



Energy Center Substation to Big Sandy Substation

| Category Ranks | Alternative - Segments | | | | | | |
|----------------------------|--------------------------|--------------------------|----------------------|------------------------------|------------------------------|--------------------------|--------------------------|
| | 46 - F1, F2, F6, F8, F11 | 47 - F1, F2, F7, F9, F11 | 48 - F1, F2, F7, F10 | 49 - F1, F3, F4, F6, F8, F11 | 50 - F1, F3, F4, F7, F9, F11 | 51 - F1, F3, F4, F7, F10 | 52 - F1, F3, F5, F8, F11 |
| Engineering | 6 | 3 | 1 | 7 | 4 | 1 | 5 |
| Geology and Soils | 6 | 1 | 2 | 5 | 3 | 4 | 7 |
| Water Resources | 1 | 2 | 2 | 2 | 5 | 5 | 5 |
| Vegetation | 1 | 1 | 1 | 4 | 4 | 4 | 4 |
| Wildlife | 1 | 3 | 2 | 4 | 7 | 4 | 4 |
| Land Use | 4 | 6 | 7 | 2 | 1 | 4 | 3 |
| Cultural Resources | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Category Rank Total | 20 | 17 | 16 | 25 | 25 | 23 | 29 |
| Alternative Rank | 3 | 2 | 1 | 5 | 5 | 4 | 7 |

Proposed, alternative, and other routes are subject to change.

Description & Results

The Energy Center Substation to Big Sandy Substation transmission line would be approximately 116 miles in length. The transmission line would begin at the new Energy Center Substation near Hartman, Colorado, cross U.S. Highway 287 near the town of Kit Carson, Colorado, and end at the existing Big Sandy Substation near Limon, Colorado.

Route refinement realigned segment F2 to avoid effects to homes.

Alternative 51 was identified as the proposed route because it would not be visible from the Sand Creek Massacre Site, would avoid many areas of sandy soils, and would affect fewer homes in the Limon area.

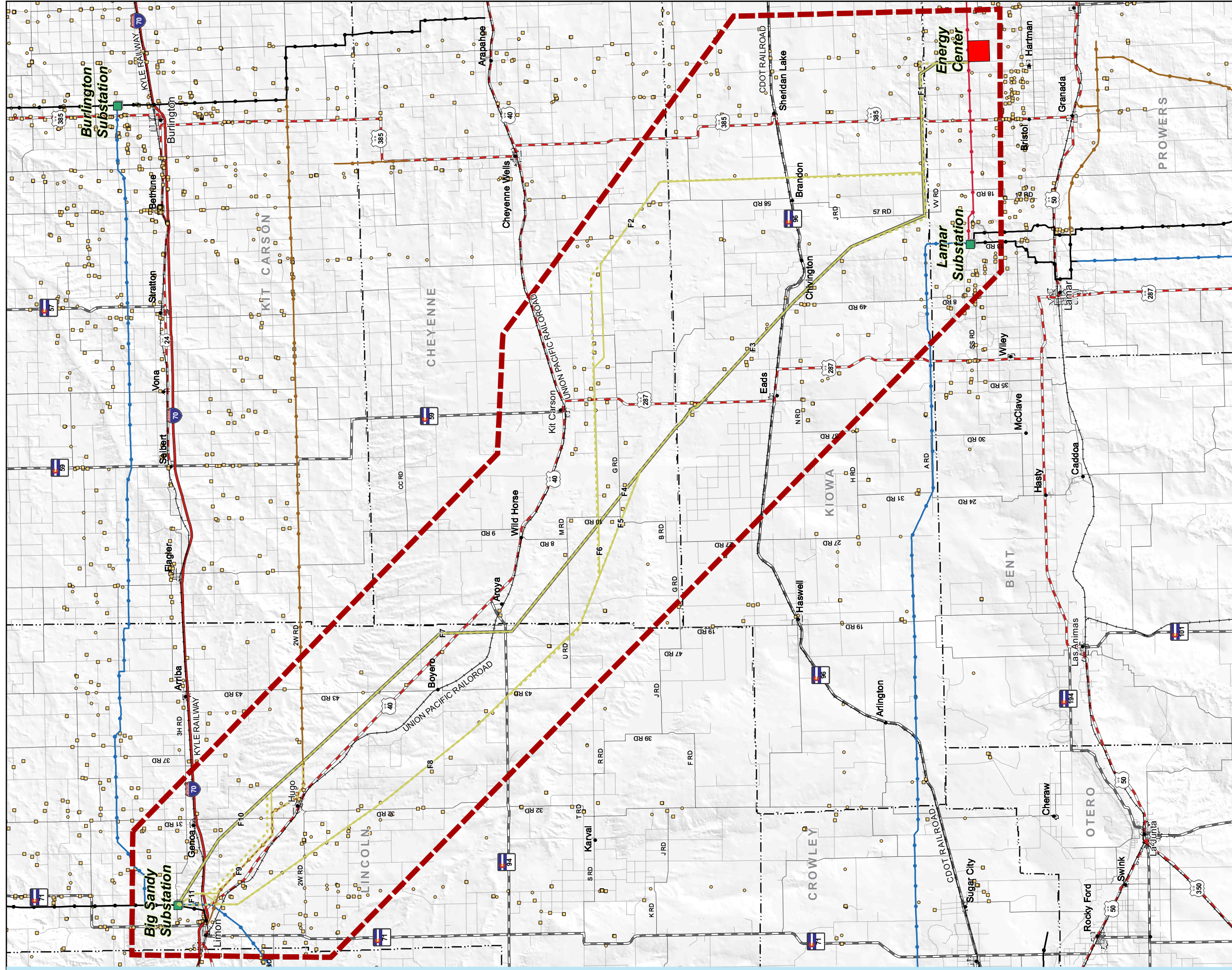
The alternative routes (46, 47, and 48) were chosen because they had generally fewer effects to natural resources.

Siting Considerations

The proposed and alternative routes respond to scoping comments and additional ground and aerial surveillance. Several of the routes between substations were re-labeled for the sake of organization and consistency. The segments between Energy Center Substation and Big Sandy Substation were re-labeled from “G” to “F”.

Route-specific comments from scoping included the following:

- Avoid G7 (passes by homes and presumed health concern)
- Prefer G8 and G9 (soil less sandy and more stable)
- Prefer lines routed as far SE as possible
- Avoid G7 north of Colorado Highway 94 (very sandy)
- Prefers to extend G8 and stay north of Wildhorse (harder soils) rather than use G4, G5, or G6



Base Map

Energy Center to Big Sandy

Legend

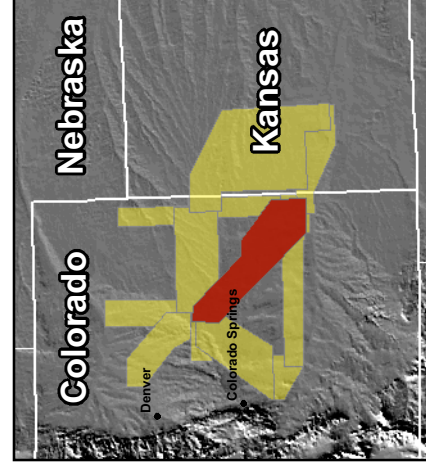
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|----------------------------|----------------------------|
| Substations | Transportation |
| Existing Substation | Interstate Highway |
| Proposed Substation | State Highway |
| Siting Area | U.S. Highway |
| Analysis Area | Minor Road |
| Energy Center to Big Sandy | Major Road |
| Other Structure | Railroad |
| Residence | Structures |
| Other Structure | Energy Center to Big Sandy |
| Other Structure | Other Structure |

Existing Transmission Lines

- 115 kV Transmission Line
- 230 kV Transmission Line
- 345 kV Transmission Line
- 69 kV Transmission Line

Routes

- Proposed (500-kV)
- Alternative (500-kV)
- Previous (500-kV)



1:280,000 When printed at 22 x 34 inches



Source Data:
 ESRI (Cities), BTS (Highways, Airports),
 National Atlas (States, Counties),
 CDOT (CO Rail, Roads, Counties, City Boundaries),
 Tri-State and Xcel (Existing Transmission)

Last Revised:
 01/24/07
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Eastern Plains Transmission Project