# **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 23 miles of 69-kilovolt (kV) transmission line to 138-kV, building approximately 3 miles of new 138-kV transmission line, upgrading three substations and building two new substations.

## WHAT

The Stuart-Bassett Transmission Line Component involves:

- Rebuilding approximately 23 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 three substations
- Building two substations
- Retiring four substations

This project was approved by the Virginia State Corporation Commission (SCC) Summer 2024.

## PROJECT SCHEDULE

## WHY

Project benefits include:

- Modernizing the aging 69-kV electrical infrastructure to a more reliable, higher capacity 138-kV transmission system
- Upgrading three substations and building two 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 a structure near the new Mayo River Substation off Commerce Drive in Patrick County and travels northeast 10 miles to the existing Patrick Henry Substation at the Patrick and Henry county line. The project continues 10 miles northeast towards the existing Fieldale and new Stoneleigh substations; then, northwest 6 miles to the new Smith River and existing Philpott Dam substations.





#### 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. Structures will be typically 45 feet taller on average than the existing structures.

Typical Structure Heights\*:

Steel H-Frames Structures: 80 feet

Double Circuit Single-Pole Structures: 100 feet

• Single Circuit Single-Pole Structures: 80 feet Right-of-Way Width: Approximately 100 feet\*

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



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

## **CORTNEY MUSTARD**

Project Outreach Specialist Sr. 833-760-0604 Apco\_Outreach@aep.com www.AppalachianPower.com/Stuart

