Blackwell Road 230 kV Transmission Line and Substation Project

Project Participation Group
April 26, 2022

Dominion Energy

Agenda

- Welcome!
- Introductions, Process Overview
- Project Communications and Outreach
- Project Need and Background
- Regulatory Process Overview

  BREAK
- Routing Considerations
- Wrap Up: Recap, Q&A, Next Meeting

Dominion Energy

Introductions

- Name
- Organization you are representing
- Number of years you have lived in community

Project Communications and Outreach

Community Input Opportunities

Project Participation Group – Dominion Energy will use a third party to facilitate discussions with community leaders representing diverse perspectives on routing constraints and potential opportunities **(April – August)**

Public Open House Events – In-person events designed to provide opportunities for one-on-one dialogue with Dominion Energy's reliability planners, project engineers, routing and environmental permitting experts, along with substation designers, landscape architects and others. **(June, August)**

Added Community Engagement/Marketing – Learn more about the project and provide comments to the team via an Online Interactive Portal (Virtual Open House), individual and community meetings, field site visits, social media.

Dominion Energy

Project Timeline

March – April 2022

- Meet with Town & County officials to discuss preliminary research and outreach cadence
- Meet with Project Participant Group invitees

Late April

- Facilitate First Meeting: Project Participant Group

Spring – Fall 2022

- Public Engagement
- Continue work with Project Participation Group
- Open House events (June and August)

Fall 2022

- Submit application to SCC

2024

- Anticipated construction start

2025

- Anticipated project completion target

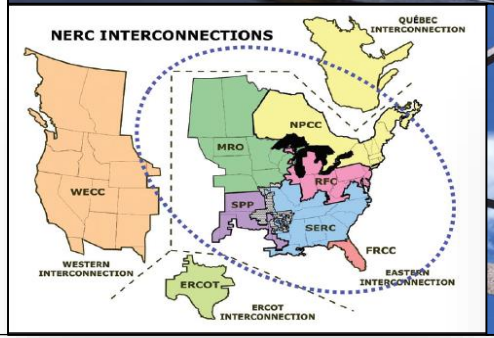
Dominion Energy

Project Need and Background

Forces Driving Infrastructure Need

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

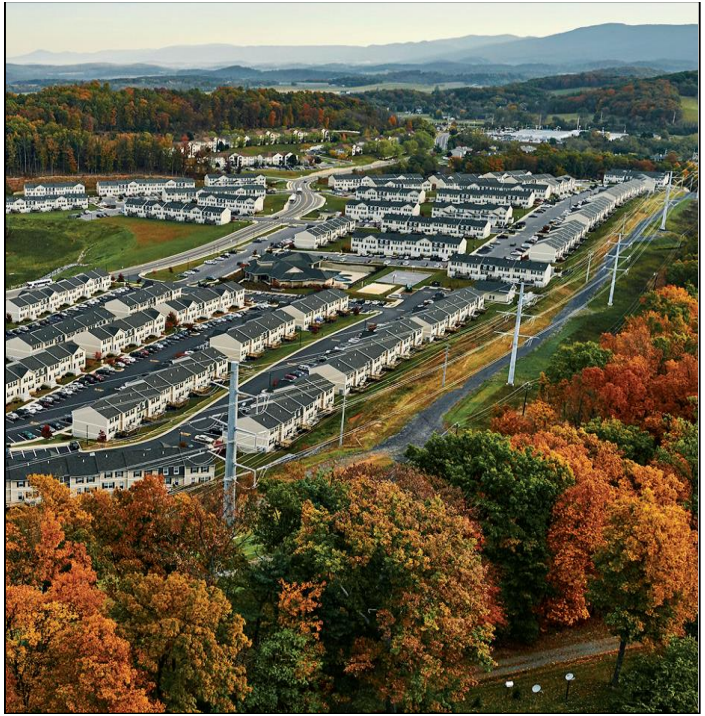
- Economic Growth
- Aging and Overloaded Power Grid Assets
- Mandatory NERC Reliability Standards



Dominion Energy

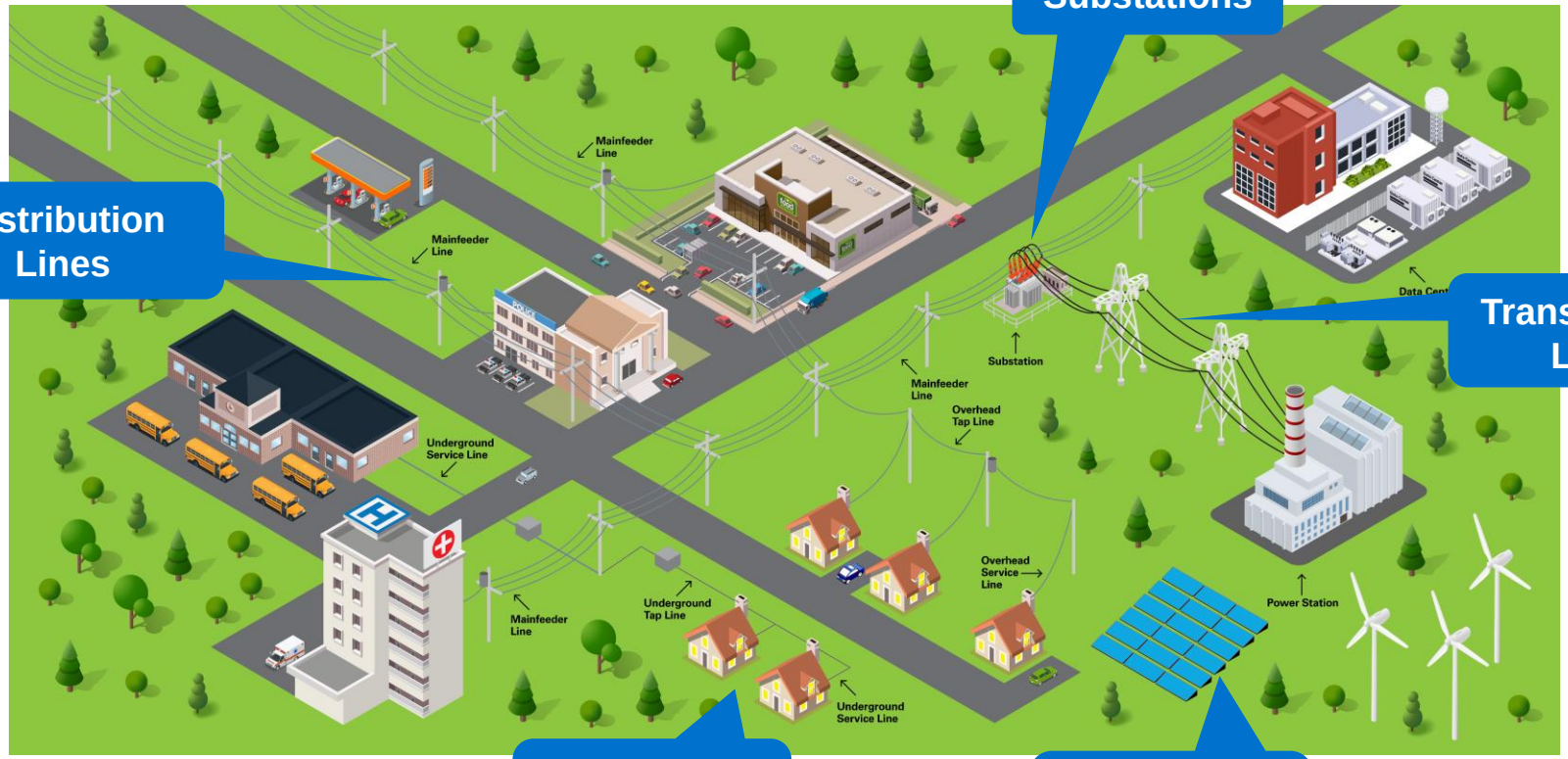
Project Need: Supports Data Center and Area Growth

- Provides safe and reliable energy to support data center development
- New transmission lines will serve a proposed substation near Lee Highway and Blackwell Road
- Supports increased energy demand in Fauquier County



Dominion Energy

The Grid and Obligation to Serve



Dominion Energy

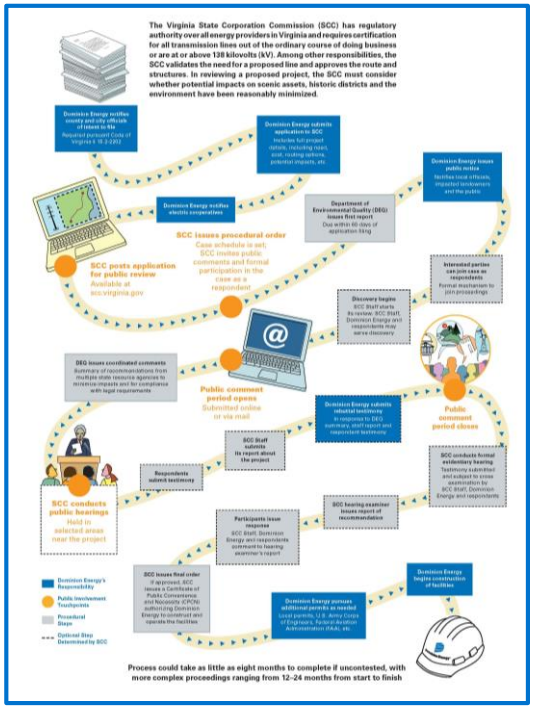
Regulatory Process

Electric Transmission Line Planning and Public Engagement Process

Virginia State Corporation Commission (SCC) Application

Opportunities for public involvement throughout the process, including public hearings.

Process could take just eight months to complete if uncontested. More complex proceedings range from 12–24 months from start to finish.



Dominion Energy

Routing Considerations

Transmission Line Routing Considerations

Andrea Thornton, Jon Berkin, Routing Consultants, ERM

ERM

Balancing Impacts

Statutory Requirement

Code of Virginia Title 56. Public Service Companies
Chapter 1. General Provisions § 56-46.1.

As a condition to approval the Commission shall determine that the line is needed and that the corridor or route the line is to follow will reasonably minimize adverse impact on the scenic assets, historic districts and environment of the area concerned. To assist the Commission in this determination, as part of the application for Commission approval of the line, the ***applicant shall summarize its efforts to reasonably minimize adverse impact on the scenic assets, historic districts, and environment of the area concerned***.

Routing Considerations

- Opportunities
- Constraints
- Engineering/construction
- Identification of potential routes
- Evaluation, comparison and selection of routes

Routing Opportunities

Existing rights-of-way should be given priority as the locations for additions to existing transmission facilities.

Corridor Collocation Principal

- Group linear facilities
  - Existing road corridors
  - Existing transmission or distribution lines
  - Existing pipelines
- Potential to share right-of-way
- Minimize clearing
- Avoid forest fragmentation

Routing Opportunities

Considerations:

- Does the existing corridor go where you need it to go?
- Is there enough room?
- Has the area adjacent to the corridor been developed or been encumbered?
- Are there other utilities in the corridor?
- Does it make sense to use?

Routing Constraints

Where practical, rights-of-way should avoid the resources listed in the National Register of Historic Places, parks, scenic, wildlife and recreational lands, officially designated by duly constituted public authorities.

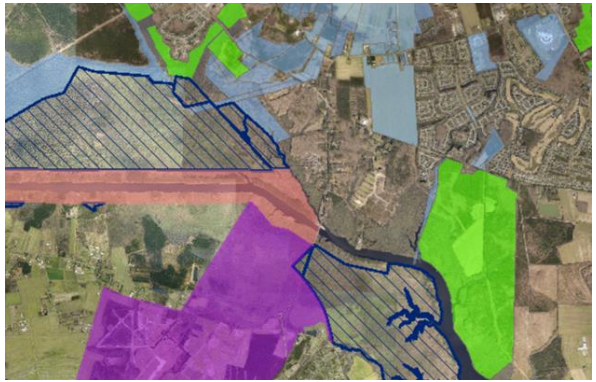
Sensitive Resources:

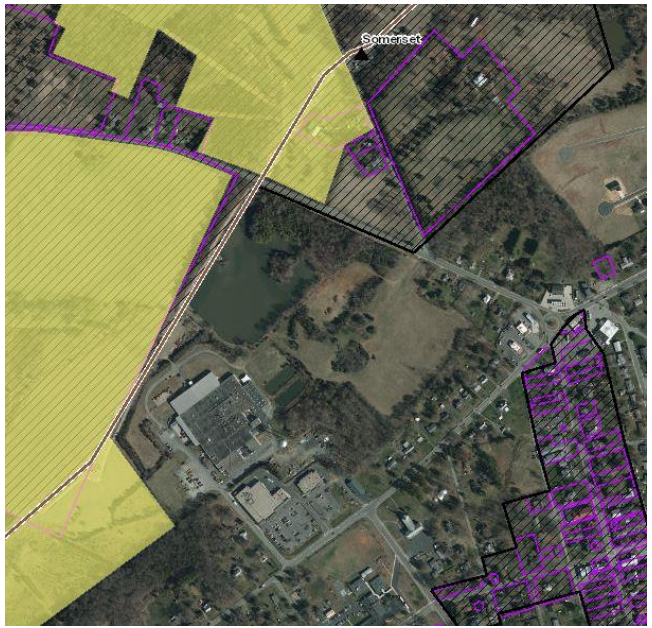
- Wetlands/Waterbodies
- T & E Habitat
- Historic properties
- Visually sensitive or scenic areas
- Specially managed lands

Routing Constraints

Land Use:

- Planned or existing residential developments
- Conservation easements
- Government-owned lands





Engineering and Construction Considerations

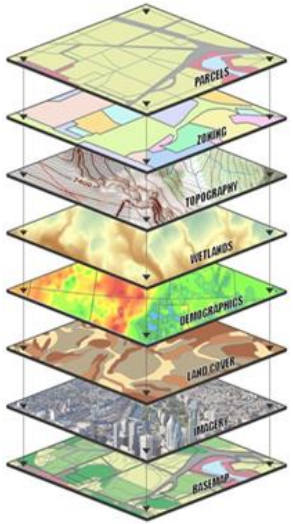
- Tower height
- Span length
- Right-of-way width and space
- Construction access
- Unstable soils
- Route angles
- Utility off-sets and crossings
- Underground utilities

Identify Potential Routes

- Define project study area:
  - Based on starting and ending facility locations
  - Large enough to include reasonable alternatives
- Collect and review data (GIS, field review)

Identify Potential Routes

- ID and map constraints and opportunities
- Adjust study area as needed
- Collect public input
- Identify and map possible routes
- Field review and refine routes



Comparative Evaluation and Selection of Routes

- Quantify features affected
- Evaluate and compare routes
- Consider “other” factors (visual/scenic, public interest, stakeholder input)
- Select proposed and alternative routes

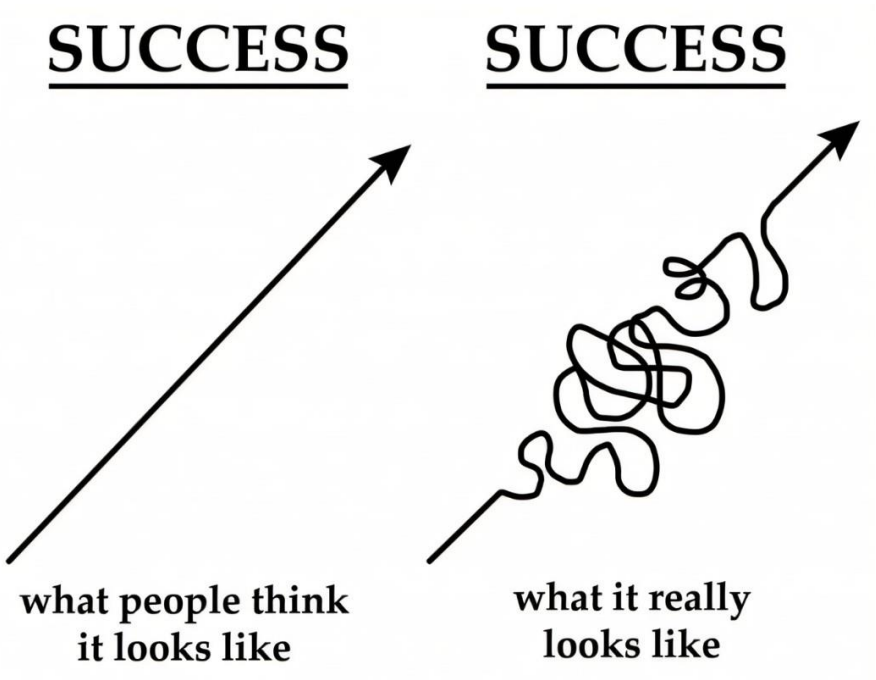
TABLE 4-1

Idylwood-Tysons 230 kV Underground Transmission Line Project
Environmental Features Comparison Table – Overhead Routes

Environmental Features	Unit	OH 01	OH 02	OH 03	OH 04
Route					
Route Length Total	miles	12.9	6.1	5.2	7.2
Rebuild [1]	miles	12.9	3.5	1.8	7.2
New	miles	0.0	2.6	3.4	0.0
Pole Line Easement [1]	percentage	26	21	0	44
	miles	3.4	1.3	0.0	3.2
Acres Expanded or New ROW	acres	52.92	39.63	39.94	17.41
Land Use Features / Constraints					
State Owned Lands	miles	0.0	0.0	0.0	0.0
Local Government Lands	miles	2.9	0.3	0.1	1.1
Federal Government Lands	miles	1.6	0.0	0.0	0.0
Private Lands Crossed (total)	miles	5.2	1.4	1.5	1.7
Northern Virginia Regional Park Authority	miles	<0.1	<0.1	0.4	4.0
MWAA Crossings (roads)	miles	1.3	1.3	0.7	0.0
Virginia DOT Crossings (roads)	miles	1.9	3.1	2.3	0.4
Parcels crossed by ROW (total)	number	261	84	60	156
Existing ROW	number	218	66	34	145
Expanded or New ROW	number	43	18	26	11
Existing Land Use (VDOF)					
Open Land	miles	5.5	3.6	1.9	1.9
Cropland	miles	0.1	0.0	0.0	0.0
Developed	miles	2.3	2.0	2.7	2.2
Forested	miles	4.2	0.5	0.6	2.9
Wetland	miles	0.8	<0.1	0.0	0.2
Zoning					
Commercial	miles	0.1	0.1	0.3	<0.1
Industrial	miles	<0.1	<0.1	<0.1	0.1
Planned Units	miles	0.4	0.2	0.7	0.0
Residential	miles	11.2	2.9	2.1	6.7
Tysons	miles	0.0	0.0	0.0	0.1
Other	miles	0.0	0.0	0.0	0.1
Uncategorized/ROW	miles	1.2	2.9	2.1	0.2
Planned Developments Crossed (Centerline)	miles	0.0	0.0	0.3	0.2
	(number)	0	0	2	2
Planned Developments Crossed (ROW)	acres	0.0	0.0	2.9	3.2
	(number)	0	0	4	4
Proposed Commuter Rail stations Crossed	miles	0.0	0.0	0.0	0.0
	(number)	0	0	0	0
Recreational Areas Crossed					
City Parks					
Existing ROW	number	0	0	0	1
	acres	0.0	0.0	0.0	0.8
Expanded or New ROW	number	0	0	0	1 (0 new)
	acres	0.0	0.0	0.0	0.8
National Park Service Land					
Existing ROW	number	1	0	0	0
	acres	12.9	0.0	0.0	0.0
Expanded or New ROW	number	1 (0 new)	0	0	0

ERM

Routing is an Exercise in Persistence and Non-Linear Thinking!



ERM

Blackwell Road
Routing Considerations
(GIS)

Report Out:
Table Groups

What's Next?

- **Recap**
- What are our key takeaways from today?
- **Questions?**
- We will provide answers to "parking lot" questions prior to the next meeting
- **Next Meeting?**
- Date, time
- In-person Community Meeting: June 23

Dominion Energy