

STUART AREA IMPROVEMENTS PROJECT

STUART - BASSETT TRANSMISSION LINE PROJECT



Appalachian Power representatives plan to upgrade the local electric transmission grid in Virginia. The Stuart Area Improvements Project provides a new electrical source for the region and increases reliability for customers. The project involves constructing several components in the next few years. The Stuart – Bassett component involves rebuilding approximately 22 miles of 69-kilovolt (kV) transmission line to 138-kV, building approximately 3 miles of new 138-kV transmission line, upgrading two substations and building two new substations.

WHAT

The Stuart-Bassett Transmission Line Component involves:

- Rebuilding approximately 22 miles of 69-kV transmission line to 138-kV in or near the existing right-of-way, which may include new or updated property easements
- Building approximately 3 miles of 138-kV transmission line in new right-of-way
- Upgrading two substations
- Building two new substations
- Retiring four substations

This project requires approval by the Virginia State Corporation Commission (SCC).

WHY

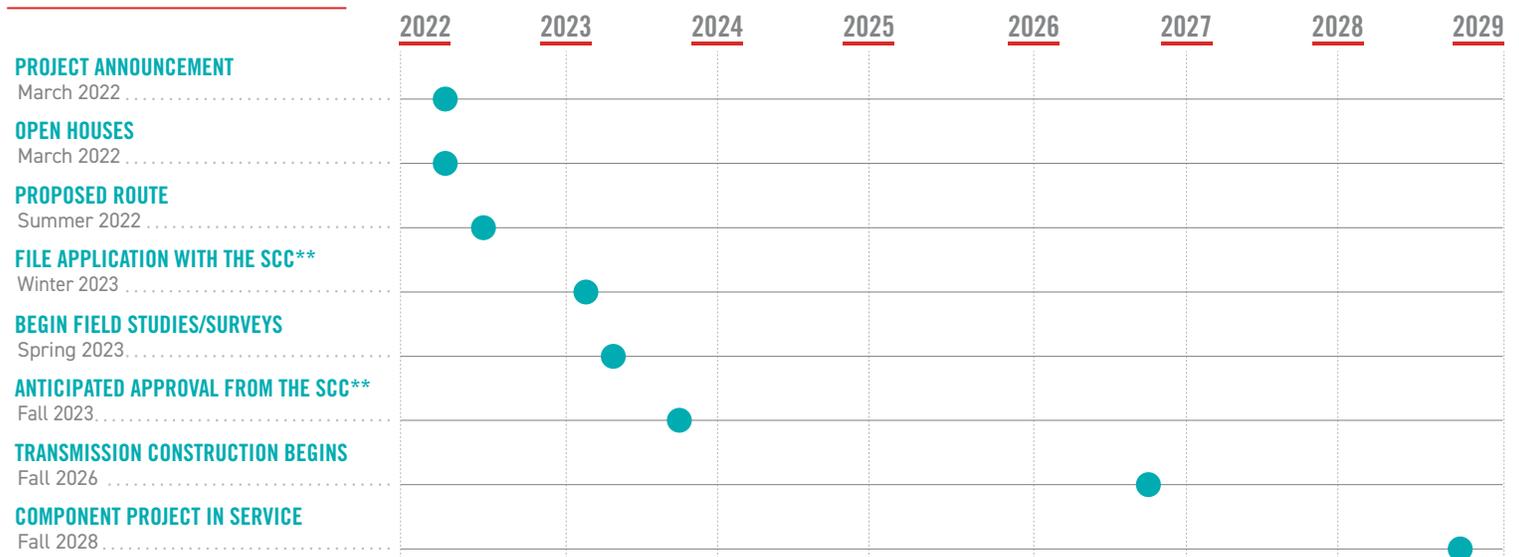
Project benefits include:

- Upgrading the aging 69-kV electrical infrastructure to a more reliable, higher capacity 138-kV transmission system
- Upgrading two substations and building two new substations to provide increased capacity to serve area customers and reduce service interruptions
- Providing a more robust and reliable electric transmission system to support local communities, businesses and future growth

WHERE

The project begins at the proposed Mayo River Substation off Commerce Drive in Patrick County and travels northeast 10 miles to the proposed Patrick Henry Substation at the Patrick and Henry county line. The project continues 9 miles northeast towards the existing Fieldale and proposed Stoneleigh substations; then, northwest 6 miles to the proposed Smith River and existing Philpott Dam substations.

PROJECT SCHEDULE



*Timeline subject to change

**Virginia State Corporation Commission

STUART AREA IMPROVEMENTS PROJECT: STUART - BASSETT TRANSMISSION LINE PROJECT

-  EXISTING TRANSMISSION LINE
-  TRANSMISSION LINE TO BE REBUILT
-  PROPOSED TRANSMISSION LINE
-  ANNOUNCED IN PREVIOUS PROJECT COMPONENTS
-  SUBSTATION TO BE RETIRED
-  PROPOSED SUBSTATION
-  EXISTING SUBSTATION

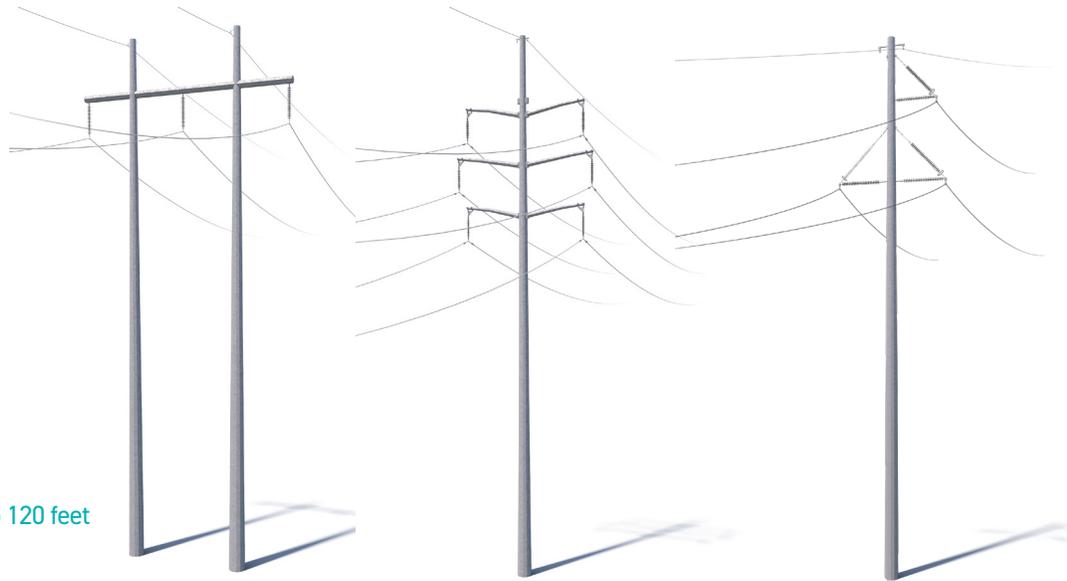


TYPICAL STRUCTURES

Crews plan to rebuild the line using steel H-frame structures and single poles. At select locations, crews may use lattice towers and three-pole steel structures with guy wires to meet engineering needs. Proposed structures will be approximately 20-30 feet taller than the existing structures.

Typical Structure Heights:

- Steel H-Frames Structures: 80 to 100 feet
- Double Circuit Single-Pole Structures: 85 to 120 feet



Single Circuit H-Frame Double Circuit Single-Pole Single Circuit Single-Pole

*Exact structure, height and right-of-way requirements may vary

APPALACHIAN POWER VALUES YOUR INPUT ABOUT THIS PROJECT. PLEASE SEND COMMENTS AND QUESTIONS TO:

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