
DECISION MEMO

Pleasant Grove 138kV Conversion Project

**USDA Forest Service
Uinta National Forest
Pleasant Grove Ranger District
Utah and Wasatch Counties, Utah**

1. INTRODUCTION

Rocky Mountain Power (RMP) is proposing to build about 0.5 mile of new single-circuit 138 kilovolt (kV) transmission line on the Uinta National Forest. The proposed line with its proposed four new wood-pole structures and replacement of one power pole would be located north of the mouth of Grove Creek Canyon east of Pleasant Grove, Utah, and would be adjacent to an existing double wood-pole 138kV transmission line. The completed transmission line would provide the additional infrastructure necessary to support the growing electrical demand in northern Utah County and southern Salt Lake County.

The project is located within Sections 16 and 22, Township 5 South, Range 2 East, S.L.B.M., at the eastern edge of Pleasant Grove City.

2. PROPOSED ACTION

The proposed action would include the following:

- About 0.5 mile of new single-circuit 138kV line on the UNF in Township 5 South, Range 2 East, Sections 16 and 22. The proposed lines and its four double- or single-pole wood structures and the replacement of one existing power pole would parallel an existing 138kV line east of the Pleasant Grove water tank for about 0.2 mile before turning to the northwest of about 0.3 mile and leaving the UNF. The four new structures would include two wood H-frame structures and two wood single-pole structures about 60 to 70 feet tall. Some structures would require guy wires. The guy wires would be located in previously disturbed areas where possible. Additionally, RMP would relocate one existing wood structure near a small spring collection pond on UNF land as requested by the Forest Service during a field review of the project. A fiber optic wire would be installed as a static wire on top of the structures.
- Physical ground disturbance would affect less than 0.5 acre (digging holes for new poles and guy wires, pulling site for stringing conductor, overland access to poles from existing dirt roads). The proposed required right-of-way would be 95 feet in width due to potential swing of the conductors in high winds and would be in compliance with National Electric Safety Code and RMP design standards.
- Construction operations would minimize disturbance to vegetation and soil resources by using existing access roads. Access to the power poles for future maintenance would be identified. Construction for the proposed project is anticipated to occur over 3 months in early summer 2007.

Equipment used in the construction of the new line may include 4WD trucks, boom/bucket trucks, excavator, or other vehicles, such as cranes.

3. PURPOSE AND NEED

Salt Lake and Utah counties have been experiencing rapid population growth. This rapid population growth has created an increased demand for electricity. For example, RMP has projected that collectively the cities of American Fork, Cedar Hills, Highland, and Pleasant Grove will increase their electrical use from 94 megawatts in 2003 to 175 megawatts in 2007. Currently, the existing 46kV subtransmission line that serves these communities in Utah County has more demand than can be reliably served with the current facilities.

The upgrade of the 46kV subtransmission line to a 138kV transmission line would provide additional transmission capacity needed to serve the rapidly growing electrical demand. Moving this line to the other 138kV line or rebuilding the line to accommodate both lines was evaluated but determined a non-viable option. Issues that arose with this option included clearance near homes during construction and using the same poles for multiple lines under existing homes creates safety problems.

Additionally, the Manila and American Fork substations (which serve the cities of American Fork, Cedar Hills, Highland, and Pleasant Grove) are currently served by 138kV radial feed circuits (only one source of power). If a radial feed circuit fails or is taken out of service for maintenance, the communities of American Fork, Pleasant Grove, and Cedar Hills would have limited electrical capacity given that there is no secondary 138kV power source to those substations.

Construction of this project would provide the necessary additional voltage support by converting from 46kV to 138kV and would provide improved system interconnection (loop system feed between substations) to reliably serve the existing and future local power loads.

4. SCOPING AND PUBLIC INVOLVEMENT

The Pleasant Grove Ranger District initiated scoping for this proposal by issuing a scoping letter in December 2006 which was sent to about 100 known interested parties. A request for comments was published in the *Provo Daily Herald* on February 10, 2007. The proposed project was also listed in the Uinta National Forest's "Schedule of Proposed Actions," winter edition. In response to these solicitations, the Forest received four comments. The project also was internally scoped. Based upon internal and external scoping, the following issues were identified:

The need for temporary and/or long-term road construction, along with the location, needs to be clarified.

The proposed project uses existing access roads. No new temporary or permanent access roads need to be constructed for the project. The locations of the existing access roads have been identified and mapped by Rocky Mountain Power and the Uinta National Forest, and will be stipulated in the Special Use Permit.

The proposed facility may pose a potentially significant change to Wildland Urban Interface (WUI) related issues in the area. The risks of fire to the facility proposed, as well as the risk of the proposed facility causing fire ignitions, must be addressed.

The fuels surrounding the project area, shrubs and grasses, are characterized by rapid rates of spread and combustion rates. A fire in these fuel types may damage the wooden power poles, but it would not burn with enough intensity to consume a significant portion of the pole. It is unlikely that a wildland fire would result in a downed power line or cause extensive damage to the facility. An existing access road along the power lines would aid in firefighting efforts, and the power supply may be temporarily shut off to provide for firefighter and public safety.

There is no significant risk of the 138kV line causing fire ignitions. Should lightning strike the transmission line, the structures are designed to ground the strike in a safe and immediate manner. There are no transformers or other equipment on the line that can fail and cause ignition.

Is the project consistent with the 2003 Forest Plan standards, guidelines or other management direction? If not, the proposal should be denied, or the Forest Plan may need to be amended concurrent with the analysis and approval of this facility.

The proposed project is consistent with the 2003 Forest Plan standards, guidelines and other management direction, as noted in Section 5 and 8 of this Decision Memo.

This project involves the long-term irreversible and irretrievable commitment of soil, plant and wildlife resources. This would seem to necessitate preparation of an EA or EIS.

The project will involve less than ¼ acre. The location of the proposed project is in a heavily impacted and disturbed area including the Salt Lake Aqueduct, Pleasant Grove water tank, existing 138kV line, and numerous user trails and roads. The project will not result in a significant long-term irreversible and irretrievable commitment of resources or constitute a significant impact to the natural and human environment.

Have alternate off-Forest locations been completely explored.

Several alternative options, including rebuilding the existing 46kV line in-place through the Mahogany Ridge subdivision (off National Forest System lands), locating the line along the Murdock Canal (off National Forest System lands), or consolidating the existing and proposed 138kV lines onto a double-circuit structure were considered early in the project and eliminated from further consideration as a result of ability to meet project schedule and in-service date, increased project cost, and construction safety issues with existing homes.

Rebuilding the existing 46kV line in-place through the Mahogany Ridge subdivision to accommodate the upgrade was evaluated but issues associated with this option included safety clearances over existing homes during construction and ability to get large construction vehicles, such as cranes, into backyards to re-build the line in-place. This option would also require taller structures to maintain safety clearances from the rooftops of the existing residences. These structure heights would exceed 120 ft. tall and would require the construction of new access roads on Metropolitan Water District land for large equipment (concrete trucks, cranes, etc.) to rebuild the line.

Locating the line off National Forest System land along the Murdock Canal was evaluated, but issues associated with this alternative included routing a new line through an existing residential neighborhood, acquisition of new private right-of-way and potentially require condemnation of private lands, operational conflicts along the canal with the Bureau of Reclamation, and approval of additional permits from the Provo River Water Users and Bureau of Reclamation.

Consolidating the existing and proposed 138kV lines onto a double-circuit structure was evaluated, but issues associated with this option included increased construction disturbance to replace wood-pole structures with taller steel poles, which would require the construction of new access roads for concrete trucks and heavier cranes.

This project is in critical big-game winter range that is supposed to be preserved or improved, but this proposed action would seem to result in only additional negative direct, indirect, and cumulative impacts to big game habitat.

The location of the proposed project is in a heavily impacted and disturbed area including the Salt Lake Aqueduct, Pleasant Grove water tank, and existing 138kV line. The project will use existing access roads and vegetation clearing will be limited to pole locations. Additional impacts to big-game winter range habitat are minimal.

Minimize impact of new power line, but build sufficient capacity in to the line to address future community power needs.

The upgrade of the 46kV subtransmission line to a 138kV transmission line will provide additional transmission capacity needed to serve the rapidly growing electrical demand in Salt Lake and Utah counties. Construction of this project would provide the necessary additional voltage support by converting from 46kV to 138kV and would provide improved system interconnection (loop system feed between substations) to reliably serve the existing and future local power loads.

The proposed project is subject to the Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that may be generated during the excavating phases of the project. A permit is not required from the Utah Division of Air Quality, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover and windbreaks.

An air quality permit is required for excavation activities that exceed 1/4 acre and to reduce impacts associated with fugitive dust. The only excavation associated with the proposed action will be the auguring of the new holes and guy wires for the four poles, which will be less than a tenth of an acre. Vehicle travel during construction will be on existing access routes and the wire pulling station will be located on previously disturbed ground. Rocky Mountain Power and its contractors will implement best management practices during the construction of the new line. These practices may include but not be limited to: restricting travel if access routes are very wet and would be rutted or damaged; using water trucks if necessary to controlling fugitive dust; restricting work crews to normal working hours to minimize disturbances to homeowners; and restricting construction activities and travel to only designated areas.

5. CATEGORICALLY EXCLUDING THIS PROPOSED ACTION

The proposed action is categorically excluded from document in an environmental impact statement or environmental assessment. Forest Service Handbook 1909.15 states that "a proposed action may be categorically excluded from document...only if the proposed action" ... "is within a category listed in section 31.1b or 31.2; and there are not extraordinary circumstances related to the proposed action" (FSH 1909.15, section 30.3(1)). The proposed action is specifically listed as one of the Forest Service Chief's categories for categorical exclusion (Forest Service Handbook 1909.15, Section 31.2, No.2 and 3)

No. 2 "Additional construction or reconstruction of existing telephone or utility lines in a designated corridor."

No. 3 "Approval, modification, or continuation of minor special uses of National Forest System lands that require less than five contiguous acres of land."

FSH 1909.15, Section 30.3 (WO Interim 1909.15-2002-2) lists the following as 'extraordinary circumstances:'

- a. Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or proposed critical habitat, or Forest Service sensitive species - The transmission line right-of-way has been surveyed and no threatened or endangered species are present. The project area does not contain any critical habitat for threatened and endangered species. The Forest Service has determined that this project will not adversely affect any federally protected species or critical habitat (Van Keuren 2007, Bornstein 2006).
- b. Floodplains, wetlands, or municipal watersheds - The transmission line construction will have no impact on municipal watersheds. The project area does not reside in, and the project will not have any direct, indirect, or cumulative impacts on, any water bodies, floodplains, or wetlands.
- c. Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas - The project area does not reside in, and the project will not have any direct, indirect, or cumulative impacts on, any congressionally designated areas.
- d. Inventoried roadless areas (IRAs) - The project area is located outside the Rocky Canyon/Buckley Mountain IRA. As described in Section 7 of this Decision Memo, transmission line construction will have no impact on the classification, management, and characteristics of this IRA.
- e. Research natural areas - The project area does not reside in, and the project will not have any direct, indirect, or cumulative impacts on, any research natural areas.
- f. American Indians and Alaska Native religious or cultural sites - Based on site investigations and scoping, the project area is not known to include, and the project will not have any direct, indirect, or cumulative impacts on, any American Indian religious or cultural sites.
- g. Archaeological sites, or historic properties or areas - A complete cultural resource survey was completed by Bighorn Archaeological Consultants in December of 2006. No sites of any kind were found. The Utah State Historic Preservation Office chose not to comment, and thereby concurred that the project would not affect archeological sites or historic properties located in the project area.

6. DECISION

I have decided to approve the construction of the Pleasant Grove 138kV project and ongoing maintenance activities on the Uinta National Forest.

7. REASON FOR MY DECISION

The proposed action will be of limited context and intensity and capable of producing little or no significant environmental effects (40 CFR 1508.4) individually or cumulatively on the quality of the human environment; is within a category listed in FSH 1909.15, Section 31.2; and there are no extraordinary circumstances related to the proposed action.

- Need to prepare an Environmental Assessment or Environmental Impact Statement: There are no impacts to "extraordinary circumstances" that require preparation of an environmental assessment or an environmental impact statement. The description of projects that may be categorically excluded from documentation in an EA or EIS may be found in the Federal Register Vol. 67, No. 164/Friday, August 23, 2002/Notices Section 30.3, paragraph 5.

8. FINDINGS REQUIRED BY OTHER LAWS

The Pleasant Grove 138kV transmission line lies within the American Fork Management Area s identified in the 2003 Uinta National Forest Land and Resource Management Plan (2003 Forest Plan). The proposed project is consistent with Forest-wide and Management Area specific direction. The 2003 Forest Plan states the following:

FW-Goal-3 -- Suitable commodity uses are provided in an environmentally sustainable and acceptable manner to contribute to the social and economic sustainability and diversity of local communities. (Forest Plan, p. 2-1)

Sub-goal-3-5 -- If consistent with ecosystem health and integrity, the demand for mineral and energy resources through environmentally responsible exploration, development and production on National Forest System land is satisfied through contributions by the Forest. (Forest Plan, p. 2-17)

FW-Goal-8 -- Forest infrastructure, including facilities and transportation systems, is safe and responsive to public needs and desires; has minimal adverse effects on ecological processes and ecosystem health, diversity, and productivity; and is balance with needed management actions." (Forest Plan, p. 2-1)

Sub-goal-8-3 -- Roads and trails are managed to protect or minimize impacts on resources." (LRMP, p. 2-22)

There are no floodplains or wetlands within the project area, and none of these areas will be impacted. The project site is located away from streams and springs and will not impact water quality. The project is consistent with the Clean Water Act.

There are no threatened, endangered, sensitive species within the project site. A Supplemental Biological Evaluation/Biological Assessment was completed (Van Keuren 2007, Bornstein 2006), and a determination of "no effect" and "no impact" to threatened, endangered, or sensitive species was made. No adverse impacts on birds are anticipated, and this decision is consistent with the Migratory Bird Treaty Act.

No cultural resources will be affected by the proposed action. The decision is consistent with the National Historic Preservation Act, the American Indian Religious Freedom Act, and the Native American Graves Protection and Repatriation Act.

In accordance with Executive Order 12898, this action will not result in any disproportionate impact to minority or low-income populations.

Implementation of this proposal is consistent with other Federal, State, and local laws for the protection of the environment.

9. IMPLEMENTATION DATE

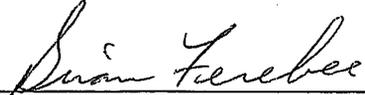
This decision may be implemented immediately.

10. ADMINISTRATIVE REVIEW OR APPEAL OPPORTUNITIES

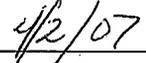
Pursuant to 36 CFR 215.8 (a)(4), this decision is not subject to a higher level of review or appeal.

11. CONTACT PERSON

For further information about this decision or project, please contact Marcy DeMillion, Natural Resource Staff, Pleasant Grove Ranger District, 390 North 100 East, Pleasant Grove, Utah 84062, or (801)785-3563.



Brian Ferebee
Forest Supervisor
Uinta National Forest



Date