

**Finding Of No Significant Impact (FONSI)  
for the  
Rebuild of Xcel Energy Transmission Lines in the San Luis Valley**

**DOI-BLM-CO-300-2013-0006 EA**

Based on review of the EA and the supporting documents, I have determined that the project is not a major federal action and will not have a significant effect on the quality of the human environment, individually or cumulatively with other actions in the general area. The environmental effects from the proposed action alternative do not meet the definition of significance in context or intensity, as defined by 43 CFR 1508.27. Therefore, an Environmental Impact Statement is not required. This finding is based on the context and intensity of the project as described below:

**RATIONALE:**

**Context:** The proposed action, authorizing Xcel Energy to rebuild three existing transmission lines in the San Luis Valley, has been selected as BLM's preferred alternative. Under the Proposed Action, the BLM would authorize an amendment to the Right-of-Way (ROW) Grants to Xcel Energy for the rebuild of three existing transmission lines, in accordance with the Federal Land Policy and Management Act (FLPMA). The rebuilt transmission lines cross public lands administered by the BLM and owned by the Forest Service. The proposed project passes through Chaffee, Saguache, Alamosa, and Rio Grande Counties, Colorado, and the BLM-administered lands and Forest Service-owned lands are in the northern portion of the project area, in Chaffee and Saguache Counties.

The rebuilt transmission lines would consist of overhead wires supported by wooden pole structures. The construction process would consist of improving access where needed, installing the new structures and dismantling the existing lines. The transmission lines to be rebuilt include:

1. Transmission Line 9811, a 115-kilovolt (kV) line that runs 72.2 miles from the Poncha Springs Substation to the San Luis Valley Substation. Transmission Line 9811 has a permanent ROW width of 100 feet and provides a source of power for communities in Chaffee, Saguache, Alamosa, and Rio Grande counties.
2. Transmission Line 6905, a 69-kV line that runs 64.0 miles from the Poncha Springs Substation to the Mosca Substation. Transmission Line 6905 has a permanent ROW width of 75 feet and provides a source of power for communities in Chaffee, Saguache, and Alamosa counties.
3. Transmission Line 6920, a 69-kV line that runs 7.7 miles from the Villa Grove Substation to the Kerber Creek Substation. Transmission Line 6920 has a permanent ROW width of 30 feet and provides the only source of power into the Kerber Creek Substation, which feeds adjacent Saguache County communities, including Bonanza.

These transmission lines were originally constructed in the 1940s and 1950s and they are approaching the end of their serviceable lives. The transmission lines would be rebuilt within the same or similar alignment as the existing lines. Transmission Line 9811 would maintain its existing voltage rating, while Transmission Lines 6905 and 6920 would be upgraded to 115-kV lines.

The goal of this project is to meet current and known future electrical power demands for the San Luis Valley. As a result, the project is of local and regional significance.

**Intensity:**

I have considered the potential intensity/severity of the impacts anticipated from authorizing the Rebuild of Xcel Energy Transmission Lines Project decision relative to each of the ten areas suggested for consideration by the CEQ. With regard to each:

**Impacts that may be beneficial and adverse:**

Impacts of the proposed project on soils, wastes, Native American concerns, socioeconomics, environmental justice, farmlands, land realty, and range management would be negligible.

Minor, short-term, adverse impacts from construction activities , including ground disturbing activities to remove and replace transmission line poles; establishing a construction staging area; upgrading construction access areas and existing drainage crossings; and, the use of heavy construction equipment, could occur to water resources, air quality, wetlands, wildlife, migratory birds, visual resources, noise, and transportation and access. Negligible long-term impacts to these resources would occur from the proposed action.

Clearing activities associated with the proposed project would remove vegetation within the ROW at a width of up to 12 feet, while grading activities would remove vegetation within the ROW at a width of up to 24 feet. A total of 64.63 acres of land within the existing ROWs would be cleared, while an additional 32.70 acres of land within the existing ROWs would be graded, across all land ownership. Clearing could impact approximately 16.7 acres of wetlands during construction activities; however, no wetlands would be graded or permanently filled.

Disturbance outside of the ROWs would include establishing a laydown yard on 0.7 acres and upgrading access roads on a total of 0.3 acres. On BLM-administered lands, approximately 20.5 acres of vegetation would be compacted, 13.3 acres of vegetation would be cleared, and 10.0 acres graded resulting in minor, short-term disturbance to vegetation during construction.

Best Management Practices would be implemented to reduce impacts to all resources, including vegetation and wetlands. New surface disturbance would be limited to the greatest practicable extent. A majority of the proposed project would occur within previously disturbed ROW corridors, which are impacted by ongoing line maintenance and inspection activities. Any graded areas would be restored to pre-construction

contours. Upon completion of construction, disturbances in areas that currently have vegetation would be reseeded with native vegetation as appropriate.

The rebuilt transmission lines would be constructed in accordance with recommendations and standards outlined in the Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* and *Mitigating Bird Collisions with Power Lines: The State of the Art in 1994*. The new lines would not pose an electrocution risk to birds and would be marked as appropriate to prevent avian collision incidents.

Transmission Lines 6905 and 9811 occur within portions of occupied habitat for the Poncha Pass unit of Gunnison sage-grouse. As documented in the Biological Assessment (BA), the proposed project may affect, but is not likely to adversely affect the Gunnison sage-grouse. These impacts are discussed in more detail in the threatened and endangered species subsection, below.

Once rebuilt, Transmission Line 9811 would have a negligible impact to visual resources. The change to structure height would not be noticeable. However, structure installation on Transmission Lines 6905 and 6920 lines would have a minor adverse impact. The new structures may be more noticeable to casual observers than the current structures, but would not draw attention or dominate views.

**Public health and safety:**

No new or additional fire or law enforcement resources would be needed to support the proposed project. A concern regarding exposure to electric and magnetic fields (EMF) from the transmission lines was noted during scoping. Power-frequency EMF (that is, EMF emitted from the Xcel transmission lines) is extremely low frequency at 60 hertz, which carries very little energy, has no ionizing effects, and usually has no thermal effects (NIEHS 2002). Transmission Line 9811 has one occupied structure within the ROW; Transmission Line 6905 has seven occupied structures within the ROW; and, Transmission Line 6920 as one occupied structure within the proposed wider ROW. The estimated EMF strength at the centerline of a 115-kV line is 30 milligauss (mG) and diminishes to 6.5 mG at the edge of a standard ROW and continues to rapidly diminish beyond the respective ROWs (NIH 2002).

There are currently no federal or state guidelines or regulations pertaining to the exposure of EMF and transmission lines. However, the International Radiation Protection Association and World Health Organization recommend exposure limits of up to 830 mG for magnetic fields. As a point of reference, the magnetic field produced by household appliances can range from 750 mG for a microwave to 60 mG for a hair dryer measured at a distance of 1.2 feet from the source (SDGE undated). The consensus of scientific panels reviewing research into long-term exposure to EMF fields is that the evidence does not support a cause and effect relationship between EMF and any adverse health outcomes (National Research Council 1997, NIH 2002 and WHO 2007). Adverse health effects to workers and members of the general public from exposure to EMF are not anticipated as a result of upgrading Transmission Lines 6905 and 6920 from 69 kV to

115 kV or operating the three rebuilt lines in perpetuity. Overall impacts of EMF to public and environmental health from the proposed project are considered negligible.

**Unique characteristics of the geographic area:**

There are no unique geologic features, minerals, or oil and gas resources in the project area that would be impacted by the proposed project. Likewise, no wild or scenic rivers exist within or directly adjacent to the ROWs. No designated wilderness, Wilderness Study Areas, or Areas of Critical Environmental Concern occur in or near the project area. No areas with wilderness characteristics are found in or near the project area. Construction along the transmission lines has the potential to temporarily impact prime farmlands during the construction period; however, no long-term conversion of prime farmland would result.

**Degree to which effects are likely to be highly controversial:**

During the scoping and Draft EIS review periods, several commenters noted deep concern about the impacts the proposed project will have on the Poncha Pass population of Gunnison sage-grouse. BLM analyzed in full an alternative to the proposed action which involved burying the transmission lines throughout occupied sage-grouse habitat. BLM determined that burying the transmission lines would result in greater short-term impacts to occupied Gunnison sage-grouse habitat than from the proposed project, which did not justify the recommendation of that alternative.

BLM has completed formal consultation with the U.S. Fish and Wildlife Service (USFWS) in regards to the potential impacts of the proposed project on the Gunnison sage-grouse. The USFWS concurred that the proposed project may affect, but is not likely to adversely affect, the Gunnison sage-grouse, and, no effect on critical habitat for the species would occur. Additionally, BLM has incorporated all best management practices and mitigation measures recommended by the USFWS and Colorado Parks and Wildlife for minimizing impacts to the Gunnison sage-grouse into the proposed action.

**Degree to which effects are highly uncertain or involve unique or unknown risks:**

Effects from the proposed project are not considered highly uncertain, nor do they involve unknown risks.

**Consideration of whether the action may establish a precedent for future actions with significant impacts:**

This decision is like one of many that have previously been made and will continue to be made by BLM responsible officials establishing or amending ROW Grants on public lands, in accordance with the FLPMA. The decision is within the scope of the Resource Management Plan and is not expected to establish a precedent for future actions. The decision does not represent a decision in principle about a future consideration.

**Consideration of whether the action is related to other actions with cumulatively significant impacts:**

The proposed project would contribute minor, short-term impacts to cumulative impacts in the region such as soil disturbance and soil loss due to wind erosion and soil compaction; air quality degradation; and, vegetation clearing and habitat fragmentation.

Long term impacts would generally be considered to be cumulatively incremental and negligible, with the exception of long-term impacts to migratory birds and habitat fragmentation, which would be minor and adverse from the continued presence of the transmission lines.

**Scientific, cultural or historical resources, including those listed in or eligible for listing in the National Register of Historic Places:**

37 resources eligible for inclusion on the National Register of Historic Places (NRHP) could be affected by the proposed project due to their location near or within the respective ROWs, including three sites identified in database record searches, 10 sites identified in historic document and map review, and 22 identified in field inventory. Impacts to most of these properties would be avoided by managing construction activities outside of cultural resource boundaries.

A Class III cultural resources inventory report for the Proposed Action has been reviewed by the State Historic Preservation Officer (SHPO). The SHPO concurred with BLM's determination that impacts of two historic properties cannot be avoided due to the inherent nature of the Proposed Action: Transmission Lines 6905 and 9811. The proposed project would involve the rebuild of these lines by replacing their components with new materials. As mitigation for the impacts to these lines, a historic context report for electrification in the San Luis Valley has been drafted, *Lights in the Valley: Electrification of the San Luis Valley, Colorado*, and is currently under review by the State Historic Preservation Officer (SHPO), as specified in a Memorandum of Understanding between BLM, SHPO, and other parties. The historic context discusses electrification of the San Luis Valley and considers early generation and use of electricity in the valley; historical factors influencing electrification; the development of electric generation and transmission facilities throughout the valley; and the influence of these facilities on settlement, economic, and other patterns. The historic context also defines property types associated with electrical systems in the valley and present guidelines for identifying and evaluating these property types for the NRHP.

**Threatened and endangered species and their critical habitat:**

Four Federally-listed species occur or have suitable habitat in the project area: the endangered southwestern willow flycatcher (*Empidonax trailii extimus*), the threatened Canada lynx (*Lynx canadensis*); the threatened Mexican spotted owl; and, the threatened Gunnison Sage-grouse (GuSG) (*Centrocercus minimus*). Under Section 7 of the Endangered Species Act, a Biological Assessment (BA) was prepared for the proposed project, for review by the USFWS to analyze the potential effects to these species. The BA determined that for all four listed species, the proposed project may affect, but is not likely to adversely affect, the species, and, no effect on critical habitat for any species would occur. On September 17, 2015, the USFWS concurred with the findings of the BA.

Specific to potential impacts to the local GuSG population, short-term impacts would occur to the population as a result of noise and clearing associated with construction activities. Approximately 21 acres of moderate-quality GuSG suitable vegetation would be removed within GuSG occupied habitat and another 4 acres of vegetation would be compacted (a combined 0.09% of the total GuSG-occupied habitat within the Poncha Pass area).

Long-term impacts to the population following vegetation stabilization would be expected to be beneficial and minor relative to existing conditions, as the transmission line structures would be spaced further apart and raptor perch deterrents would be located on the structures within occupied GuSG habitat. Specifically, under the proposed action, the structures within occupied GuSG habitat would be reduced from 71 to 62 on Transmission Line 9811 and from 143 to 59 on Transmission Line 6905. Line marking would also be added to reduce the risk of avian collisions.

Construction activities would not occur within GuSG-occupied habitat between March 1 and July 15. A helicopter would not be used for pole replacement within occupied habitat, and adverse effects to non-breeding GuSG from noise and human presence during installation of the rebuilt transmission lines would be limited to a narrow area along and near each line where human presence and relatively high noise levels already exist due to the presence of U.S. Highway 285. Perch deterrents and line markers would be installed on the rebuilt transmission lines to minimize the potential indirect adverse effects of predation and collision to the very small population of GuSG in the area, and a corvid nest removal and monitoring plan would be implemented to ensure that corvids do not nest on the transmission lines.

**Any effects that threaten a violation of Federal, State or local law or requirements imposed for the protection of the environment:**

The proposed action conforms with the provisions of NEPA (U.S.C. 4321-4346) and FLPMA (43 U.S.C. 1701 et seq.) and is compliant with the Clean Water Act and The Clean Air Act, the National Historic Preservation Act, Migratory Bird Treaty Act (MBTA) and the Endangered Species Act.

NAME OF PREPARER: Leon Montoya

SUPERVISORY REVIEW: Paul Tigan

NAME OF ENVIRONMENTAL COORDINATOR: Martin Weimer

DATE: 9/28/2015

SIGNATURE OF AUTHORIZED OFFICIAL:



Paul Tigan, Acting Field Office Manager

DATE SIGNED: 9/28/15

APPENDICES:

ATTACHMENTS:

