Welcome!

Estes-to-Flatiron Transmission Lines Rebuild
Drop-in Learning Sessions

(Drop In anytime from 12 pm to 7 pm)

September 23, 2014
Estes Park Museum
200 Fourth Street
Estes Park, CO

September 24, 2014
Bison Visitor Center
1800 S. County Road 31
Loveland, CO
EIS PROCESS

Notice of Intent to Prepare an EIS

Public Scoping
April 17 - August 31, 2012

Alternatives Development

Draft EIS and Drop-In Learning Sessions

45-Day Comment Period & Public Hearings

Final EIS and NOA

Forest Service Objection/Resolution Period

Records of Decision

Opportunities for Public Input

WE ARE HERE
HOW TO PARTICIPATE

At this meeting:

1. Learn about the proposed alternatives;
2. Review the highlights of the DEIS; and
3. Learn about the DEIS public comment period.

After this meeting

Send comments to:

Mark Wieringa
Western Area Power Administration, A7400
P.O. Box 281213
Lakewood, CO  80228-8213
RMR_EstesFlatironeis@wapa.gov

Attend the Public Open Houses and Public hearings:

October 29th: Rialto Theater, Loveland

October 30th: Estes Park Conference Center
Western is providing an expanded public involvement process for the Estes to Flatiron Transmission Lines Rebuild, as detailed below.

**Public Scoping**
- Stakeholder Interviews
- Public Scoping Meetings: August 6/7, 2012
- End of Scoping Period: August 31, 2012

**Alternatives Screening**
- Field Visits
- Small Group Workshops September 2012

**Public Draft EIS**
- Draft EIS
- Open Houses + Public Hearings

**Final EIS and Records of Decision (ROD)**
- Final EIS
- Forest Service Objection Period

Introduce and describe the proposed project

Describe project schedule, key milestones and opportunities for public involvement

Identify issues for analysis in the EIS

Receive public comment on potential options and alternatives screening criteria

Receive public comment on the Draft EIS

Provide a forum for questions about the findings of the Draft EIS

Publish Final EIS incorporating comments received on the Draft EIS

Publish RODs
Western proposes to rebuild two existing H-frame wood-pole 115-kV transmission lines, totaling about 32 miles long, between Flatiron Reservoir and Estes Park. These lines are over 60 years old.

The Alternatives A-C of the proposed project would rebuild aging and deteriorating transmission lines, and reduce the linear miles of transmission line by half. Western’s proposal includes:

- Approximately 16 miles of the existing transmission line would be removed.
- The transmission line would be rebuilt with steel monopole structures replacing the existing wood H-frame structures, in a double-circuit configuration (i.e., six conductors per structure).
- Utilizing existing ROW, if possible.
- Structure height would increase from 70 feet to up to 105 feet.
- ROW would need to be expanded to 110 feet in areas with inadequate ROW.
- Variants A2 and C1 include 2.7 miles of underground construction on the westemmost portion of the line.

Alternative D rebuilds the two existing transmission lines on separate ROWs. Changes include structure height increasing 5 to 10 feet, expansion of the ROWs as needed, and a reroute around Newell Lake Subdivision.
PURPOSE AND NEED

Through field observation and maintenance records, Western Area Power Administration has determined that the existing lines need to be upgraded and rebuilt.

Transmission systems in the United States are planned, operated and maintained to meet North American Electric Reliability Corporation (NERC) reliability standards and National Electrical Safety Code (NESC) requirements. These organizations establish reliability, safety and other standards for the bulk power system in the United States.

To fulfill its statutory mission and meet NERC and NESC standards, Western must ensure its facilities:

• meet current safety standards,
• are readily accessible for maintenance and emergencies,
• resistant to wildfire, and
• are cost effective for its customers.
Figure 1.2-1

Project Area

Estes-Flatiron Transmission Lines Rebuild Project

PROJECT MAP
• Be clear, concise and relevant

• Things to comment on: the proposed alternatives, the assessment of the environmental impacts, proposed mitigation.

• Solution oriented and provide specific examples

• Include facts (e.g. comparative impacts, issues of most concern, information on resource tradeoffs, information on the relative values attached to resources)

• Include supporting rationale that would aid in reaching a decision

• Reference the name of the Draft EIS and include your name, address, telephone number and organization represented (if applicable)

• NEPA isn’t a voting exercise -- don’t simply provide an expression of preference for one alternative versus another
Ways to submit your comments:

- Orally at the public open houses and hearings
- In writing at the drop-in meetings or public open houses
- E-mailed to:
  RMR_EstesFlatironEIS@wapa.gov
- Mailed to:
  Mark Wieringa
  Western Area Power Administration, A7400
  PO Box 281213
  Lakewood, CO 80228-8213

Public Open Houses and Hearing dates:
Loveland: October 29th  Estes Park: October 30th

Draft EIS comments must be postmarked or received by November 14th, 2014
PROPOSED ALTERNATIVES

Figure 2

Alternatives for Overhead Construction

Estes-Flatiron Transmission Lines Rebuild Project

Note: The alignment for Alternative D overlaps other alignments and is not visible for the entire length of the alternative in this map. The end-to-end alignment for Alternative D is shown on Figure 2-7.
PROPOSED ALTERNATIVES

Figure 2
Alternatives with Underground Construction (Variants A2 and C1)

Estes-Flatiron Transmission Lines Rebuild Project

Larimer County
Boulder County

Department of Interior
US Forest Service
State
County
Private Conserved Lands

Overhead Construction
Variant A2 (following existing ROW)
Variant C1 (following existing ROW)

Underground Construction
Variant A2 (off existing ROW)
Variant C1 (off existing ROW)

300-foot buffer
NCWCD

Study area
Substations
Roads
Pole Hill Substation

Variant A2
Variant C1

Park Hill Subdivision
Meadowdale Subdivision

Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
POLE STRUCTURES

115-kV Single Circuit Wood Pole H-Frame Structure
Alternative D and No Action

115-kV Double Circuit Single Pole Standard Steel Structure
Alternatives A, A1, A2, B, C, C1

115-kV Double Circuit Single Pole Standard Steel Short Structure
Alternatives A, A1, A2, B, C, C1
1. **Alternatives**
Alternatives considered and measures taken to minimize adverse effects

2. **Affected Environment**
Description of the existing environmental conditions for physical, biological, and human resources.

3. **Environmental Impacts**
Direct and indirect impacts of each alternative

4. **Cumulative Impacts**
Environmental impacts of the project when added to past, present, and reasonably foreseeable future actions.
Routing Considerations
Considerations include slope greater than 30%, sensitive viewsheds, parks and open space, and a 65 ft buffer around homes.
Routing Considerations

- Slope greater than 30%
- Sensitive viewsheds
- Parks and open space
- 65 ft buffer around homes

Considerations include slope greater than 30%, sensitive viewsheds, parks and open space, and a 65 ft buffer around homes.
### Segments Carried Forward for Analysis

<table>
<thead>
<tr>
<th>Map Reference</th>
<th>Issue Identified During Internal &amp; Public Scoping</th>
<th>How proposed alternative or re-route addresses the issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>The existing transmission line ROW limits future expansion of the Upper Thompson Sanitation District's treatment plant located on BOR land west of Mall Road.</td>
<td>Alternatives A &amp; D propose minor adjustments to the existing alignment of the North Line to avoid conflicts with Sanitation District facility expansion. Alternatives B &amp; C use the southern ROW, and therefore do not constrain facility expansion.</td>
</tr>
<tr>
<td>B</td>
<td>Strong public preference for siting the ROW for the rebuild in the valley between Mt Olympus and Mt Pisgah.</td>
<td>Alternatives A &amp; D follow the existing alignment of the North Line between Mt Olympus and Mt Pisgah. Variant A1 proposes a new alternate alignment to bring the line through the valley.</td>
</tr>
<tr>
<td>C</td>
<td>The valley between Mt Olympus and Mt Pisgah is highly visible from the Town of Estes. Crocker Ranch also prefers a southern route across their property.</td>
<td>Alternatives B &amp; C avoid the valley between Mt Olympus and Mt Pisgah by siting the ROW to the south.</td>
</tr>
<tr>
<td>D</td>
<td>Areas with steep slopes and no (or inadequate) access present challenges for construction and maintenance of the rebuilt line. Areas with steep slopes and poor access include: 1) North Line west of The Notch, 2) South Line, south of US 36, 3) South Line west of Pole Hill Substation.</td>
<td>Alternative C avoids these three sections of existing ROW that have steep slopes and poor access.</td>
</tr>
<tr>
<td>E</td>
<td>Visibility from US 36</td>
<td>Alternative C reduces visibility from US 36.</td>
</tr>
<tr>
<td>F</td>
<td>Meadowdale residents have strong preference for siting the ROW for the rebuild to the north and/or west of the Meadowdale subdivision.</td>
<td>Alternative A and Variant A1 do not use existing ROW through Meadowdale Subdivision.</td>
</tr>
<tr>
<td>G</td>
<td>Public comments requested that the transmission line be constructed underground on both the Estes Park and Pinewood Lake ends of the project to reduce effects to recreational and residential viewsheds, and visibility from US 36.</td>
<td>Variants A2 and C1 propose to construct the western end of Alternatives A &amp; C underground. The Alternative A reroute around Newell Lake Subdivision addressed this issue without the added expense of underground construction. Therefore, an underground option is not carried on the east end of the project area.</td>
</tr>
<tr>
<td>H</td>
<td>Reduce effects to recreational and residential viewsheds at Pinewood Lake (viewshed is to the south).</td>
<td>Alternative A avoids impacts to recreational and residential viewsheds at Pinewood Lake by rerouting the line to the north and east of Newell Lake View Subdivision. Alternatives C &amp; D reduce effects on recreational and residential viewsheds by siting the line to follow Pole Hill Rd on the east side of Pinewood Lake.</td>
</tr>
<tr>
<td>I</td>
<td>There is inadequate existing ROW through Newell Lake View Subdivision; expansion of existing ROW would require the removal of homes.</td>
<td>All alternatives avoid conflicts with homes in the Newell Lake View Subdivision.</td>
</tr>
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### Segments Dismissed from Detailed Analysis

<table>
<thead>
<tr>
<th>Map Reference</th>
<th>Reason for Dismissal</th>
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<tbody>
<tr>
<td>J</td>
<td>Reroute west of Meadowdale Subdivision, on the east slope of Mount Pisgah. This proposed route crossed steep slopes without any existing access roads, and would be difficult and costly to construct. Road construction across this topography would require excessive cut and fill.</td>
</tr>
<tr>
<td>K</td>
<td>Reroute to the south side of the northern alignment to avoid an area with steep slopes and poor access west of The Notch. This route follows a riparian corridor and is not suitable for siting the transmission line.</td>
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<tr>
<td>L</td>
<td>Reroutes far to the south of the southern alignment were suggested during workshops to reduce effects to recreational and residential viewsheds at Pinewood Lake. These reroutes were dismissed because they crossed protected lands, and did not fully address the issue. To more effectively respond to concerns regarding viewshed effects, a reroute to the north and east of Newell Lake View Subdivision (Alternative A) is proposed.</td>
</tr>
<tr>
<td>M</td>
<td>Reroute along Cottonwood Creek. This reroute would extend from the vicinity of Flatiron Reservoir and follow an alignment to the northwest generally along Cottonwood Creek, rejoining the ROW of the existing North line near Pinewood Lake Dam. This alternative would require several miles of construction through steep terrain with poor access. It was dropped in favor of other alternatives, specifically Alternatives A, C, and D that accomplish an avoidance of the Pinewood Lake viewed and adjacent subdivisions in a more direct and effective manner.</td>
</tr>
<tr>
<td>N</td>
<td>A reroute that followed a gas pipeline between the northern and southern alignment on the east end of the project area was dismissed. The reroute was suggested as a means to collocate linear infrastructure. However, the reroute fails to effectively address other scoping issues raised, and for that reason was dismissed from further consideration.</td>
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