What are we going to cover?

• Introductions and overview of meeting
• History of the Estes-Flatiron lines
• Expected benefits of the rebuild
• Construction Plan
• Maintenance of Reliable Service
• Vegetation management around the Estes-Flatiron area
• Contact information
About WAPA

- Sell & deliver hydropower & provide other electric services across 15 states
- 1,400 employees in 49 offices
- ~700 customers who serve 40 million Americans
- 17,000+ circuit-mile transmission system
- Part of U.S. Department of Energy
Estes Park to Flatiron T-line Story

• In 1938, the Estes-Lyons transmission line (northern alignment) was built to provide power for the construction of the Colorado-Big Thompson (C-BT) facilities part of the C-BT project.

• The Estes-Pole Hill and Pole Hill-Flatiron segments (southern alignment) were built in 1953.

• The two original lines were constructed using wood H-Frame structures with hand-dug foundations.

• These two 115-kV lines are the primary power sources into Town of Estes Park and also the transmission source for area hydroelectric generation.

• The third source is a 69-kV line inside the Alva B. Adams Tunnel. This line was constructed in the 1930s as a 115kV line and is still a reliable source of power. The line will not be rebuilt once it ceases operating due to the large expense of maintenance and construction.
Public engagement and alternative evaluation

• **The project:** Rebuild and combine two transmission lines into one double-circuit steel pole line.
• First proposed to area residents in 2012.
• Expanded environmental review concluded in 2019.
  • Examined eight alternatives including taking no action.
  • Included several public workshops and discussions.
• Environment phase webpage: [https://www.wapa.gov/transmission/EnvironmentalReviewNEPA/Pages/estes-flatiron.aspx](https://www.wapa.gov/transmission/EnvironmentalReviewNEPA/Pages/estes-flatiron.aspx)
Benefits of project

• Reduces risk of disruption to customer service through improved reliability to Town of Estes Park.

• Improves management of transmission line right of way (ROW).
  • Mitigates encroachments to meet National Electric Safety Code Requirements.
  • Vegetation management aids in protecting structures during wildfires and reduces risk of ignition from lines.

• Reduces maintenance burden.
  • Maintenance responsibility reduced from 29 to 14.5 miles.
  • Replaces aging wood pole structures with fewer steel pole structures.
  • Reduces vegetation management footprint.

• Resolves access issues and reduces restoration time.
  • Avoids steep terrain, inaccessible areas, highway crossings, canyon spans, etc.
Pinewood-ROW encroachment

Looking East
Result of 30 ft. ROW established in 1938
Estes-Flatiron and Estes-Lyons Transmission Lines

15 miles between Estes and Flatiron Substations
Double-circuit Estes-Flatiron Transmission Line route

Blue Line: New double-circuit transmission line
Black Line: Old transmission lines to be removed
Construction Plan

• Anticipated start of construction in fall 2021 and completion in summer 2023.

• Construction of the project is divided into four segments.
  • Three will require six months to construct each.
  • Fourth will take less than a week – overhead stringing of fiber

• All system conditions will be continuously evaluated throughout the project.
  • Working closely with Bureau of Reclamation on water and generation schedules
  • WAPA will notify PRPA and Town of Estes Park prior to the start of construction of each segment.
Construction Plan
Maintaining reliable service during construction

• Goal – Town of Estes Park is not expected to experience power outages during construction.
  • Town of Estes Park will be served by two power sources at all times except for two 12-hour windows where there will be a single source of power.
  • Backup plan developed between WAPA, Bureau of Reclamation and PRPA to use Lake Estes generation, if necessary.
Vegetation Management in Town of Estes Park

• **Estes-Pole Hill 115-kV line** treated Fall/Winter 2019.
  • ROW varies from 75-130 ft.
  • Treated to minimum target clearance (conductor to veg) of 21 ft as per WAPA Order 450.3C.

• **Estes-Flatiron 115-kV line** treated Fall/Winter 2019 and summer 2020 (higher elevation).
  • ROW varies 20-75 ft.
  • Treated to minimum target clearance of 21 ft.

Where we want to be: Hayden-Gore Pass 230-kV line protected from Muddy Slide Fire.
Contact Info

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Project webpage: https://go.usa.gov/x6hVm

- Or visit https://www.WAPA.gov; there is a link to the project webpage on our homepage.