Sigurd to Red Butte No. 2 - 345kV Transmission Project

Record of Decision

U.S. Department of Agriculture
Forest Service
Intermountain Region
Dixie National Forest
Fishlake National Forest

December 2012
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<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
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<tr>
<td>ACHP</td>
<td>Advisory Council on Historic Preservation</td>
</tr>
<tr>
<td>BLM</td>
<td>Bureau of Land Management</td>
</tr>
<tr>
<td>BRTG</td>
<td>Biological Resources Task Group</td>
</tr>
<tr>
<td>CIC</td>
<td>Compliance inspection contractor</td>
</tr>
<tr>
<td>DOE</td>
<td>U.S. Department of Energy</td>
</tr>
<tr>
<td>EIS</td>
<td>Environmental impact statement</td>
</tr>
<tr>
<td>ESA</td>
<td>Endangered Species Act of 1973</td>
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<tr>
<td>FLPMA</td>
<td>Federal Land Policy and Management Act of 1976</td>
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<td>FWS</td>
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<td>HPTP</td>
<td>Historic Properties Treatment Plan</td>
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<tr>
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<td>IPP</td>
<td>Intermountain Power Project</td>
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<tr>
<td>IRA</td>
<td>Inventoried roadless area</td>
</tr>
<tr>
<td>kV</td>
<td>Kilovolt</td>
</tr>
<tr>
<td>LRMP</td>
<td>Land and Resource Management Plan</td>
</tr>
<tr>
<td>MW</td>
<td>Megawatt</td>
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<tr>
<td>NEPA</td>
<td>National Environmental Policy Act of 1969</td>
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<td>NHL</td>
<td>National Historic Landmark</td>
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<td>NHPA</td>
<td>National Historic Preservation Act of 1966</td>
</tr>
<tr>
<td>NO₂</td>
<td>Nitrogen dioxide</td>
</tr>
<tr>
<td>NPS</td>
<td>National Park Service</td>
</tr>
<tr>
<td>NRHP</td>
<td>National Register of Historic Places</td>
</tr>
<tr>
<td>PLPCO</td>
<td>Utah Public Lands Policy Coordination Office</td>
</tr>
<tr>
<td>PM₂₅</td>
<td>Particulate matter less than 2.5 micrometers in diameter</td>
</tr>
<tr>
<td>POD</td>
<td>Plan of Development</td>
</tr>
<tr>
<td>SHPO</td>
<td>State Historic Preservation Officer</td>
</tr>
<tr>
<td>SITLA</td>
<td>Utah State Institutional Trust Lands Administration</td>
</tr>
<tr>
<td>SR</td>
<td>State Route</td>
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<tr>
<td>UDWR</td>
<td>Utah Division of Wildlife Resources</td>
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<td>USFS</td>
<td>U.S. Forest Service</td>
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<tr>
<td>WECC</td>
<td>Western Electricity Coordinating Council</td>
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Introduction

Summary

On December 19, 2008, PacifiCorp (doing business as Rocky Mountain Power [the Proponent]) submitted an Application for Transportation and Utility Systems and Facilities on Federal Lands (Standard Form 299) to the Bureau of Land Management (BLM) and U.S. Forest Service (USFS) (UTU-83067), proposing to construct, operate, and maintain the Sigurd to Red Butte No. 2 – 345-kilovolt (kV) Transmission Project (Project) from the existing Sigurd Substation in Sevier County, Utah, to the existing Red Butte Substation in Washington County, Utah. The Project also includes the addition of new substation equipment for interconnecting the transmission line at the existing Sigurd Substation. The original application was submitted and received on December 19, 2008, and revised by the Proponent on September 11, 2009, and July 5, 2011, to reflect changes in the Project description.

Agencies’ Purpose and Need

The purpose of this federal action is to respond to the Proponent’s application to the BLM and USFS for right-of-way for the Project across the federal lands they administer.

Decision to be Made

The decision I must make for USFS is whether or not to authorize, under special-use permit, a 150-feet-wide corridor across between 40.7 to 51.5 miles of USFS-administered lands, depending on the route selected, on the Dixie and Fishlake National Forests in Utah for the Proponent to construct, operate, and maintain the proposed Project facilities for a special use permit authorization term of 30 years (with a right for renewal). Other permanent facilities involved in the decision include communication regeneration stations associated with the transmission line; access roads to the 345kV transmission line structures where needed and where there is no existing access; and new substation equipment at terminus points to interconnect the Project with the existing Sigurd and Red Butte substations.

Proposed Action

The USFS is proposing to authorize the Proponent to cross the federal lands they administer to accommodate the Proponent’s proposed Project for a period of 30 years with right to renewal.

The Proponent’s Proposed Action is to construct, operate, and maintain a single-circuit 345kV transmission line from the existing Sigurd Substation, located north of Richfield, in Sevier County, Utah, to the existing Red Butte Substation, located west of Central, in Washington County, Utah.
Permanently facilities would include:

- A single-circuit, alternating current 345kV overhead transmission line (including structures, shield wires, conductors, and insulators) between the Sigurd Substation and Red Butte Substation
- Communication regeneration stations associated with the transmission line
- Access roads to the 345kV transmission line structures where needed and where there is no existing access
- New substation equipment at terminus points to interconnect the Project with the existing Sigurd and Red Butte substations

The Proposed Action and Project description are presented in detail in Chapter 2, Sections 2.2 and 2.3, of the Final Environmental Impact Statement (EIS).

Assessment and Disclosure of Environmental Impacts

In response to the application, the BLM, as lead federal agency and in coordination with the USFS and other cooperating agencies, prepared a Draft EIS (BLM 2011) and Final EIS (BLM 2012) for the Project pursuant to the requirements of the National Environmental Policy Act of 1969 (NEPA, 40 CFR 1500-1508) and other law, regulation, and policy including the National Forest Management Act, and the Fishlake and Dixie Land and Resource Management Plans (LRMP). The EIS was prepared to evaluate and disclose the potential Project-related environmental impacts that could result from implementation of the Proposed Action and any of the alternatives.

The USFS participated as a cooperating agency for the NEPA process for the Selected Alternative for the Project. The regulations promulgated to implement NEPA (40 CFR 1506.3) provide that a cooperating agency may adopt, without recirculating, the EIS of a lead agency when after independent review of the EIS, the cooperating agency concludes that its comments, suggestions, and requirements have been satisfied. Based on my independent review of the EIS, I have concluded that the comments and requirements of the USFS have been satisfied and I am adopting the Final EIS and associated record to support my decision.

In accordance with the direction contained in USFS regulations for processing special-use applications (36 CFR 251.54(g)(2)(iii), I am deferring to the Utah Public Services Commission and BLM determination of the overall purpose and need for the Project as described in the Project record. Based on their findings, I have concluded occupancy of National Forest System lands is appropriate and the Project is in the public interest.

Decision and Acknowledgements

Based on my review of the analysis as documented in the Draft EIS (BLM 2011) and Final EIS (BLM 2012), including public comments received on the Draft EIS, I have decided to issue a special-use permit to Rocky Mountain Power for a 150-foot-wide powerline corridor on 43.4 miles of National Forest System lands under my jurisdiction on the Fishlake and Dixie National Forests for the construction, operation, and maintenance of a 345kV transmission line following
Alternatives N2-A and S7-A, the Agency Preferred Alternative (refer to Maps 1 and 2 of this Record of Decision). Alternatives N2-A and S7-A are now referred to as the Selected Alternative.

This decision affects only those lands in the Project area administered by the Fishlake and Dixie National Forest. The BLM will issue a separate decision on whether to grant a right-of-way for lands under its jurisdiction based on the analyses contained in the EIS. However, I considered effects on public lands managed by the USFS, as well as those managed by agencies other than the USFS and private lands in making my decision. Legal descriptions for the portions of the Fishlake and Dixie National Forests where the power line corridor is approved are included in Appendix A of this Record of Decision.

In developing this decision, USFS line officers, resource specialists, and forest engineers from the Fishlake and Dixie National Forests worked with Rocky Mountain Power managers, engineers, and environmental managers to refine implementation measures and construction techniques to reduce impacts, based on the resource issues identified, at specific locations or areas. This collaboration included a series of meetings to discuss detailed engineering in specific sensitive resource areas, which resulted in engineering changes such as modifying tower design in visually sensitive areas and micro-siting tower placement in areas with sensitive plant populations. Also, through this collaboration, additional detailed mitigation also was developed to be incorporated into the Plan of Development (POD) (refer to Appendix B of this Record of Decision), which outlines construction techniques and details measures specifically developed to reduce impacts on identified natural resources during construction, operation, and maintenance of the Project as a result of this decision. As required by the standard terms of the special-use authorization, initiation of construction is conditioned upon final USFS approval of the POD.

As a requirement of the standard terms of the special-use permit authorization and the POD, the Proponent will provide for an environmental compliance inspection contractor (CIC), to be approved by the BLM, as lead federal agency, and USFS, to represent the BLM and USFS during the construction and reclamation phases of the Project. The CIC will report directly to the BLM, as lead federal agency, in coordination with USFS. The primary role and responsibility of the CIC is to ensure compliance with all terms, conditions, and stipulations of special-use authorization, the POD, and other permits, approvals and regulatory requirements, as described in Section 1.9 of the Final EIS and Section 1.6 of the POD (refer to Appendix B of this Record of Decision). Additionally, the CIC shall follow the Environmental Compliance Management Plan, included as Appendix A6 of the POD. The Proponent also will be responsible for monitoring the reclamation of the transmission line, temporary access roads, and ancillary facilities, as described in Appendix B14 (Reclamation, Revegetation, and Monitoring Framework Plan), and for compliance with Appendix B10 Noxious Weed Management Plan of the POD.

Engineering design was ongoing in parallel with the preparation of the EIS. Since the Final EIS was published, two minor modifications were made along approximately 1.2 miles of the reference centerline on USFS-administered lands described and analyzed in the Final EIS. The modifications reflect (1) slight adjustments to refine the location of the centerline that was required after completing more detailed engineering design and (2) USFS request for adjustment to address visual concerns. Table 1 is a summary of modifications made to the reference centerline of the Selected Alternative; provided are the location of each modification by link and milepost, and a description and reason for each modification. Maps 3 and 4 show the modifications. In addition to the route modifications, the Proponent has determined that the temporary development and use of a shoe-fly (a temporary line built to bypass a construction
area) adjacent to the north side of the Red Butte Substation, and requiring a temporary work area approximately 1.25 miles long and 150 feet wide (refer to Section 2.3.5.2 of the Final EIS), will not be necessary for Project construction. These changes in the Project description are not substantial and the effects of the changes are within the range of effects analyzed in the Final EIS.

### TABLE 1

**MODIFICATIONS TO THE CENTERLINE ANALYZED IN THE FINAL EIS**

<table>
<thead>
<tr>
<th>Link No.</th>
<th>From Milepost</th>
<th>To Milepost</th>
<th>Miles</th>
<th>Description of Modification&lt;sup&gt;1,2&lt;/sup&gt; (maximum number of feet moved)</th>
<th>Direction of Modification</th>
<th>Reason for Modification to Referenced Centerline</th>
</tr>
</thead>
<tbody>
<tr>
<td>66</td>
<td>0.8</td>
<td>1.7</td>
<td>0.9</td>
<td>15</td>
<td>South</td>
<td>Adjusted to navigate steep terrain</td>
</tr>
<tr>
<td>272</td>
<td>2.1</td>
<td>2.4</td>
<td>0.3</td>
<td>35</td>
<td>East</td>
<td>Requested by USFS to address visual concerns (i.e., make the power line less visually intrusive)</td>
</tr>
</tbody>
</table>

**NOTES:**
1. The number reported here is the maximum distance the centerline was moved.
2. Calculations are approximate.

### Rationale for the Decision

I have selected the route combination of Alternatives N2-A and S7-A as the Selected Alternative because this route attains the Proponent’s purpose and need for the Project while being sensitive to other resource concerns within the Project area, and the missions and management objectives of the various land management agencies responsible for the public lands that would be crossed by the Selected Alternative. It was a combination of several issues that led me to decide on the Selected Alternative. I considered the Fishlake and Dixie LRMP standards and guidelines for the Project area, and took into account public interests and values.

### Meeting the Purpose and Need

As a regulated utility, PacifiCorp is responsible for providing its customers with safe, reliable, and adequate transmission capacity to meet short- and long-term projected load growth via connection to generation resources and through access to energy markets. The current transmission capacity of the existing system will be exceeded by 2014. For the Project to address projected short-term load growth and to provide reliable electrical power service to Washington County, Utah, the Project must to be in service by June 2015. The Selected Alternative for construction, operation, and maintenance of the Project will meet the need for the Project by enabling PacifiCorp to meet these obligations by adding facilities to its transmission system that would improve reliability and increase the capacity required to serve forecasted loads in Utah. The Selected Alternative also will allow for potential access to renewable energy resources and other generation sources in the future and would provide increased capacity to export energy in the event of energy surpluses.
SELECTED ALTERNATIVE
Selected Alternative Route

GENERAL REFERENCE FEATURES
- Project Study Area
- Link Number
- Link Node
- Bureau of Land Management
- Indian Reservation
- National Park Service
- Private
- State of Utah Trust Lands
- State Park
- U.S. Forest Service

NOTES:
- Route colors are representative of the corridor, but multiple options are being considered.

SELECTED ALTERNATIVE

SOURCES:
- Transportation: Streetmap 50K to 250K, 2008
- Land Jurisdiction: BLM State Office Utah, 2009
- POWERmap, powermap.platts.com

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MAP 2
SELECTED ALTERNATIVE
SOUTH OF THE BLACK MOUNTAINS TO RED BUTTE SUBSTATION

SELECTED ALTERNATIVE
Selected Alternative Route

GENERAL REFERENCE FEATURES
- Project Study Area
- Link Number
- Link Node
- Bureau of Land Management
- Indian Reservation
- National Park Service
- Private
- State of Utah Trust Lands
- State Park
- U.S. Forest Service
- Substation
  - 500kV +/- DC Transmission Line
  - 345kV Transmission Line
  - 230 to 287kV Transmission Line
  - 138 to 161kV Transmission Line
- Pipeline
  - County
  - Interstate & U.S. Highway
  - State Highway
  - Railroad
- Lake or Reservoir

SOURCES:
Transportation: Streetmap 50K to 200K, 2008
Land Jurisdiction: BLM State Office DAI, 2009
POWERmap, powermap.platts.com
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NOTES:
Route colors are representative of the centerline, but multiple options are being considered.

SIGURD TO RED BUTTE NO. 2
345kV TRANSMISSION PROJECT
Selected Alternative described in Record of Decision
Area of Minor Adjustment to Selected Alternative

**SELECTED ALTERNATIVE**

**GENERAL REFERENCE FEATURES**
- Project Study Area
- Link Number
- Link Node
- Bureau of Land Management
- Indian Reservation
- National Park Service
- Private
- State of Utah Trust Lands
- State Park
- U.S. Forest Service
- Substation
  - 500kV +/- DC Transmission Line
  - 345kV Transmission Line
  - 230 to 287kV Transmission Line
  - 138 to 161kV Transmission Line
- Pipeline
- County
- Interstate and U.S. Highway
- State Highway
- Railroad
- Lake or Reservoir

**SOURCES:**
- EPG, 2009
- Roads, County Boundary: ESRI, 2008
- Land Jurisdiction: BLM State Office Utah, 2009;
- Transportation: NTAD2008, U.S. Department of Transportation
- Railroad: FRA, 2008
- Project Study Area: ESRI, 2011
- River, Stream: USGS, 2006
- U.S. Forest Service: ESRI, 2008
- Hillshade: USGS, 1999
- POWERmap, powermap.platts.com
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**SIGURD TO RED BUTTE NO. 2**
345kV TRANSMISSION PROJECT
The Selected Alternative will require the proposed transmission line to cross the existing directcurrent Intermountain Power Project 500kV transmission line (IPP), which is a major transmission line delivering up to 1,800 megawatts (MW) of power to southern California, and the existing Sigurd to Red Butte No. 1 transmission line. In a letter dated August 11, 2011, PacifiCorp responded to an earlier request from BLM to evaluate a middle hybrid alternative (Alternative S7) against its system planning criteria. PacifiCorp noted that while the transmission line could be built using this alignment, it would not be prudent to cross the transmission lines and risk the reliability of the system. BLM requested an independent review from U.S. Department of Energy (DOE, Mills 2011), which concurred with PacifiCorp that multiple line crossings could affect reliability of the system but did not discount the technical feasibility of the alternative route. In a letter dated September 28, 2011, responding to BLM regarding questions posed by DOE during their independent review, the Proponent stated that while they would prefer to avoid line crossings of the IPP and Sigurd to Red Butte No. 1 transmission line due to safety issues and additional risk to reliability, they would be willing to construct the Project using the Alternative S7 alignment. The concerns of PacifiCorp about effects on reliability of the system associated with Alternative S7 are also relevant to the Selected Alternative.

A detailed description of the Proponent's purpose and need for the Project is presented in Appendix A of the Final EIS.

Consideration of the Issues

The range of issues summarized and analyzed in this EIS was derived from the scoping process and public involvement (described in detail in Chapter 5, Section 5.3, of the Final EIS). These issues were used to identify, refine, and evaluate alternative routes, and to direct the level of detail needed for each of the environmental resource studies completed for the EIS. A complete list of the issues identified and where each issue is addressed in the EIS is presented in Table 1-1 of the Final EIS.

From the inclusive list of issues identified in scoping and public involvement, many issues are addressed by design features of the Project or were found not to be substantive through the effects analysis conducted for the Project. However, several planning issues proved to be pivotal to Project development and critical to my decision for the Selected Alternative. These issues include impacts on Inventoried Roadless Areas (IRAs), the Mountain Meadows Massacre Site National Historic Landmark (NHL), and other cultural and historic resources and visual resources on the Fishlake and Dixie National Forests.

Impacts on Inventoried Roadless Areas

IRAs, identified and mapped by the USFS, are undeveloped and meet the minimum criteria for possible future wilderness consideration by the USFS (U.S. Department of Agriculture 2001); therefore, fragmentation of these areas by new road construction or improvements should be avoided.

In the southern portion of the Project area, Alternative S2, the Environmentally Preferred Alternative, avoids crossing through IRAs with the exception of 0.1 mile on the Dixie National Forest. This alignment is located within approximately 1,458 feet (0.25 mile) of the northern parcel of the Mountain Meadows Massacre Site NHL and less than 700 feet (0.13 mile) of the southern parcel of the Mountain Meadows Massacre Site NHL. The Mountain Meadows
Massacre Site NHL was given landmark status on June 30, 2011 (after the Draft EIS was published). As a result of the NHL designation, and in response to comments received on the Draft EIS from the National Trust for Historic Preservation, National Park Service, and private organizations and descendants’ groups with special interest the Mountain Meadows Massacre Site NHL and Mountain Meadows Historic Site regarding potential adverse visual impacts on nationally significant cultural resources, Alternative S7 (a combination of Alternatives S2 and S4) and Alternative S7-A (the Selected Alternative; a route variation of Alternative S7) were developed for analysis in the Final EIS. Alternatives S7 and S7-A are located within or adjacent to a designated utility corridor and mitigate impacts on the cultural, historical, and visual resources on the Mountain Meadows Massacre Site NHL and the Mountain Meadows Historic Site. However this would require crossing through the edges of the Atchinson IRA. Alternative S7 crosses 2.7 miles of the Atchinson IRA; Alternative S7-A crosses 1.4 miles of the Atchinson IRA.

To mitigate potential impacts on the wilderness attributes and roadless characteristics of the IRAs, the USFS and the Proponent collaborated to develop helicopter-only construction methods, supported by overland travel, to be used in the IRA. Helicopters will transport personnel, drilling equipment, towers, and other construction materials to and from the powerline corridor. Wire pulling and tensioning activities, normally a road dependent activity due to the size of equipment used for tensioning, have been designed to occur outside of the IRAs. Access to the powerline corridor also will be accomplished by overland travel from the existing access roads associated with the Sigurd to Red Butte No. 1 transmission line using low-impact vehicles (i.e., transport vehicles with rubber treading, low pressure tires, or specialized mechanical movement to accommodate the terrain and landscape, all-terrain vehicles, or utility terrain vehicle). No blade work will be performed to assist overland travel in IRAs. The construction methods to be used within the IRAs are detailed in the POD.

The Selected Alternative (Alternative S7-A) follows Alternative S7 to a point north of the Atchinson IRA boundary (refer to Map 3-8 of the Final EIS), where it crosses back west across the existing transmission lines (the IPP and Sigurd to Red Butte No. 1 transmission lines) and pipeline corridor, thereby avoiding crossing approximately 5.2 miles of the Cove Mountain IRA. The Selected Alternative then follows the existing Sigurd to Red Butte No. 1 transmission line offset 300-foot from the eastern side of the transmission line (to minimize the amount of the IRA crossed) for approximately 1.8 miles to just south of the Atchinson IRA boundary, staying within or adjacent to the designated utility corridor. From there it returns to the alignment of Alternative S7 to the Red Butte Substation. Following the existing Sigurd to Red Butte No. 1 transmission line 300 feet east of the line will reduce impacts on the Atchinson IRA as compared to Alternative S7 while also mitigating cultural, historical, and visual impacts on the Mountain Meadows Massacre Site NHL and the Mountain Meadows Historic Site by placing distance between the proposed transmission line and the NHL and by siting the proposed transmission line behind the existing IPP transmission line. The Selected Alternative also will concentrate the linear utilities into a narrower corridor.

**Impacts on the Mountain Meadows Massacre Site National Historic Landmark**

In the southern portion of the Project area, Alternative S2, the Environmentally Preferred Alternative, is located within approximately 1,458 feet (0.25 mile) of the northern parcel of the Mountain Meadows Massacre Site NHL and less than 700 feet (0.13 mile) of the southern parcel of the Mountain Meadows Massacre Site NHL. As described in the preceding section, the Mountain Meadows Massacre Site NHL was given landmark status on June 30, 2011 (after the
Draft EIS was published). In accordance with the Secretary of the Interior’s Standards and Guidelines for Federal Agency Historic Preservation Programs and associated guidelines, an agency evaluating an undertaking that could affect directly or indirectly and adversely an NHL should consider all “prudent and feasible alternatives to avoid an adverse effect on the NHL.” As a result of the NHL designation, and in response to agency and public comments received on the Draft EIS (described in the preceding section), Alternative S7 (a combination of Alternatives S2 and S4) and Alternative S7-A (the Selected Alternative; a route variation of Alternative S7) were developed for analysis in the Final EIS with a view to mitigate potential visual impacts (i.e., on scenery and sensitive viewers) in the area of the Mountain Meadows Massacre Site NHL.

As discussed in the preceding section, both Alternative S7 and the Selected Alternative (Alternative S7-A) mitigate visual impacts on the Mountain Meadows Massacre Site NHL and the Mountain Meadows Historic Site by placing more distance between the proposed transmission line and the NHL and by siting the proposed transmission line behind the existing IPP transmission line, which reduces the visual contrast created by the Project. In addition, the Selected Alternative also reduces impacts on the Atchinson IRA as compared to Alternative S7 (i.e., Alternative S7 crosses 2.7 miles of the IRA; Alternative S7-A crosses 1.4 miles of the IRA). To further mitigate impacts on the on the Mountain Meadows Massacre Site NHL and the Mountain Meadows Historic Site, the Proponent will use an alternate structure type (i.e., a dull-galvanized steel lattice structure rather than the predominant self-weathering steel H-frame structure). In addition the Proponent has worked with the Dixie National Forest to site tower locations so as to minimize visibility and visual contrast from the Mountain Meadows Historic Site NHL. Also, the Proponent will minimize ground-disturbance associated with construction of any access roads (outside of the IRA) and vegetation clearing within the right-of-way to reduce the visual contrast. A simulated view from the Mountain Meadows Massacre Site NHL overlook and memorial of the constructed Project along the Selected Alternative is presented as Figure 1.

Impacts on Cultural and Historic Resources

The Selected Alternative crosses more miles of areas with high cultural resource sensitivity and more cultural resource sites than other alternative routes considered in the EIS. However, the Selected Alternative mitigates adverse visual effects on the Mountain Meadows Massacre Site NHL and avoids crossing segments of the Old Spanish Trail, while also minimizing impacts on IRAs on the Dixie National Forest (described in preceding sections). A Class III intensive field survey has been completed on the Selected Alternative and associated access roads, substations, and ancillary facilities and the results documented in a Class III Technical Report. The Class III intensive field survey report and an addendum were submitted to the SHPO on August 20, 2012, and November 2, 2012, respectively. Letters documenting concurrence with the findings in the Class III intensive field survey report and the addendum were issued by the SHPO on October 11, 2012, and November 21, 2012, respectively. All cultural resources identified in the survey have been evaluated for eligibility to the National Register of Historic Places (NRHP) based on criteria set forth in the federal regulation 36 CFR 60.4. The final class III Technical Report facilitated BLM and USFS, in consultation with the State Historic Preservation Officer (SHPO), to identify NRHP-eligible properties and make determination on eligibility of, and potential effects on, those properties and to develop a Historic Properties Treatment Plan (HPTP). The HPTP addresses the effects of the Project on identified historic properties. Any identified cultural resource sites will be treated per direction of the HPTP and implemented in consultation with the BLM, SHPO, other involved agencies, and consulting parties.
Impacts on Visual Resources

Based on the analysis presented in the Final EIS, impacts on visual resources associated from implementation of the Project would be similar for all alternative routes considered. In general, the construction and operation of the Project along these alignments would result in similar impacts on viewers associated with Interstate 15 (I-15), Cove Fort Pioneer Historic Place, and Fremont Indian State Park. Additionally, all of the route alternatives analyzed in the northern portion of the Project area share the same alignment though the Fishlake National Forest. The majority of the route across the Fishlake National Forest lies within a utility window designated in the Fishlake National Forest LRMP. In addition, site-appropriate selective mitigation measures, including the reduction of the visible footprint of construction access roads and limiting vegetation clearing in the corridor have been designed to minimize to the extent practicable visual impacts of associated with the transmission line.

In the southern portion of the Project area, the Selected Alternative is mostly located within a designated utility corridor, except for a portion of Links 270, 272, and 445. Applying site-appropriate selective mitigation measures, including the reduction of the visible footprint of construction access roads, limiting vegetation clearing in the right-of-way, and using an alternate structure type (i.e., a dull-galvanized steel lattice structure rather than the predominant self-weathering steel H-frame structure), the Project would be compliant with the scenery management standard for the area assigned in the Dixie National Forest LRMP, as amended.

Consideration of Public Comments and Concerns

The BLM and USFS considered effects on other resource areas in the process of evaluating the consequences of the alternatives in the EIS and identifying the Agency Preferred Alternative. In addition to the specific resource issues discussed above, the Agency Interdisciplinary Team considered the effect of each of the alternative routes on paleontological resources, soils, water, vegetation, forest products, rangeland resources, recreation, cultural resources, visual resources, and socioeconomics. All practical means to avoid or minimize environmental harm from implementation of the Selected Alternative have been adopted (see Table 3-3 of the Final EIS). I believe that all potential effects have been disclosed and that the LRMP standards and guidelines will be met.

The BLM published a Notice of Availability of the Draft EIS for public review and comment in the Federal Register on May 27, 2011. The U.S. Environmental Protection Agency published a Notice of Availability of the Draft EIS for public review and comment in the Federal Register on June 3, 2011, which initiated a 45-day public comment period. During the comment period, 41 submittals offering comments on the Draft EIS were received from various federal, state, and local agencies; various special interest groups; and individuals, including 17 emails, 7 letters, 10 comment forms with comments submitted at the public open house meetings, and 7 comment forms with comments mailed to the BLM. A list of agencies, organizations, and individuals that commented on the Draft EIS is presented in Appendix M, Table M-1, of the Final EIS. Agency responses to agency and public comments received on the Draft EIS also are contained in Appendix M of the Final EIS.
Simulated Condition – View of alternative route S7-A for the 345kV transmission line east of the existing Intermountain Power Project transmission line and State Route 18

Photo Date: 10-23-09  Time:  12:45 p.m.
Structure models that were used in the simulations were created using diagrams provided by Rocky Mountain Power. This simulation represents a schematic concept design that will be refined and finalized. Actual final structure sizes, heights, materials, conductor sag, vegetation clearing, and access roads will vary on a case-by-case basis.
Based on agency and public comments received, some expansion of discussions and addition of information to the Draft EIS were determined to be warranted. Also, the Mountain Meadows Massacre Site NHL was given landmark status on June 30, 2011 (after the Draft EIS was published). As a result of the NHL designation, and in response to comments received on the Draft EIS from organizations with special interest the Mountain Meadows Massacre Site NHL and Mountain Meadows Historic Site regarding potential visual impacts on the nationally significant cultural resources, Alternative S7 (a combination of Alternatives S2 and S4) and Alternative S7-A (the Selected Alternative; a route variation of Alternative S7) were developed for analysis in the Final EIS. The additional alternative route and route variations are described in Section 2.4.2 of the Final EIS. Chapters 3 and 4 of the Final EIS include updated analysis reflecting these changes.

Substantive changes made between the Draft and Final EIS are demarcated by a vertical black line on the left margin of each page, where applicable, of the Final EIS.

Authority

The authority under which the USFS and BLM will issue a special-use authorization and right-of-way grant, respectively, for the transmission line and associated facilities addressed in the EIS is Title V of the Federal Land Policy Management Act (FLPMA) of October 2, 1976 (43 U.S.C. 1761-1771), as amended. The FLPMA provides the BLM and USFS with discretionary authority to grant rights-of-way on lands they administer, taking into consideration impacts on natural and cultural resources (including historical resources). In doing so, the BLM and USFS must endeavor “to minimize damage to scenic and esthetic values and fish and wildlife habitat and otherwise protect the environment” through avoidance or mitigation (FLPMA Title V).

Additionally, the Energy Policy Act of 2005, which recognized the need to improve domestic energy production, develop renewable energy resources, and enhance the infrastructure (e.g., transmission lines) for collection and distribution of energy resources across the Nation, encourages the use of public land for energy-related facilities. When analyzing applications, the agencies also must consider the recommendations in the 2011 Western Electricity Coordinating Council (WECC) 10-Year Regional Transmission Plan regarding future transmission needs (WECC 2011).

The decision to be made by each agency is whether or not to grant the Proponent a right-of-way (BLM action) or a Special Use Permit (Forest Service action) to construct, operate, and maintain the proposed facilities on lands they administer and under what terms and conditions. To inform the agency decisions, the BLM (as lead agency) analyzed, through the EIS, the Proponent’s plan for, and the potential environmental impacts of constructing, operating, and maintaining the Project.

Consultation

The BLM is required to prepare EISs in coordination with any studies or analyses required by the Fish and Wildlife Conservation Act (16 U.S.C. 661 et seq.), Endangered Species Act of 1973 (ESA) (16 U.S.C. 1531 et seq.), and the National Historic Preservation Act of 1966 (NHPA), as amended (16 U.S.C. 470 et seq.). Also, in accordance with Executive Order 13175, BLM must consult, government to government, with American Indians, to ensure the tribes are informed about actions that may affect them.
Consultation under Section 7 of the Endangered Species Act

Under provisions of Section 7(a)(2) of the ESA, a federal agency that carries out, permits, licenses, funds, or otherwise authorizes an activity must consult with the U.S. Fish and Wildlife Service (FWS) as appropriate to ensure the action is not likely to jeopardize the continued existence of any species listed as threatened or endangered. The BLM initiated informal consultation with the FWS in September 2009 by requesting a list of federally threatened, endangered, and candidate species that may occur in the Project area. On November 2, 2009, the FWS attended an interagency meeting with the BLM, USFS, and Utah Division of Wildlife Resources (UDWR) to identify and discuss concerns regarding the potential effects of the Project on wildlife resources, including federally listed species.

At the direction of FWS, BLM obtained lists of federally threatened, endangered, and candidate species with the potential to occur in Sevier, Millard, Beaver, Iron, and Washington counties from the FWS Region 6 website in September 2009. The BLM requested a list of any federally listed, sensitive, endangered, and/or threatened species that may occur in the Project area. The species lists were updated as new lists become available to reflect the current listing status of all federally listed and candidate species occurring in Utah counties potentially crossed by the Project.

The BLM formed the Biological Resources Task Group (BRTG) composed of the biologists from the BLM, USFS, FWS, and UDWR. The group met via conference call once a month throughout preparation of the EIS to discuss status of the Project, issues, and approach. BLM and USFS coordinated with FWS through the BRTG to determine the potential need for formal consultation under Section 7 of the ESA for the various action alternatives. FWS indicated that formal consultation, including preparation of a Biological Assessment, would not be required if the selected route would not adversely affect listed species. The Selected Alternative avoids occupied habitat for federally listed species in the Project area, including Utah prairie dog and southwestern willow flycatcher. BLM prepared a letter to FWS documenting the occurrence of threatened, endangered, and candidate species along the Selected Alternative route and potential effects on each species, and requested concurrence on the information presented from FWS. FWS concurred with the BLM findings by letter on November 9, 2012.

Consultation under Section 106 of the National Historic Preservation Act

Section 106 (16 U.S.C. 470f) of the NHPA requires federal agencies to take into account the effect of their undertakings on any district, site, building, structure, or object that is included in or eligible for inclusion in the NRHP, historic properties, including those listed on, or eligible for, the NRHP. Regulations for the implementation of Section 106 are defined in 36 CFR Part 800 – Protection of Historic Properties. These regulations define how federal agencies meet their statutory responsibilities as required under the law. The Section 106 process seeks to accommodate historic preservation concerns with the needs of federal undertakings through consultation among the agency official and other parties with an interest in the effects of the undertaking on historic properties (36 CFR 800.1). These parties include the Advisory Council on Historic Preservation (ACHP), SHPO, American Indian tribes, Tribal Historic Preservation Officers, state and other federal agencies, and individuals or organizations with a demonstrated interest in the undertaking due to their legal or economic relation to the undertaking or affected
properties, or their concern with the effects of undertakings on historic properties (36 CFR 800.2).

As lead federal agency for compliance with Section 106 of the NHPA, BLM initiated Section 106 consultation with the SHPO, Utah Public Lands Policy Coordination Office (PLPCO), Utah State Institutional Trust Lands Administration (SITLA), USFS, National Park Service (NPS) and the ACHP pursuant to 36 CFR Part 800.6 and 800.14 (b) of the ACHP’s regulations implementing Section 106 of the NHPA in April 2010. The Section 106 process is separate from but often conducted parallel with the preparation of an EIS.

The BLM formed the Cultural Resources Task Group composed of cultural resource specialists from the BLM and USFS. The group met via conference call once a month throughout the preparation of the EIS to discuss status of the Project, issues, and approach. The group also coordinated with the ACHP and Utah SHPO regarding compliance with Section 106 of the NHPA. The BLM and USFS in consultation with the SHPO agreed to develop a Programmatic Agreement among various state and federal agencies and consulting parties with an interest in the Project. A Programmatic Agreement outlines the stipulations that will be followed concerning the identification, assessment, and treatment of cultural resources for the Project in accordance with 36 CFR 800.15(b). Signatories agree that the Project will be administered in accordance with stipulations and measures set forth in the Programmatic Agreement. The following parties have been participating in development of the Programmatic Agreement:

- **Signatory Parties**
  - BLM Color Country District
  - USFS Dixie National Forest
  - Utah SHPO
  - ACHP
  - NPS
  - SITLA
  - Utah Department of Transportation

- **Invited Signatory Parties**
  - PacifiCorp (Rocky Mountain Power, Proponent)

- **Concurring Parties**
  - PLPCO
  - Paiute Indian Tribe of Utah
  - Church of Jesus Christ of Latter-Day Saints
  - Milford Archaeological Research Institute
  - Mountain Meadows Association
  - Mountain Meadows Massacre Descendants
  - Mountain Meadows Monument Foundation
  - National Trust for Historic Preservation
  - Old Spanish Trail Association
  - Oregon California Trails Association
  - Utah Rock Art Research Association
  - We Nooch Society

A copy of the draft Programmatic Agreement is presented in Appendix G of the Final EIS. The signature process for the Final Programmatic Agreement was completed on November 29, 2012. The Programmatic Agreement is in the Project Record.
In addition, pursuant to 36 CFR Part 800.2, the lead federal agency must consult with American Indian tribes that attach religious and cultural significance to historic properties that may be affected by an undertaking. This requirement applies regardless of the location of the historic property. In such cases, the federal agency must notify the tribes potentially affected by the undertaking and give those tribes the opportunity to participate in the Project as a concurring party should they wish to do so. Early in the environmental process, BLM initiated contact with several American Indian tribes in accordance with various environmental laws and Executive Orders. While no American Indian reservations or lands owned in fee by tribes are within the Project area, the BLM identified several American Indian tribes whose traditional territories are within the Project area.

BLM initiated consultation meetings with the tribes in October 2009, meeting with the Navajo Nation, Hopi Tribe, Moapa Band of Paiute Indians, Paiute Indian Tribe of Utah, Northwestern Band of Shoshone Nation, and Confederated Tribes of the Goshute Nation. The tribes did not express specific concerns or objections to the Project. All requested to be kept informed of Project developments and updated on the EIS process.

As part of scoping, the BLM mailed letters, dated December 17, 2009, to the Navajo Utah Commission and the following 13 American Indian tribes to inform them of and determine their interest in the Project:

- Confederated Tribes of Goshute Nation
- Fallon Paiute-Shoshone Tribe
- Hopi Tribe
- Kaibab Band of Paiute Indians
- Moapa Band of Paiute Indians
- Navajo Nation
- Northwestern Band of Shoshone Nation
- Paiute Indian Tribe of Utah
- San Juan Southern Paiute Tribe
- Southern Ute Tribe
- Ute Indian Tribe
- Ute Mountain Ute Tribe
- White Mesa Ute Tribe (Band of the Ute Mountain Ute)

The tribes also were asked to determine the need for further study related to the identification of traditional cultural properties in the Project area that may be affected by the Project.

Through BLM’s ongoing consultation, one tribe contacted, the Paiute Indian Tribe of Utah, agreed to participate in development of the Programmatic Agreement as a concurring party. BLM continued meeting with tribes in spring and summer of 2010. The Paiute Indian Tribe of Utah expressed an interest in participating in the Project. On August 2, 2010, the BLM met with the Council of the Paiute Indian Tribe to update them on the status of the Project and discuss the tribe’s concerns. On November 16, 2010, the BLM sent a letter to the Paiute Indian Tribe of Utah offering field visits of all alternative routes. The tribe requested visits to three areas of importance to them in the Project area. BLM conducted multiple field visits with tribal

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1 NEPA; NHPA, as amended; American Indian Religious Freedom Act of 1978; Native American Graves Protection and Repatriation Act of 1990, as amended; FLPMA, Archaeological Resources Protection Act of 1979; Executive Order 11593 – Protection and Enhancement of the Cultural Environment; Executive Order 12898 – Environmental Justice; Executive Order 13007 – Indian Sacred Sites; Executive Order 13175 – Consultation and Coordination with Indian tribal Governments
representatives to specific areas of concern between April 2011 and November 2011. BLM also met with the tribal council on April 26, 2011; September 16, 2011; and March 2, 2012, to update them on the status of the Project. Consultation efforts and results of the consultation efforts are documented in the Project administrative record.

Government-to-Government Tribal Consultation

The United States has a unique legal relationship with American Indian tribal governments as set forth in the Constitution of the United States, treaties, Executive Orders (e.g., Executive Order 13175), federal statutes, federal policy, and tribal requirements, which establish the interaction that must take place between federal and tribal governments. An important basis for this relationship is the trust responsibility of the United States to protect tribal sovereignty, self-determination, tribal lands, tribal assets and resources, and treaty and other federally recognized and reserved rights. Government-to-government consultation is the process of seeking, discussing, and considering views on policy, and/or, in the case of this Project, environmental and cultural resource management issues. As part of the BLM’s ongoing government-to-government consultation, tribal officials were informed of the Project and those who expressed interest in the Project were updated periodically on the status of the Project. For efficiency, government-to-government consultation activities (e.g., updates to the Paiute Tribal Council) often were combined with Section 106 tribal consultation activities described above. Consultation efforts and results of the consultation efforts are documented in the Project administrative record.

Public Involvement

Scoping Process

Scoping, a process open to the public and conducted early in the Project (February and March 2010), served to identify the range or scope of issues to be addressed during the environmental studies in the EIS. A Notice of Intent was published in the Federal Register on January 5, 2010, announcing preparation of the EIS for the proposed Project and the opportunity for the public to participate in the process and provide input. While the publication of the Notice of Intent initiated a 45-day public comment period, scoping comments were accepted until March 15, 2010, 15 days after the last public scoping meeting.

Activities associated with scoping included (1) agency and interagency meetings; (2) four public scoping meetings; (3) newsletter mailings (distributed to interested parties on the Project mailing list, which includes federal, state, and local government agencies, special interest groups, and individuals—a total of 5,322 parties), media releases, and legal notices to inform the public of the Project, EIS preparation; and (4) establishing a BLM Project website (http://www.blm.gov/ut/st/en/fo/cedar_city/planning/sigurd_to_red_butter.html) and posting Project information to the BLM Environmental Notification Bulletin Board (https://www.blm.gov/ut/enbb/index.php). In general, comments from both the public and agencies related to Project need, benefits, and impacts on the environment. Comments received during this early process are documented in the Sigurd to Red Butte No. 2 – 345kV Transmission Line Project EIS Scoping Report (BLM 2010), which is available for viewing at the BLM field offices and on the BLM Project website.
Public Review Process

The BLM published a Notice of Availability of the Draft EIS for public review and comment in the Federal Register on May 27, 2011. The U.S. Environmental Protection Agency published a Notice of Availability of the Draft EIS for public review and comment in the Federal Register on June 3, 2011, which initiated a 45-day public comment period. Approximately 90 hard copies and 135 electronic copies of the Draft EIS were distributed in May and June 2011 to federal agencies; tribal, state, and local governments; organizations; and individuals. The availability of the Draft EIS; deadline for public comments; and locations, dates, and times of public meetings on the Draft EIS were announced in paid newspaper legal notices, paid newspaper advertisements, and project newsletters that were mailed out to potentially affected property owners, agencies, and stakeholders. During the comment period, BLM held four public meetings, one each in Richfield, Milford, Enterprise, and St. George, Utah, to provide information and solicit public comments on the proposed Project and the Draft EIS. A total of 81 people attended the public open houses.

The comment period ended on July 11, 2011. BLM received 41 submittals containing comments from federal, state, and local agencies; public and private organizations; and individuals. The comments in each submittal were identified, recorded, and analyzed. Responses were prepared for all substantive comments. A description of the comment analysis, the comments received, and the responses to those comments are provided in the Appendix M of the Final EIS.

In addition, the Proponent convened two Community Working Groups representing diverse interests within the Project area, including representatives from cities, counties, and stakeholders in the northern and southern portions of the Project area. While the Community Working Groups were not decision-making entities on the Project, the members of the Community Working Groups were asked to provide feedback on the Project and consider the views of the group, as well as the views of their respective organizations and/or communities. The Proponent also mailed a letter to landowners within 1 mile of the reference centerline with information regarding the alternative routes to be presented during public scoping for recommendation for detailed analysis in the EIS. The Proponent also posted a basic description the Project on their communications website, conducted briefings of community leaders to introduce and keep them informed about the Project, and conducted meetings with the landowners to discuss the Project and answer their questions prior to the BLM’s public scoping meetings.

The Proponent provided updates and information regarding the Project to all counties and cities that required conditional use permits and general plan amendments, beginning in 2010. The application for the general plan amendment for Millard County was approved in February 2012 and all required conditional use permits have been approved.

Although not a formal comment period, BLM, as lead federal agency, received two comment submittals during the 30-day public review period for the Final EIS. The comment submittals were received from Millard County, Utah, and the Southern Utah Wilderness Association. The comments contained in the submittals did not identify significant new circumstances or information relative to environmental concerns and did not bear upon this decision.
Alternatives

Alternatives Considered in Detail

Thirteen alternative routes (and two route variations) were analyzed in the Final EIS, including the Agency Preferred Alternative on federal lands and the Proponent’s Preferred Alternative, as well as the alternative of taking no action. The alternative routes were organized into two segments: (1) the northern area from the existing Sigurd Substation to south of the Black Mountains and (2) the southern area from south of the Black Mountains to the existing Red Butte Substation. Maps presenting the alternative routes are presented in Chapter 2, Maps 2-1 and 2-2, and Volume II of the Final EIS.

Northern Area – Sigurd Substation to South of the Black Mountains

Six transmission line alternative routes (and one route variation) were analyzed in the Final EIS in this segment that begins at the Sigurd Substation and end south of the Black Mountains. Each alternative route crosses Sevier, Millard, Beaver, and Iron counties.

Alternative N1 – Black Rock Road to IPP North of Milford Wind Farm

Alternative N1 is 120.6 miles in length. As proposed, the alternative route exits the existing Sigurd Substation to the north and crosses Interstate 70 (I-70) approximately 1.0 mile west of the substation. The alternative route then turns south and parallels I-70 to the west for approximately 23.8 miles before crossing I-70 west of Fremont Indian State Park. The alternative route then crosses west through Sage Flat (a narrow mountain valley), south of Fremont Indian State Park, before paralleling the existing Cameron to Sigurd 138kV transmission line through the Fishlake National Forest for approximately 14.0 miles before turning west, approximately 2.6 miles south of the historic Cove Fort.

From the Cove Fort area, the alternative route continues west and crosses I-15 before turning northwest to parallel Black Rock Road. The alternative route parallels Black Rock Road for approximately 6.3 miles before heading west at the north end of the Mineral Mountains. From the Mineral Mountains it continues west, crossing State Route (SR) 257 before turning south to parallel the IPP. The alternative route parallels the transmission line 1,500 feet to the east for approximately 48.1 miles before terminating south of the Black Mountains. Notable features or places in proximity to the alternative route include Richfield, Elsinore, Joseph, Fremont Indian State Park, Fish Creek, Cove Fort, and Milford.

Alternative N2 – Black Rock Road to IPP South of Milford Wind Farm

Alternative N2 is 120.4 miles in length and would follow the same route as Alternative N1 to the north end of the Black Mountains. From the north end of the Mineral Mountains the alternative route turns south and parallels the west bench of the Mineral Mountains for approximately 11.8 miles. Near the Blundell Geothermal Plant, the alternative route turns west for approximately 9.1 miles before turning south to parallel the IPP. The alternative route parallels the transmission line 1,500 feet to the east for approximately 37.8 miles before terminating south of the Black Mountains. Notable features or places in proximity to the alternative route include Richfield,
Alternative N2-A (Route variation of Alternative N2) – Black Rock Road to IPP south of Milford Wind Farm 1,500 feet east of Kern River Pipeline (Agency Preferred Alternative)

Alternative N2-A, a route variation of Alternative N2, was developed in response to comments received on the Draft EIS from First Wind Corporation and Beaver and Millard counties regarding conflicts with planned energy projects (refer to Appendix M of the Final EIS). Alternative N2-A is 120.0 miles in length and would follow the same route as Alternative N2 with a slight variation using Links 25 and 27 as the route exits the Sigurd Substation on the west side. The route would use Links 348 and 455, instead of Link 450. The route is located 1,500 feet east of the Kern River Pipeline corridor near the Blundell Geothermal Plant, then turns west for approximately 9.1 miles before turning south to parallel the IPP. The alternative route parallels the transmission line 1,500 feet to the east for approximately 37.8 miles before terminating south of the Black Mountains. Notable features or places within proximity to the alternative route include Richfield, Elsinore, Joseph, Fremont Indian State Park, Fish Creek, Cove Fort, Blundell Geothermal Plant, and Milford.

Alternative N3 – Black Rock Road Parallel to Kern River Pipeline

Alternative N3 is 117.2 miles in length and is similar to Alternative N1 from the Sigurd Substation to near the Blundell Geothermal Plant. From the geothermal plant the alternative route parallels the Kern River Pipeline approximately 100 feet to the east before turning south at SR 21 to avoid center-pivot-irrigated agriculture. It parallels SR 21 for approximately 4.2 miles before crossing the highway and rejoining the pipeline west of Minersville. The alternative route continues to parallel the pipeline to the south of the Black Mountains. Notable features or places in proximity to the alternative route include Richfield, Elsinore, Joseph, Fremont Indian State Park, Fish Creek, Cove Fort, Blundell Geothermal Plant, and Minersville.

Alternative N4 – Mineral Mountains to IPP South of Milford Wind Farm

Alternative N4 is 109.4 miles in length and follows the same route as Alternative N1 between the Sigurd Substation and Cove Fort area. From the Cove Fort area, the alternative route would parallel an existing 46kV transmission line over the Mineral Mountains north of Bailey Mountain to the Blundell Geothermal Plant. The alternative is also similar to Alternative N2 from the geothermal plant to south of the Black Mountains. Notable features or places in proximity to the alternative route include Richfield, Elsinore, Joseph, Fremont Indian State Park, Fish Creek, Cove Fort, Blundell Geothermal Plant, and Milford.

As a design alternative, the transmission line could be colocated with the existing Cove Fort to Blundell 46kV transmission line. If implemented, the right-of-way of the Cove Fort to Blundell 46kV transmission line would be increased to 150 feet to accommodate this design alternative.
Alternative N5 – Mineral Mountains Parallel to Kern River Pipeline

Alternative N5 is 106.2 miles in length and is similar to Alternative N4 from the Sigurd Substation to the Blundell Geothermal Plant. From the geothermal plant, the alternative route follows the same route as Alternative N3. Notable features or places in proximity to the alternative route include Richfield, Elsinore, Joseph, Fremont Indian State Park, Fish Creek, Cove Fort, Blundell Geothermal Plant, and Minersville.

Alternative N6 – Mineral Mountains 1,500 Feet East of Kern River Pipeline (Proponent’s Preferred Alternative)

Alternative N6 is 105.4 miles in length and is similar to Alternative N5, except the alternative route is located approximately 1,500 feet east of the Kern River Pipeline. This alternative was selected by the Proponent because it provides physical separation from other high-voltage transmission lines (e.g., IPP) and underground pipelines (e.g., Kern River Pipeline). Notable features or places in proximity to the alternative route include Richfield, Elsinore, Joseph, Fremont Indian State Park, Fish Creek, Cove Fort, Blundell Geothermal Plant, and Minersville.

Southern Area – South of the Black Mountains to Red Butte Substation

There were seven transmission line alternative routes (and one route variation) analyzed in the Final EIS in this segment that begins south of the Black Mountains and end at the Red Butte Substation. Each alternative route crosses Iron and Washington counties.

Alternative S1 – Pinto Creek

Alternative S1 is 55.9 miles in length. From the Black Mountains it parallels the IPP approximately 1,500 feet to the east for approximately 14.9 miles before paralleling the Sigurd to Red Butte No. 1 – 345kV transmission line for approximately 8.8 miles along the east bench of the Antelope Range. The alternative route continues east of Newcastle Reservoir and follows Pinto Creek, turning southwest after passing the community of Pinto. The alternative route then turns northwest approximately 2.2 miles south of Central to parallel two existing 345kV and 138kV transmission lines and enters the north side of the Red Butte Substation. Notable features or places in proximity to the alternative route include Newcastle Reservoir, Pinto, Pine Valley, Santa Clara River, and Central.

Alternative S2 – IPP West

Alternative S2 is 49.6 miles in length and is similar to Alternative S1 from the Black Mountains to north of the Newcastle Reservoir. North of the Newcastle Reservoir, the alternative route continues west of the reservoir and continues to parallel the Sigurd to Red Butte No. 1 – 345kV transmission line to the east for approximately 3.1 miles. The alternative route then turns west, south of Newcastle, and parallels the IPP approximately 1,500 to 2,500 feet to the west. The alternative route crosses back to the east side of the IPP and Sigurd to Red Butte No. 1 transmission lines north of the community of Central and enters the north side of the Red Butte Substation. Alternative S2 crosses a corner of the Mogotsu IRA for 0.1 miles. Notable features or places in proximity to the alternative route include Newcastle, Newcastle Reservoir, Holt
Canyon, Mountain Meadows Massacre Site NHL and Mountain Meadows Historic Site, and Central.

**Alternative S3 – Ox Valley**

Alternative S3 is 57.4 miles in length and is similar to Alternative S2 from the Black Mountains to crossing the IPP and Sigurd to Red Butte No. 1 transmission lines. The alternative route continues to parallel the IPP until turning west along the north bench of Gum Hill. After crossing SR 18, the alternative route turns south and passes near Ox Valley. The alternative route continues south for approximately 6.4 miles before crossing the IPP and Harry Allen to Red Butte 345kV transmission lines. After crossing the transmission lines, the alternative route turns northeast to parallel the Harry Allen to Red Butte 345kV transmission line approximately 1,500 feet to the east before entering the north side of the Red Butte substation. Notable features or places in proximity to the alternative route include Newcastle, Newcastle Reservoir, Enterprise, Ox Valley, and Central.

**Alternative S4 – IPP East**

Alternative S4 is 48.9 miles in length and is similar to Alternative S2, with the exception that the alternative route parallels the Sigurd to Red Butte No. 1 – 345kV transmission line approximately 1,500 feet to the east. The alternative route also is parallel to the UNEV Pipeline through Holt Canyon. Notable features or places within proximity to the alternative route include Newcastle, Newcastle Reservoir, Holt Canyon, Mountain Meadows Massacre NHL and Mountain Meadows Historic Site, and Central. Because the alternative route is located east of the existing transmission lines, it is farther away from the Mountain Meadows Massacre NHL and Mountain Meadows Historic Site than Alternative S2, but crosses the Atchinson IRA for 2.8 miles (approximately 0.4 miles from the western boundary) and the Cove Mountain IRA for 5.5 miles.

**Alternative S5 – Iron Springs and Pinto Creek (Proponent’s Preferred Alternative)**

Alternative S5 would be 59.0 miles in length. The alternative route runs south from the Black Mountains for approximately 16.2 miles before turning southwest at Iron Springs. From Iron Springs, the alternative route crosses through the Neck of the Desert (a narrow mountain valley between the Antelope Range and Granite Mountains) and along the southern bench of the Antelope Range before crossing State Route 56. After crossing State Route 56, the alternative route turns south at the Newcastle Reservoir and follows Pinto Creek, turning southwest after passing the community of Pinto. The alternative route then turns northwest approximately 2.2 miles south of Central to parallel two existing 345kV and 138kV transmission lines and enters the north side of the Red Butte Substation. Notable features or places in proximity to the alternative route include Iron Springs, Newcastle Reservoir, Pinto, Pine Valley, Santa Clara River, and Central.

This alternative was selected by the Proponent because it best meets their need to provide safe, reliable, adequate, and efficient service to southwestern Utah by providing physical separation from existing high-voltage transmission lines (e.g., IPP and Sigurd to Red Butte No. 1 – 345kV) and would require the least cost for permitting and construction to be passed on to ratepayers.
Alternative S6 – Iron Springs and Ox Valley

Alternative S6 is 61.8 miles in length and is similar to Alternative S5 between the Black Mountains and Newcastle Reservoir. South of the reservoir the alternative route turns west for approximately 3.3 miles and follows the same alignment as Alternative S3. Notable features or places in proximity to the route include Iron Springs, Newcastle Reservoir, Newcastle, Enterprise, Ox Valley, and Central.

Alternative S7 – Middle Hybrid Route

Alternative S7 is 49.8 miles in length and combines segments of Alternatives S2 and S4. This alternative route was developed in response to comments received on the Draft EIS from the National Trust for Historic Preservation, National Park Service, and private organizations and descendants’ groups with special interest the Mountain Meadows Massacre Site NHL and Mountain Meadows Historic Site. The alternatives route would follow Alternative S2 to a point north of the Mountain Meadows Massacre Site NHL boundary, cross back east across the existing transmission lines and pipeline to follow Alternative S4, and continue south to the Red Butte Substation. Using segments of Alternative S2 to the point of crossover, the existing transmission lines would avoid about 5.2 miles of the Cove Mountain IRA. Alternative S7 crosses 2.7 miles of the Atchinson IRA. Crossing over to segments of Alternative S4 north of the Mountain Meadows Massacre Site NHL would mitigate cultural, historical, and visual impacts by placing more distance between the proposed transmission line and the NHL. The crossover would require the transmission line to cross the existing direct-current IPP, which is a major transmission line delivering up to 1,800 MW of power to Southern California, and the existing Sigurd to Red Butte No. 1 transmission line. In a letter dated August 11, 2011, the Proponent responded to an earlier request from BLM to evaluate the middle hybrid alternative against its system planning criteria. The Proponent noted that while the transmission line could be built using this Alternative S7 alignment, it would not be prudent to cross the transmission lines and risk the reliability of the system. BLM requested an independent review from DOE (Mills 2011), which concurred with the Proponent that multiple line crossings could affect reliability of the system but did not discount the technical feasibility of the alternative route. In a letter dated September 28, 2011, responding to BLM regarding questions posed by DOE during their independent review, the Proponent stated that while they would prefer to avoid line crossings of the IPP and Sigurd to Red Butte No. 1 transmission line due to ongoing safety issues and additional ongoing risk to reliability, they would be willing to construct the Project using the Alternative S7 alignment.

Alternative S7-A (route variation of Alternative S7) – Middle Hybrid Route 300 Feet East of Sigurd to Red Butte No. 1 Transmission Line Adjacent to Atchinson IRA (Agency Preferred Alternative)

Alternative S7-A, a route variation of Alternative S7, also was developed in response to agency and public comments received on the Draft EIS. This alternative route variation is 49.8 miles in length and follows Alternative S7 to a point north of the Atchinson IRA boundary, where it crosses back west across the existing transmission lines (the IPP and Sigurd to Red Butte No. 1) and pipeline corridor, and follows the existing Sigurd to Red Butte No. 1 transmission line offset 300-feet from the eastern side of the transmission line for approximately 1.8 miles to just south of the Atchinson IRA boundary. From there it returns to the alignment of Alternative S7 to the Red Butte Substation. Alternative S7-A crosses 1.4 miles of the Atchinson IRA. Following
the existing Sigurd to Red Butte No. 1 transmission line 300 feet east of the line would reduce
impacts on the Atchinson IRA while also mitigating cultural, historical, and visual impacts on the
Mountain Meadows Massacre Site NHL and the Mountain Meadows Historic Site by placing
distance between the proposed transmission line and the NHL (but lesser distance than under
Alternative S7) and by concentrating the linear utilities into a narrower corridor. The concerns of
the Proponent about effects on reliability of the system associated with Alternative S7 also
would be relevant to this route variation.

No Action Alternative

If no action were taken, the BLM right-of-way and USFS special-use authorization for the
Project to cross federal lands would not be granted and the transmission line and ancillary
facilities would not be constructed.

Alternatives Considered But Not Studied in Detail

In the preparation of the Draft EIS, an initial evaluation was made of a full range of alternatives.
All reasonable alternatives were given further consideration, including alternatives to the
transmission line option, new generation facilities, reliance on the existing transmission system,
and alternative transmission technologies. Alternatives that were (1) ineffective (i.e., did not
meet the agencies' purpose and need), (2) technically or economically infeasible, (3)
inconsistent with the basic policy objectives of the management of an area (e.g., land use
plans), (4) remote or speculative (i.e., could not be analyzed), or (5) substantially similar in
design or effects to another alternative being analyzed were eliminated from further
consideration.

Transmission line alternative routes and segments considered early in the NEPA process and
eliminated from detailed analysis based on the systematic analysis for preliminary impact
analysis and screening and comparing alternatives (described in Section 2.4.1.5 and Section
2.5 of the Final EIS) are presented on Map 2-3 of the Final EIS. These alternative routes and
segments had greater overall impacts than other routes and segments in the same general
vicinity.

Alternatives to a Transmission Line Option

Alternatives to constructing new transmission lines and substations, which would reduce the
electrical load requirements of the system or provide additional capacity to the system, were
considered but did not meet the purpose and need of the Project.

Electrical Load and Demand-Side Management and Energy Conservation

Load-management programs are designed to achieve reductions in load (i.e., the amount of
power needed), primarily at the time of peak load. For example, by agreement with their
customers, utilities can have direct control over loads that can be interrupted by the utility
system operator during periods of peak demand by directly interrupting power supply to
individual appliances or equipment. This method usually involves consumers allowing the utility
to periodically interrupt service to water or space-heating units during the hours of peak load.
Another type of load-management program makes use of interruptible loads. An interruptible load is a load that can be separated from the system during periods of peak load or system disturbances, either by direct control of the utility system operator, or by action of the consumer at the direct request of the system operator. For example, large commercial and industrial consumers are candidates for interruptible load management, depending on the type of business.

Other load-management programs that limit peak loads shift peak load from on-peak to off-peak hours or encourage consumers to respond to changes in the utility’s cost of providing power. This includes technologies that primarily shift all or part of a load from one time of day to another and may affect overall energy consumption. Examples include space- and water-heating storage systems, cool-storage systems, and load-limiting devices in energy management systems.

Demand-side management consists of electric utilities planning, implementing, and monitoring activities designed to encourage consumers to modify their levels and patterns of energy consumption. While demand-side management affects only a small percentage of the system load, utilities implement demand-side management programs to achieve two basic objectives: energy efficiency and load management.

Energy efficiency (or energy conservation) is achieved primarily through programs that reduce the overall energy consumption of specific end-user devices and systems by promoting high-efficiency equipment and building design. Energy-efficiency programs typically reduce energy consumption over many hours during the year. Examples include energy-saving appliances and lighting, high-efficiency heating, ventilating, and air-conditioning systems or control modification, efficient building design, advanced electric motors and drive systems, and heat recovery systems.

The Proponent has implemented the following energy-efficiency and load-management programs:

- Since 2003, the Proponent has offered a residential/small commercial air conditioning load control program along the Wasatch Front. Currently, the initiative has approximately 80,000 participating customers. The system is dispatched during summer peak periods and yields approximately 70 MW of peak load relief. There is no energy savings associated with this initiative.

- Additionally since 2003, the Proponent has offered an irrigation-load-control program in southeast Idaho. The system is dispatched during peak periods (2 p.m. to 8 p.m.), and the Proponent currently has 208 MW of participating load. The Proponent also offers an irrigation-load-control program in Utah, although agriculture is much smaller in Utah. Currently, the Proponent realizes 5 MW of irrigation load control benefit in Utah on a scheduled-forward initiative. This was expected to grow in 2009, as the Proponent planned to offer an initiative beginning in 2009. It is anticipated the program will grow to approximately 30 MW of avoided peak demand in Utah.

Energy-efficiency and load-management programs are valuable tools that the Proponent is using and will continue to use to manage the demand for and consumption of energy. However, these programs do not address any of the need categories of the Project. While demand-side management programs focus on managing a very small part of the load on the system; two of the Project’s primary needs are to increase transmission capacity and improve the ability of the
Proponent’s transmission system to transport energy into central Utah and to growth areas along the Wasatch Front, facilitating better operational management of the existing interconnected system. Further, energy-efficiency and load-management programs do not meet the BLM’s purpose and need, which is to analyze the Proponent’s application for a utility-scale transportation system across federal lands and enhance transportation infrastructure for collection and distribution of energy resources across the nation. Thus, these alternatives were eliminated from further consideration and detailed analysis.

New Generation Facilities or Other Types of Generation

The Proponent assesses electric generation needs and transmission expansion requirements on a long-term basis. An electrical system model is established to analyze different transmission and generation options geographically to deliver electricity to customers while evaluating electrical generation alternatives (i.e., natural gas, wind, geothermal, etc.) to assess financial requirements and risk. One of the Proponent’s models studied various combinations of electrical generation alternatives and/or transmission to determine the mix of generation sources and transmission options and timing that minimizes investment and operating costs. These studies include electrical system reliability constraints, loads, generation/transmission costs and operating characteristics, transmission system configuration, electricity markets, fuel price variations, and emissions.

Electrical system modeling has indicated the optimal portfolio includes a mix of generation alternatives (i.e., base load generation, intermediate generations, and seasonal peaking generation) that can be delivered to the Proponent’s customers. Additionally, market purchases from the Desert Southwest are particularly important for supporting northern and southern Utah loads prior to when generating facilities can be acquired and enabled by the Project.

Other types of generation, including distributed (local) generation resources, also were considered. Based on responses to the previous Proponent request for potential new generation resources, none of the current proposed facilities would meet the load growth demands in southern and central Utah and, therefore, would not meet the Project’s purpose and need. Construction of the Project would provide flexibility to match customer load requirements in varying locations.

Distributed generation resources can be differentiated from centralized generation resources, primarily in terms of size, multiple units dispersed throughout an area, and they are usually installed at or near customer loads where the generated power is used. Distributed generation generally ranges in size from about 5,000 watts to 10 MW, in contrast to centralized generation resources that are typically hundreds of megawatts per site. Distributed generation is also more expensive per watt than central generation due to the types of technology used. Distributed generation resources technologies include solar photovoltaics, energy storage devices (e.g., batteries), micro turbines, mini wind turbines, and fuel cells. For the reasons described, it is most effective for the Proponent to use a centrally located generation unit, in addition to supporting seasonal or regional energy exchanges.

New and distributed generation resources did not meet the agencies’ purpose and need, which is to analyze the Proponent’s application for a utility-scale transportation system across federal lands, and therefore were eliminated from further consideration for this Project.
Existing Transmission Systems

Transmission capacity of the existing transmission paths within the Project area is fully allocated to meet native load obligations or point-to-point transmission service. The existing 345kV transmission line (Sigurd to Red Butte No. 1), as part of the electric supply grid, is currently being operated at full capacity. Therefore, the use of the existing transmission system was eliminated from further consideration for this Project.

Alternative Transmission Technologies

Alternative Voltage Levels

To provide the Project’s needed capacity in the most cost effective manner, a 345kV line was chosen to match the existing voltage infrastructure of the local bulk transmission facilities. If a 345kV line is not built, then multiple 230kV lines or a 500kV line would be needed to meet the Project’s needed capacity. However, multiple 230kV lines would be more costly and result in greater surface disturbance and resource impacts. Likewise, because there is no existing 500kV infrastructure in the area, the existing substation facilities would need to be greatly expanded or a new substation site would be required, thereby also resulting in greater cost, surface disturbance, and resource impacts than a single 345kV line. This alternative was dismissed because the effects would be substantially similar to or greater than those predicted to occur under the Proponent’s Preferred Alternative.

Direct or Alternating Current Transmission

The main benefit of a direct-current system is better control of power flows over very long distances (i.e., more than 400 miles); whereas, line construction cost savings may be able to offset the high costs of direct-current terminal substations. To interconnect with an alternating-current system, the direct current must be converted to alternating current. Converter substations require more land than a typical alternating-current substation, and costs for one 500kV direct-current converter station can be up to $350 million (a potential total of $700 million for the two new substations) (Rocky Mountain Power 2008). The alternating-current system selected allows for multiple substation interconnections necessary for load centers and for generation resources while being more economical than direct current. A direct-current system also has limited ability for future expansion where additional future transmission capacity is needed and therefore requires a higher upfront cost. For these reasons, the alternating-current design was chosen for the Project over a direct-current design.

Underground Transmission

Extra-high-voltage underground lines (345kV and 500kV) have been constructed in some parts of the United States, but only for short distances, and usually where circumstances dictated overhead lines were not feasible (e.g., in the vicinity of airports and urban centers).

High-voltage underground transmission lines have markedly different technological requirements than lower-voltage underground distribution lines. Underground high-voltage transmission lines require extensive cooling systems to dissipate the heat generated by the transmission of bulk energy. Cooling systems are complex and expensive. The extremely high
Operational problems are greater and the duration of outages is normally longer for underground transmission lines. When an outage of an underground line occurs, determining the cause and location of the damage, the replacement parts needed to repair the line, and actually repairing the line takes much more time than for an overhead line. Repairs to an underground line are also more expensive. If an underground line is damaged during the winter at a high elevation, the presence of snow would increase the length of time required and the degree of difficulty to repair the facility. The potential long-term outages associated with the 345kV transmission line would be unacceptable for a circuit carrying bulkpower to a large area of south central/southern Utah.

The environmental impacts from construction of an underground transmission line would be similar to those for major pipeline construction. Typical construction would require a continuous trench between endpoints, resulting in ground disturbance along an entire right-of-way. By comparison, overhead transmission line construction typically results in partial disturbances of the right-of-way, primarily at individual tower sites, pulling and tensioning sites, staging areas, and in areas providing access to the right-of-way.

Because this alternative was not economically feasible, it was eliminated from further consideration.

New Transmission Technologies

Other technologies considered as alternatives for economical bulk-power transmission of electric energy to load centers included microwave, laser, and superconductors. Current research and development indicate some of these technologies eventually may become viable alternatives to overhead transmission systems; however, none of them are currently available for commercial use. Because they are remote and speculative and not technically feasible at this time, alternatives associated with new transmission technologies were eliminated from further consideration.

Consistency with the Forest Plan and Other Laws

Forest Plan Compliance

The USFS cannot issue a special-use authorization to Rocky Mountain Power without ensuring consistency with the Fishlake and Dixie LRMPs (USFS 1986a and 1986b, respectively). I have determined that issuance of a special-use authorization for the Sigurd to Red Butte No. 2 Transmission Project is compliant with the Fishlake and Dixie LRMPs.
Other Laws

Endangered Species Act

As discussed in the “Consultation” section above, BLM and USFS have coordinated with FWS through the BRTG to determine the potential need for formal consultation under Section 7 of the ESA for the various action alternatives. FWS has indicated that formal consultation, including preparation of a Biological Assessment, would not be required if the selected route would not adversely affect listed species. The Selected Alternative will avoid occupied habitat for federally listed species that may occur in the Project area, including Utah prairie dog and southwestern willow flycatcher. BLM prepared a letter to FWS documenting the occurrence of threatened, endangered, and candidate species along the Selected Alternative route and potential effects on each species, and requested concurrence on the information presented from FWS. The FWS concurred with the findings by letter on November 9, 2012.

Clean Air Act

The screening-level air quality model performed to analyze potential impacts on air quality could not rule out a potential exceedance of the numerical value of the 1-hour standard for nitrogen dioxide (NO₂) or the 24-hour standard for particulate matter less than 2.5 micrometers in diameter (PM$_{2.5}$) because of emissions from diesel equipment to be used during Project construction. However, both the 24-hour PM$_{2.5}$ and 1-hour NO₂ National Ambient Air Quality Standards are based on a 3-year average of sub-maximum concentrations, while the model only predicts maximum concentrations over a construction duration of less than 2 years. Based on the conservative assumptions used in estimating the concentrations and dispersion of criteria pollutants generated from construction activities, violations of the National Ambient Air Quality Standards for PM$_{2.5}$, NO₂, or any other criteria pollutant resulting from Project construction would not be anticipated.

Safe Drinking Water Act

Potential impacts of the Selected Alternative on drinking water sources (i.e., wells, springs, and shallow groundwater) were determined to be low (refer to Section 3.2.3.4 of the Final EIS).

Clean Water Act, Executive Order 11988, and Executive Order 11990

The Project has been designed to comply with the requirements of Executive Order 11988 (Floodplain Management), Executive Order 11990 (Wetland Protection), and Sections 401 and 404 of the Clean Water Act (refer to Sections 3.2.3 and 3.2.4 of the Final EIS).

Executive Order 12898

Potential environmental justice populations are not expected to be disproportionately affected by impacts associated with construction of the Project (refer to Section 3.6.2.2 of the Final EIS).
Executive Order 13186

On September 23, 2008 a National Memorandum of Understanding between the USFS and the USFWS was entered into to promote the conservation of migratory birds. The bird species analyzed in the EIS were derived from a compilation of species included in the Utah Partners in Flight Conservation Strategy, the Utah Comprehensive Wildlife Conservation Strategy, and the USFWS’ Birds of Conservation Concern bird lists. The analysis regarding migratory birds presented in the Final EIS is compliant with the terms of both memorandum (refer to Section 3.2.4.5 and Appendix E of the Final EIS) and Executive Order 13186.

Roadless Area Conservation Rule

Pursuant to the Roadless Area Conservation Rule of 2001, both the Fishlake and Dixie National Forests identified areas having pristine, sensitive, and roadless characteristics as IRAs to prevent the fragmentation of these areas by new road construction or improvements. IRAs represent some of the largest and most extensive tracts of undeveloped land on the Fishlake and Dixie National Forests and are valued for their roadless nature, undeveloped values, and associated environmental characteristics and attributes.

The Selected Alternative crosses through the edges of the Atchinson IRA for 1.4 miles. An impact on the wilderness attributes and roadless characteristics of the Atchinson IRA are anticipated where the Project would conflict physically with IRAs. The types of effects anticipated include changes to ecological conditions, a loss of acres, and a decrease in user experience. To mitigate potential impacts on the wilderness attributes and roadless characteristics of the IRAs, the USFS and the Proponent collaborated to develop helicopter-only construction methods, supported by overland travel, to be used in the IRA. Helicopters would transport personnel, drilling equipment, towers, and other construction materials to and from the right-of-way and would be used for wire pulling and tensioning. Access to the right-of-way also can be accomplished by overland travel from the existing right-of-way for the Sigurd to Red Butte No. 1 transmission line using low-impact vehicles (i.e., transport vehicles with rubber treading, low pressure tires, or specialized mechanical movement to accommodate the terrain and landscape, all-terrain vehicles, or utility terrain vehicle). No blade work would be performed to assist overland travel within IRAs. The construction methods to be used within the IRAs are detailed in the POD. The intensity and extent of impacts anticipated will not preclude the ability of the area to be managed as an IRA and/or wilderness.

Environmental Preferred Alternative

In an EIS, the alternative or alternatives that are considered to be environmentally preferable are identified. In this EIS, the environmentally preferred alternative is the alternative route that, on balance, appears to have the lowest overall impact on the natural, human, and cultural environment, including resource uses.

The route that exhibits the least impact overall is a combination of Alternative N2 and Alternative S2. After implementation of measures to lessen impacts, significant long-term impacts resulting from implementation of the Project along this route, are anticipated only in localized areas. These areas include 2.1 miles of moderate-to-high impacts on views from the Fremont State Park and other recreation and travel-corridor views, on views from the Mountain Meadows
Massacre Site NHL and Mountain Meadows Historic Site and views from portions of the Old Spanish National Historic Trail, and some residences.

In the Draft EIS, Alternative N1 in the northern portion of the Project area exhibited the least impact on the environmental resources and resource uses analyzed. Since publication of the Draft EIS in May 2011, a private wind developer has obtained development rights on private lands crossed by Links 365 and 380 and intends to complete construction of a new wind facility prior to BLM’s decision on the Project. Link 380 is located within the designated WWEC containing the IPP; however, wind turbines are planned for development on private land within the designated utility corridor, thereby precluding use of the designated utility corridor for the proposed transmission line (Alternative N1). Both Beaver and Millard counties support the development of the wind farm and have approved permit applications for the wind farm since the release of the Draft EIS. In addition, Millard County provided formal comments noting that they would not support amending the County General Plan to allow for a utility corridor along the alignment of Alternative N1. Based on the reasons outlined here, Alternative N1 is no longer a technically feasible and viable alternative for the transmission line. Therefore, the alternative route in the northern portion of the Project area that exhibits the least environmental impact overall is Alternative N2.

The IRAs, identified and mapped by the USFS, are undeveloped and meet the minimum criteria for wilderness consideration by the USFS (U.S. Department of Agriculture 2001); therefore, development in these areas should be avoided. In the southern portion of the Project area, Alternative S2 avoids crossing through IRAs on the Dixie National Forest. Alternative S2 is, however, located within approximately 1,458 feet (0.25 mile) of the northern parcel of the Mountain Meadows Massacre Site NHL and less than 700 feet (0.13 mile) of the southern parcel of the Mountain Meadows Massacre Site NHL. The Mountain Meadows Massacre Site NHL was given landmark status on June 30, 2011 (after the Draft EIS was published). In accordance with the Secretary of the Interior’s Standards and Guidelines for Federal Agency Historic Preservation Programs and associated guidelines, an agency evaluating an undertaking that could affect directly or indirectly and adversely an NHL should consider all “prudent and feasible alternatives to avoid an adverse effect on the NHL.”

Administrative Review

This decision is subject to administrative appeal pursuant to 36 CFR 215. Only those individuals and organizations that provided comments during the 45-day comment period (or its extension) on the Draft EIS are eligible to file an appeal. The appeal must meet the requirements at 36 CFR 215.14.

Appeals filed by regular mail or express delivery must be sent to: Appeal Deciding Officer, Intermountain Regional Office, 324 25th Street, Ogden, Utah 84401. Appeals may also be hand delivered to the above address between the hours of 8:00 a.m. and 4:30 p.m. Mountain Time, Monday through Friday, excluding holidays. Appeals may also be submitted via fax at 801-625-5277.

Electronic appeals must be submitted in rich text format (.rtf), Microsoft Word (.doc or docx.), portable document format (.pdf), or as an email message to appeals-intermtn-regional-office@fs.fed.us. Emailed appeals must include the project name in the subject line. In cases where no identifiable name is attached to an electronic message, a verification of identity will be required. A scanned signature is one way to provide verification.
Appeals, including attachments, must be filed within 45 days from the publication date of the legal notice of decision in *The Spectrum*, St. George, Utah and the *Richfield Reaper*, Richfield, Utah. Documents received after the 45-day appeal period will not be considered. The concurrent publication date in the newspapers of record for the Dixie National Forest (*The Spectrum*, St. George, Utah) and the Fishlake National Forest (*Richfield Reaper*, Richfield, Utah), is the exclusive means for calculating the time to file an appeal. **Those wishing to appeal this decision should not rely upon dates or timeframe information provided by any other source.**

**Implementation**

If no appeals are filed within the 45-day time period, implementation of the decision may occur on, but not before, five business days from the close of the appeal filing period. When appeals are filed, implementation may occur on, but not before, the 15th business day following the date of the last appeal disposition.

**Contact Person**

Kenton Call  
Dixie National Forest  
(435) 865-3730
Signature and Date

ALLEN ROWLEY  
Forest Supervisor  
Fishlake National Forest

December 7, 2012
Appendix A – Legal Descriptions
Salt Lake Meridian, Richfield Field Office, Sevier County

T. 22 S., R. 02 W.,
  sec. 33, SE1/4SW1/4, N1/2SE1/4, and SW1/4SE1/4;
  sec. 34, SE1/4SE1/4.

T. 23 S., R. 02 W.,
  sec. 5, SE1/4NE1/4, SE1/4SW1/4, N1/2SE1/4, and SW1/4SE1/4;
  sec. 7, SE1/4NE1/4.

T. 23 S., R. 03 W.,
  sec. 13, SE1/4NE1/4, NE1/4SE1/4, and S1/2SE1/4.

Salt Lake Meridian, Cedar City Field Office, Beaver County

T. 26 S., R. 07 W.,
  sec. 1, SE1/4SE1/4;
  sec. 3, SE1/4SE1/4;
  sec. 10, NE1/4NE1/4;
  sec. 11, NW1/4NE1/4, S1/2NE1/4, and N1/2NW1/4;
  sec. 12, lot 5, NE1/4NE1/4, S1/2NE1/4, and SE1/4NW1/4.

T. 26 S., R. 09 W.,
  sec. 3, SE1/4SW1/4;
  sec. 10, E1/2NW1/4, E1/2SW1/4, and SW1/4SE1/4;
  sec. 15, W1/2NE1/4, E1/2NW1/4, E1/2SW1/4, and W1/2SE1/4;
  sec. 22, W1/2NE1/4, E1/2NW1/4, E1/2SW1/4, and W1/2SE1/4;
  sec. 27, E1/2NW1/4 and E1/2SW1/4;
  sec. 34, NE1/4NW1/4, SW1/4NW1/4, and W1/2SW1/4.

T. 27 S., R. 09 W.,
  sec. 3, lot 4, SW1/4NW1/4;
  sec. 4, NE1/4SE1/4 and S1/2SE1/4;
  sec. 6, lot 7, SE1/4SW1/4;
  sec. 7, N1/2NE1/4, SE1/4NE1/4, and NE1/4NW1/4;
  sec. 8, S1/2NE1/4, NW1/4NW1/4, S1/2NW1/4, and E1/2SE1/4;
  sec. 9, N1/2NE1/4, SW1/4NE1/4, NE1/4NW1/4, S1/2NW1/4, and NW1/4SW1/4.

T. 27 S., R. 10 W.,
  sec. 1, N1/2SW1/4 and SE1/4;
  sec. 5, S1/2SW1/4 and S1/2SE1/4;
  sec. 6, S1/2SW1/4.

T. 27 S., R. 11 W.,
  sec. 1, S1/2SW1/4 and SE1/4;
  sec. 11, NE1/4NE1/4;
  sec. 12, NW1/4 and E1/2SW1/4;
sec. 25, E1/2NW1/4, N1/2SW1/4, and SW1/4SW1/4;
sec. 35, lots 2 and 3, NE1/4NE1/4, S1/2NE1/4, and NW1/4SE1/4.

T. 28 S., R. 11 W.,
sec. 1, SW1/4SW1/4;
sec. 11, E1/2NW1/4 and SW1/4;
sec. 12, N1/2NW1/4, SE1/4NW1/4, and NE1/4SW1/4;
sec. 15, SE1/4NE1/4 and E1/2SE1/4;
sec. 22, lots 5, 7, and 8, W1/2NE1/4 and W1/2SE1/4;
sec. 27, lot 1, NW1/4NE1/4 and NW1/4SW1/4;
sec. 28, SE1/4SE1/4;
sec. 33, lots 4 to 6, inclusive, N1/2NE1/4, SW1/4NE1/4, E1/2SW1/4, and NW1/4SE1/4.

T. 29 S., R. 11 W.,
sec. 4, lot 4;
sec. 5, lot 1, S1/2NE1/4, NE1/4SW1/4, S1/2SW1/4, and NW1/4SE1/4;
sec. 7, E1/2NE1/4, SE1/4SW1/4, N1/2SE1/4, and SW1/4SE1/4;
sec. 8, N1/2NW1/4 and SW1/4NW1/4;
sec. 18, lots 1 to 3, inclusive, E1/2NW1/4.

T. 29 S., R. 12 W.,
sec. 13, SE1/4;
sec. 24, W1/2NE1/4, SE1/4NW1/4, E1/2SW1/4 and NW1/4SE1/4;
sec. 25, N1/2NW1/4, SW1/4NW1/4, and W1/2SW1/4;
sec. 26, SE1/4SE1/4;
sec. 35, E1/2NE1/4 and SE1/4.

T. 30 S., R. 12 W.,
sec. 10, SE1/4SW1/4, N1/2SE1/4, and SW1/4SE1/4;
sec. 16, NE1/4SE1/4 and S1/2SE1/4;
sec. 20, lots 3 and 4, W1/2SE1/4;
sec. 21, NW1/4NE1/4, E1/2NW1/4, SW1/4NW1/4, and NW1/4SW1/4;
sec. 29, NW1/4NE1/4, E1/2NW1/4, and SW1/4NW1/4;
sec. 30, S1/2SE1/4.

Salt Lake Meridian, Cedar City Field Office, Iron County

T. 31 S., R. 12 W.,
sec. 6, SE1/4SE1/4;
sec. 7, E1/2NE1/4 and E1/2SE1/4;
sec. 18, NE1/4NE1/4 and E1/2SE1/4;
sec. 31, lot 1.

T. 32 S., R. 12 W.,
sec. 7, lot 1;
sec. 18, lots 1 and 2, SE1/4SW1/4;
sec. 19, lots 1 to 4, inclusive, E1/2NW1/4;
sec. 30, lots 1 to 4, inclusive;
sec. 31, lots 1 to 3, inclusive.

T. 33 S., R. 12 W.,
sec. 6, lot 7.
T. 33 S., R. 13 W.,
sec. 13, N1/2NE1/4, SW1/4NE1/4, SE1/4NW1/4, N1/2SW1/4, and SW1/4SW1/4;
sec. 14, SE1/4SE1/4;
sec. 22, S1/2SE1/4;
sec. 23, N1/2NE1/4, SW1/4NE1/4, E1/2NW1/4, N1/2SW1/4, and SW1/4SW1/4;
sec. 27, W1/2NE1/4, SE1/4NW1/4, N1/2SW1/4, and SW1/4SW1/4;
sec. 28, SE1/4SE1/4;
sec. 32, W1/2SE1/4.

T. 34 S., R. 14 W.,
sec. 14, SE1/4SE1/4.

T. 35 S., R. 15 W.,
sec. 24, NW1/4NW1/4.

T. 36 S., R. 15 W.,
sec. 3, SE1/4NE1/4 and SE1/4;
sec. 10, lots 1, 2, 5, 6, and 8, NE1/4SW1/4 and W1/2SE1/4;
sec. 14, SW1/4SW1/4;
sec. 15, N1/2NE1/4, SE1/4NE1/4, NE1/4SE1/4, and S1/2SE1/4;
sec. 20, lots 3 and 4, SW1/4SE1/4 and E1/2SW1/4;
sec. 21, NE1/4NE1/4, SW1/4NE1/4, S1/2NW1/4, and N1/2SW1/4;
sec. 22, N1/2NE1/4 and N1/2NW1/4;
sec. 29, N1/2NW1/4 and SW1/4NW1/4;
sec. 30, lots 7, 10, 11, and 12, S1/2NE1/4, N1/2SE1/4, and SW1/4SE1/4.

Salt Lake Meridian, Fillmore Field Office, Millard County

T. 25 S., R. 07 W.,
sec. 21, S1/2SE1/4;
sec. 22, S1/2SW1/4;
sec. 27, S1/2SW1/4 and SW1/4SE1/4;
sec. 28, NW1/4NE1/4, NW1/4, N1/2SW1/4, NW1/4SE1/4, and S1/2SE1/4;
sec. 29, NE1/4NE1/4, S1/2NE1/4, S1/2NW1/4, NE1/4SW1/4, and N1/2SE1/4;
sec. 30, lot 1, NW1/4NE1/4, S1/2NE1/4, and NE1/4NW1/4;
sec. 34, NW1/4NE1/4, S1/2NE1/4, and SE1/4.

T. 25 S., R. 08 W.,
sec. 17, NE1/4SW1/4 and N1/2SE1/4;
sec. 21, lot 1, E1/2NE1/4;
sec. 22, lots 4, 7, 8, and 10, SW1/4NW1/4, and NE1/4SW1/4;
sec. 23, lot 1, NW1/4SW1/4, SE1/4SW1/4, and S1/2SE1/4;
sec. 24, SW1/4SW1/4;
sec. 25, NE1/4 and N1/2NW1/4.

T. 25 S., R. 09 W.,
sec. 13, N1/2NW1/4;
sec. 14, N1/2NE1/4, NE1/4NW1/4, and S1/2NW1/4;
sec. 15, E1/2SW1/4, N1/2SE1/4, and SW1/4SE1/4;
sec. 22, W1/2NE1/4, E1/2NW1/4, E1/2SW1/4, and W1/2SE1/4;
sec. 27, NE1/4, E1/2NW1/4, E1/2SW1/4, and W1/2SE1/4;
sec. 34, W1/2NE1/4, E1/2NW1/4, E1/2SW1/4, and NW1/4SE1/4.
T. 26 S., R. 07 W.,
sec. 1, SE1/4SE1/4;
sec. 2, lot 3, SE1/4NW1/4;
sec. 3, lot 1, SE1/4NE1/4 and E1/2SE1/4.

T. 26 S., R. 09 W.,
sec. 3, lot 3, SE1/4NW1/4 and E1/2SW1/4.
BUREAU OF LAND MANAGEMENT, EXHIBIT A
ROCKY MOUNTAIN POWER RIGHT-OF-WAY GRANT
LEGAL DESCRIPTION
TEMPORARY RIGHT-OF-WAY

Salt Lake Meridian, Richfield Field Office, Sevier County

T. 22 S., R. 02 W.,
sec. 33, SE1/4SW1/4, N1/2SE1/4, and SW1/4SE1/4;
sec. 34, SE1/4SE1/4.

T. 23 S., R. 02 W.,
sec. 5, SE1/4NE1/4, SE1/4SW1/4, N1/2SE1/4, and SW1/4SE1/4;
sec. 7, SE1/4NE1/4.

T. 23 S., R. 03 W.,
sec. 13, SE1/4NE1/4, NE1/4SE1/4, and S1/2SE1/4.

Salt Lake Meridian, Cedar City Field Office, Beaver County

T. 26 S., R. 07 W.,
sec. 1, SE1/4SE1/4;
sec. 3, SE1/4SE1/4;
sec. 10, E1/2NE1/4;
sec. 11, NW1/4NE1/4, S1/2NE1/4, and N1/2NW1/4;
sec. 12, lots 3 and 5, NE1/4NE1/4, S1/2NE1/4, and SE1/4NW1/4.

T. 26 S., R. 09 W.,
sec. 3, SE1/4SW1/4;
sec. 10, N1/2NW1/4, SE1/4NW1/4, E1/2SW1/4, and SW1/4SE1/4;
sec. 15, W1/2NE1/4, E1/2NW1/4, E1/2SW1/4, and W1/2SE1/4;
sec. 22, W1/2NE1/4, E1/2NW1/4, E1/2SW1/4, and W1/2SE1/4;
sec. 27, E1/2NW1/4 and E1/2SW1/4;
sec. 34, NE1/4NW1/4, SW1/4NW1/4, and W1/2SW1/4.

T. 27 S., R. 09 W.,
sec. 3, lot 4, SW1/4NW1/4;
sec. 4, NE1/4SE1/4 and S1/2SE1/4;
sec. 6, lot 7, SE1/4SW1/4;
sec. 7, N1/2NE1/4, SE1/4NE1/4, and NE1/4NW1/4;
sec. 8, S1/2NE1/4, NW1/4NW1/4, S1/2NW1/4, and E1/2SE1/4;
sec. 9, N1/2NE1/4, SW1/4NE1/4, NE1/4NW1/4, S1/2NW1/4, and NW1/4SW1/4.

T. 27 S., R. 10 W.,
sec. 1, N1/2SW1/4 and SE1/4;
sec. 5, S1/2SW1/4 and S1/2SE1/4;
sec. 6, S1/2SW1/4.

T. 27 S., 11 W.,
sec. 1, SW1/4 and S1/2SE1/4;
sec. 11, NE1/4NE1/4;
sec. 12, NW1/4 and E1/2SW1/4;
sec. 25, E1/2NW1/4, N1/2SW1/4, and SW1/4SW1/4;
sec. 35, lots 2 and 3, NE1/4NE1/4, S1/2NE1/4, and NW1/4SE1/4.

T. 28 S., R. 11 W.,
sec. 1, SW1/4SW1/4;
sec. 11, E1/2NW1/4 and SW1/4;
sec. 12, N1/2NW1/4, SE1/4NW1/4, and NE1/4SW1/4;
sec. 15, SE1/4NE1/4 and E1/2SE1/4;
sec. 22, lots 5, 7, and 8, W1/2NE1/4 and W1/2SE1/4;
sec. 27, lot 1, NW1/4NE1/4 and NW1/4SW1/4;
sec. 28, SE1/4SE1/4;
sec. 33, lots 4 to 6, inclusive, N1/2NE1/4, SW1/4NE1/4, E1/2SW1/4, and NW1/4SE1/4.

T. 29 S., R. 11 W.,
sec. 4, lot 4;
sec. 5, lot 1, S1/2NE1/4, NE1/4SW1/4, S1/2SW1/4, and NW1/4SE1/4;
sec. 7, E1/2NE1/4, SE1/4SW1/4, N1/2SE1/4, and SW1/4SE1/4;
sec. 8, N1/2NW1/4 and SW1/4NW1/4;
sec. 18, lots 1 to 3, inclusive, E1/2NW1/4.

T. 29 S., R. 12 W.,
sec. 13, SE1/4;
sec. 24, W1/2NE1/4, SE1/4NW1/4, E1/2SW1/4 and NW1/4SE1/4;
sec. 25, N1/2NW1/4, SW1/4NW1/4, and W1/2SW1/4;
sec. 26, SE1/4SE1/4;
sec. 35, E1/2NE1/4 and SE1/4.

T. 30 S., R. 12 W.,
sec. 10, SE1/4SW1/4, N1/2SE1/4, and SW1/4SE1/4;
sec. 16, NE1/4SE1/4 and S1/2SE1/4;
sec. 20, lots 3 and 4, W1/2SE1/4;
sec. 21, NW1/4NE1/4, E1/2NW1/4, SW1/4NW1/4, and NW1/4SW1/4;
sec. 29, NW1/4NE1/4, E1/2NW1/4, and SW1/4NW1/4;
sec. 30, S1/2SE1/4.

Salt Lake Meridian, Cedar City Field Office, Iron County

T. 31 S., R. 12 W.,
sec. 6, SE1/4SE1/4;
sec. 7, E1/2NE1/4 and E1/2SE1/4;
sec. 18, NE1/4NE1/4 and E1/2SE1/4;
sec. 31, lot 1.

T. 32 S., R. 12 W.,
sec. 7, lot 1;
sec. 18, lots 1 and 2, SE1/4SW1/4;
sec. 19, lots 1 to 4, inclusive, E1/2NW1/4;
sec. 30, lots 1 to 4, inclusive;
sec. 31, lots 1 to 3, inclusive.

T. 33 S., R. 12 W.,
sec. 6, lot 7.
T. 33 S., R. 13 W.,
   sec. 13, N1/2NE1/4, SW1/4NE1/4, SE1/4NW1/4, N1/2SW1/4, and SW1/4SW1/4;
   sec. 14, SE1/4SE1/4;
   sec. 22, S1/2SE1/4;
   sec. 23, NE1/4, E1/2NW1/4, N1/2SW1/4, and SW1/4SW1/4;
   sec. 27, W1/2NE1/4, SE1/4NW1/4, N1/2SW1/4, and SW1/4SW1/4;
   sec. 28, SE1/4SE1/4;
   sec. 32, W1/2SE1/4.

T. 34 S., R. 14 W.,
   sec. 14, SE1/4SE1/4.

T. 35 S., R. 15 W.,
   sec. 24, NW1/4NW1/4.

T. 36 S., R. 15 W.,
   sec. 3, SE1/4NE1/4 and SE1/4;
   sec. 10, lots 1, 2, 5, 6, and 8, NE1/4SW1/4 and W1/2SE1/4;
   sec. 14, SW1/4SW1/4;
   sec. 15, N1/2NE1/4, SE1/4NE1/4, NE1/4SE1/4, and S1/2SE1/4;
   sec. 20, lots 3 and 4, SW1/4SE1/4 and E1/2SW1/4;
   sec. 21, NE1/4NE1/4, SW1/4NE1/4, S1/2NW1/4, and N1/2SW1/4;
   sec. 22, N1/2NE1/4 and N1/2NW1/4;
   sec. 29, N1/2NW1/4 and SW1/4NW1/4;
   sec. 30, lots 7, 10, 11, and 12, S1/2NE1/4, N1/2SE1/4, and SW1/4SE1/4.

Salt Lake Meridian, Fillmore Field Office, Millard County

T. 25 S., R. 07 W.,
   sec. 21, S1/2SE1/4;
   sec. 22, S1/2SW1/4;
   sec. 27, S1/2SW1/4 and SW1/4SE1/4;
   sec. 28, NW1/4NE1/4, NW1/4, N1/2SW1/4, NW1/4SE1/4, and S1/2SE1/4;
   sec. 29, NE1/4NE1/4, S1/2NE1/4, S1/2NW1/4, NE1/4SW1/4, and N1/2SE1/4;
   sec. 30, lot 1, NW1/4NE1/4, S1/2NE1/4, and NE1/4NW1/4;
   sec. 34, NE1/4 and SE1/4.

T. 25 S., R. 08 W.,
   sec. 17, NE1/4SW1/4 and N1/2SE1/4;
   sec. 21, lot 1, E1/2NE1/4;
   sec. 22, lots 4, 7, 8, and 10, SW1/4NW1/4, and NE1/4SW1/4;
   sec. 23, lot 1, NW1/4SW1/4, SE1/4SW1/4, and S1/2SE1/4;
   sec. 24, SW1/4SW1/4;
   sec. 25, NE1/4 and N1/2NW1/4.

T. 25 S., R. 09 W.,
   sec. 13, N1/2NW1/4;
   sec. 14, N1/2NE1/4, NE1/4NW1/4, and S1/2NW1/4;
   sec. 15, SW1/4, N1/2SE1/4, and SW1/4SE1/4;
   sec. 22, W1/2NE1/4, E1/2NW1/4, E1/2SW1/4, and W1/2SE1/4;
   sec. 27, NE1/4, E1/2NW1/4, E1/2SW1/4, and W1/2SE1/4;
   sec. 34, W1/2NE1/4, E1/2NW1/4, E1/2SW1/4, and NW1/4SE1/4.
T. 26 S., R. 07 W.,
sec. 1, SE1/4SE1/4;
sec. 2, lots 2 and 3, SW1/4NE1/4 and SE1/4NW1/4;
sec. 3, lot 1, SE1/4NE1/4 and E1/2SE1/4.

T. 26 S., R. 09 W.,
sec. 3, lot 3, SE1/4NW1/4 and E1/2SW1/4.
The Plan of Development is a two-volume document. A copy of Volume I (text volume) of the Plan of Development is included on the CD attached to the back cover of this ROD.