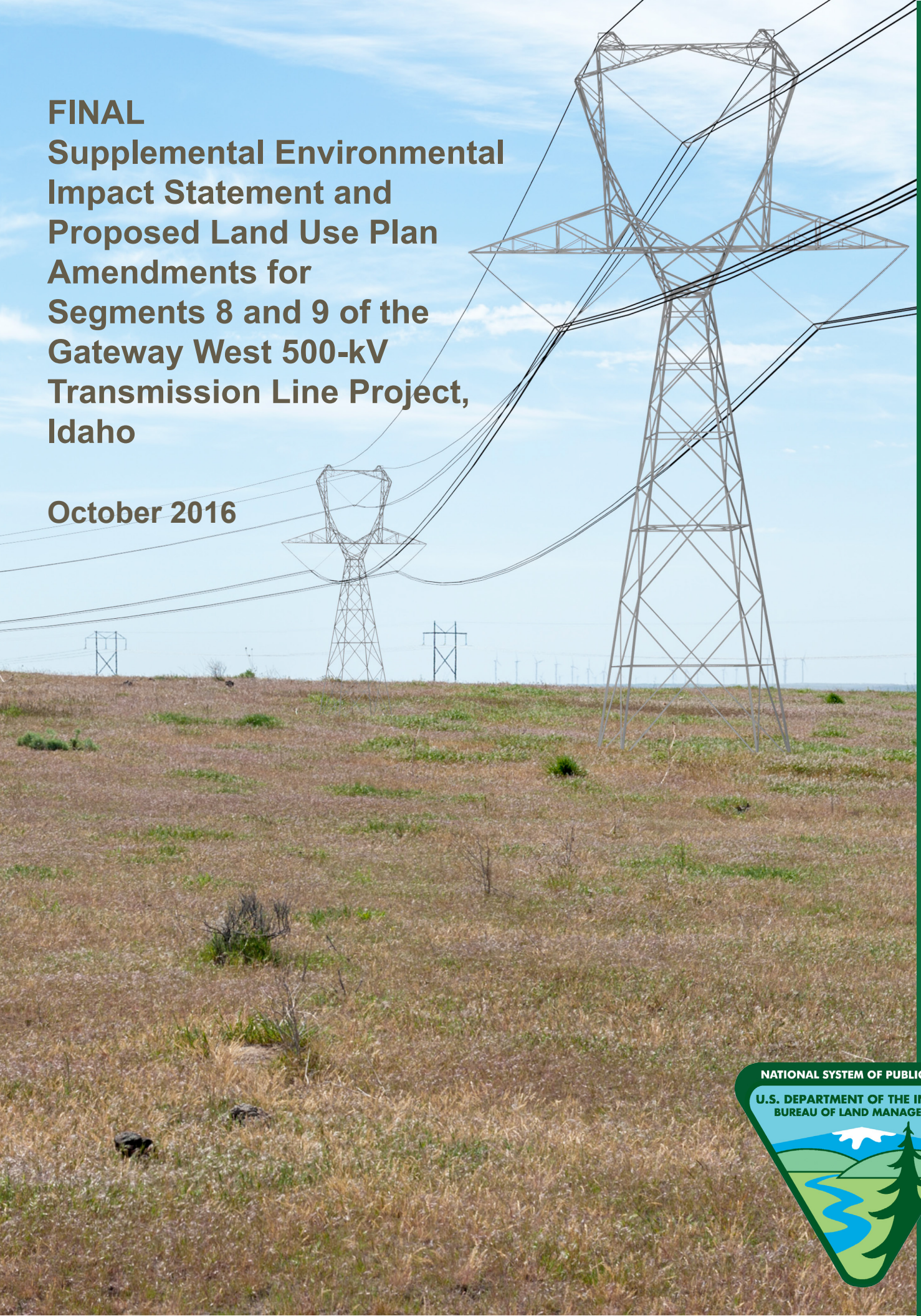

FINAL Supplemental Environmental Impact Statement and Proposed Land Use Plan Amendments for Segments 8 and 9 of the Gateway West 500-kV Transmission Line Project, Idaho

October 2016

BLM

Idaho State Office

NATIONAL SYSTEM OF PUBLIC LANDS

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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BLM/ID/PL-15/100

The photograph used for the cover of the Supplemental EIS was taken in western Gooding County, Idaho, facing southeast toward a portion of the Oregon Trail, Key Observation Point C1512 in the National Historic Trails analysis. The transmission lines and towers depicted in this photograph are computer-generated simulations.

Final Supplemental Environmental Impact Statement and Proposed Land Use Plan Amendments for Segments 8 and 9 of the Gateway West 500-kV Transmission Line Project, Idaho

[ ] Draft [ ] Final [X] Supplemental

Lead Agency	Bureau of Land Management, Department of the Interior
Cooperating Agencies	U.S. Fish and Wildlife Service (Ecological Services Division); National Park Service (National Trails Office, Pacific West Region, Hagerman Fossil Beds National Monument); U.S. Army Corps of Engineers; Idaho State Historic Preservation Office; Idaho Department of Fish and Game; the Idaho Governor's Office of Energy Resources; City of Kuna; Twin Falls County, Idaho
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Abstract

On May 7, 2007, Idaho Power Company and PacifiCorp (doing business as Rocky Mountain Power), collectively known as the Proponents, applied to the Bureau of Land Management (BLM) for a right-of-way (ROW) grant to use the National System of Public Lands for portions of the Gateway West Transmission Line Project (Gateway West or Project). The original application was revised in October 2007, August 2008, May 2009, January 2010, and August 2014 to reflect changes and refinements in their proposed Project and in response to feedback from the public regarding routing alternatives. The Plan of Development (POD) has been revised several times in response to Project changes and recommendations from the BLM, other reviewing agencies, and public comment. This supplemental environmental impact statement (SEIS) evaluates the revised proposed action for Segments 8 and 9 as stated in the application including environmental protection measures. It also examines the environmental impacts of four other route alignments and four variations. The BLM has identified seven action alternatives, one of which has been selected as the Preferred Alternative by the BLM. Granting of the ROW for the Revised Proposed Routes or other route alignments would require amendments to BLM Resource Management Plans and BLM Management Framework Plans. Proposed amendments have been identified. Significant impacts were identified from construction and operations of the transmission line on historical resources (historic trails), visual quality, and cumulative impacts on several resources based on past and present levels of disturbance. A framework for compensatory mitigation has been developed. The protest period for the proposed plan amendments will close 30 days from the date of publication of the U.S. Environmental Protection Agency's Notice of Availability in the Federal Register.

EXECUTIVE SUMMARY

INTRODUCTION

On May 7, 2007, Idaho Power Company and PacifiCorp (doing business as Rocky Mountain Power), collectively known as the Proponents, applied to the Bureau of Land Management (BLM) for a right-of-way (ROW) grant to use the National System of Public Lands for portions of the Gateway West Transmission Line Project (Gateway West or Project). The original application was revised in October 2007, August 2008, May 2009, and January 2010 to reflect changes and refinements in their proposed Project and in response to public feedback regarding routing alternatives.

The BLM published the Final Environmental Impact Statement (FEIS) for this Project on April 26, 2013 (BLM 2013a), and a Record of Decision (ROD) on November 14, 2013 (BLM 2013b). In that ROD, the BLM deferred offering a ROW grant for 2 of the 10 segments (i.e., Segments 8 and 9) to allow additional time for federal, state, and local permitting agencies to examine additional routing options, as well as mitigation and enhancement measures for these segments in and around the Morley Nelson Snake River Birds of Prey National Conservation Area (SRBOP).

The Proponents submitted a revised Project application for Segments 8 and 9 in August 2014, which has been assigned the case file number of IDI-35849-01. Segments 8 and 9 as now proposed would require amendment of one or more BLM land use plans, including the Twin Falls Management Framework Plan (MFP), the 1987 Jarbidge Resource Management Plan (RMP)[1], the SRBOP RMP, the Bennett Hills/Timmerman Hills MFP, and the Kuna MFP. The Proponents also submitted a portfolio of proposed mitigation measures and other measures focused on enhancing resources and values in the SRBOP, known as the Mitigation and Enhancement Portfolio (MEP; see Appendix C).

This Supplemental Environmental Impact Statement (SEIS) incorporates by reference the analysis related to Segments 8 and 9 included in the Gateway West 2013 FEIS. The SEIS supplements the analysis found in that FEIS by assessing the new information that has become available since the FEIS and ROD were published. The SEIS analyzes the Proponents' Revised Proposed Routes for Segments 8 and 9 and associated design features, the environmental effects of the MEP, and the impact of amending BLM land use plans. Other new information considered in the SEIS is listed below.

New information has become available since the FEIS for this Project was published on April 26, 2013. This new information includes the following:

- The Boise District Resource Advisory Committee (RAC) reviewed available information and local concerns and identified route options and design features for Segments 8 and 9.
- The Proponents submitted a revised application that adopted RAC-identified options as revised Proposed Routes for Segments 8 and 9.

[1] Portions of the area managed under the 1987 RMP are not included in the 2015 Jarbidge RMP; therefore, the 1987 RMP still applies to these areas. Refer to Appendix F for details.

- New routes and route variations have been developed, and the BLM has identified seven action alternatives based on the routes analyzed in this SEIS.
- The BLM identified a Preferred Alternative for the Project.
- The Proponents submitted an MEP that offers mitigation and enhancement for resources and values found in the SRBOP.
- The Proponents revised the Proposed Action within the SRBOP in response to the new Western Electricity Coordinating Council guidelines for spacing of transmission lines and route options evaluated by the RAC.
- Public and agency comments on the revised Proposed Action were received during the public scoping period.
- BLM Manual 6280 direction for evaluating project impacts on National Historic Trails was incorporated into the analysis.
- The BLM issued guidance on mitigation in a Draft Regional Mitigation Manual (BLM 2013c) to implement Secretarial Order 3330 (October 31, 2013), Improving Mitigation Policies and Practices of the Department of the Interior.
- In October 2015, the U.S. Department of the Interior released Manual 600 DM 6, *Implementing Mitigation at the Landscape-scale* (DOI 2015), which also implements landscape-scale mitigation for impacts from projects.
- On November 3, 2015, the BLM received the Presidential Memorandum: Mitigating Impacts on Natural Development and Encouraging Related Private Investment (80 Federal Register 68743).
- The BLM has developed a framework for compensatory mitigation for unavoidable impacts to the resources and values in the SRBOP.
- The BLM issued a revised RMP for the area managed under the Jarbidge Field Office.
- The BLM issued a ROD for Approved RMP Amendments for the Great Basin Region, Including the Greater Sage-Grouse Sub-Regions of Idaho and Southwestern Montana, Nevada and Northeastern California, Oregon, Utah.

Changes between Draft SEIS and Final SEIS

Numerous minor edits to the document were made between the Draft SEIS (DSEIS) and Final SEIS (FSEIS), many in response to comments by agencies and the public. These include corrections to the text, figures, and tables, as well as typographical errors. Major changes to the document include:

- The Environmentally Preferred Alternative is identified in Chapter 2.
- The BLM's Preferred Alternative is identified in Chapter 2.
- The Mitigation Framework for the SRBOP was further developed (see Appendix K).
- Both RAC reports are included in Appendix H.
- Comments on the DSEIS and the BLM's responses to those comments are presented in Appendix L.
- A section on the SRBOP has been added to Chapter 3 of the FSEIS.

- Section 3.7 was updated to reflect that the U.S. Fish and Wildlife Service reinstated threatened status for slickspot peppergrass under the Endangered Species Act on August 17, 2016.
- The environmental protection measures (EPMs) approved in the 2013 ROD for the Gateway West Project have been included as Appendix M. References to Table 2.7-1 in the FEIS have been changed to refer to Appendix M in this FSEIS.
- Two new variations to Alternative 5 are analyzed: the Alternative 5 Helicopter-Assisted Construction Variation and the Alternative 5 West-wide Energy Corridor Variation (see Section 2.3.2.3). Both variations follow routes analyzed in the DSEIS and employ helicopter construction as discussed in the 2013 FEIS. Appendix B-2 provides information on helicopter-assisted construction methods.[2]
- Additional visual resource surveys and analysis were completed for the Hagerman area at the request of the Hagerman Fossil Beds National Monument staff (see Section 3.2 and Appendix E).
- Information on road construction and road improvement for the alternatives has been updated (see Section 3.19).
- The DSEIS incorrectly identified some EPMs as only applying to federally managed lands. This information has been corrected in the FSEIS.

The SEIS identifies opportunities to mitigate the impacts of siting and building Segments 8 and 9, if a ROW is granted, by incorporating avoidance, minimization, and compensation measures with consideration of local and regional conditions. In addition, opportunities for enhancement of resources and values within the SRBOP are evaluated, in accordance with Public Law (P.L.) 103–64, the statute which established the SRBOP. These mitigation and enhancement measures would be scaled to apply to whichever alternative is selected other than No Action.

PURPOSE AND NEED

The BLM is the lead federal agency under the National Environmental Policy Act and is coordinating the preparation of the environmental analysis. The cooperating agencies include the U.S. Fish and Wildlife Service (Ecological Services Division); National Park Service (National Trails Office, Hagerman Fossil Beds National Monument); U.S. Army Corps of Engineers; the Idaho State Historic Preservation Office, Idaho Department of Fish and Game; the Idaho Governor's Office of Energy Resources; the City of Kuna; and Twin Falls County, Idaho.[3]

The purpose of the federal action on federally managed lands is to decide whether to grant, grant with modifications, or deny an application to construct and operate a transmission line on public lands. The need for the action is established by the federal

[2] NEPA Handbook Section 5.3.2 (BLM 2008c) states (emphasis added), "If a new alternative is added after the circulation of a draft EIS, **supplementation is not necessary if the new alternative lies within the spectrum of alternatives analyzed in the draft EIS or is a minor variation of an alternative analyzed in the draft EIS.** In such circumstances, the new alternative may be added in the final EIS."

[3] BLM and the cooperating agencies may be referred to collectively hereafter as "the Agencies."

agencies' responsibility under the Federal Land Policy and Management Act[4] (FLPMA) to respond to an application for a ROW.

ISSUES

Issues raised through scoping include effects on visual resources, cultural resources, historic trails, socioeconomics, environmental justice, plants and wildlife, including special status species, water resources, land use, conformance with land use plans, agriculture, reclamation, control of invasive plant species, recreation, wilderness characteristics, transportation, air quality, noise, electrical environment, and public safety. Important areas of concern included how the Project would affect private landowners in Ada, Canyon, and Owyhee Counties and protecting and enhancing the resources and values for which the SRBOP was established. Chapter 3 of the Draft SEIS discusses how the Revised Proposed Routes, other routes, and Toana Road Variations would affect key issues.

REVISED PROPOSED ACTION

Project Segments 1 through 7 and Segment 10 were analyzed in the 2013 FEIS and authorized in the 2013 ROD. The 2013 ROD deferred the decision to grant ROWs on federal lands for Segments 8 and 9 for the following reasons:

> *…for some portions of the Project the authorizing entities have not been able to agree on an acceptable route. One of these areas involves Segments 8 and 9 and siting in or around the Morley Nelson Snake River Birds of Prey NCA. The EIS analyzes routes located in the NCA and routes that generally avoid the NCA. The principal siting issue involves a requirement in the enabling legislation (Public Law 103-64) that the NCA be managed "to provide for the conservation, protection and enhancement of raptor populations and habitats and the natural and environmental resources and values associated therewith, and of the scientific, cultural, and educational resources and values of the public lands in the conservation area" (Public Law 103-64, Section 3(2)). This requirement differs from state and local government objectives to avoid private lands and site the Project on public land in the NCA.*
>
> *The Proponents' proposal, including environmental protection measures, and BLM standard requirements for surface-disturbing activities for routes in the NCA would conserve and protect NCA resources. However, enhancement components were lacking for routes in the NCA that were analyzed in the Final EIS. As part of their Final EIS comments, the Proponents submitted an "Enhancement Portfolio" for routes located in the NCA. While the Portfolio has merit and the potential to meet the enhancement requirement in the enabling legislation, the BLM needs more time to evaluate and refine it to ensure that it is sufficient.*

As noted in the SRBOP RMP (BLM 2008a):

> *The SRBOP was established in 1993 by P.L. 103-64 and is located in southwestern Idaho, within a 30-minute drive of Boise and almost half of Idaho's population. It encompasses approximately 483,700 public land acres, extending 81 miles along the Snake River. Within the SRBOP boundary are approximately 41,200 State acres, 4,800 privately owned acres, 1,600 military acres, and 9,300 acres covered by water. Since 1979, over 300,000 acres of upland shrub habitat has been lost to fire.*
>
> *The SRBOP contains the greatest concentration of nesting raptors in North America. About 700 raptor pairs, representing 16 species, nest in the SRBOP each spring, including golden*

[4] Federal Land Policy and Management Act of 1976, as amended, 43 United States Code (U.S.C.) § 1761

> *eagles, burrowing owls, and the greatest density of prairie falcons in the world. Eight other raptor species use the area during various seasons.*
>
> *…Prior to authorizing uses, the BLM determines the compatibility of those uses with the purposes for which the SRBOP was established. Public activities and uses that existed when the SRBOP legislation was enacted are allowed to continue to the extent that they are compatible with the purposes for which the SRBOP was established.*

The Segment 8 Revised Proposed Route follows a more northerly route toward the Hemingway Substation from the Midpoint Substation, while the Segment 9 Revised Proposed Route follows a more southerly route from the Cedar Hill Substation to the Hemingway Substation (Figure ES-1). The Proponents have proposed this split because of the need to serve customers along each route and to increase system reliability.

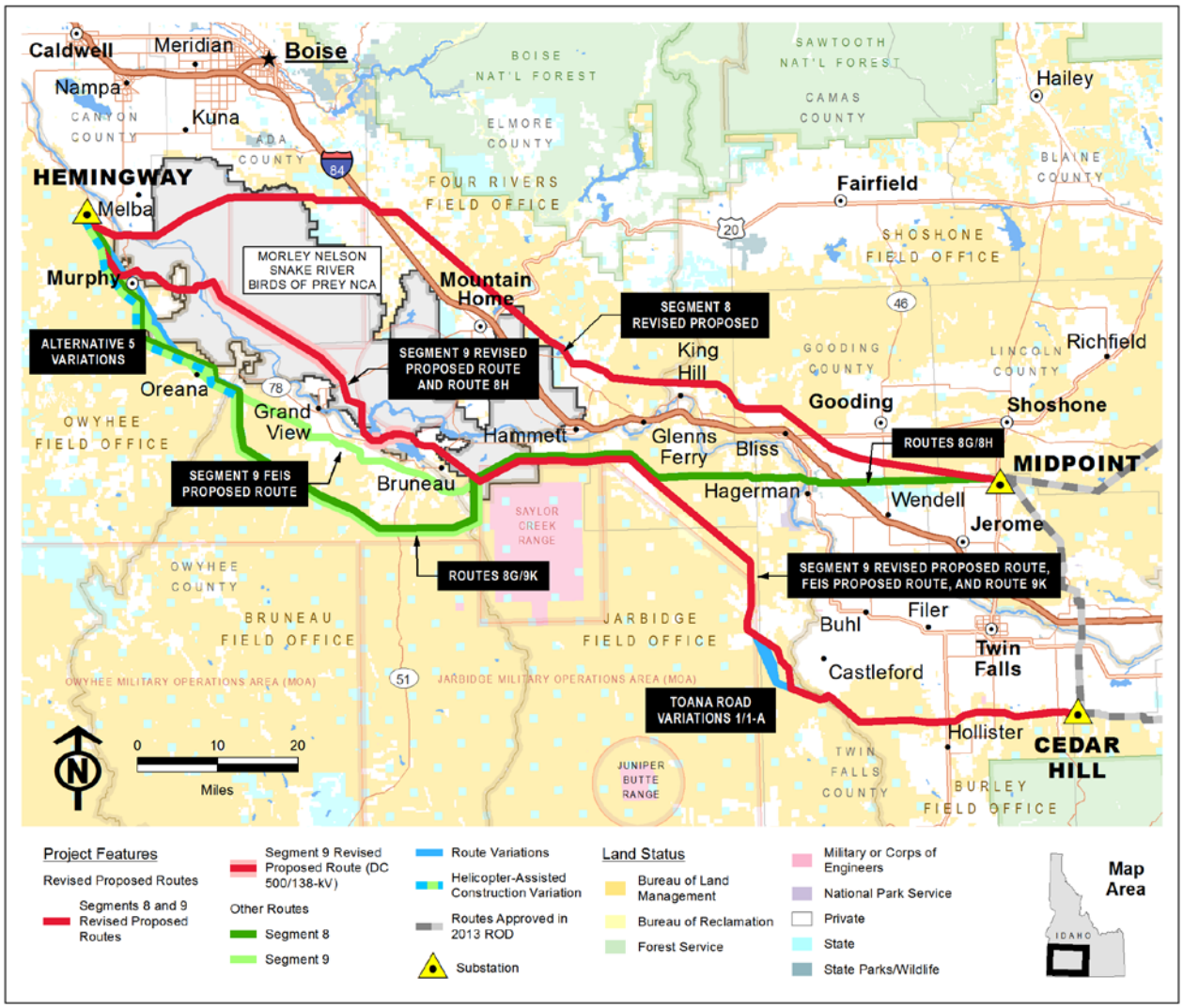

Figure ES-1. Project Overview

Project facilities include the following:

- two transmission line segments, their associated access roads, multipurpose and helicopter fly yards, and other temporary construction ground disturbances;
- proposed substation and expansions or modifications at two existing substations and at one substation approved under the 2013 ROD;
- reconstruction of portions of existing 138-kV and 500-kV lines;
- removal of one small existing substation and associated lines;
- other associated facilities including communication systems and optical fiber regeneration stations; and
- access roads and distribution supply lines where needed for proposed substations and optical fiber regeneration stations.

Project substations, structure design alternatives including a summary and comparison of tower types and structure finish and surface treatment alternatives, and components common to all action alternatives are described in Chapter 2 of the 2013 FEIS.

Details of construction and operation modifications submitted by the Proponents as part of their Plan of Development (POD) Supplement are included in Appendix B of this FSEIS. Proposed mitigation measures are discussed in the Draft MEP submitted by the Proponents as part of their POD Supplement; the Draft MEP is included separately in Appendix C of this FSEIS. Environmental protection plans are included as appendices to the August 2013 POD. All of these plans are considered part of the Project description for the proposed Project. Table 2.2-2 in Chapter 2 summarizes the proposed facilities.

SEGMENT 8 REVISED PROPOSED ROUTE – MIDPOINT TO HEMINGWAY

One single-circuit 500-kV transmission line is proposed between the existing Midpoint Substation and the existing Hemingway Substation, located approximately 30 miles southwest of Boise, Idaho (Figure ES-1). The line would be constructed using steel lattice towers between 145 and 180 feet tall (Appendix B of this SEIS). Appendix A, Figure A-1 in this SEIS shows the Segment 8 Revised Proposed Route. The Revised Proposed Route is 129.7 miles long and therefore two optical signal regeneration sites would be needed along the route. Final locations for regeneration stations would be determined after detailed design engineering is completed. This route is similar to the original proposed route in the 2013 FEIS except that the line would be 250 feet north of the existing 500-kV line rather than 1,500 feet south of the line from the eastern boundary of the SRBOP (milepost [MP] 99.7) to the Hemingway Substation. It would also cross the Snake River north of Guffey Butte, instead of south as in the 2013 FEIS. The first 91.4 miles of the route is unchanged from the 2013 FEIS Proposed Route.

Key factors considered in routing this segment included using the West-wide Energy (WWE) corridor where possible, conflicts with agricultural lands, residential development, visual resources, the SRBOP, slickspot peppergrass, the Halverson Bar and Wees Bar Non-motorized areas, a National Register Historic District, and the Idaho Army National Guard Orchard Combat Training Center. Key factors considered since the 2013 FEIS included impacts to communities, agriculture, and private property in the

Kuna and Melba areas of Ada, Canyon, and Owyhee Counties; critical habitat for slickspot peppergrass; and the Orchard Combat Training Center Alpha Sector. The 129.7-mile-long Revised Proposed Route is within the WWE corridor for 33.8 miles and adjacent to existing transmission corridors for 117.1 miles.

Several plan amendments would be needed to make the Segment 8 Revised Proposed Route conform to BLM land use plans. The Project would be consistent with 2015 Jarbidge RMP; however, the 2015 RMP does not cover all the areas that were managed under the 1987 Jarbidge RMP. Amendments would be needed to areas managed under the 1987 RMP to allow the transmission line in an avoidance area near paleontological areas, to allow disturbance while protecting cultural resources, and to change Visual Resource Management (VRM) classes to allow the transmission line. The Kuna MFP, the SRBOP RMP, and the Bennett Hills/Timmerman Hills RMP each require an amendment to allow the transmission line outside of existing corridors. In addition, the Bennett Hills/Timmerman Hills MFP would need an amendment for visual resources. The SRBOP RMP would also need an amendment to allow the surface disturbance from the Project within 0.5 mile of occupied sensitive plant habitat.

SEGMENT 9 REVISED PROPOSED ROUTE – CEDAR HILL TO HEMINGWAY

One single-circuit 500-kV transmission line is proposed between the proposed Cedar Hill and the existing Hemingway Substations (Figure ES-1). The line would be constructed using 500-kV single-circuit lattice steel structures between 145 and 180 feet tall and H-frame 500/138-kV structures between 125 and 200 feet tall in the areas to be double-circuited (Appendix B to this Draft SEIS). Appendix A, Figure A-1 of this SEIS provides details on the transmission line route between the Cedar Hill and Hemingway Substations. The Segment 9 Revised Proposed Route is 165.3 miles long and therefore would require two optical signal regeneration sites along its route. Final locations for regeneration stations would be determined after detailed design engineering is completed. The Revised Proposed Route follows the same alignment as the 2013 FEIS Proposed Route for 95.6 miles, and then follows an alignment similar to the 2013 FEIS Route 9D/9G from MPs 95.6 and 154.7, except that two portions of the route (totaling 25.7 miles) would be double-circuited with existing 138-kV lines authorized by the Federal Energy Regulatory Commission within the SRBOP: the first, near C.J. Strike Reservoir and the Bruneau Arm (MPs 106.2 to 109.3 and 109.9 to 112.1), and the other along Baja Road (MPs 121 to 141.2). Several rebuilds totaling approximately 0.6 mile are also required to tie the existing 138-kV lines into the new double-circuit alignments. Except for minor variations, the route is unchanged from the 2013 FEIS Route 9D/9G between MP 141.2 to 154.7. The Revised Proposed Route crosses the Snake River south of Sinker Butte, whereas the 2013 FEIS Proposed Route did not cross the Snake River. From MP 154.7 to the Hemingway Substation, the route is the same as the 2013 FEIS Proposed Route.

Key factors considered in routing this segment were agricultural and residential development in Owyhee County, visual resources, the Jarbidge Military Operations Areas, Saylor Creek Air Force Range, Mountain Home Air Force Base, Balanced Rock County Park, Bruneau Dunes State Park, the Cove Non-Motorized Area, greater sage-grouse leks and priority habitat, and the Salmon Falls Creek Wild and Scenic River, as described in the 2013 FEIS. Key factors considered since the 2013 FEIS included the

amount of new road that would be constructed and maintained within the SRBOP and in unroaded areas in Owyhee County, and minimizing the construction of transmission towers and roads near sage-grouse leks and within sage-grouse habitat.

The Segment 9 Revised Proposed Route would not be in conformance with the management direction provided in the 1987 Jarbidge and SRBOP RMPs, nor the Twin Falls MFP. The 1987 Jarbidge RMP would need an amendment for visual resources, changing VRM Class II to VRM Class III, for areas still managed under that plan. The SRBOP RMP would need amendments to allow the project in the Cove non-motorized area, to change VRM Class II areas to VRM Class III and allow a crossing of the Oregon Trail, to permit surface-disturbing activity within 0.5 mile of sensitive plant habitat, to cross outside of existing utility corridors within the SRBOP, and to allow the Project within the C.J Strike and Snake River Special Recreation Management Areas. The Twin Falls MFP would need amendments to allow the ROW outside of existing corridors and to allow the Project to cross the Salmon Falls Area of Critical Environmental Concern, changing the VRM to VRM Class III, consistent with the new Jarbidge RMP.

OTHER ROUTES CONSIDERED

Over 50 routes were considered but were eliminated from further consideration because, upon examination, it became clear that they would not result in effects outside the range of effects analyzed in the 2013 FEIS. The exception to this is the Proposed Route considered in the 2013 FEIS, which is fully analyzed in this document. Routes considered and eliminated are described in Section 2.5.3 of this SEIS, along with the reason they are no longer being considered. The six routes considered in detail are the Revised Proposed Route for Segment 8, 8G, 8H, the Revised Proposed Route for Segment 9, the Segment 9 Proposed Route analyzed in the 2013 FEIS (referred to as FEIS Proposed 9), and 9K.

Route 8G

Route 8G is being considered by the BLM to avoid crossing the northern portion of the SRBOP (Figure ES-1). The route follows an alignment similar to the ones analyzed for Routes 8A and 9B in the FEIS for approximately 44 miles, although it parallels 250 feet north of the existing 500-kV transmission line rather than 1,500 feet to the south in order to avoid the Hagerman Fossil Beds National Monument and development near Hagerman. The alignment then parallels 250 feet north of the Segment 9 Revised Proposed Route and Route 9K for most of the remaining distance into the Hemingway Substation. The route is 146.9 miles long (including a 1.9-mile rebuild of the existing 500-kV line), compared to the 129.7-mile-long Revised Proposed Route. Approximately 8.8 miles of this route would be within the SRBOP.

The SRBOP RMP would need an amendment to allow the transmission line outside of existing corridors and to allow the surface disturbance from the Project within 0.5 mile of occupied sensitive plant habitat. An amendment would be needed for the Bruneau MFP for visual resources.

Route 8H

Route 8H is being considered by the BLM to avoid crossing the northern portion of the SRBOP. The route follows a combination of portions of the alignments analyzed for 8G

and the Revised Proposed Route for Segment 9. The route is 137.5 miles long (including a 1.9-mile rebuild of the existing 500-kV line and a 25.7-mile removal and rebuild of a 138-kV line), compared to the 129.7-mile-long Segment 8 Revised Proposed Route. Approximately 44 miles of the route follows the 8G alignment, while the remainder of 8H follows the alignment of the Segment 9 Revised Proposed Route. Approximately 52.4 miles of this route would be within the SRBOP.

The SRBOP RMP would need amendments to allow the transmission line outside of existing corridors, for cultural and visual resources associated with the Oregon Trail and Special Recreation Management Areas, to cross a restricted area, and to allow the surface disturbance from the Project within 0.5 mile of occupied sensitive plant habitat.

FEIS Proposed 9

The Proponents originally designed the 162.2-mile-long route as the Proposed Route in Segment 9 to follow existing utility corridors and avoid the SRBOP and other protected areas where feasible (Section 2.2 of the 2013 FEIS). Approximately 54 miles of the route is within or adjacent to a utility corridor. FEIS Proposed 9 is approximately 3.1 miles shorter than the Revised Proposed Route but it crosses 13.6 miles of the SRBOP compared to 54.2 miles for the Revised Proposed Route. Both the Revised Proposed Route and FEIS Proposed 9 cross the Salmon Falls Creek at Lilly Grade adjacent to an existing single-phase 34.5-kV distribution line just north of the Salmon Falls Creek wilderness study area.

The SRBOP RMP would need an amendment to allow the transmission line outside of existing corridors and to allow the surface disturbance from the Project within 0.5 mile of occupied sensitive plant habitat. The Twin Falls MFP would require an amendment to allow the transmission line outside of existing corridors and for visual resources. The Bruneau MFP would require an amendment for visual resources.

Route 9K

Route 9K is being considered by the BLM as a modified version of FEIS Route 9E (the FEIS Preferred Route) to avoid crossing the northwestern portion of the SRBOP. The route was modified to minimize direct and indirect impacts to priority sage-grouse habitat (Figure ES-1). The route is approximately 174.6 miles long, compared to the 165.3-mile-long Revised Proposed Route. Approximately 8.7 miles of this route would be within the SRBOP.

As with the Revised Proposed Route and FEIS Proposed 9, Route 9K would cross the Salmon Falls Creek at Lilly Grade adjacent to an existing single-phase 34.5-kV distribution line just north of the Salmon Falls Creek wilderness study area. The SRBOP RMP would need an amendment to allow the transmission line outside of existing corridors and to allow the surface disturbance from the Project within 0.5 mile of occupied sensitive plant habitat. The Bruneau MFP would require an amendment for visual resources. The Twin Falls MFP would require an amendment to allow the transmission line outside of existing corridors and for visual resources.

The proposed transmission line segments, routes, and variations would cross federal, state, and private lands. Table ES-1 summarizes miles crossed by ownership for the Revised Proposed Routes, other routes, and route variations. The ROW width

requested for the transmission line is 250 feet for both single-circuit 500-kV segments and double-circuit 500/138-kV segments.

Table ES-1. Revised Proposed Routes, Other Routes, and Variations Summary of Miles and Percent Crossed by Ownership

Routes	Length in Miles					Percent of Total[1/,2/]			
	Total[3/]	BLM[4/]	State	Private	Other[5/]	BLM[3/]	State	Private	Other
Segment 8 Revised Proposed Route	**129.7**	78.4 [17.6]	11.1 [2.0]	35.8 [3.0]	3.9 2.5]	60.5% [13.5%]	8.5% [1.5%]	27.6% [2.3]	3.4% [2.0%]
Route 8G	**146.9**	114.5 [8.8]	13.5 [1.1]	18.9	0.1	77.9% [6.0%]	9.2% [0.8%]	12.9%	–
Route 8H	**137.5**	103.0 [52.4]	14.3 [5.2]	19.7 [3.0]	0.5 [0.2]	74.9% [38.1%]	10.4% [3.8%]	14.3% [2.2%]	0.4% [0.2%]
Segment 9 Revised Proposed Route	**165.3**	142.6 [52.4]	7.5 [5.2]	14.7 [3.0]	0.4 [0.2]	86.3% [31.7%]	4.5% [3.2%]	8.9% [1.8%]	0.2% [0.1%]
FEIS Proposed 9	**162.2**	129.4 [11.1]	4.6 [1.1]	28.3 [1.3]	–	79.8% [6.9%]	2.8% [0.7%]	17.4% [0.8%]	–
Route 9K	**174.6**	156.2 [8.7]	4.6 [1.1]	13.8	–	89.5% [5.0%]	2.6%	7.9%	–
Segment 9 Comparison portion for Toana Road Variations 1/1-A	**8.7**	8.7	–	–	–	100.0%	–	–	–
Toana Road Variation 1	**8.5**	8.2	0.3	–	–	96.5%	3.5%	–	–
Toana Road Variation 1-A	**8.9**	7.8	1.0	–	–	87.6%	11.2%	–	–
Alternative 5Comparison Portion for Helicopter-Assisted Construction and WWE Corridor Variations[6/]	**66.1**	58.4	2.5	5.2	–	88.4	3.7	7.9	–
Alternative 5 Helicopter-Assisted Construction Variation[6/]	**66.1**	58.4	2.5	5.2	–	88.4	3.7	7.9	–
Alternative 5 WWE Corridor Variation[6/]	**62.2**	50.2 [7.0]	2.1	9.6 [2.7]	–	80.7 [11.2]	3.8	15.4 [4.3]	–

Note that values in "[ ]" indicates miles inside the SRBOP (regardless of landownership).

1/ Percentages provided in other chapters of the SEIS may vary slightly due to differences in the Analysis Area used for various resources.

2/ Totals may not equal 100 percent due to rounding.

3/ Mileages are rounded to tenths of a mile throughout table; therefore, rows may not sum exactly.

4/ BLM – Bureau of Land Management

5/ "Other" includes Bureau of Reclamation, U.S. Fish and Wildlife Service, etc.

6/ Distance represents the sum of the 8G and 9K lines placed 250 feet apart.

Toana Road Variation 1 to the Segment 9 Revised Proposed Route

Toana Road Variation 1 to the Segment 9 Revised Proposed Route was recommended by the BLM Jarbidge Field Office to avoid paralleling the Toana Freight Wagon Road, a National Register historic site. After the 2013 FEIS, BLM archaeologists determined that the Proposed Route paralleled within 0.25 mile of the Toana Road between MP 38.2 and 40.6, and paralleled within 1 mile of the road through Blue Gulch between MP 40.6 and 43.5. Variation 1 is approximately 8.5 miles long and would not require any plan amendments.

Toana Road Variation 1-A to the Segment 9 Revised Proposed Route

The Toana Road Variation 1-A to the Segment 9 Revised Proposed Route was also recommended by the BLM to minimize visual impacts to the Toana Freight Wagon Road and to utilize existing roads and to minimize new road construction in the area. Variation 1-A is approximately 8.9 miles long and would not require any plan amendments.

Alternative 5 Helicopter-Assisted Construction Variation

The Alternative 5 Helicopter-assisted Construction Variation would be implemented between MP 141 of Route 9K/MP 112 of Route 8G and the Hemingway Substation. The beginning location is approximately 2 miles south of State Highway 78 and 5 miles southeast of Oreana (see Figure A-6 in Appendix A). This variation would consist of 32.9 miles of 8G and 33.2 miles of 9K, each route built adjacent to each other but approximately 250 feet apart; therefore, the total length of the transmission lines would be 66.1 miles.

Helicopter-assisted construction is intended to reduce ground disturbance. This variation would utilize low-impact vehicles and ground equipment to support the construction of foundations and tower erection. Tower foundations would be constructed using equipment specifically selected to minimize ground disturbance to the extent practicable. Some lattice tower erection may be completed within the limitations of the lower impact construction equipment. All other construction would be supported by helicopters with sufficient lift capacity for the intended operation.

The Proponents estimate that up to 1,600 helicopter flights would be required, for a period of 2 to 3 months, in order to construct the Project under this variation. See Appendix B-2 for additional information on helicopter-assisted construction.

Alternative 5 West-wide Energy Corridor Variation

The Alternative 5 WWE Corridor Variation would also be implemented between MP 141 of Route 9K/MP 112 of Route 8G and the Hemingway Substation. The beginning location is approximately 2 miles south of State Highway 78 and 5 miles southeast of Oreana (see Figure A-6). This variation would consist of 31.0 miles of 8G and 31.2 miles of 9K, each route built adjacent to each other but approximately 250 feet apart; therefore, the total length of the transmission lines would be 62.2 miles.

Under this variation, the 9K and 8G routes would follow FEIS Proposed 9 to the Hemingway Substation beginning approximately 2 miles south of State Highway 78 and 5 miles southeast of Oreana (see Figure A-6). FEIS Proposed 9 generally follows the WWE corridor, leaving it briefly near Murphy to avoid impacting a pivot irrigation system.

MITIGATION

To authorize a ROW under FLPMA through any portion of the SRBOP, the BLM must demonstrate that: 1) the use is compatible with the enabling statute of the SRBOP; 2) impacts to the SRBOP have been avoided and minimized to the greatest extent possible; and 3) enhancement will result in a net benefit to the SRBOP for the duration of the ROW permit (BLM 2008a).

The Proponents have developed a draft MEP (August 2014) aimed at offsetting remaining residual impacts to resources and values and enhancing the resources and values found in the SRBOP (see Appendix C). The Proponents' Draft MEP includes both compensatory mitigation and enhancement components that collectively are design features of their proposal. The compensatory mitigation addresses the

remaining impacts that persist after all other design features have been implemented. Remaining impacts are defined in Section 3.0. Specifically, the MEP includes:

- avoidance and minimization through routing and environmental protection measures (EPMs);
- mitigation that requires so-called "enhancement ratios" designed to rectify direct impacts beyond standard mitigation;
- restoration efforts consistent with SRBOP required mitigation goals and objectives;
- visitor enhancement activities;
- reclamation and project-wide compensatory mitigation;
- removal of existing power lines and substation within the SRBOP;
- purchase of high-priority private inholdings in the SRBOP; and
- improved funding of law enforcement.

The mitigation for cultural resources, including national historical trails, will be covered by a Historic Properties Treatment Plan and site-specific Segment Plans being developed through the Programmatic Agreement for compliance with Section 106 of the NHPA. Mitigation under the National Environmental Policy Act will encompass those resources that are not necessarily considered "historic properties" such as cultural sites and traditional cultural and religious places important to tribes or other cultural groups. Additional information is found in Section 3.3 – Cultural Resources.

Mitigation for greater sage-grouse and sagebrush habitats will be covered under the Greater Sage-Grouse Habitat Mitigation Plan, and mitigation for migratory birds will be covered under the Migratory Bird Habitat Mitigation Plan. Refer to Section 3.11 – Special Status Wildlife and Fish Species for additional information. Mitigation for unavoidable impacts to wetlands will be covered under the Compensatory Mitigation and Monitoring of Unavoidable Impacts to Waters of the U.S. See Section 3.9 – Wetlands and Riparian Areas for additional information.

The Proponents' MEP intends to offer mitigation and enhancement for the resources and values in the SRBOP, which is its focus; however, the MEP does not provide sufficient details or specifics for development of such mitigation actions related to habitat restoration. The lack of detail or specifics in the MEP makes it unclear how the MEP goals would be achieved. Consistent with policies released in October and November 2015 (see Section 3.0), the BLM is directed to determine the measurable environmental benefit of (proposed) mitigation.

To address this deficiency, the BLM developed the Compensatory Mitigation Framework (Appendix K) for determining the required compensatory mitigation for impacts to raptor populations and habitats and the associated natural and environmental resources and values, and to the scientific, cultural, and educational resources and values in SRBOP. After avoidance and minimization are considered, this Framework would be used for any alternative selected for the Project to offset reasonably foreseeable remaining residual effects from the Project in SRBOP. The Framework is structured to ensure that raptor populations and habitats and the natural and environmental resources and values will be enhanced above baseline conditions,

and therefore meet the enhancement requirements in P.L. 103-64. A more detailed discussion of the Compensatory Mitigation Framework can be found in the Introduction to Chapter 3 and Appendix K of this FSEIS.

If Project routes are approved, the BLM may also develop compensatory mitigation requirements for other protected resources in the SRBOP that are impacted by the Project, including scientific and educational resources, which are not already covered in the Compensatory Mitigation Framework (e.g., cultural resources are addressed in the HPTP) following engineering and design of the approved route.

As the Project is potentially renewable after its 30-year term, additional or continued compensatory mitigation may be required during that renewal process.

NO ACTION ALTERNATIVE

The action triggering this environmental review is described in the Proponents' applications to the BLM for a ROW grant for the portion of the Project on federal lands. The agency may deny the respective applications or approve the Project with or without conditions. Therefore, the No Action Alternative analyzed in the 2013 FEIS is the predicted result of the denial of the applications. Under the No Action Alternative, Gateway West Segments 8 and 9 would not be constructed (no construction of the new substations, substation expansion, or the transmission line). No RMPs or MFPs would need to be amended if the No Action Alternative is selected. The objectives of the Project, which include providing increased transmission capacity and a more reliable transmission line system for transport of energy, including wind energy, to meet existing and future needs (as described in Section 1.4, Proponents' Objectives for the Project), would not be met. The cumulative effects of the No Action Alternative are described in Chapter 4.

ACTION ALTERNATIVES

The BLM identified seven action alternatives combining one route each from Segment 8 and 9. These alternatives are listed below.

Alternative 1 – The Proposed Action (the Revised Proposed Routes for Segments 8 and 9). Alternative 1 has a combined length of 295 miles. Two portions of the new 500-kV line (totaling 25.7 miles) would be double-circuited on new H-frame structures with the existing 138-kV lines within the SRBOP. This would require removal of an existing transmission line along a total of 25.6 miles. Approximately 83.3 miles of this alternative would be within the SRBOP.

Alternative 2 – Revised Proposed 8 and FEIS Proposed 9. Alternative 2 has a combined length of 291.9 miles, which is the shortest length among the seven alternatives. It would require removal of an existing transmission line along 1.1 miles of the route. Approximately 35.1 miles of this alternative would be within the SRBOP.

Alternative 3 – Revised Proposed 8 and Route 9K. Alternative 3 has a combined length of 304.3 miles and would require removal of an existing transmission line along 1.1 miles of the route. Approximately 31.3 miles of this alternative would be within the SRBOP.

Alternative 4 – Route 8G and FEIS Proposed 9. Alternative 4 has a combined length of 309.1 miles. It would require removal of an existing transmission line along 1.9 miles of the route. Approximately 23.5 miles of this alternative would be within the SRBOP.

Alternative 5 – Route 8G and Route 9K. Alternative 5 has a combined length of 321.5 miles, which is the highest total length among the seven alternatives. However, the majority of the alignment would consist of two lines located 250 feet apart, rather than two separate lines affecting different areas. It would require removal of an existing transmission line along 1.9 miles of the route. The two routes would follow the same alignment within the SRBOP for approximately 9.9 miles each regardless of land ownership (approximately 8.8 miles on lands administered by the BLM), for a combined total of approximately 19.7 miles of new transmission line in the SRBOP.

Two variations are considered for this alternative. The Alternative 5 Helicopter-Assisted Construction Variation would be implemented between MP 141 of Route 9K/MP 112 of Route 8G and the Hemingway Substation. The beginning location is approximately 2 miles south of State Highway 78 and 5 miles southeast of Oreana (see Figure A-6). The Alternative 5 WWE Corridor Variation would also be implemented between MP 141 of Route 9K/MP 112 of Route 8G and the Hemingway Substation. Under this variation, the 9K and 8G routes would follow FEIS Proposed 9 to the Hemingway Substation beginning approximately 2 miles south of State Highway 78 and 5 miles southeast of Oreana (see Figure A-6). FEIS Proposed 9 generally follows the WWE Corridor, leaving it briefly near Murphy to avoid impacting a pivot irrigation system.

Alternative 6 – Route 8H Route and FEIS Proposed 9. Alternative 6 has a combined length of 299.7 miles, and would require removal of an existing 138-kV transmission line along 25.7 miles of the route as well as a 1.9-mile rebuild of an existing 500-kV line. Approximately 74.7 miles of this alternative would be within the SRBOP. Two portions of the new 500-kV line (totaling 25.7 miles) would be double-circuited on new H-frame structures with the existing 138-kV lines within the SRBOP.

Alternative 7 – Route 8H and Route 9K. Alternative 7 has a combined length of 312.1 miles. It would require removal of an existing 138-kV transmission line along 25.7 miles of the route as well as a 1.9-mile rebuild of an existing 500-kV line. Approximately 70.9 miles of this alternative would be within the SRBOP. Two portions of the new 500-kV line (totaling 25.7 miles) would be double-circuited on new H-frame structures with the existing 138-kV lines within the SRBOP.

Each of the seven action alternatives is analyzed with and without the Toana Road Variation 1 and Toana Road Variation 1-A.

PREFERRED ALTERNATIVE

The BLM has identified Alternative 5, with the inclusion of the Toana Road Variation 1 as a modification, as the Preferred Alternative for the Project. This alignment minimizes crossing of the SRBOP on BLM-managed land to a total of 17.5 miles (approximately 8.8 miles for Route 8G and 8.7 miles for Route 9K in parallel), separated by 250 feet at minimum. The alternative avoids all greater sage-grouse Priority Habitat Management Areas, the Hagerman Fossil Beds National Monument, the historic Toana Freight Road, and Balanced Rock natural landmark in Twin Falls County. The distance separating the segments (250 feet at minimum) meets the Western Electricity Coordinating Council

planning criteria, while minimizing the Project footprint by reducing the need to construct new access roads to build and service the lines. The alignments in this alternative also avoid primary agricultural lands in Owyhee County and, in general, impact the least amount of private lands of any alternative analyzed in detail in the SEIS. Residential areas of Kuna and Melba are also avoided.

The BLM's Preferred Alternative only applies to federal lands. While the BLM's Preferred Alternative could affect private lands adjacent to or between federal areas, decisions on siting and construction requirements for non-federal lands are under the authority of state and local governments (see Table 1.5-1 for permits that would be required and Section 3.17.1.3 for a description of the regulatory requirements).

Environmentally Preferable Alternative

The environmentally preferred alternative is the alternative that, on balance, appears to have the lowest overall impact on the natural, human, and cultural environment, including resource uses. For Gateway West, the environmentally preferred alternative is the No Action Alternative. As described earlier, the No Action Alternative analyzed in the EIS, as well as in this SEIS, is the predicted result of the denial of the Proponents' applications. Under the No Action Alternative, Gateway West would not be constructed across federal lands. The RMPs or MFPs amendments discussed in the SEIS would not be approved if the No Action Alternative is selected. No Project-related impacts to vegetation, soils and wildlife species and other resources would occur. There would be no impacts to the resources and values of the SRBOP. However, impacts would continue as a result of natural events (such as fire, drought, and severe weather) as well as from existing developments within the Analysis Area and from other projects, including wind farms, mining, agricultural, or other competing land uses. There would also be no Project-related impacts to agriculture, transportation, scenery, or other aspects of the human environment. Other transmission line projects may be proposed to meet regional energy needs if the Gateway West lines are not built.

SUMMARY OF EFFECTS

This section summarizes the effects analysis documented in Chapter 3 of this FSEIS.

Tables ES-2 and ES-3 present the comparison of effects for the Segments 8 and 9 Revised Proposed Routes, respectively; FEIS Proposed 9; Routes 8G, 8H, and 9K; and the four variations. Table ES-4 presents this same information, but for the seven BLM action alternatives. A full explanation of the evaluation criteria and the environmental consequences of choosing each route or alternative is found by resource in Chapter 3. All impact analysis was conducted based on a Project description that includes the Proponents' EPMs contained in Appendix Z to the August 2013 POD (which is in Appendix B to the 2013 ROD). These measures are also included as Appendix M to this document. The EPMs would apply to all routes and action alternatives as discussed in Section 2.6.1. Although the BLM can only require mitigation measures on federal lands, the Proponents have agreed to apply these measures to all lands in Idaho unless the landowner directs otherwise (see Appendix M).

Table ES-2. Comparison of Effects for Segment 8[1/]

Comparison Features	Unit	SEIS Revised Proposed Route Segment 8 [2/]	SEIS Route 8G	SEIS Route 8H
General				
Total Length	miles[3/]	129.7	146.9	137.5
Construction Disturbance Area	acres[4/]	2,271 [298]	2,752 [180]	2,525 [1,006]
Operations Disturbance Area	acres	243 [28]	332 [28]	256 [88]
Land Ownership and Use				
BLM	miles	78.4 [17.6]	114.5 [8.8]	103.0 [52.4]
Other Federal	miles	3.9	0.1	0.5
State	miles	11.1	13.5	14.3
Private	miles	35.8	18.9	19.7
Indian Reservation	miles	–	–	–
WWE Corridor[5/]	miles	33.8 [2.3]	49.8 [6.7]	46.2 [7.8]
Within or Adjacent to Existing Transmission Corridor	miles	117.1 [17.6]	38.9	71.9 [25.7]
Resource Summaries				
National Historic Trails				
Adverse impacts	number	7	3	11
Visual				
VRM I or II crossed	miles	9.7	0.3	15.4
Cultural				
Potentially affected pre-historic cultural resources	number	117	91	110
Potentially affected historic cultural resources	number	151	100	130
Wildlife				
Designated big game winter range affected (construction)	acres	1,237	733 [9]	388 [38]
Raptor nests within 1 mile	number	489 [144]	228 [12]	908 [584]
Sage-grouse PPH Habitat affected (construction)	acres	129	103 [5]	–
Vegetation				
Total Natural vegetation removed (construction)	acres	666 [13]	1,049 [27]	343 [152]
Juniper Woodland vegetation removed (construction)	acres	–	26	2 [2]
Wetland/Riparian disturbance (construction)	acres	7.6	2.5 [0.3]	2.7 [0.7]
Water/Fish				
Waterbodies crossed	number	204	149	115
Temperature- or Sediment-impaired stream crossings	number	18	31	21
Soils/Minerals				
High K factor impacted (i.e., highly erodible soils) (construction)	acres	1,621 [276]	1,141 [10]	1,296 [620]
Low T factor impacted (i.e., sensitive soils) (construction)	acres	1,809 [205]	1,612 [30]	941 [352]
Land Use/Recreation				
BLM Plan Amendment would be required	Yes/No	Yes	Yes	Yes
Residences within 300 feet of centerline	number	5	1	4
Residences within 1,000 feet of centerline	number	37	40	37

Table ES-2. Comparison of Effects for Segment 8[1/] (continued)

Comparison Features	Unit	SEIS Revised Proposed Route Segment 8 [2/]	SEIS Route 8G	SEIS Route 8H
Agriculture				
Prime Farmland (operations)	acres	50 [8]	86 [61]	116 [72]
Dryland farming impacted (operations)	acres	–	–	<1
Irrigated agriculture impacted (operations)	acres	15	12	14

Note: The numbers in square brackets "[ ]" correspond to values/impacts that occur on BLM-managed lands within the SRBOP. This information is only presented for resources that have been identified as environmental resources and values for which the SRBOP was established to manage and protect.

1/ Disturbance from the MEP is not included because it would be scaleable to whichever route is selected.
2/ Mileage and acreage do not include disturbance from proposed line removal because much would be within the same footprint.
3/ Mileages rounded to the nearest tenth of a mile; rows may not sum exactly.
4/ Acreages rounded to the nearest acre; rows may not sum exactly.
5/ WWE = West-wide Energy

Table ES-3. Comparison of Effects for Segment 9[1/]

Comparison Features	Unit[3/4/]	SEIS Revised Proposed Route Segment 9[2/]	FEIS Proposed 9	SEIS Route 9K	SEIS Toana Variation 1	SEIS Toana Variation 1-A	Alternative 5 Helicopter-Assisted Construction Variation[6/]	Alternative 5 WWE Corridor Variation[6/]
General								
Total Length	miles	165.3	162.2	174.6	8.5	8.9	66.1	62.1
Construction Disturbance Area	acres	3,149 [996]	3,294 [269]	3,383 [172]	168	163	1,027 [17]	1,112 [184]
Operations Disturbance Area	acres	350 [87]	360 [28]	425 [27]	16	11	69 [5]	86 [16]
Land Ownership and Use								
BLM	miles	142.6 [52.4]	129.4 [11.1]	156.2 [8.7]	8.2	7.8	58.4	50.2 [7.0]
Other Federal	miles	0.4	–	–	–	–	–	-
State	miles	7.5	4.6	4.6	0.3	1	2.5	2.4
Private	miles	14.7	28.3	13.8	–	–	5.2	9.6
Indian Reservation	miles	–	–	–	–	–	–	–
WWE Corridor[5/]	miles	27.4	67.8 [9.5]	30.8	–	–	6.9	31.9
Within or Adjacent to Existing Transmission Corridor	miles	55.1	8.2	18.2	–	–	2.1	2.1
Resource Summaries								
National Historic Trails								
Adverse impact	number	10	0	0	–	–	-	-
Visual								
VRM I or II crossed	miles	15.5	0.3	0.5	–	–	0.7	0.4

Table ES-3. Comparison of Effects for Segment 9[1/] (continued)

Comparison Features	Unit[3/4/]	SEIS Revised Proposed Route Segment 9 [2/]	FEIS Proposed 9	SEIS Route 9K	SEIS Toana Variation 1	SEIS Toana Variation 1-A	Alternative 5 Helicopter-Assisted Construction Variation[6/]	Alternative 5 WWE Corridor Variation[6/]
Cultural								
Potentially affected pre-historic cultural resources	number	146	149	148	46	46	10	11
Potentially affected historic cultural resources	number	111	113	96	36	36	12	13
Wildlife								
Designated big game winter range affected (construction)	acres	657 [38]	571 [61]	657 [8]	–	–	699 [9]	659 [103]
Raptor nests within 1 mile	number	963 [584]	306 [14]	284 [12]	10	10	6	71 [2]
Sage-Grouse PPH Habitat affected (construction)	acres	282	292	386 [4]	126	129	146 [4]	1 [1]
Vegetation								
Total Natural vegetation removed (construction)	acres	643 [145]	1,084 [88]	1,339 [25]	54	57	733 [6]	879 [118]
Juniper Woodland vegetation removed (construction)	acres	3 [2]	1	26	–	–	-	-
Wetland/Riparian disturbance (construction)	acres	3.2 [0.9]	6.0 [0.7]	3.5 [0.3]	–	–	2.6	0.3
Water/Fish								
Waterbody crossings	number	172	319	237	15	10	63	58
Temperature- or sediment-impaired stream crossings	number	25	14	52	–	–	3	1
Soils/Minerals								
High K factor impacted (i.e., highly erodible soils) (construction)	acres	1,924 [621]	1,510 [85]	1,767 [8]	165	161	740 [17]	815 [184]
Low T factor impacted (i.e., sensitive soils) (construction)	acres	1,592 [353]	2,131 [108]	2,260 [29]	168	163	926 [17]	1,031 [184]
Land Use/Recreation								
BLM Plan Amendment would be required	Yes/ No	Yes	Yes	Yes	No	No	No	Yes
Residences within 300 feet of the centerline	number	2	8	2	–	–	2	5
Residences within 1,000 feet of centerline	number	10	28	11	–	–	25	37

Table ES-3. Comparison of Effects for Segment 9[1/] (continued)

Comparison Features	Unit[3/4/]	SEIS Revised Proposed Route Segment 9 [2/]	FEIS Proposed 9	SEIS Route 9K	SEIS Toana Variation 1	SEIS Toana Variation 1-A	Alternative 5 Helicopter-Assisted Construction Variation[6/]	Alternative 5 WWE Corridor Variation[6/]
Agriculture								
Prime Farmland (operations)	acres	140 [111]	999 [21]	110 [61]	–	–	309	383
Dryland farming impacted (operations)	acres	<1	<1	–	–	–	–	–
Irrigated agriculture impacted (operations)	acres	9	34	8	–	–	12	15

Note: The numbers in square brackets "[ ]" correspond to impacts that would occur on BLM-administered lands within the SRBOP. This information is only presented for resources that have been identified as environmental resources and values for which the SRBOP was established to manage and protect.

1/ Disturbance from the MEP is not included because it would be scaleable to whichever route is selected.
2/ Mileage and acreage do not include disturbance from proposed line removal because much would be within the same footprint.
3/ Mileages rounded to the nearest tenth of a mile; rows may not sum exactly.
4/ Acreages rounded to the nearest acre; rows may not sum exactly.
5/ WWE = West-wide Energy
6/ Total length of 8G and 9K lines, placed 250 feet apart.

Table ES-4. Comparison of Effects for the Seven BLM Action Alternatives[1/]

Comparison Features	Unit[3/,4/]	Alternative[2/]						
		1	2	3	4	5	6	7
General								
Total Length	miles	294.9	291.9	304.3	309.1	321.5	299.7	312.1
Construction Disturbance Area	acres	5,420 [1,294]	5,565 [567]	5,654 [470]	6,046 [449]	6,135 [352]	5,819 [1,275]	5,908 [1,178]
Operations Disturbance Area	acres	593 [115]	603 [56]	668 [55]	692 [56]	757 [55]	616 [116]	681 [115]
Land Ownership and Use								
BLM	miles	221.0 [70.0]	207.8 [28.7]	234.6 [26.3]	243.9 [19.9]	270.7 [17.5]	232.4 [63.5]	259.2 [61.1]
Other Federal	miles	4.3	3.9	3.9	0.1	0.1	0.5	0.5
State	miles	18.6	15.7	15.7	18.1	18.1	18.9	18.9
Private	miles	50.5	64.1	49.6	47.2	32.7	48.0	33.5
Indian Reservation	miles	–	–	–	–	–	–	–
WWE Corridor[5/]	miles	61.2	101.6	64.6	117.6	80.6	114.0	77.0
Within or Adjacent to Existing Transmission Corridor	miles	172.2	125.3	135.3	47.1	57.1	80.1	90.1
Resource Summaries								
National Historic Trails								
Adverse impacts	number	17 [9]	7 [0]	7 [0]	3 [0]	3 [0]	11 [6]	11 [6]
Visual								
VRM I or II crossed	miles	25.2	10.0	10.2	0.6	0.8	15.7	15.9
Cultural								
Potentially affected pre-historic cultural resources	number	263 [52]	266 [26]	265 [26]	240 [3]	239 [3]	259 [29]	258 [29]
Potentially affected historic cultural resources	number	262 [65]	264 [48]	247 [22]	213 [14]	196 [10]	243 [42]	226 [25]
Wildlife								
Designated big game winter range affected (construction)	acres	1,894 [38]	1,808 [61]	1,894 [8]	1,304 [70]	1,390 [17]	959 [99]	1,045 [46]
Raptor nests within 1 mile	number	1,447 [728]	790 [158]	1,768 [156]	390 [14]	334 [12]	1,073 [587]	1,054 [586]
Sage-Grouse PPH Habitat affected (construction)	acres	411	421	515 [4]	395 [5]	489 [9]	292	386 [4]
Vegetation								
Total Natural vegetation removed (construction)	acres	1,309 [158]	1,750 [101]	2,005 [38]	2,133 [115]	2,388 [52]	1,427 [240]	1,682 [177]
Juniper Woodland vegetation removed (construction)	acres	3 [2]	1	26	27	52	3 [2]	28 [2]
Wetland/Riparian disturbance (construction)	acres	10.8 [0.9]	13.6 [0.7]	11.1 [0.3]	8.5 [1.0]	6.0 [0.6]	8.7 [1.4]	6.2 [1.0]

Table ES-4. Comparison of Effects for the Seven BLM Action Alternatives[1/] (continued)

Comparison Features	Unit[3/,4/]	Alternative[2/]						
		1	2	3	4	5	6	7
Water/Fish								
Waterbody crossings	number	376	523	441	468	386	434	352
Temperature- or sediment-impaired stream crossings	number	43	32	70	45	83	35	73
Soils/Minerals								
Highly erodible soils impacted (High K factor, construction)	acres	3,545 [897]	3,131 [361]	3,388 [284]	2,651 [95]	2,908 [18]	2,806 [705]	3,063 [628]
Mineral area (construction)	acres	3,401 [558]	3,940 [313]	4,069 [234]	3,743 [138]	3,872 [59]	3,072 [460]	3,201 [381]
Land Use/Recreation								
BLM Plan Amendment would be required	Yes/ No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Residences within 300 feet of the centerline	number	7	13	7	9	3	12	6
Residences within 1,000 feet of centerline	number	47	65	48	68	51	65	48
Agriculture								
Prime Farmland (operations)	acres	190 [119]	1,049 [29]	160 [69]	1,085 [82]	196 [122]	1,115 [93]	226 [133]
Dryland farming impacted (operations)	acres	<1	<1	–	<1	–	<1	<1
Irrigated agriculture impacted (operations)	acres	24	49	23	46	20	48	22

Note: The numbers in square brackets "[ ]" correspond to impacts that would occur on BLM-managed lands within the SRBOP. This information is only presented for resources that have been identified as environmental resources and values for which the SRBOP was established to manage and protect.

1/ Disturbance from the MEP is not included because it would be scaleable to whichever alternative is selected.
2/ Mileage and acreage do not include disturbance from proposed line removal because much would be within the same footprint.
3/ Mileages rounded to the nearest tenth of a mile; rows may not sum exactly.
4/ Acreages rounded to the nearest acre; rows may not sum exactly.
5/ WWE = West-wide Energy

CUMULATIVE EFFECTS SUMMARY

PROPOSED PROJECT

The effects of the proposed Project, when taken together with past, present, and reasonably foreseeable future actions, constitute the cumulative effects of the Project and are fully analyzed in Chapter 4. This analysis assumes the Project would be constructed but examines both the Proponents' Segments 8 and 9 Revised Proposed Routes, other routes, and route variations considered in the SEIS where appropriate. Chapter 4 also discusses the cumulative effects of land use plan amendments needed to allow for the Segments 8 and 9 Revised Proposed Routes when the amendment would change one or more land classifications. For many resources, the effects of

Segments 8 and 9 Revised Proposed Routes, when combined with the effects of other known projects, would not be cumulatively substantial. In other cases, although the effects of Segments 8 and 9 Revised Proposed Routes would be minor, when taken together with effects of other past, present, and proposed future actions, many of which collectively already present a substantial cumulative effect, the cumulative impact may be considerable. Finally, there are some effects of the Segments 8 and 9 Revised Proposed Routes that would by themselves be large and, when considered with other effects, also be cumulatively substantial.

Resources for which the Segments 8 and 9 Revised Proposed Routes effects would be minor and, even when considered together with other projects, would remain less than cumulatively substantial include socioeconomics, environmental justice, invasive plant species, wetlands and riparian areas, federally listed invertebrate species, yellow-billed cuckoo, bald eagle, minerals, paleontological resources, geologic hazards, transportation, air quality, electrical environment, public safety, and noise. Additional details are found in Chapter 4.

Gateway West, by itself, would have minor effects on vegetation, soils, and waterbodies where crossed by access roads and therefore on habitat for most wildlife and fish species, including specifically sagebrush-obligate species (pygmy rabbits, greater sage-grouse, and burrowing owl), riparian-obligate species (Columbia spotted frog and northern leopard frog), and others (e.g., northern goshawk; see Section 3.11 for a comprehensive list). However, even without Gateway West's effects, the loss of habitat and fragmentation from past and present events alone would be considerable. When the Gateway West effects are taken together with historic and present events and projects as well as with multiple future projects, the level of soil and habitat loss and fragmentation continues to be considerable. The Proponents have offered off-site compensatory mitigation for sage-grouse habitat and for wetlands to offset the contribution that Gateway West may make to that loss. Due to the Revised Proposed Routes across the SRBOP and efforts to comply with the SRBOP's enabling statute (P.L. 103-64), the Proponents have also developed an MEP to mitigate effects within the SRBOP (included in Appendix C). These mitigation plans are outlined in Chapter 3.

Gateway West would not have a measurable adverse effect on non-special status migratory bird populations or significant bird conservation sites, though it would impact some individuals. It would also have an adverse effect on migratory bird habitats and ecological conditions through vegetation removal, fragmentation of native habitats, and possible increases in predation pressure due to adding perching substrate for avian predators and adding service roads sometimes used by predators. When taken together with the extensive habitat loss caused by past, present, and reasonably foreseeable actions, the cumulative impact on migratory bird habitat and ecological conditions would be substantial. The BLM will continue to discuss mitigation with the Proponents as part of the National Environmental Policy Act process.

Gateway West, by itself, would have minor adverse effects to private land uses or to agriculture. When taken together with many of the factors that constrain and limit agriculture, including availability of irrigation water and development pressure on property values, additional land withdrawals for utility uses can be very important to individual farmers and to agricultural communities. On federal lands, the Revised

Proposed Routes, other routes, and Route Variations would require changes in existing land use plans. In particular, visual resource or scenic management objectives would not be met if some of the routes were chosen, and existing specifications for allowable levels of visual contrast would have to be altered. Also, several land management plans would require amendments to allow the Project. In some cases, large areas of public lands would be reclassified, possibly allowing for additional projects without additional plan amendments. These impacts to land use planning goals would be considerable, particularly when taken together with other transmission lines requesting similar consideration, which if granted along the same route would create a large utility corridor.

Gateway West, by itself, would have significant adverse effects on some cultural resources, particularly on historic properties for which visual setting is important like historic trails. When considered together with other past, present, and foreseeable future projects, including additional transmission lines, the cumulative effect would also be significant. Similarly, the visual impact of the Gateway West set of lattice towers in some areas would be a substantial negative effect, and when taken together with the several proposed transmission lines and other developments, would form a cumulatively considerable adverse impact.

NO ACTION

Under the No Action Alternative, the BLM would not issue a ROW grant to the Proponents for Segments 8 and 9 and the Project would not be constructed across federal lands. No land management plans would be amended to allow for the construction of this Project. Other projects would continue, including other transmission line projects, wind farms, solar projects, extraction of saleable minerals and industrial, commercial and residential development. The demand for electricity, especially for renewable energy, would continue to grow in the Proponents' service territories. If Segments 8 and 9 are not permitted, the demand for transmission services identified by the Proponents would not be met through this Project and the area would have to turn to other proposals to meet the transmission demand.

CONFORMANCE WITH FEDERAL MANAGEMENT PLANS

Table ES-5 lists the amendments for Resource Management Plans and Management Framework Plans associated with the alternatives being considered in this FSEIS. The proposed amendments associated with the BLM's Preferred Alternative, Alternative 5, are highlighted in gray.

Table ES-5. BLM Land Use Plan Amendments by Alternative

Management Plan	Management Direction	Amendment Description (Number)	Alternative						
			1	2	3	4	5	6	7
Twin Falls MFP	L-4.1 Allow future major power transmission lines (line of at least 46-138 kV which originate and terminate outside of the MFP area) to be constructed within the recommended corridors. Also allow construction of transmission lines between the corridors. Do not permit power lines to the west or the east of the two corridors. Exempt service lines from restriction.	Allow a 500-kV transmission line ROW outside of existing corridors. (SEIS-1)	x	x	x	x	x	x	x
	VRM I – VRM 1.1 Manage Salmon Falls Canyon between the Salmon Falls Dam and Lilly Grade for natural ecological change in accordance with a VRM Class I designation. This designation would include only the area from rim to rim. Manage the canyon from Lilly Grade to Balanced Rock under a VRM Class II designation. 2. The ACEC is subject to the following resource restrictions….(2) avoid utility rights-of-way….management of the Salmon Falls ACEC in the Twin Falls Resource Area will be the same as in the Jarbidge Resource Area.	The Class I and II areas adjacent to the Roseworth Corridor (established by the 2015 Jarbidge RMP) will be reclassified to match the VRM classes in the Jarbidge RMP. Allow a 500-kV transmission line to cross Salmon Falls Canyon through the ACEC, consistent with the corridor established in the Jarbidge 2015 RMP. (SEIS-2)	x	x	x	x	x	x	x
1987 Jarbidge RMP	MUA-3 Utility avoidance/restricted area – three paleontological areas (Sugar Bowl, Glenn's Ferry, & McGinnis Ranch) and Oregon Trail ruts (7,200 acres/22.5 miles) to overhead and surface disturbance and underground utilities.	The current Lands decision is amended to reclassify the area identified as restricted in Section 35, T. 04 S., R. 09 E. to allow the overhead lines of a 500-kV powerline right of way while protecting the Oregon Trail ruts. (SEIS-3)	x	x	x				

Table ES-5. BLM Land Use Plan Amendments by Alternative (continued)

Management Plan	Management Direction	Amendment Description (Number)	Alternative						
			1	2	3	4	5	6	7
1987 Jarbidge RMP (cont'd)	Cultural Resources – The existing ruts of the main route, north and south alternate routes of the Oregon Trail and Kelton Road will be protected by not allowing incompatible uses to occur within ½ mile corridor through which these routes pass.	The existing ruts of the main route, north and south alternate routes of the Oregon Trail and Kelton Road will be protected by not allowing incompatible uses to occur within ½ mile corridor of ruts except where visual impacts are already compromised. Protect existing trail ruts from surface disturbance. (SEIS-4)	x	x	x				
	Visual Resource Management – The visual or scenic values of the public lands will be considered whenever any physical actions are proposed on BLM lands. The degree of alterations to the natural landscape will be guided by the criteria established for the four Visual Resource Management Classes as outlined in BLM 8400. VRM Classes will be managed as shown on Map 9.	The VRM decisions and Map 9 are amended to accommodate a major powerline R/W. These VRM boundaries are modified according to the new manual to reclassify the VRM Class I area associated with Oregon Trail and the Proposed 500-kV line as VRM Class IV. (SEIS-5)	x	x	x				
		The VRM decisions and Map 9 are amended to accommodate a major powerline R/W. The VRM Classification is amended to change the VRM Class to VRM Class III, adjacent to the proposed line, where the towers would be visible and dominate the landscape. (SEIS-14)	x					x	x
SRBOP RMP	Utility and Communication Corridors – Restrict major utility developments to the two utility corridors identified (Lands Map 3).	Restrict major utility developments to the two utility corridors identified and allow an additional major powerline ROW as applicable with laws and values for which the SRBOP NCA was designated. (SEIS-6)	x	x	x				
		Restrict major utility developments to the two utility corridors identified (Lands Map 3) and allow an additional major powerline ROW as applicable with laws and values for which the SRBOP NCA was designated. (SEIS-7)		x		x		x	

Table ES-5. BLM Land Use Plan Amendments by Alternative (continued)

Management Plan	Management Direction	Amendment Description (Number)	Alternative						
			1	2	3	4	5	6	7
SRBOP RMP (cont'd)	Utility and Communication Corridors – Restrict major utility developments to the two utility corridors identified (Lands Map 3). (cont'd)	Restrict major utility developments to the two utility corridors identified (Lands Map 3) and allow additional major transmission line ROWs as applicable with laws and values for which the SRBOP NCA was designated. Allow two additional 500 kV transmission line ROWs to leave the WWE corridor and exits the SRBOP NCA due south of Bruneau Dunes State Park. (SEIS-13)[1/]					x		
		Restrict major utility developments to the two utility corridors identified (Lands Map 3) and allow an additional major powerline ROW, as applicable with laws and values for which the SRBOP NCA was designated. (SEIS-20)	x					x	x
		Restrict major utility developments to the two utility corridors identified (Lands Map 3) and allow an additional major powerline ROW as applicable with laws and values for which the SRBOP NCA was designated. (SEIS-21)			x				x
		Restrict major utility developments to the two utility corridors identified (Lands Map 3) and allow an additional major powerline ROW as applicable with laws and values for which the SRBOP NCA was designated. (SEIS-22)				x			
	Sensitive Plant Habitat Include in all BLM authorizations permitting surface disturbing activities (non-grazing), requirements that (1) affected areas be reseeded with a perennial vegetative cover, and (2) surface disturbing activities be located at least 1/2 mile from occupied sensitive plant habitat.	Gateway West will be allowed within 0.5 mile of occupied, sensitive plant habitat, with appropriate mitigation to protect sensitive plants, including slickspot peppergrass. (SEIS-8)[2/]	x	x	x	x	x	x	x

Table ES-5. BLM Land Use Plan Amendments by Alternative (continued)

Management Plan	Management Direction	Amendment Description (Number)	Alternative						
			1	2	3	4	5	6	7
SRBOP RMP (cont'd)	VRM II Protect the Oregon Trail and management areas along the Snake River Canyon as a Visual Resource Management (VRM) Class II area, the Army National Guard Orchard Training Area (OTA) as Class IV and remaining areas as Class III. [Visual Resource Management (VRM Map)]	A corridor 250 feet from the centerline of the proposed powerline would be established with a VRM of Class III. This corridor would maintain a distance of at least 0.5 mile from the NHT, except where it crosses the trail. (SEIS-15)	x					x	x
		VRM Class II areas associated with the Oregon Trail and Snake River that are in view of the 500-kV transmission line that would not meet VRM Class II objectives of the C. J. Strike SRMA would be reclassified to VRM Class III. (SEIS-18)	x					x	x
	This SRMA consists of 22,300 acres in the Snake River Canyon downstream from Grandview, Idaho that is managed for the protection of cultural and scenic values. (2.14 Recreation 2-20).	This SRMA consists of 22,300 acres in the Snake River Canyon downstream from Grandview, Idaho that is managed for the protection of cultural and scenic values. Allow a 500-kV transmission line to cross the SRMA while protecting cultural resources from surface disturbance. (SEIS-16)	x					x	x
	C.J. Strike SRMA: This SRMA consists of 20,000 acres surrounding C.J. Strike Reservoir along the Snake River. The purpose of the SRMA is to provide enhanced recreation management associated with the reservoir, and protection of the Oregon Trail adjacent to the reservoir (2.14 Recreation 2-20).	C.J. Strike SRMA: This SRMA consists of 20,000 acres surrounding C.J. Strike Reservoir along the Snake River. The purpose of the SRMA is to provide enhanced recreation management associated with the reservoir, and protection of the Oregon Trail adjacent to the reservoir. Allow a 500-kV transmission line to cross the SRMA while protecting the Oregon Trail from surface disturbance. (SEIS-17)	x					x	x
	2.16 Transportation – Close the following areas to motorized vehicles: … Cove – 1,600 acres (Transportation Map A-145).	The area is closed to motorized vehicle use, subject to authorized use. (SEIS-19)	x					x	x
Bennett Hills/ Timmerman Hills MFP	REC 4.1 – No management activity should be allowed to cause any evident changes in the form, line, color, or texture that is characteristic of the landscape within this Class II area.	The VRM Class II area within 3,000 feet to the north of the existing transmission line ROW will be reclassified to VRM III (including the existing ROW). (SEIS-9)	x	x	x				

Table ES-5. BLM Land Use Plan Amendments by Alternative (continued)

Management Plan	Management Direction	Amendment Description (Number)	Alternative						
			1	2	3	4	5	6	7
Bennett Hills/ Timmerman Hills MFP (cont'd)	REC 14.6 – Prohibit all land disturbing developments and uses on archeological sites.	Manage all cultural resources with applicable laws and policies. (SEIS-10)	x	x	x				
Kuna MFP	L-4.1 – Confine major new utility R/Ws (i.e., 500 kV or larger or 24-inch pipeline) to existing corridors, as shown on Overlay L-4. The R/Ws will be subject to reasonable stipulations to protect other resource uses.	L-4.1 – Confine major new utility R/Ws (i.e., 500 kV or larger or 24-inch pipeline) to existing corridors as shown on Overlay L-4. The R/Ws will be subject to reasonable stipulations to protect other resource uses. Amend Overlay L-4 to add a major transmission line (500 kV) right-of-way. (SEIS-11)	x	x	x			x	x
Bruneau MFP	VRM-1.2: Designate 136,000 acres as VRM Class II where activities are designed and located to blend into the natural landscape and not visually apparent to the casual visitor	The area designated as VRM Class II adjacent to Castle Creek will be reclassified to VRM Class III. (SEIS-12)		x	x	x	x	x	x

Notes:
Gray shading indicates the amendments associated with the BLM's Preferred Alternative.

1/ SEIS-13 would also apply to the Alternative 5 WWE Corridor Variation.
2/ SEIS-8 would also apply to the Alternative 5 WWE Corridor and Helicopter-Assisted Construction Variations.

ACEC: Area of Critical Environmental Concern; kV: kilovolt; MFP: Management Framework Plan; NHT: National Historic Trail; R/W or ROW: right-of-way; R: Range; RMP: Resource Management Plan; SRBOP: Morley Nelson Snake River Birds of Prey National Conservation Area; SRMA: Special Recreation Management Area; T: Township; VRM: Visual Resource Management

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Acronyms and Abbreviations

AC	alternating current
ACEC	Area of Critical Environmental Concern
ACHP	Advisory Council on Historic Preservation
ACSR	aluminum conductor steel reinforced
ADA	Americans with Disabilities Act
Agencies	BLM and the cooperating agencies
AGL	above ground level
AIRFA	American Indian Religious Freedom Act
ANVIS	Aviator's Night Vision Imaging System
APAI	Area of Potential Adverse Impact
APE	Area of Potential Effect
APLIC	Avian Power Line Interaction Committee
AOI	Area of Inconsistency
ARPA	Archaeological Resources Protection Act
ATR	auto tour route
ATV	all-terrain vehicle
AU	Analysis Unit
B2H	Boardman to Hemingway transmission line project
BA	Biological Assessment
BLM	Bureau of Land Management
BMP	best management practice
BO	Biological Opinion
BP	Before Present
BPA	Bonneville Power Administration
BSC	biological soil crust community
CAFE	Corona and Field Effects
CAFO	concentrated animal feeding operation
CCS	Center for Climate Strategies
CDC	Conservation Data Center
CDNST	Continental Divide National Scenic Trail
CDP	Census Designated Place
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations

CGP	Construction General Permit
CH_4	methane
CIAA	Cumulative Impact Analysis Area
CIC	Construction Inspection Contractor
CMUP	Comprehensive Management and Use Plan
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
CRP	Conservation Reserve Program
CUP	conditional use permit
CWA	Clean Water Act
CWCS	Comprehensive Wildlife Conservation Strategies
dB	decibel
dBA	decibel, A-weighted
DC	direct current
DEIS	Draft Environmental Impact Statement
DFC	desired future condition
DICIAA	Direct Impact Cumulative Impact Analysis Area
DOE	U.S. Department of Energy
DOI	U.S. Department of the Interior
DPS	Distinct Population Segment
Eagle Act	Bald and Golden Eagle Protection Act
EDRR	Early Detection and Rapid Response
EGS	Energy Gateway South
EHS	extra high strength
EIRR	Eastern Idaho Railroad
EIS	environmental impact statement
ELF	extremely low frequency
EMF	electric and magnetic fields
EO	Executive Order
EPC	Engineering, Procurement, and Construction
EPM	environmental protection measure
ERMA	extensive recreation management area
ERS	Economic Research Service
ESA	Endangered Species Act
ESD	Ecological Site Description
ESRI	Environmental Systems Research Institute
ESRP	Eastern Snake River Plain
ETL	Electrical Testing Laboratories

ETVEP	Eastern Treasure Valley Electrical Plan
FAA	Federal Aviation Administration
FCC	Federal Communication Commission
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FLPMA	Federal Land Policy and Management Act
FM	frequency modulation
Forest Plan	Land and Resource Management Plan
Forest Service	U.S. Department of Agriculture, Forest Service
FSA	USDA Farm Service Agency
FSH	Forest Service Handbook
FSM	Forest Service Manual
FTE	full-time equivalent
FY	Fiscal Year
G	Gauss
GAP	Gap Analysis Program
Gateway West	Gateway West Transmission Line Project
GHG	greenhouse gas
GHMA	General Habitat Management Areas
GIS	Geographic Information System
GMP	General Management Plan
GPS	Global Positioning System
GRP	Grassland Reserve Program
GW	gigawatt
HABS	Historic American Building Survey
HAER	Historic American Engineering Record
HALS	Historic American Landscape Survey
HEA	Habitat Equivalency Analysis
HMA	Herd Management Area
HPHS	high potential historic site
HPRSEG	high potential route segment
HPTP	Historic Properties Treatment Plan
HUC	Hydrologic Unit Code
Hz	hertz
I	Interstate
IBC	International Building Code
IDARNG	Idaho Army National Guard

IDFG	Idaho Department of Fish and Game
IDL	Idaho Department of Lands
IDT	Interdisciplinary Team
IEEE	Institute of Electrical and Electronic Engineers
IFWIS	Idaho Fish and Wildlife Information System
IHMA	Important Habitat Management Areas
IM	Instruction Memorandum
INFISH	Inland Fish Strategy
IOP	Interagency Operating Procedure
IOP	Inventory Observation Point
IPUC	Idaho Public Utilities Commission
IRP	integrated resource plan
ISDA	Idaho State Department of Agriculture
ITA	Indian Trust Asset
IV	Impact Value
IVN	integrated vegetation management
kcmil	one thousand circular mils
kHz	kilohertz
KOP	Key Observation Point
kV	kilovolt
kV/m	kilovolt per meter
L_{dn}	day-night sound level
L_{eq}	equivalent sound level
LED	light-emitting diode
LWD	large woody debris
µV/m	microvolt per meter
mA	milliampere
MA	Management Area
MBF	thousand board feet
MBTA	Migratory Bird Treaty Act
MBTA Plan	Final Migratory Bird Habitat Conservation Plan
MD LR 12	Management Decision Lands and Realty 12
MEP	Mitigation and Enhancement Portfolio
MFP	management framework plan
mG	milligauss
MHz	megahertz
MIS	Management Indicator Species
mm	millimeter

MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MP	milepost
mpg	mile per gallon
mph	mile per hour
MW	megawatt
MWh	megawatt-hours
MZ	Management Zone
N_2O	nitrous oxides
NAGPRA	Native American Graves Protection and Repatriation Act
NCA	National Conservation Area
NEPA	National Environmental Policy Act
NERC	North American Electrical Reliability Corporation
NESC	National Electrical Safety Code
NFS	National Forest System
NHPA	National Historic Preservation Act
NHT	National Historic Trail
NLCS	National Landscape Conservation System
NOAA	National Ocean and Atmospheric Administration
NOI	Notice of Intent
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRHP	National Register of Historic Places
NRT	National Recreation Trail
NRCS	Natural Resources Conservation Service
NRHD	National Register Historic District
NSA	noise sensitive area
NSO	no surface occupancy
NST	National Scenic Trail
NTSA	National Trails System Act
NTTG	Northern Tier Transmission Group
NVCS	National Vegetation Classification System
NVG	night vision goggle
NWI	National Wetland Inventory
NWR	National Wildlife Refuge
OATT	Open Access Transmission Tariff
OCTA	Oregon-California Trails Association

OCTC	Orchard Combat Training Center
OER	Office of Energy Resources
OHV	off-highway vehicle
OPGW	fiber optic shield ground wire
ORV	outstandingly remarkable value
PA	Programmatic Agreement
PEIS	programmatic environmental impact statement
PFYC	Potential Fossil Yield Classification
PGH	Preliminary General Habitats
PHMA	Priority Habitat Management Areas
P.L.	Public Law
$PM_{2.5}$	particulate matter with diameter of less than 2.5 microns
PM_{10}	particulate matter with diameter of less than 10 microns
POD	Plan of Development
PPH	Preliminary Priority Habitats
Project	Gateway West Transmission Line Project
Proponents	Rocky Mountain Power and Idaho Power
PSD	Prevention of Significant Deterioration
R	Restoration
RAC	Resource Advisory Council
RCRA	Resource Conservation and Recovery Act of 1976
RHA	Rivers and Harbors Act
RM	river mile
RMA	Recreation Management Area
RMP	resource management plan
ROD	Record of Decision
ROW	right-of-way
RTO	Runway Turnoff
RV	recreational vehicle
Sage-Grouse Plan	Off-Site Compensatory Mitigation to Offset Project Impacts to Greater Sage-Grouse
SEIS	Supplemental Environmental Impact Statement
SFA	Sagebrush Focal Areas
SHPO	State Historic Preservation Office
SIO	Scenic Integrity Objective
SMA	Special Management Area
SMS	Scenery Management System
SO_x	sulfur oxides

SPCC	Spill Prevention, Containment, and Countermeasures
SR	State Route
SRBOP	Morley Nelson Snake River Birds of Prey National Conservation Area
SRMA	Special Recreation Management Area
STATSGO	State Soil Geographic
SWPPP	Stormwater Pollution Prevention Plan
T/A/Y	tons per acre per year
TCP	traditional cultural property
TES	threatened, endangered, and sensitive
THPO	Tribal Historic Preservation Officer
TMDL	total maximum daily load
UPRR	Union Pacific Railroad
US	U.S. Highway
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USDA	United States Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VAC	Visual Absorption Capability
VCR	visual contrast rating
VMS	Visual Management System
VOC	volatile organic compound
VQO	Visual Quality Objective
VR	Visual Route
VRI	visual resource inventory
VRM	Visual Resource Management
WAFWA	Western Association of Fish and Wildlife Agencies
WECC	Western Electricity Coordinating Council
WRP	Wetlands Reserve Program
WSA	wilderness study area
WSR	Wild and Scenic River
WWE	West-wide Energy