

Comparison of Alternatives

This section provides a summary of the effects of implementing each alternative. Information in the table is focused on activities and effects where different levels of effects or outputs can be distinguished quantitatively or qualitatively among alternatives.

Table 6. Alternative comparison of effects

| | Alternative | | | | Option |
|--|-------------|---|---|---|--|
| | A | B | C | D | |
| Significant Issues | | | | | |
| Environmental Effects of a New Utility Corridor | | | | | |
| Miles of proposed transmission line construction in new corridor | 0 | 6.8 | 0 | 11.0 | 7.5 (but is within highway corridor) |
| Miles of proposed transmission line in existing corridor | 0 | 2.8 | 15.6 | 1.5 | 0 |
| Total miles | 15.6 | 9.6 | 15.6 | 12.5 | 7.5 |
| Estimated disturbed acres, including substation and temporary use areas (not including existing roads) | None | 22.3 | 33.5 | 39.7 (Includes removal of 5 miles of existing 25 kV line and poles) | Area within highway right-of-way is already disturbed |
| Impacts on Scenic Values | | | | | |
| Summary of visual effects | No Change | The primary effect would be on an area that is a relatively open, uninterrupted expanse. Only a mile or two | This corridor would be the most visible to the most people throughout the majority of its length—by | This alternative is the least visually intrusive. The eastern portion would be located in a broad | A smaller line, but would be visible for 7.5 miles along the edge of the highway right-of-way. |

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| | | of line would be visible from most locations within the area due to the slightly rolling landscape including from U.S. 285. The entire line would be visible from high points such as Black Mesa, Mesa Vibora and Cerro Azul. | both residents from the Carson area and traveling visitors along U.S. 285. | depression and would only be visible to visitors in the immediate area. The western portion would be mostly out of sight from U.S. 285. It would be visible near the boundary of BLM and FS at which all the action alternatives would be equally or similarly visible. Five miles of existing 25 kV line would be removed from along U.S. 285, thus improving visual quality along this section. | Slightly mitigated by being on the west side, with the major viewshed to the east. |
| Acres where scenic integrity would be reduced | No change | 1,490 From Partial Retention to Modification | 0 | 1,055 From Partial Retention Modification | 2,486 From Partial Retention to Modification |
| Acres where scenic integrity would be upgraded | No change | 0 | 0 | 1,619 From Modification to Retention | 0 |
| Effects on scenic quality in the Carson | No change | No effect | Very visible along NM 567 for | No effect | No effect |

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| community | | | about 6 miles. | | |
| Miles along U.S. 285 and NM 567 in which transmission line would be visible | 8.1 along U.S. 285 6 along NM 567 | 3.6 along U.S. 285 | 8.1 along U.S. 285 6 along NM 567 | 3.7 along U.S. 285 | 7.5 along U.S. 285 |
| Miles of distribution line eliminated | 0 | 0 | 0 | 5 | 0 |
| Consistency with Carson National Forest Visual Quality Objectives and Recreation Opportunity Spectrum | No change | Does not go below 1 level | No change | Does not go below 1 level | Does not go below 1 level |
| Tres Piedras Connection | | | | | |
| Whether the area along U.S. 285 south of Tres Piedras has access to the electrical grid serviced by KCEC | No change | No change | No change | No change | Power would become available |
| Whether the Tres Piedras area has a backup loop designed into their electrical system | No | No | No | No | Yes |
| Other Environmental Impacts | | | | | |
| Need for Proposed Action (Economics) | | | | | |

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| Project reliability | No | Yes | Yes | Yes | NA |
| Long-term needs | No | Yes | Yes | Yes | Yes |
| Project costs/maintenance | \$8,300 | \$2,500,100/ \$5,150 | \$3,161,400/ \$8,300 | \$2,825,400/ \$6,700 | \$163,500/ \$1,900 |
| Estimated annual line loss | \$27,575 | \$8,380 | \$13,500 | \$10,900 | \$2,600 |
| Soils and Water | | | | | |
| Effects on soils and potential for erosion | No change | Minimal | Minimal | Minimal | Minimal |
| Effects on water quality | Insignificant | Insignificant | Insignificant | Insignificant | Insignificant |
| Vegetation | | | | | |
| Acres of vegetation affected | No change | 17.5 | 28.1 | 22.5 10.8 (line removal) | No change |
| Wildlife | | | | | |
| Effects on wildlife (especially potential raptor electrocution) | Low - area is outside raptor concentration areas, but not fully mitigated. | No effect in new construction areas/fully mitigated |
| T&E species and associated habitats | No effect | No effect | No effect | No effect | No effect |
| Effects on Forest Service plant and animal "sensitive species" | No effect | No effect | No effect | No effect | No effect |
| Public Health and Safety | | | | | |

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| | A | B | C | D | |
| Potential for electromagnetic field effects on human health | Slight (no change) | None | Slight | None | None |
| Increased potential for wildland fire caused by power line | No change (Minimal) | Minimal | Minimal | Minimal | Minimal |
| Roads | | | | | |
| Potential for increased access to areas not currently accessible by motor vehicle | No change | Approximately 2 miles of two-track | No change | Approximately 2 miles of two-track | No change |
| Effects of increased access | None | Increased recreational access. Temporary habitat disturbance. Vegetation removal and soil compaction and/or erosion. | None | Increased recreational access. Temporary habitat disturbance. Vegetation removal and soil compaction and/or erosion. | None |

