

# PRESTONSBURG-THELMA TRANSMISSION LINE REBUILD PROJECT

Kentucky Power plans to upgrade the electric transmission grid in Floyd and Johnson counties. The Prestonsburg - Thelma Transmission Line Rebuild Project involves rebuilding approximately 14 miles of transmission line to 69-kilovolt (kV) standards between Prestonsburg and Thelma substations, retiring approximately 2 miles of 46-kV transmission line between Kenwood Substation and Van Lear Switch Station and retiring Jenny Wiley and Van Lear switch stations to enhance electric reliability for area customers.

## WHAT

The project involves:

- Rebuilding approximately 14 miles of transmission line to 69-kV standards between Prestonsburg and Thelma substations
- Retiring approximately 2 miles of 46-kV transmission line between Kenwood Substation and Van Lear Switch Station
- Retiring Jenny Wiley Switch Station
- Retiring Van Lear Switch Station

The project team is seeking community input on route options to rebuild the transmission line.

This project involves filing an application with the Kentucky Public Service Commission (PSC).

## WHY

The existing transmission line has experienced multiple power outages in recent years due to lightning and other causes. Currently, the customers served from the Kenwood Substation may experience longer restoration time when the transmission line experiences an outage.

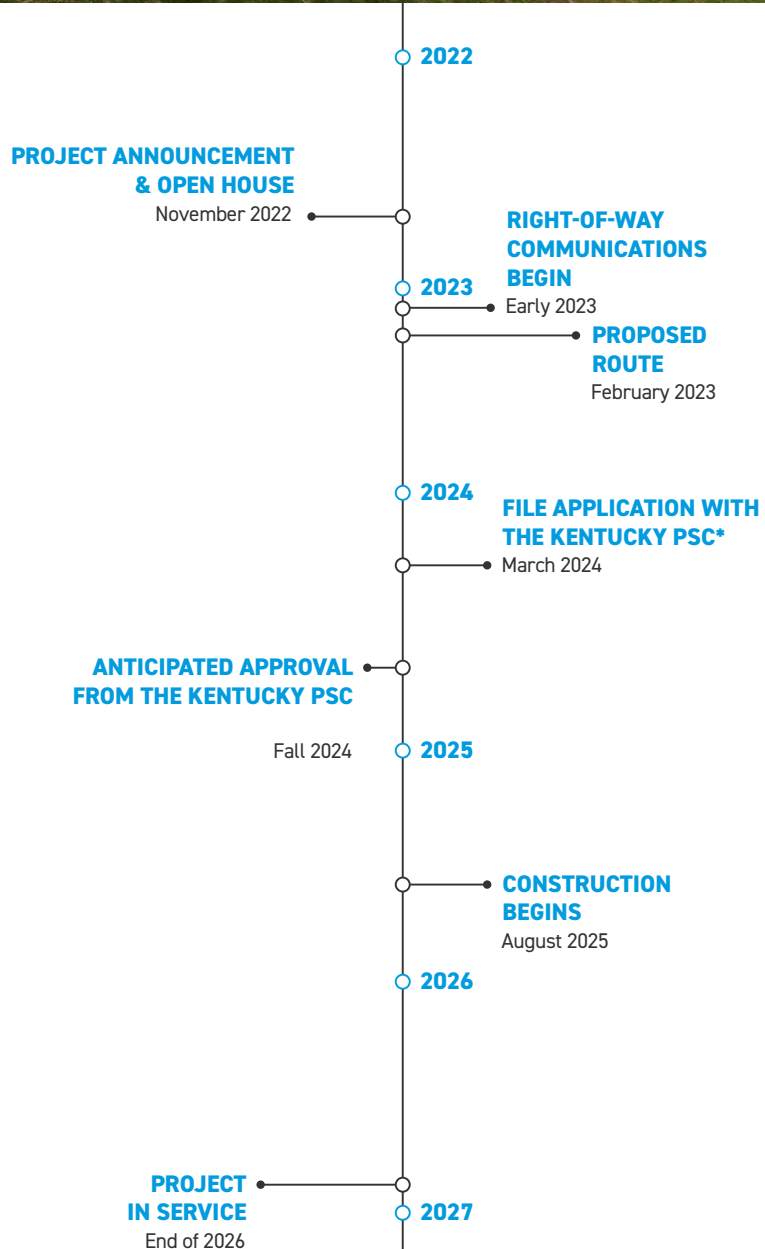
AEP and PJM, the regional transmission organization that monitors the electric transmission grid in our region, have identified additional needs for the upgrades. The proposed upgrades will mitigate identified reliability criteria violations and strengthens the transmission system to increase electric reliability for the area customers.

The proposed upgrades:

- Allow crews to rebuild the line in a more suitable location. The existing line has no road access and is in mountainous terrain. Walking is the only way to access many of the structures
- Allow crews to replace aging wooden structures with modern steel structures
- Allow crews to add modern equipment that protects the line from lightning strikes

## WHERE

The project begins at the Prestonsburg Substation on Webb Lane in Prestonsburg and continues north to Thelma Substation in Thelma along Kentucky 1107.

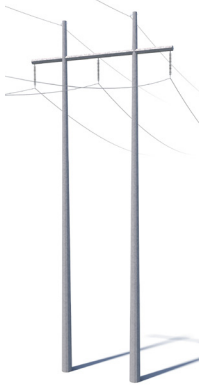


\*PSC: Public Service Commission  
\*\*Timeline subject to change.

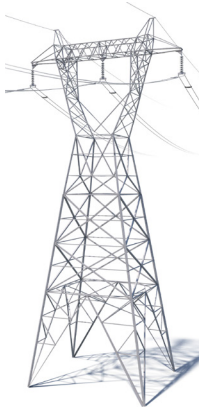
# TYPICAL STRUCTURES

Crews plan to install steel H-frame, lattice tower and three-pole structures along the line route.

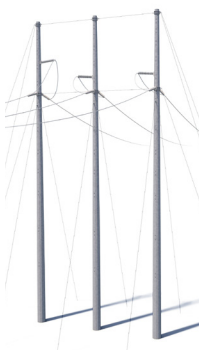
Typical Structure Height: **Approximately 80-100 feet\***  
 Typical Right-of-Way Width: **Approximately 100 feet\***



**\*PRIMARY STRUCTURE TO BE USED**  
**H-FRAME\***

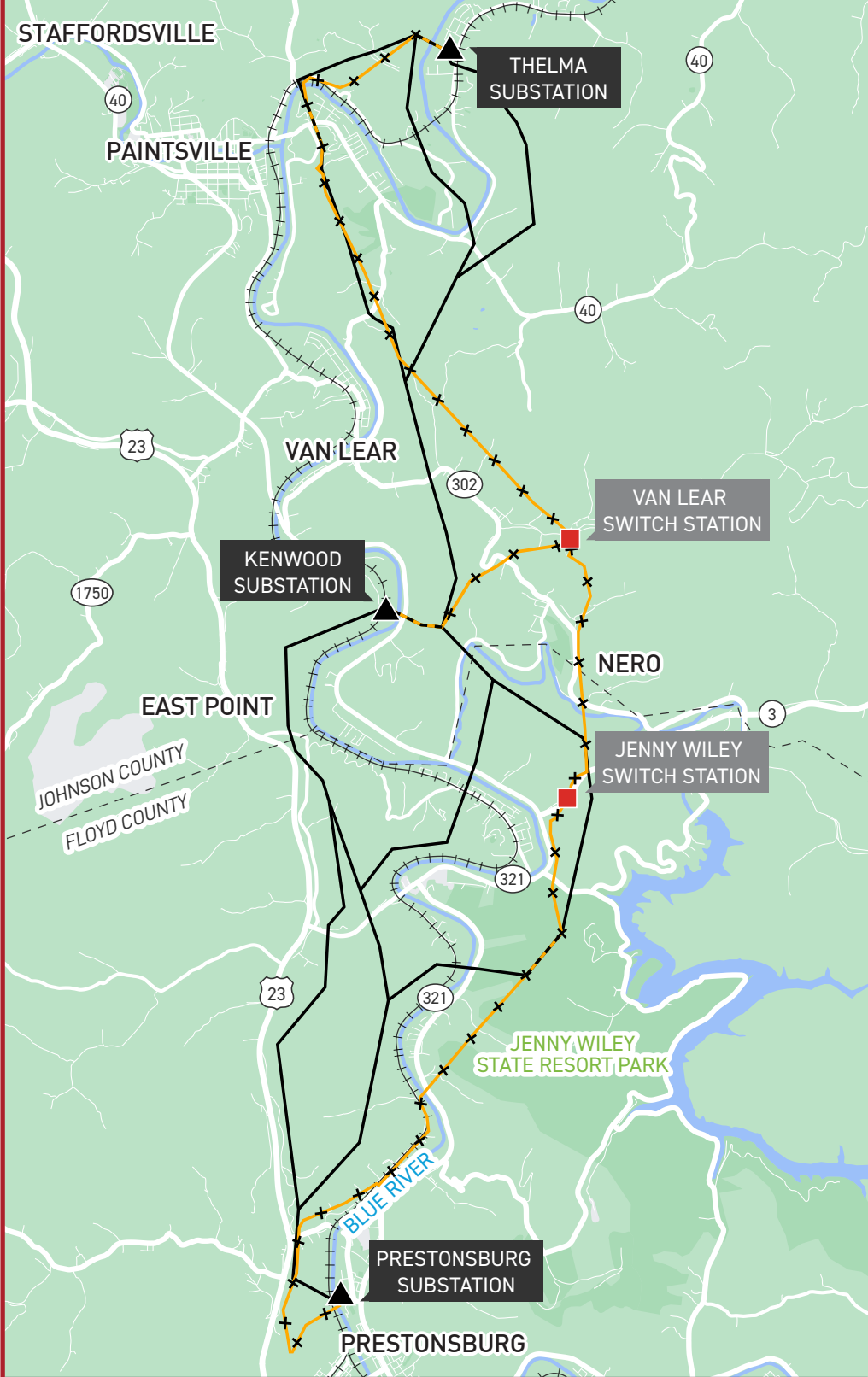


**LATTICE TOWER**



**THREE POLE STRUCTURE**

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



## PRESTONSBURG - THELMA TRANSMISSION LINE REBUILD PROJECT

- EXISTING TRANSMISSION LINE TO BE RETIRED
- EXISTING TRANSMISSION LINE TO BE REBUILT
- STUDY SEGMENTS FOR TRANSMISSION LINE
- EXISTING SUBSTATION
- SWITCH STATION TO BE RETIRED



### WHAT ARE STUDY SEGMENTS?

The proposed study segments are alternatives to review in determining a final line route. Not all study segments are constructed. Rather, the company selects the final line routes based on public input and feasibility.

**WE VALUE YOUR INPUT. PLEASE SEND COMMENTS AND QUESTIONS TO:**

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