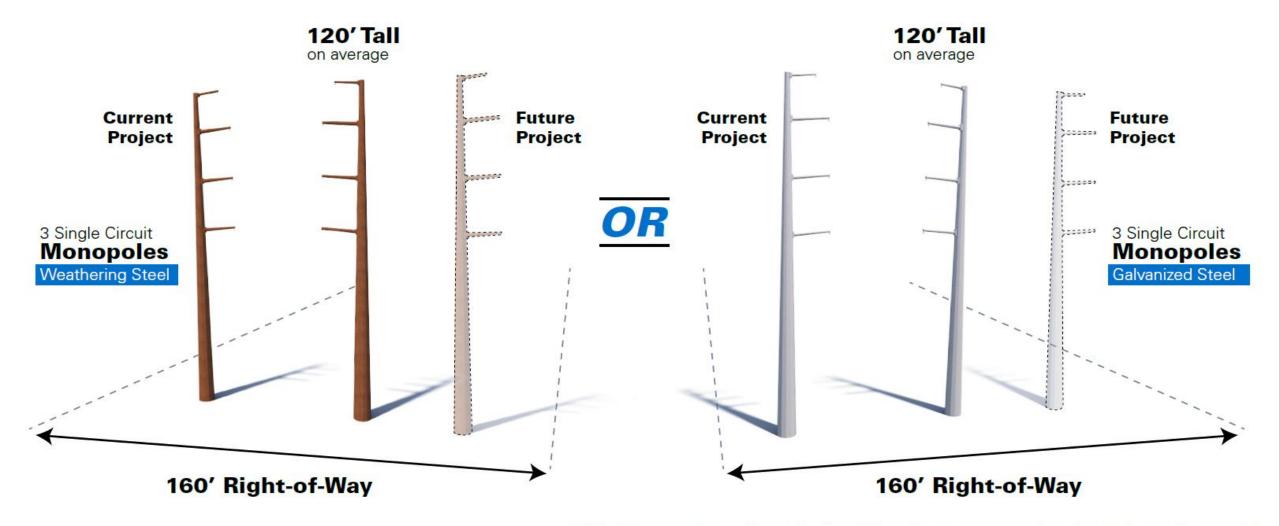


Visualization is for discussion purposes only. Final design is subject to change pending public, engineering, and regulatory review.

# **South Hill Typical Structures**

Substation Interconnects - Eastern and Northern Solution





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# **Routing Considerations**



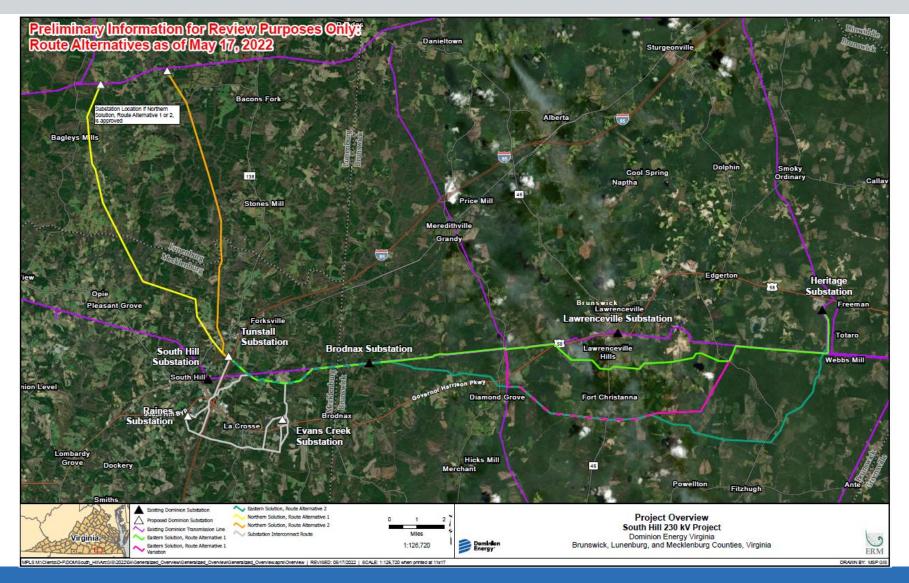
# **Foundational Principles**

- Process always begins with review of existing rights of way
- Respect the land use of the property owners
- Co-locate with other infrastructure, where appropriate
- Stay close to property boundaries
- Minimize impact on private property, and environmental, historic, cultural and scenic resources



# **Route Options**







# Proposed Conditions

# **South Hill**

Transmission Line Project

### **Aerial Rendering 1**

Northern Solution

### Typical Structure:

120' - 2 Single Circuit Monopoles

### Right-of-Way Width:

120 Feet

### Structure Material:

Weathering Steel

### Viewing Direction:

Southeast

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# Proposed Conditions Proposed Conditions

# **South Hill**

Transmission Line Project

### **Aerial Rendering 1**

Northern Solution

### Typical Structure:

120' - 2 Single Circuit Monopoles

### Right-of-Way Width:

120 Feet

### Structure Material:

Galvanized Steel

### Viewing Direction:

Southeast

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Transmission Line Project

### **Aerial Rendering 2**

Eastern Solution

### Typical Structure:

120' - 2 Single Circuit Monopoles

### Right-of-Way Width:

120 Feet

### Structure Material:

Weathering Steel

### Viewing Direction:

Northeast

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Transmission Line Project

### **Aerial Rendering 2**

Eastern Solution

### Typical Structure:

120' - 2 Single Circuit Monopoles

### Right-of-Way Width:

120 Feet

### Structure Material:

Galvanized Steel

### Viewing Direction:

Northeast

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# Proposed Conditions



Transmission Line Project

# Ground Rendering Eastern & Northern Solution

### Typical Structure:

120' - 2 Single Circuit Monopoles

### Right-of-Way Width:

120 Feet

### Structure Material:

Weathering Steel

### **Viewing Direction:**

West

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Transmission Line Project

### **Ground Rendering**

Eastern & Northern Solution

### Typical Structure:

120' - 2 Single Circuit Monopoles

### Right-of-Way Width:

120 Feet

### Structure Material:

Galvanized Steel

### Viewing Direction:

West

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# Proposed Conditions

# **South Hill**

Transmission Line Project

### **Aerial Rendering 3**

Substation Interconnects Solution

### **Typical Structure:**

120' - 3 Single Circuit Monopoles

### Right-of-Way Width:

160 Feet

### Structure Material:

Weathering Steel

### **Viewing Direction:**

East

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Transmission Line Project

### **Aerial Rendering 3**

Substation Interconnects Solution

### Typical Structure:

120' - 3 Single Circuit Monopoles

### Right-of-Way Width:

160 Feet

### Structure Material:

Galvanized Steel

### Viewing Direction:

East

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# **Permitting**



- Virginia State Corporation Commission (SCC): Certificate of Public Convenience and Necessity
  - Alternatives Analysis
  - Routing Study
  - Department of Environmental Quality Supplement and coordinated review
- U.S. Army Corps of Engineers
- Other Agency Review
  - Department of Environmental Quality (DEQ)
  - Virginia Marine Resources Commission (VMRC)
  - Virginia Department of Transportation (VDOT)
- Local Permitting Requirements
  - Substations on Data Center property/part of developer's site plans
  - New Unity 500 kV/230 kV Substation for South Hill Northern electrical solution

# Transmission Line Planning and Public Engagement Process SCC Application

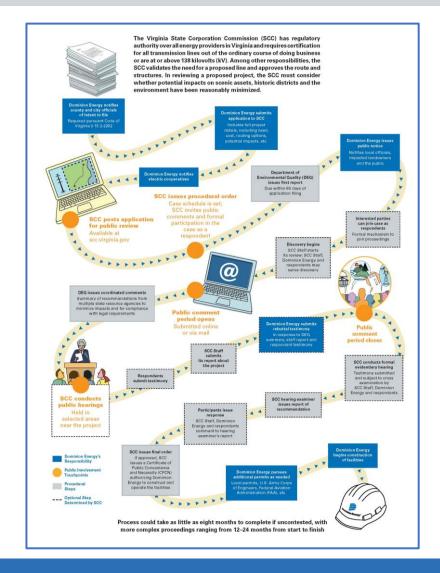




Opportunities for public involvement throughout the process, including public hearings



Process could take as little as eight months to complete if uncontested, with more complex proceedings ranging from 12–24 months from start to finish

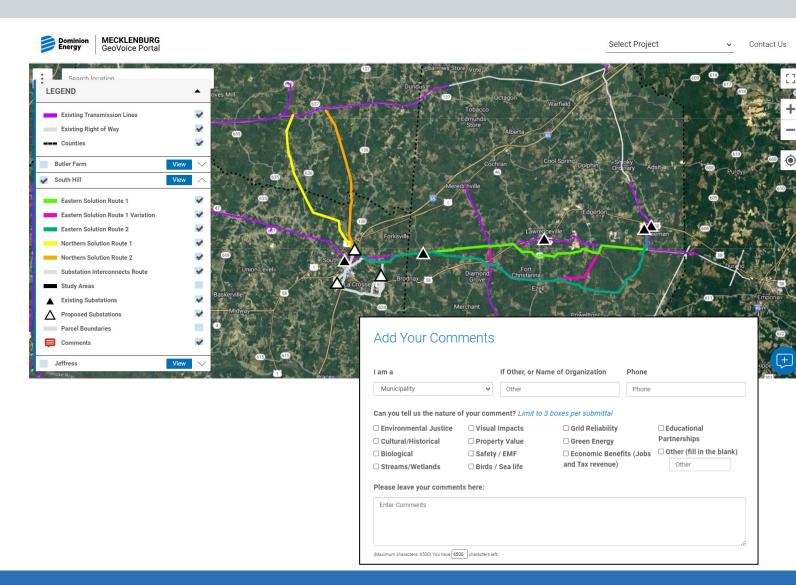


# **GeoVoice**



## **DominionEnergy.com/southhill**

- Review the study areas
- Interactive mapping tool
- Evolves as routing options become available and are refined
- Add comments, provide input or share insight
- Track project development and receive updates



# **Timeline**



# Butler Farm

Begin public engagement: Spring 2022

VA SCC Filing Submission: Summer 2022

Construction begins (tentative): Early 2024

Project Completion: Summer 2025

# **South Hill**

Begin public engagement: Spring 2022

VA SCC Filing Submission: Summer 2022

Construction begins (tentative): Early 2024

Project Completion: Summer 2025

## **Jeffress**

Begin public engagement:
Ongoing/
Summer 2022

VA SCC Filing Submission: Early 2023

Construction begins (tentative): Early 2025

Project Completion: Summer 2026

# What's Next?



- Review routing options and speak to subject matter experts
- Another in-person community meeting later this summer once public input is received and incorporated into project planning
- For questions throughout the project, send an email to powerline@dominionenergy.com or call 888-291-0190
- For more information and to access GeoVoice, please visit: DominionEnergy.com/southhill



Thank you for joining!