

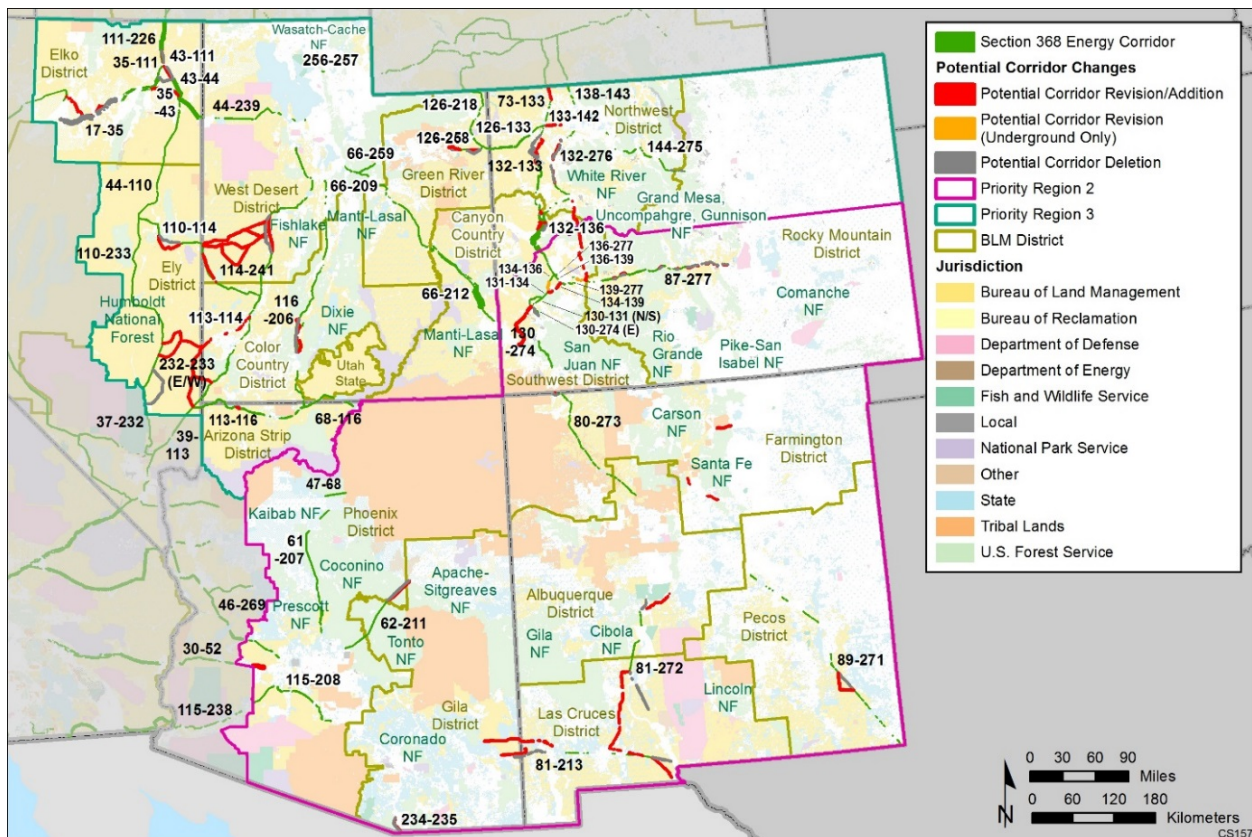
August 2019



Energy Policy Act of 2005

Section 368 Energy Corridor Review

REGIONS 2 and 3



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Notation

Acronyms, Initialisms, and Abbreviations

ACEC	Area of Critical Environmental Concern	NCA	National Conservation Area
ARMPA	Approved Resource Management Plan Amendment	NEPA	National Environmental Policy Act
		NGO	nongovernmental organization
		NHT	National Historic Trail
BIA	Bureau of Indian Affairs	NPS	National Park Service
BLM	Bureau of Land Management	NREL	National Renewable Energy Laboratory
BMP	Best Management Practices	NST	National Scenic Trail
BOR	Bureau of Reclamation		
		OHMA	Other Habitat Management Area
DoD	U.S. Department of Defense		
DOE	U.S. Department of Energy	PEIS	Programmatic Environmental Impact Statement
DOI	U.S. Department of the Interior		
		PHMA	Priority Habitat Management Area
EIS	Environmental Impact Statement		
EPA	U.S. Environmental Protection Agency	RDEP	Restoration Design Energy Project
EPAct	Energy Policy Act of 2005	REDA	Renewable Energy Development Area
ESA	Endangered Species Act	RFI	Request for Information
		RMP	Resource Management Plan
FLPMA	Federal Land Policy and Management Act	ROD	Record of Decision
		ROW	Right-of-Way
GHMA	General Habitat Management Area	SEZ	Solar Energy Zone
GIS	Geographic Information System	SWIP	Southwest Intertie Project
GRSG	Greater Sage-grouse		
GUSG	Gunnison Sage-grouse	USDA	U.S. Department of Agriculture
		USFS	U.S. Forest Service
IOP	Interagency Operating Procedure	USFWS	U.S. Fish and Wildlife Service
IRA	Inventoried roadless areas	UTTR	Utah Test and Training Range
LMP	Land Management Plan	VRM	Visual Resource Management
MOU	Memorandum of Understanding	WECC	Western Electricity Coordinating Council
MP	milepost	WSMR	White Sands Missile Range

Units of Measure

ft	foot, feet
km ²	square kilometer(s)
kV	kilovolt(s)
m	meter(s)
mi ²	square mile(s)
MW	megawatt(s)

Executive Summary

On behalf of the Section 368 Interagency Workgroup, comprising the Bureau of Land Management (BLM), the United States Forest Service (USFS), and the United States Department of Energy (DOE), and in response to the 2012 Settlement Agreement, this is the second of three reports and identifies enhancements to the West-wide energy corridors in Regions 2 and 3 in the western United States. The first report covering Region 1 was released for 30-day public comment on June 20, 2019. The Settlement Agreement did not change or nullify designated energy corridors but it did provide four foundational principles which were to be applied within a corridor review process as has been done here. This review process was performed collaboratively with State and tribal governments, the energy industry, nongovernmental organizations, local communities, and other Federal agencies. The findings will help inform potential improvements to the West-wide energy corridors (sometimes referred to as “368 corridors” due to their designation in accordance with Section 368 of the Energy Policy Act), as well as advance the Presidential priority of improving the Federal environmental review and permitting for infrastructure projects outlined in Executive Order 13807.

The Regions 2 and 3 review evaluated energy corridor placement on Federal lands managed by both the BLM and the USFS across Colorado, New Mexico, Utah, northern and eastern Arizona, and eastern Nevada. In compliance with the Settlement Agreement, the Agencies identified opportunities for potential energy corridor revisions, deletions, and additions for consideration during future land use planning at the local level. The specific findings are presented in Section 3, Table 3-1 of this report and are summarized as follows: 25 potential corridor revisions; 2 potential corridor segment deletions (Nevada and Colorado); and 6 potential corridor additions (two in New Mexico, two in Colorado, one in Nevada, and one in Utah). The corridor summaries detail the findings related to each corridor, including potential corridor revisions, deletions, and additions. The potential corridor revisions, deletions, and additions reflect application of the corridor siting principles and appropriately balance the need for safe and reliable energy connectivity with concerns for potential resource impacts on public lands and National Forest System lands.

The Section 368 Interagency Workgroup also identified two potential additions to interagency operating procedures, which are best management practices for improving consistency across the BLM and USFS in processing applications for use of Section 368 energy corridors. The two potential additions to interagency operating procedures are presented in Section 3.4 of this report.

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1. Purpose, Scope, and Background

During the Section 368 energy corridor review for Regions 2 and 3, the Bureau of Land Management (BLM), the United States Forest Service (USFS), and the United States Department of Energy (DOE), hereafter referred to collectively as “the Agencies,” analyzed 53 energy corridors (commonly referred to as “Section 368 energy corridors” or “West-wide energy corridors”) located in Regions 2 and 3 (Figure 1-1). This report specifically identifies and describes 25 potential corridor revisions, two potential corridor segment deletions, and six potential corridor additions that local BLM and USFS land managers should consider through future land use planning processes. Additionally, the Agencies present two potential additions to the Interagency Operating Procedures (IOPs) ¹.

1.1 Purpose and Scope

The purpose of the Section 368 energy corridor regional reviews is to examine current relevant information and stakeholder input on the corridors, including corridors of concern,² and based on this information, identify potential revisions, deletions, or additions to the corridors and potential IOP revisions, deletions, or additions. The first report covering Region 1 was released for 30-day public comment on June 20, 2019. That report included potential corridor and IOP revisions, deletions and additions. Further revisions, deletions, and additions are presented in this report.

Abstracts for each Section 368 energy corridor in Regions 2 and 3 were developed to assist the Agencies and stakeholders in identifying specific environmental concerns and other challenges, such as pinch points.³ The abstracts allow for review of each corridor within the framework of the corridor siting principles as listed in section 1.2.2. The Agencies used geographic information system (GIS) analyses to evaluate possible physical constraints and resource conflicts, as well as input from stakeholders and other available data. The abstracts provide a condensed record of environmental and other concerns for each corridor. They identify which Section 368 energy corridors effectively meet current and projected energy needs and which fall short due to limited build-out capacity, site-specific conflicts, or other considerations. Figure 1-2 displays the energy corridor regional review process, including developing the abstracts from multiple information sources utilizing an analysis framework, conducting workshops, and drafting this report.

1.1.1 Potential Corridor Revisions, Deletions, or Additions

As described above, one component of this regional review is to identify potential revisions, deletions, or additions to Section 368 energy corridors. Corridor abstracts include details used to develop potential corridor revisions, deletions, or additions for consideration in future land use planning decisions including (1) during the normal course of land use plan(s) revisions; (2) during an amendment to a land use plan(s) caused by a specific project proposal that does not conform to a land use plan, or when issues within a designated Section 368 energy corridor necessitate review of an alternative corridor path; or (3) during an amendment to individual land use plans specifically to address corridor

changes. Corridor summaries (Regions 2 and 3: Interagency Corridor Modification Summaries, Potential Corridor Additions, and Deletions) detail potential revisions, deletions, or additions, or – if none are identified for a corridor – describe how the current location of the corridor meets the four siting principles identified in the Settlement Agreement (see section 1.2.2)

Examples of potential corridor revisions include:

- Slight corridor alignment adjustments to avoid a specific area (e.g., an Area of Environmental Concern [ACEC], National Historic Trail [NHT], or other sensitive resource);
- Corridor adjustments to better align with existing infrastructure;
- Corridor adjustments to create greater capacity within the corridor;
- Modifications to corridor width; and
- Changes to designated use within a corridor (multi-modal, electric only, underground only).⁴

Examples of potential corridor deletions or additions include:

- Shortening a section of corridor or eliminating a corridor or corridor branch that does not meet the siting principles (i.e., corridor contains no existing infrastructure and does not serve as a preferred pathway to support energy transmission); and
- Addition of new corridors or corridor sections to better align with energy demand (including potential renewable energy generation sites) along existing or planned infrastructure and to increase connectivity to other West-wide energy corridors.

1.1.2 Corridor Management

In reviewing the energy corridors, the Agencies observed a need for additional clarity and guidance for managing existing corridors to ensure they continue to meet the siting principles through subsequent amendments to land use plans. Chapter 3, Section 3.3 notes that in addition to defining the appropriate and acceptable uses, as is required upon designation, it would be beneficial to define inappropriate and unacceptable uses within corridors. This will serve as guidance to provide the clarity needed for the corridor's intended designated purpose. Specific issues to address through agency land use planning are identified in the corridor summaries. These issues include situations where land management prescriptions conflict with the purpose of Section 368 energy corridors as the preferred location for energy transport across Federal lands managed by the BLM and USFS.

The Energy Policy Act of 2005 (42 U.S.C. § 15926) (EPAAct) required that "A corridor designated under this section shall, at a minimum, specify the centerline, width, and compatible uses of the corridor." The 2012 Settlement Agreement Siting Principle #3 states that "Appropriate and acceptable uses are defined for specific corridors."⁵ In 2009, the BLM and USFS issued Records of Decision (RODs) designating energy corridors and identifying their centerline, width, and compatible uses.^{6 7} Compatible use was defined as multi-modal, pipeline only, transmission only, and potential inclusion of limits on above- or below-grade use.

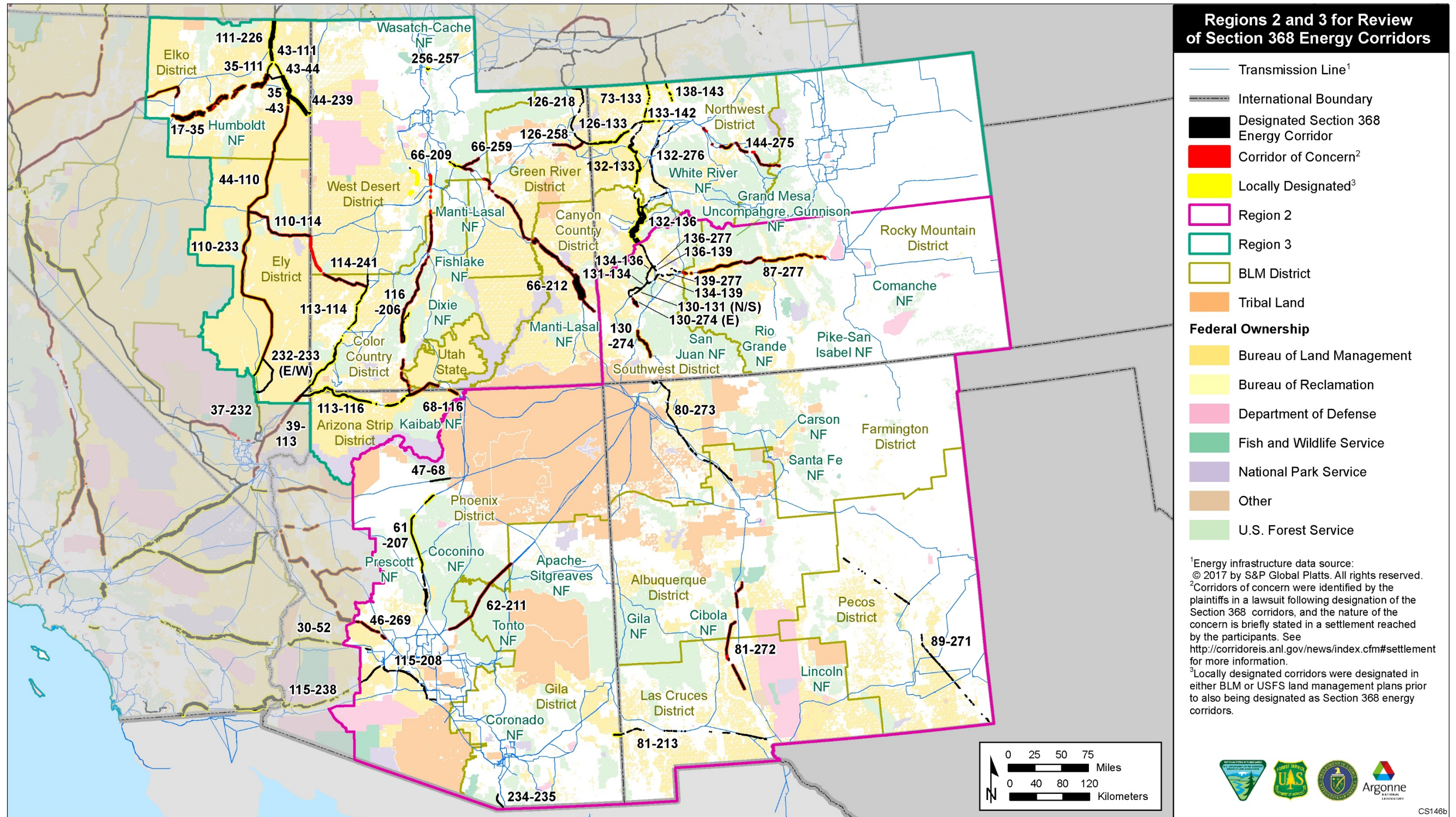


Figure 1-1 Section 368 Energy Corridors in Regions 2 and 3

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SECTION 368 REGIONAL REVIEWS FOR REGIONS 2 & 3 – PROCESS GRAPHIC

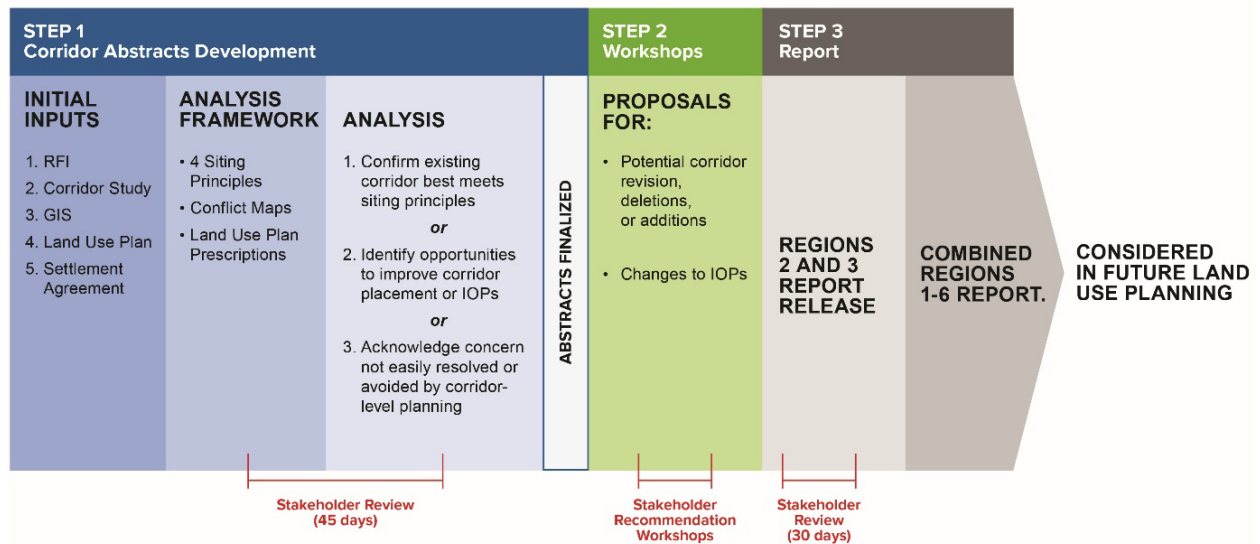


Figure 1-2 Section 368 Energy Corridor Review Process — Regions 2 and 3

1.1.3 IOPs

As part of the Settlement Agreement, this regional review also assesses the IOPs, which the Agencies established in the 2009 RODs and presents Best Management Practices (BMPs) for processing applications for use of Section 368 energy corridors across the BLM and USFS. The Agencies reviewed the IOPs and assessed the need to update them to better address concerns within the Section 368 energy corridors. Chapter 3, Section 3.4, of this report describes four potential new IOPs and three potential IOP revisions. The IOP assessment will continue throughout subsequent regional reviews, and additional modifications to the IOPs may be forthcoming. The BLM and USFS will adopt changes to the IOPs (additions, revisions, deletions) through internal guidance or manuals or handbooks. The corridor summaries identify resource concerns within each Section 368 energy corridor or potential corridor revisions, deletions, or additions that could be mitigated with the adoption of potential new IOPs or IOP revisions.

1.1.4 Stakeholder Process

The regional review process includes robust stakeholder engagement to identify concerns and develop solutions through potential revisions, deletions, or additions to Section 368 energy corridors. Agency stakeholder engagement included but was not limited to:

- Tribal governments;
- State governments;
- County governments;
- Plaintiffs in the litigation giving rise to the Settlement Agreement (see Section 1.2.2 of this report);

- Non-governmental organizations (NGOs);
- U.S. Department of Defense (DoD), U.S. Fish and Wildlife Service (USFWS), National Park Service (NPS), Bureau of Indian Affairs (BIA), Bureau of Reclamation (BOR), and other Federal agencies;
- The energy industry (e.g., utilities, transmission and pipeline companies, power project generators, and regional transmission planning entities);
- Private landowners; and
- Members of the public.

Stakeholder engagement occurred in three stages, indicated in red text in Figure 1-2. Stakeholders provided input through interactive webinars, in-person meetings and workshops, telephone calls, e-mails, and web-based submissions. The Agencies apprised stakeholders of current information via project website updates providing access to a variety of corridor-related information, including archived documents from the West-wide Energy Corridor Programmatic Environmental Impact Statement (PEIS), Corridor Study, and Settlement Agreement. The website continues to be updated periodically as the regional review process progresses and will be available for use in Agency land use planning following completion of the regional reviews.

1.1.5 Available Tools

Several tools were developed to facilitate stakeholder understanding of and input on the regional review process. These tools include corridor abstracts, the Section 368 Energy Corridor Mapping Tool, and a web-based form for receiving stakeholder input on the regional review process and the Section 368 energy corridors. These tools are available on the West-wide Energy Corridor Information Center project website at <http://www.corridoreis.anl.gov>.

1.2 Background

1.2.1 West-wide Energy Corridor PEIS

Section 368 of the EAct mandated that the U.S. Department of the Interior (DOI) and the U.S. Department of Agriculture (USDA) designate energy corridors for potential placement of future oil, gas, and hydrogen pipelines and electricity transmission and distribution infrastructure. The BLM and USFS prepared a PEIS and each signed a ROD in 2009 designating approximately 5,000 miles of Section 368 energy corridors on BLM-administered lands and approximately 1,000 miles of Section 368 energy corridors on USFS-administered lands. The PEIS, RODs, and related documents are available on the project website at www.corridoreis.anl.gov/eis/guide/index.cfm.

1.2.2 Lawsuit and Settlement Agreement

On July 7, 2009, several plaintiffs⁸ filed a lawsuit against the BLM, USFS, and DOE in United States District Court alleging that the energy corridor PEIS and RODs violated the EPCA, the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Federal Land Policy and Management Act (FLPMA), and the Administrative Procedure Act.

On July 3, 2012, the BLM, DOE, and USFS entered into a Settlement Agreement with the plaintiffs (Settlement Agreement). The Settlement Agreement required the BLM, USFS, and DOE to conduct regional reviews of the designated Section 368 energy corridors, among other stipulations, and to establish an interagency memorandum of understanding to outline the Agencies' process for conducting regional reviews, guided by four siting principles outlined in the Settlement Agreement.

The regional reviews are intended to evaluate the Section 368 energy corridors for any potential revisions, deletions, and additions utilizing the Settlement Agreement siting principles as a framework:

1. Corridors are thoughtfully sited to provide maximum utility and minimum impact on the environment;
2. Corridors promote efficient use of the landscape for necessary development;
3. Appropriate and acceptable uses are defined for specific corridors; and
4. Corridors provide connectivity to renewable energy generation to the maximum extent possible while also considering other sources of generation, in order to balance the renewable sources and to ensure the safety and reliability of electricity transmission.

Additional information on the Settlement Agreement is available on the project website at <http://corridoreis.anl.gov/regional-reviews/settlement/>.

1.2.3 Corridor Study

The Settlement Agreement required the Agencies to perform a corridor study to evaluate how well the Section 368 energy corridors are achieving their intended purpose of promoting environmentally responsible Right-of-Way (ROW) siting decisions and reducing the proliferation of dispersed ROWs across Federal lands.⁹ The corridor study assessed the utilization of Section 368 energy corridors since their designation in 2009 and established current baseline data to be used in the regional reviews. The corridor study covered the time period from January 2009 to October 2014. Findings from the corridor study are located on the project website at <http://corridoreis.anl.gov/regional-reviews/corridor-study/>.

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2. Regions 2 and 3 Review

2.1 Current Conditions and Projected Growth

Energy corridors exist to provide reliable energy transmission pathways for local and national needs. Two of the corridor siting principles in the Settlement Agreement are to consider whether the Section 368 energy corridors are thoughtfully sited to promote maximum utility and minimum impact on the environment and whether the corridors promote efficient use of the landscape for necessary development. Consistent with these siting principles, the Regions 2 and 3 review assessed existing energy infrastructure, planned or future energy development potential, and additional energy transmission capacity in the Regions 2 and 3 Section 368 energy corridors.

Most of the 53 energy corridors in Regions 2 and 3 that the Agencies designated in 2009 had preexisting energy transmission infrastructure. That existing infrastructure was largely developed to transport nonrenewable energy sources. Since 2009, additional infrastructure has been constructed within the Section 368 energy corridors, and many corridors have pending ROW applications for other primary energy transportation sources, including renewable energy sources (Figure 2-1). Appendix A contains a description of the existing infrastructure, planned or pending projects, and the potential for future energy development in the Regions 2 and 3 Section 368 energy corridors. The Agencies utilized that information in this review to assess available capacity for development in those corridors.

A third siting principle in the Settlement Agreement is to consider whether Section 368 energy corridors provide connectivity to renewable energy generation to the maximum extent possible while also considering other sources of generation, to balance the renewable sources and to ensure the safety and reliability of energy transmission. Stakeholder input received during the Regions 2 and 3 review indicated strong interest in developing renewable energy. Renewable energy development in Section 368 energy corridors is critical for connecting renewable energy sources to the grid. Chapter 2, Sections 2.1.1 through 2.1.5, of this report describe initiatives and studies investigating future energy potential and associated energy transmission needs.

2.1.1 NREL Synthesis Study

The BLM commissioned the National Renewable Energy Laboratory (NREL) to prepare a report synthesizing information from multiple studies forecasting western energy generation and transmission needs over the next 10 to 15 years. The NREL synthesis focused on implications from potential developments in the oil, gas, and electricity markets in Colorado, New Mexico, Utah, and portions of Arizona and Nevada. The findings provided useful information related to potential development in existing Section 368 energy corridors and the need for potential reconfiguration of energy corridors through revisions, deletions, or additions. The report is included as Appendix B. Findings specific to particular corridors are incorporated into the relevant corridor summaries. Following are overall findings relevant to Regions 2 and 3 from the NREL synthesis study:

- In general, electric transmission projects already under development will largely meet projected future transmission needs, according to the Western Electricity Coordinating

Council (WECC), in their common case (“expected future”) scenario for the Western Interconnection¹⁰. Accordingly, demand for future development within the West-wide energy corridors is anticipated to be low over the next 10 to 15 years.

- Under WECC scenarios with higher than expected renewable energy development, the West-wide energy corridors in Nevada, Utah, and New Mexico might see additional development interest in the near future.
- For interstate natural gas pipeline development in the West, the outlook for additional development in the near term appears to be moderate to low, based on a 2015 DOE study¹¹.

2.1.2 Solar Energy Development PEIS

In 2012, the BLM created a Solar Energy Program for utility-scale solar energy development on BLM-administered lands in six southwestern states.^{12 13} The BLM designated through land use plan amendments seventeen Solar Energy Zones (SEZs) and additional solar variance areas in Arizona, California, Colorado, New Mexico, Nevada, and Utah.¹⁴ The SEZs are priority areas for solar energy and associated transmission infrastructure development, established to facilitate near-term, utility-scale solar energy development on BLM-administered lands; minimize potential negative environmental impacts; and optimize existing transmission infrastructure and energy corridors. The BLM also designated two additional SEZs in other land use planning efforts: the West Chocolate Mountains SEZ in California was designated in the Desert Renewable Energy Conservation Plan, and the Agua Caliente SEZ in Arizona was designated in the Arizona Restoration Design Energy Project (Section 2.1.3). The following SEZs are close to (within 5 miles of) Regions 2 and 3 Section 368 energy corridors:

- Gillespie SEZ, Arizona, adjacent to Corridor 115-208 (milepost (MP) 0 to MP 4), and within 0.2 mi of Corridor 115-238 (MP 0 to MP 2);
- Afton SEZ, New Mexico, overlapping corridor 81-213 (MP 4 to MP 19);
- Milford Flats SEZ, Utah, within 2 miles of Corridor 113-114 (MP 108 to MP 118);
- Escalante Valley SEZ, Utah, within 3.5 miles of Corridor 113-114 (MP 81 to MP 90);
- Wah Wah Valley SEZ, Utah, overlapping Corridor 110-114 (MP 133 to MP 137); and
- Dry Lake Valley North SEZ, Nevada, overlapping Corridor 110-233 (MP 125 to MP 137).

2.1.3 Arizona Restoration Design Energy Project

The Restoration Design Energy Project (RDEP) was a BLM initiative to identify lands across Arizona that may be suitable for the development of renewable energy. The RDEP Final Environmental Impact Statement (FEIS), released in October 2012,¹⁵ and RDEP ROD and Approved Resource Management Plan Amendments, released in January 2013, established 192,100 acres of Renewable Energy Development Areas (REDAs) on BLM-administered lands throughout Arizona and designated the Agua Caliente SEZ.¹⁶

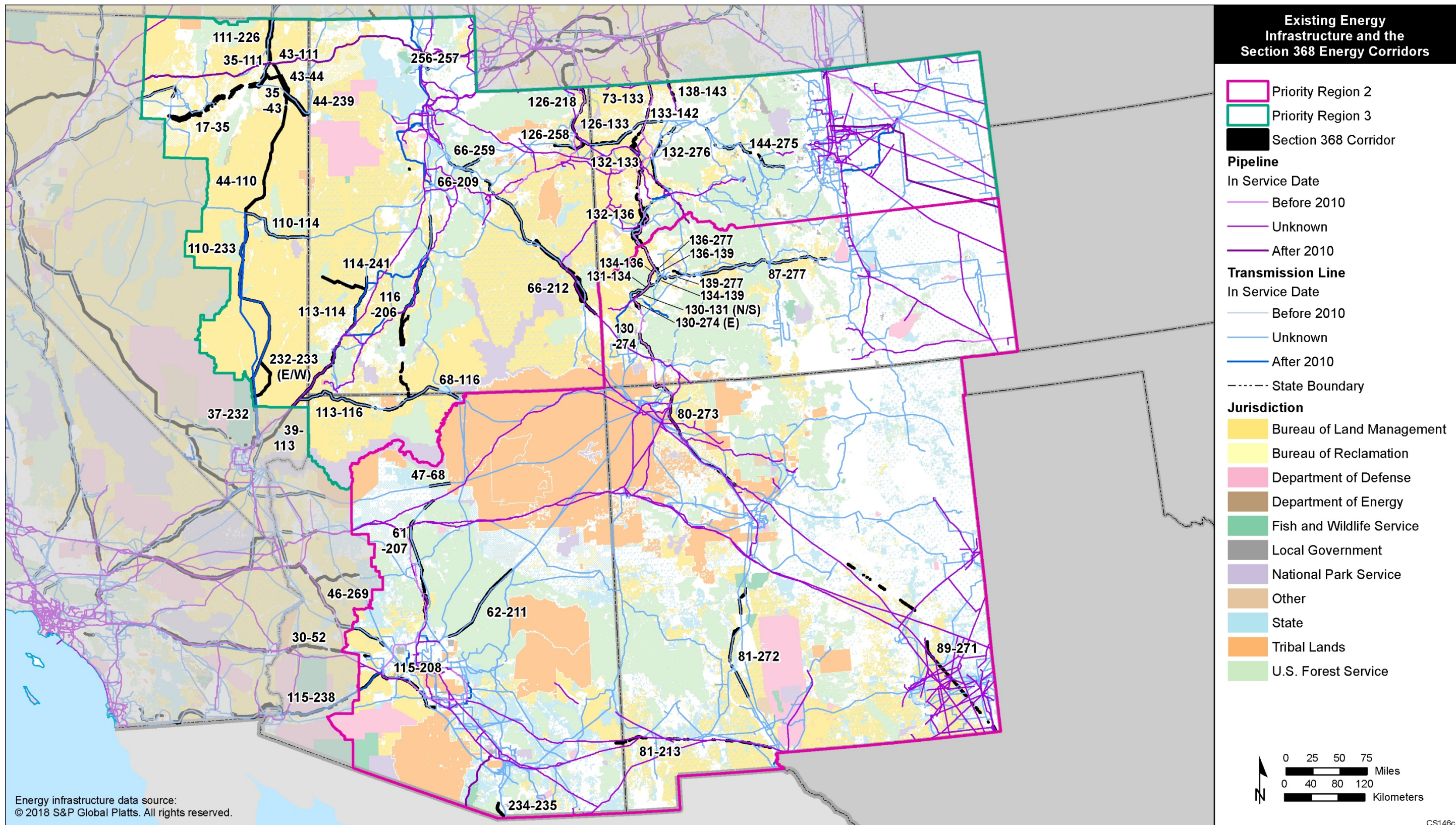


Figure 2-1 Existing Energy Infrastructure and the Regions 2 and 3 Section 368 Energy Corridors

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The Regions 2 and 3 Section 368 energy corridors within or near the boundaries of a REDA include:

- Corridor 115-208, REDA intersecting corridor (MP 18), adjacent to corridor (MP 0 to MP 4, MP 17 to MP 39, and MP 42 to MP 44), and within 5 miles of corridor (MP 44 to MP 46 and MP 55 to MP 62);
- Corridor 115-238, REDA adjacent to and within 5 miles of corridor (MP 1 to MP 8);
- Corridor 3-52, REDA 1,100 ft from corridor (MP 175 to MP 181);
- Corridor 62-211, REDA within 5 miles of corridor (MP 87);
- Corridor 46-269, REDA intersecting and within 5 miles of corridor (MP 38 to MP 56 and MP 83 to MP 94);
- Corridor 61-207, REDA within 5 miles of corridor (MP 4 to MP 22);
- Corridor 81-213, REDA within 5 miles of corridor (MP 145);
- Corridor 113-116, REDA intersecting or 1,100 ft from corridor (MP 38 to MP 39, MP 41, and MP 106 to MP 109); and
- Corridor 68-116, REDA intersecting corridor (MP 1 to MP 2).

2.1.4 Potential Energy Growth near Existing Section 368 Energy Corridors or Potential Corridor Additions

Union County, New Mexico

Union County in northeastern New Mexico has significant wind energy resources and substantial support to develop wind energy on approximately 19,000 acres of state trust land and 30,000 acres of private land. Additional transmission capacity is needed to transport electricity westward to a major energy hub. Lucky Corridor, LLC (Lucky Corridor), is proposing two 345-kV transmission lines (Lucky Corridor transmission lines). The Lucky Corridor transmission lines are supported by the State of New Mexico and the Coalition of Renewable Energy Landowner Association to provide flexibility to an aging grid and facilitate renewable energy development in northeastern New Mexico. Lucky Corridor has identified two potential routes that could serve this transmission need. This report includes two potential Section 368 energy corridor additions in this area across both BLM- and USFS-administered lands. The potential corridor additions could facilitate the proposed major interstate electric transmission network and would enhance grid reliability (see Section 3).

Utah

There are preliminary discussions regarding a potential Nuclear Power Plant near the Green River in Emery County, Utah. Corridor 66-212 is a north-south corridor designated on federal lands surrounding Green River, Utah and could potentially provide transmission access to a future power plant in the area. Blue Castle Holdings is proceeding with licensing and forming a development consortium. The licensing phase would occur from 2017-2020. The construction phase would extend from 2023-2030. In the fourth year, the financial commitments would begin. The existing electric transmission lines in the vicinity of the proposed nuclear power plant are owned by PacifiCorp.

2.1.5 Authorized Major Transmission Project ROWs

The corridor summaries describe potential Regions 2 and 3 energy corridor additions, some of which follow recently authorized electric transmission ROWs across Federal lands. Recently authorized (2015 to 2018) interstate electric transmission projects on federal lands in Regions 2 and 3 include:

Energy Gateway South Transmission Project: 250-ft-wide ROW; 416-mile, single-circuit 500 kV transmission system from a substation near Medicine Bow in Carbon County, Wyoming, to a substation near Mona in Juab County, Utah.^{17 18 19}

Southline Transmission Line Project: 240-mile, double-circuit 345-kV transmission line and 120-mile upgrade of existing 115-kV line to double-circuit 230-kV transmission line located in southern New Mexico and in Arizona between Doña Ana County, New Mexico, and Pinal County, Arizona.²⁰

SunZia Southwest Transmission Project: two 515-mile (about 183 miles on BLM-administered lands) 500-kV lines between central New Mexico (Lincoln County) and central Arizona (Pinal County).

TransWest Express Transmission Project: 250-ft-wide ROW; 728-mile (442 miles on BLM-administered lands; 18 miles on USFS-administered lands) 600-kV direct current transmission system from south-central Wyoming to southern Nevada (See Figure 2-2).^{21 22 23}

Recently authorized multi-state electric transmission line projects within Regions 2 and 3 that have necessitated conforming amendments to BLM resource management plans (RMPs) or USFS Land Management Plans (LMPs) are listed in Appendix C.

2.2 Land Use Planning Process and Regional Reviews

BLM RMPs and USFS LMPs guide administration of Federal lands by each agency. RMPs and LMPs outline management guidelines, including designations regarding siting of energy ROWs. The Regions 2 and 3 Section 368 energy corridors are managed under multiple RMPs and LMPs (see Appendix C for a list of the land use plans associated with each Regions 2 and 3 Section 368 energy corridor). At the time of writing this report, several agency land use planning efforts are in progress or planned to initiate soon. In-process land use planning is not included in this regional review, but to the extent possible, the information from this regional review related to potential Section 368 energy corridor revisions, deletions, and additions is being shared with those land use planning efforts to improve government efficiencies.

2.2.1 Amendments to RMPs and LMPs

Since the designation of Section 368 energy corridors in 2009, RMP and LMP amendments have been issued that impact Section 368 energy corridors management and/or identify changes to corridor boundaries. These RMP and LMP amendments are listed below. In addition, a decision that prevents designation of Section 368 energy corridors is also described in this section.

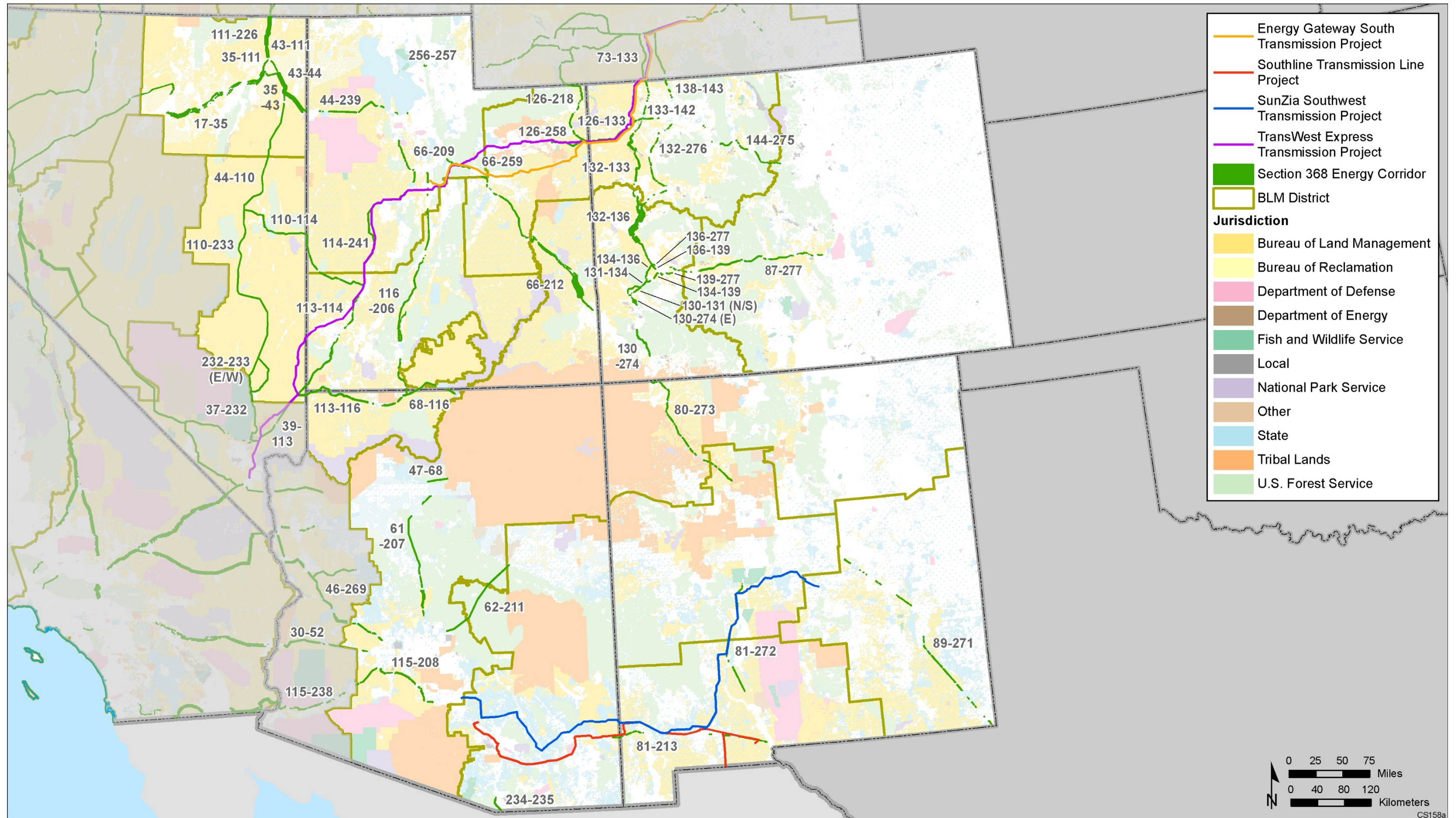


Figure 2-2 Recently Authorized Interstate Electric Transmission Projects in Regions 2 and 3

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Greater Sage-grouse Approved Resource Management Plan Amendments (ARMPAs) issued in 2015 were aimed at protecting the Greater Sage-grouse (GRSG); while the **Gunnison Sage-grouse Draft Resource Management Plan Amendment**²⁴ issued in 2016 was aimed at protecting the Gunnison Sage-grouse (GUSG). The GUSG Draft Resource Management Plan Amendment has not been finalized as of the publication date for this report. These documents revised 14 Section 368 energy corridors within Regions 2 and 3. Corridor revisions included re-aligning a corridor, reducing corridor width, removing corridor segments, and designating corridors as underground only. The 2015 ARMPAs relevant to Regions 2 and 3 are listed below and Appendix C lists details of the revisions to corridors:

- BLM Nevada and Northeastern California GRSG ARMPA;²⁵
- BLM Northwest Colorado GRSG Approved Resource Management Plan Amendment (ARMPA);²⁶
- BLM Utah GRSG ARMPA;²⁷
- USFS GRSG ROD for Idaho and Southwest Montana, Nevada and Utah;²⁸ and
- USFS GRSG ROD for Northwest Colorado and Wyoming.²⁹

In March 2019, the BLM issued RODs and ARMPAs amending the 2015 GRSG ARMPAs to conserve GRSG habitat, better align with state wildlife plans, and strike a regulatory balance. Communication and collaboration with states were used in developing GRSG conservation goals while minimizing adverse impacts to local economic opportunities. The 2019 RODs/ARMPAs do not change the boundaries of any Section 368 corridors. In some cases, they do change GRSG habitat management prescriptions, which results in some modification to the evaluation of corridor/GRSG habitat intersections.

For Region 2 and 3 corridors, the following RODs/ARMPAs are relevant:

- Nevada and Northeastern California GRSG ROD and ARMPA³⁰
- Northwest Colorado GRSG ROD and ARMPA³¹
- ROD and Approved Utah GRSG RMPA³²

The Northwest Colorado ROD and ARMPA did not result in substantial changes to GRSG management prescriptions with respect to the Section 368 corridor evaluations. However, the ROD and Approved Utah RMPA removed the general habitat management area (GHMA) and Sagebrush Focal Area (SFA) designations and associated management actions for those areas. The Nevada and Northeastern California ROD and ARMPA removed SFA designations, and specified that the former SFA areas will be managed as GHMA, Priority Habitat Management Area (PHMA), or Other Habitat Management Area (OHMA). This ROD also adjusted the boundaries of GRSG management areas to reflect the best available science and to be consistent with boundaries identified by the State of Nevada and the California Department of Fish and Wildlife.

The Dominguez-Escalante National Conservation Area (NCA) ROD and ARMP³³ and the **Beaver Dam Wash NCA ROD and ARMP**³⁴ established designated areas that resulted in revisions to Section 368 energy corridor boundaries. In addition, the boundary of the Grand Staircase-Escalante National Monument has changed, and the BLM Utah State Office is preparing an amendment to the RMP for the Grand Staircase-Escalante National Monument consistent with those changes. As of the date of this report, there is ongoing litigation regarding the monument boundary.

Section 2815(d) of Public Law No. 106-65, the National Defense Authorization Act for Fiscal Year 2000 (October 5, 1999) restricts amendments to the RMPs for the BLM Fillmore and Salt Lake Field Offices.³⁵ Section 368 energy corridors that are located within the BLM Fillmore and Salt Lake Field Offices are not currently designated. At such time the restriction is lifted, the corridors could be considered for designation. Potential corridor revisions identified in this regional review for corridors within the BLM Fillmore and Salt Lake Field Offices would be also considered at that time.

2.3 Summary of Stakeholder Input

The agencies consider robust stakeholder input critical to an effective and comprehensive regional review of west-wide energy corridors. The Agencies engaged stakeholders through letters, website notifications, public webinars, conference calls, workshops, and in-person meetings. The Agencies compiled input from diverse perspectives to evaluate energy corridors and identify potential revisions, deletions, and additions consistent with Settlement Agreement siting principles. Appendix D describes the stakeholder engagement process, lists the entities that provided input during comment periods and workshops, and summarizes the input received from stakeholders.

3. Potential Modifications to Regions 2 and 3 Section 368 Energy Corridors

3.1 Potential Corridor Revisions, Deletions, and Additions

The Agencies' review of Section 368 energy corridors in Regions 2 and 3, including corridors of concern, identified potential revisions, deletions, and additions to the corridors for consideration in future land use planning, either with a plan amendment or as part of a larger planning effort.

Figure 3-1 shows potential revisions for Section 368 energy corridors in Regions 2 and 3 on a map of the corridor network. Table 3-1 contains a summary of the potential revisions, deletions, and additions for the Section 368 energy corridors in Regions 2 and 3, including a rationale for those potential changes. More detailed information for all the corridors is provided in the corridor summaries. Appendix E contains a table showing the Agencies' application of the corridor siting principles in identifying potential revisions, deletions, and additions to the Section 368 energy corridors in Regions 2 and 3.

3.2 General Considerations for Future Energy Development

During the Region 1 Review, the Agencies identified the following actions that would help regional and local agency planning offices address concerns related to Section 368 energy corridors and thus promote improved use of the corridors and protection of resources:

- Provide Agency policy and program guidance to local BLM and USFS offices describing the purpose and benefits of designating and using Section 368 energy corridors. This could be accomplished through updating or expand training for managers and staff; possibly in coordination with the energy industry (e.g., Pipeline Systems course, Electric Systems course), webinars, etc.
- Improve coordination between the BLM, USFS, and other involved agencies to avoid or restrict siting of nonlinear features such as geothermal and solar energy facilities within Section 368 energy corridors.
- Review why a Section 368 energy corridor was not used when an authorized long-distance oil, gas, or hydrogen pipeline or high-voltage electric transmission or distribution line has been located outside or adjacent to a Section 368 energy corridor and consider whether future revisions, deletions, or additions to the unused corridor segments could improve utilization of the corridor.

- Consider a corridor shift when a Section 368 energy corridor straddles a road or trail (e.g., an Interstate Highway, National Scenic or Historic Trails (NSHTs), or a Scenic Byway) to increase the potential for meeting applicable VRM objectives.
- Encourage proponents of projects in Section 368 energy corridors to integrate visual resource planning and design principles during the early phases of project planning to meet BLM VRM and USFS scenic integrity objectives and avoid land use plan amendments.

During the Regions 2 and 3 Review, the Agencies identified two additional actions that would help regional and local agency planning offices address concerns related to Section 368 energy corridors:

- Consider realigning corridors with existing infrastructure to allow maximum utilization. Figure 3-2 is an example of how a corridor can be shifted along existing infrastructure to allow maximum utilization as well as avoid an ACEC and lands with wilderness characteristics.
- Include robust communication between local BLM and USFS offices and the Section 368 Interagency Workgroup in Agency policy and/or program guidance to ensure that changes to Section 368 energy corridors resulting from land use revisions or amendments are updated in the Section 368 energy corridor mapping tool to provide transparency to stakeholders.

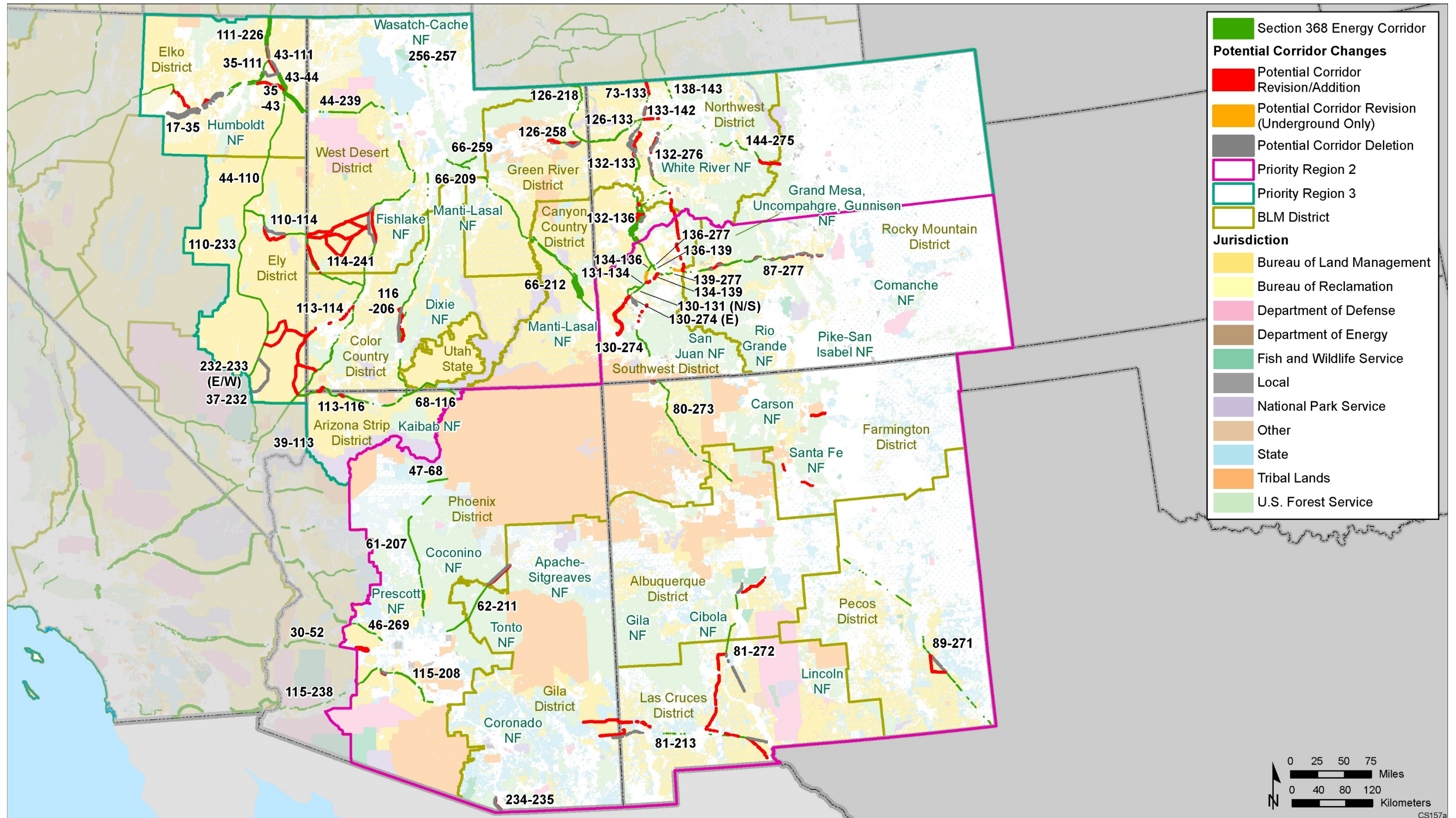


Figure 3-1 Potential Revisions, Deletions, and Additions to Regions 2 and 3 Section 368 Energy Corridors

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Table 3-1 Summary of Potential Revisions, Deletions, and Additions to Regions 2 and 3 Section 368 Energy Corridors

Corridor # ^a and Location	Potential Revision, Deletion, or Addition	Rationale
Potential Corridor Revisions		
113-114 Utah	Revision: Consider adding a corridor segment (braid) at MP 30 connecting the corridor to the authorized TransWest Express route (if constructed) in eastern Nevada.	<p>The potential corridor revision would improve corridor utility. The current route through the Dixie National Forest is not likely to accommodate additional large transmission lines. The additional corridor segment would increase capacity for north-south development in the region, while also providing a connection to Washington County.</p> <p>The potential corridor revision would avoid IRAs, the Beaver Dam Slope ACEC, GRSG PHMA, the Dixie National Forest, Mountain Meadow Massacre National Historic Landmark, and the Old Spanish NHT.</p>
17-35 Nevada	Revision: From MP 175 to MP 251, consider adding a corridor segment (braid) along existing infrastructure and retaining the designation of underground only for a portion of the corridor.	The potential corridor revision would avoid Hastings Cutoff Trail, the town of Elko, Elko Band Colony tribal lands, and the California NHT; reduce corridor overlap with GRSG habitat allocations; and collocate along existing infrastructure.
30-52 Arizona	Revision: There are two potential corridor revisions that would follow along the proposed Ten West Link Project between MP 190 and MP 200, where a greater amount of BLM-administered lands can be utilized for the corridor. Consider adding a corridor segment (braid) north of the corridor along the Ten West Link preferred route and a locally designated corridor, or consider widening the corridor to accommodate both the Ten West Link preferred route and Corridor 30-52.	Both of the potential corridor revisions would maximize utility through collocation and would increase capacity within the corridor for future projects. To avoid the Big Horn Mountain Wilderness Area, consideration should be given to using the existing transmission line as the northern boundary of the potential corridor revisions.
35-43 Nevada	Revision: Consider re-aligning the corridor along Interstate 80 to connect Corridor 43-44 to Corridor 17-35.	The potential corridor revision would collocate existing infrastructure, thereby improving corridor utility and promoting more efficient use of the landscape. This potential revision would also minimize potential impacts by avoiding Sage-grouse habitat.
43-111 Nevada	Revision: Consider shifting the corridor to the west to collocate with the planned SWIP transmission line to minimize potential impacts on GRSG PHMAs.	If the Southwest Intertie Project (SWIP) transmission line were constructed, this potential corridor revision would maximize use and minimize impacts by collocating with infrastructure within GRSG PHMAs and would avoid locating the corridor in PHMAs between MP 6 and MP 11.

Corridor # ^a and Location	Potential Revision, Deletion, or Addition	Rationale
62-211 Arizona	Revision: Consider shifting the corridor between MP 60 and MP 87, less than 1 mile east and south along the existing 345-kV transmission line, so that the existing transmission line becomes the northern boundary of the corridor.	The potential corridor revision would allow maximum utilization and avoid potential impacts on the General George Crook National Recreation Trail, the Mogollon Rim, Chevelon Creek River (which is eligible for Wild and Scenic River status), Chevelon Crossing, aquatic endangered species, the Citizen’s proposed wilderness, USFS Roadless Areas and USFS potential wilderness areas, scenic integrity, cultural resource site density, Steep Ridge, and the Vincent Ranch property.
73-133 Colorado	Revision: Consider shifting the corridor to the east between MP 46 and MP 57 and MP 72 and MP 79, so that the existing pipelines become the western boundary of the corridor.	The potential corridor revision would avoid lands with wilderness characteristics, the spring creek drainage, and cultural sites. The potential corridor revision would minimize impacts through collocation with existing and planned infrastructure and would maximize utility by increasing capacity within the corridor.
80-273 New Mexico	Revision: Consider shifting the corridor at MP 131 to follow existing infrastructure.	The potential corridor revision would maximize utility and minimize impacts by collocating along existing infrastructure and avoiding the Morris 41 ACEC.
81-213 New Mexico Arizona	<p>Revision: Consider realigning the corridor between MP 0 and MP 18 along an existing 345-kV transmission line south of the corridor to avoid overlapping the Afton SEZ.</p> <p>Consider realigning the corridor along the authorized route for the Southline Transmission Project between MP 28 and MP 78. Consider adding a corridor segment (braid) to the north along the SunZia and Southline authorized routes. The northern corridor segment (braid) could be designated for electric transmission lines, and the southern corridor segment (braid) could be designated for pipelines.</p> <p>Consider realigning the corridor at MP 100 with the authorized SunZia Southwest Transmission Project and Southline Transmission Project.</p>	<p>The potential corridor revision would maximize utility by expanding capacity within the corridor and allowing full build-out of the Afton SEZ while also providing transmission access to the SEZ.</p> <p>The potential corridor revision would improve corridor utility and minimize impacts by realigning the corridor along the SunZia and Southline authorized routes. The potential corridor revision would improve utility because there are numerous homes and farms along the current route that could prevent future development. The additional corridor segment could accommodate different needs of electric transmission lines and oil and gas pipelines in river crossing areas.</p> <p>A potential re-routing of the corridor at MP 100 would avoid Lordsburg Playa, Organ Mountain Desert Peaks, a Visual Resource Management (VRM) Class II area, and Butterfield Trail.</p>
81-272 New Mexico	Revision: Consider realigning the corridor between MP 0 and MP 40 with the authorized route for the SunZia Southwest Transmission Project.	The potential corridor revision would maximize utility and minimize impacts by collocating along existing infrastructure. From MP 0 to MP 25, the potential corridor revision would avoid impacts on El Camino Real de Tierra Adentro NHT, minimize impacts on wildlife, and avoid crossing the Rio Grande River.

Corridor # ^a and Location	Potential Revision, Deletion, or Addition	Rationale
	Consider realigning the corridor between MP 100 and MP 109 with the authorized route for the SunZia Southwest Transmission Project.	From MP 100 to MP 109, The potential revision from MP 100 to MP 109 would improve corridor utility and minimize impact by avoiding the Seville National Wildlife Refuge, which does not allow additional infrastructure, and the Ladron Mountain-Devil's Backbone Complex ACEC. Coordination with White Sands Missile Range (WSMR) would be required, and it is likely that only pipelines would be authorized in the WSMR call-up area.
87-277 Colorado	<p>Revision: Consider shifting the corridor to the south between MP 5 and MP 43 and narrowing or shifting the corridor between MP 103 and MP 115 to avoid lands with wilderness characteristics. Consider shifting the corridor slightly to avoid overlap with roadless areas and to avoid overlap with the active geothermal lease.</p> <p>Although no specific revision has been identified, the Agencies should consider alternate routes to avoid or minimize impacts on Gunnison Sage-grouse critical habitat during the land use planning process.</p>	The potential corridor revision would reduce impacts by avoiding lands with wilderness characteristics and roadless areas and would improve corridor utility by increasing capacity.
89-271 New Mexico	Revision: Consider shifting the corridor west at MP 64 for approximately 12 miles and then north to meet the existing corridor at MP 85.	The potential corridor revision would minimize impacts by avoiding Lesser Prairie Chicken habitat and would maximize utility by collocating with existing infrastructure on BLM-administered lands as much as possible.
110-114 Nevada Utah	<p>Between MP 30 and MP 50, consider realigning the corridor along Highway 50.</p> <p>Between MP 70 and MP 110, consider realigning the corridor east along either existing 230-kV transmission lines, Highway 50, or south of Highway 50 to avoid WSAs.</p> <p>Revision: Between MP 83 and MP 93, consider re-routing the corridor east of Highway 21.</p> <p>See also the potential energy corridor addition that follows the proposed Cross-Tie transmission line that would connect Corridor 110-114 and Corridor 114-241 (Cross-Tie Corridor).</p>	The potential corridor revision would improve corridor utility and minimize impact by avoiding private land, the UTTR, and riparian areas. The potential corridor revision would also support connectivity to multiple energy generation sources and would promote efficient use of the landscape by aligning the corridor with energy demand.

Corridor # ^a and Location	Potential Revision, Deletion, or Addition	Rationale
113-116 Arizona Nevada Utah	Revision: Consider shifting the corridor from MP 47 to MP 51, so that the existing 500-kV transmission line becomes the northern boundary of the corridor. Also, consider shifting the corridor south or narrowing the corridor at its northern end between MP 20 and MP 26 to avoid lands with wilderness characteristics.	The potential corridor revision would avoid intersecting the Fort Pearce ACEC and lands with wilderness characteristics and would collocate with existing infrastructure.
114-241 Utah	Revision: Consider shifting the corridor between MP 42 and MP 79 to follow the east side of the authorized TransWest Express route and UNEV pipeline.	The potential corridor revision would improve corridor utility and minimize impacts by collocating infrastructure and maximizing capacity.
115-208 Arizona	Revision: Consider a slight shift between MP 4 and MP 8, so that the existing infrastructure becomes the northern boundary of the corridor.	The potential corridor revision would avoid the Gila River Terraces and Lower Gila Historic Trails ACEC.
116-206 Arizona Utah	Revision: Consider realigning the corridor with U.S. Highway 89 from MP 53 to MP 79. Consider aligning the corridor at MP 79 with the gas pipeline headed west to connect to, and follow, a 345-kV transmission line and reconnect with the existing corridor at about MP 86.	The potential corridor revision would maximize utility and minimize impacts by collocating along existing infrastructure, which would minimize potential impacts on GRSG PHMAs.
126-258 Utah	Revision: Consider realigning the corridor from MP 3 to MP 17 and from MP 24 to the end of the corridor to follow the authorized route for the TransWest Express Transmission Project.	The potential corridor revision would maximize utility and minimize impacts through collocation with infrastructure, would avoid oil and gas infrastructure and topography concerns, and would minimize impacts on lands with wilderness characteristics.
132-133 Colorado	Revision: Consider shifting the corridor to occupy BLM-administered lands to the east from MP 6 to MP 9. Consider minor adjustments to avoid lands with wilderness characteristics and to make the existing transmission line the boundary of the corridor. Designate the corridor as multi-modal where there are existing transmission lines in the corridor to allow for upgrades to those lines.	The potential corridor revisions would maximize utility and minimize impacts; close a gap in the corridor; maximize utility of the corridor by increasing the amount of BLM-administered lands in the corridor; and continue to avoid the South Shale Ridge ACEC. Potential minor corridor revisions would reduce impacts by avoiding lands with wilderness characteristics and sage-grouse habitat, as well as improve corridor utility by increasing capacity.

Corridor #^a and Location	Potential Revision, Deletion, or Addition	Rationale
132-276 Colorado	Revision: Consider revising the corridor along the existing 345-kV transmission line from MP 60 to MP 103. Consider shifting the corridor slightly to the east between MP 53 and MP 54 to retain capacity within the corridor on BLM-administered lands and avoid the Magpie Gulch ACEC.	The potential corridor revision would improve corridor utility and minimize impacts by collocating with existing infrastructure and avoiding the Magpie Gulch ACEC. The potential revision also would avoid mining operations and state lands.
133-142 Colorado	Revision: Consider shifting the corridor so that the existing 345-kV transmission line becomes the southern boundary of the corridor.	The potential corridor revision would minimize impacts by avoiding lands with wilderness characteristics.
134-136 Colorado	Revision: Consider designating the corridor as underground only from MP 1 to MP 9.	The potential corridor revision would minimize impacts on the Roubideau Special Management Area and maximize utility because project proponents would not have to address separation integrity issues that arise when electric transmission lines and pipelines are collocated within a corridor.
134-139 Colorado	Revision: Consider shifting the corridor south so that the existing transmission line becomes the northern boundary of the corridor.	The potential corridor revision would avoid the Silesca Ranger Station, a site listed on the National Register of Historic Places that is within the northern portion of the current alignment near MP 3, and would maximize utility within the corridor.
144-275 Colorado	Revision: Consider minor corridor adjustments to eliminate intersections with IRAs.	The potential corridor revision would avoid IRAs by deleting overlap and narrowing the corridor.
234-235 Arizona	Revision: Consider slight adjustments so that the entire corridor is aligned with existing infrastructure and so that the existing transmission line becomes the western boundary of the corridor, except from MP 7 to MP 8.	The potential corridor revision would enhance corridor utility and minimize impacts by realigning with existing infrastructure. Locating the corridor east of the existing transmission line would avoid jaguar critical habitat to the maximum extent possible while collocating with existing infrastructure.

Corridor # ^a and Location	Potential Revision, Deletion, or Addition	Rationale
Potential Corridor Deletions		
130-274 Colorado	Partial deletion: Consider deleting segment from MP 0 to MP 32 and deleting Corridor 130-274(E).	The portions of Corridor 130-274 that are being considered for deletion are not consistent with the siting principles or the potential addition of the San Miguel/Dolores Corridor. Corridor 130-274 does not contain infrastructure from MP 0 to MP 32 and during the past 10 years has not served as a preferred pathway to support electric transmission infrastructure. Deleting this portion of the corridor would also minimize potential impacts on conservation easements on private land to protect GUSG and would minimize potential impacts on scenery values in this area. Without Corridor 130-274, Corridor 130-274(E) is an isolated parcel that does not promote efficient use of the landscape or maximize utility.
232-233 Nevada	Partial deletion: Consider deleting Corridor 232-233(E), but retaining Corridor 232-233(W).	Corridor 232-233(E) does not meet the siting principles because there is no existing infrastructure within the corridor; and development could create an island and fragment desert tortoise habitat.
Potential Corridor Additions		
Potential Corridor Addition (San Miguel/Dolores Corridor) Colorado	Addition: Consider adding a new corridor to replace Corridor 130-274/130-274(E). The potential corridor addition would be in alignment with a recently upgraded 230-kV transmission line in the northern portion of the potential corridor addition and would follow a local road in the southern portion.	The potential corridor addition would maximize utility by collocating with existing infrastructure and would minimize potential impacts by avoiding lands with wilderness characteristics and conservation easements to protect GUSG. The potential corridor addition would also minimize potential visual resource conflicts by aligning the corridor with existing infrastructure and would promote efficient use of the landscape by providing a continuous north-south corridor through a large portion of western Colorado.
Potential Corridor Addition (Curecanti-Rifle Corridor) Colorado	Addition: Consider adding a new corridor in alignment with the Curecanti-Rifle transmission line.	The potential corridor addition would maximize utility by linking multiple West-wide energy corridors to create a north-south pathway in Colorado and would minimize potential impacts by collocating along existing infrastructure (a 230-kV transmission line) and by avoiding inventoried roadless areas (IRAs).
Potential Corridor Addition (Lucky Corridor) New Mexico	Addition: Consider adding a new corridor in alignment with the planned Lucky Corridor through the Carson National Forest.	The potential corridor addition would maximize utility by strengthening the transmission grid along the aging 115-V transmission line and would minimize potential impacts by collocating along existing infrastructure (a 115-V transmission line and the Lucky Corridor transmission line, if constructed). The potential corridor addition would provide connectivity to renewable energy generation to the maximum extent possible by facilitating the transmission of renewable energy from northeastern New Mexico to the Four Corners energy hub.

Corridor # ^a and Location	Potential Revision, Deletion, or Addition	Rationale
Potential Corridor Addition (Santa Fe Corridor) New Mexico	Addition: Consider adding a new corridor in alignment with the planned Santa Fe transmission line through BLM- and USFS-administered lands through northern New Mexico near Santa Fe.	The potential corridor addition would maximize utility by relieving the voltage and capability constraints along the east-west electricity pathway, which has limited capacity to carry electricity, and would minimize potential impacts by collocating along existing infrastructure (a 115-V transmission line and the Santa Fe transmission line, if constructed). The potential corridor addition would provide connectivity to renewable energy generation to the maximum extent possible by facilitating the transmission of renewable energy from northeastern New Mexico to the Four Corners energy hub.
Potential Corridor Addition (TransWest Connector Corridor) Nevada	Addition: Consider a new corridor segment from MP 136 of Corridor 110-233 east-southeast to the TransWest Express approved route. In addition or alternatively, consider adding a corridor segment from MP 146 of Corridor 110-233 along U.S. Highway 93 to the TransWest Express preferred route.	The potential corridor addition would maximize utility and promote efficient use of the landscape by providing a second north-south pathway in eastern Nevada to Las Vegas. Corridor 232-233 currently connects multiple Section 368 energy corridors to create the north-south route in eastern Nevada. However, the corridor is constrained by existing infrastructure, the Desert National Wildlife Refuge, ACECs, desert tortoise habitat, and designated wilderness. This potential corridor addition could improve corridor utility and minimize impact by allowing for additional development in the region while avoiding sensitive resources.
Potential Corridor Addition (Cross-Tie) Utah	Addition: Consider adding a corridor east of Corridor 110-114 (MP 72) along a local energy corridor, an existing 230 kV transmission line, and the proposed Cross-Tie transmission line to connect to Corridor 114-241.	The potential corridor addition would maximize utility by better aligning the corridor with energy demand and increasing transmission capability between the Utah/Wyoming and Nevada/California segments of Section 368 energy corridors. This potential energy corridor addition would minimize potential impacts by collocating along existing infrastructure (a 230-V transmission line and the Cross-Tie transmission line, if constructed) and would promote efficient use of the landscape by providing a continuous east-west corridor through Nevada and Utah. This potential corridor addition would also provide connectivity to renewable energy generation to the maximum extent possible by facilitating the transmission of high-capacity renewable resources from Wyoming and Utah to southern Nevada and California and providing access for the oversupply of solar energy from California Independent System Operator to customers in Utah and Wyoming. However, topography and the Utah Test and Training Range (UTTR) could make these potential corridor revisions challenging.

Corridor # ^a and Location	Potential Revision, Deletion, or Addition	Rationale
No Potential Revisions, Deletions, or Additions		
35-111	61-207	126-218
37-232	66-209	130-131
39-113	66-212	131-134
43-44	66-259	132-136
44-110	68-116	136-139
44-239	110-233 (see <i>TransWest Express Connector Corridor Addition Summary</i>)	136-277
46-269	111-226	138-143
47-68	115-238	139-277
	126-133	256-257

^a **Corridors of Concern are identified in red text.**

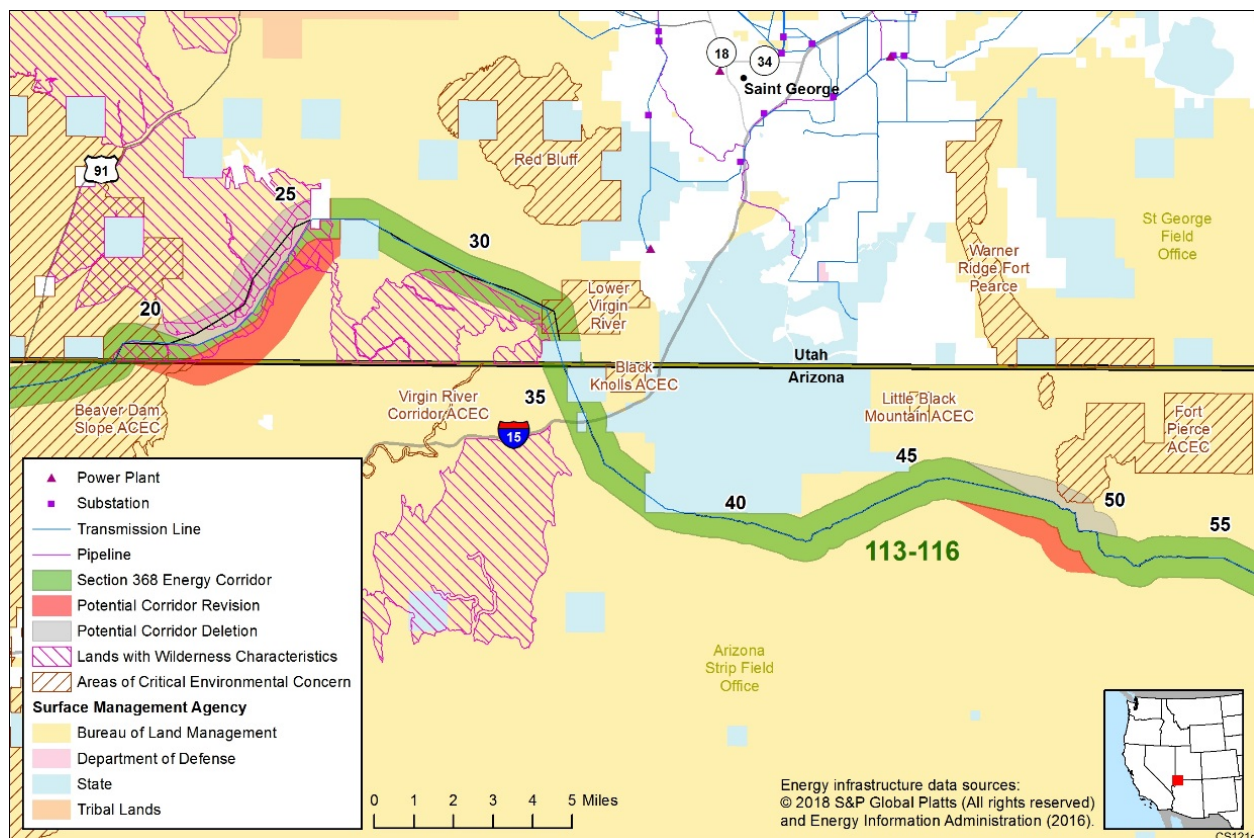


Figure 3-2 Corridor 113-116: Example Corridor Shift to Avoid ACEC

3.3 Corridor Management

The minimum specifications for each designated energy corridor include specifying the length, width, and compatible uses of the corridor. The regional reviews have identified that this minimum standard lacks the detail needed to administer Section 368 energy corridors effectively in terms of corridor utilization and resource protection. Agency land use planning needs improved Section 368 energy corridor management specifications and direction to enhance corridor utilization and resource protection both inside and outside Section 368 energy corridors. Agency land use plans should:

- Include a legal description for the corridor centerline and mileposts.
- Specify the corridor width and, if the corridor width is variable, specify where and how variations occur.
- Specify modes of corridor use (e.g., multimodal, electric transmission only, pipeline only, underground use only).
- Enumerate compatible corridor uses in the following order of priority: major energy transmission infrastructure, minor energy transmission and distribution infrastructure, broadband telecommunications and fiber-optic infrastructure,³⁶ and access roads).
- Identify non-compatible corridor uses.
- Enumerate corridor management objectives.
- List management actions to improve transmission reliability, relieve congestion, and enhance the capability of the energy grid to deliver electricity.
- Preclude or limit certain types of land use allocations as necessary to insure the orderly administration of Section 368 energy corridors as preferred locations for long-distance oil, gas, and hydrogen pipelines and high-voltage electric transmission and distribution lines.
- Align other management actions with the purposes of Section 368 energy corridors. Examples of this type of alignment include the following:
 - Section 368 energy corridors serve a public benefit by providing a reliable location for energy transmission infrastructure development for the supply of energy essential to the local, regional, and national economies.
 - Vegetative conditions and vegetation management objectives are aligned with energy transmission reliability standards.
 - Other land uses in Section 368 energy corridors are compatible with and not detrimental to construction, operation, maintenance, and decommissioning of energy transmission facilities and associated access and infrastructure.
 - Obsolete or unused facilities in Section 368 energy corridors are promptly removed, and the areas where the removed facilities were situated are rehabilitated to the satisfaction of the authorized officer.
 - Section 368 energy corridors are managed as recreational avoidance areas (for both motorized and non-motorized use)
 - Section 368 energy corridors are managed to meet VRM III or VRM IV objectives.
 - Section 368 energy corridors are managed to avoid the introduction or minimize the spread of noxious and invasive plant species in the corridors.

Additional guidance on land use planning for Section 368 energy corridors is contained in Appendix F.

Designated ROW corridors are preferred locations for linear ROWs and facilities. Where there are competing management objectives for the same Federal lands (e.g., a corridor intersects with an area designated as “avoidance” in the land use plan), the agency planning staff should balance the need for responsible corridor development with the objective of minimizing adverse environmental impacts. The corridor summaries identify conflicting management objectives in each of the Regions 2 and 3 Section 368 energy corridors and potential corridor additions that could address those conflicts.

3.4 General Considerations for IOP Revisions, Deletions, and Additions

IOPs are critical for expediting application processing in Section 368 energy corridors and providing consistency between the BLM and USFS in administering Section 368 corridors. The IOPs were developed through the West-wide Energy Corridor PEIS and designated the subsequent BLM and USFS RODs to provide uniform criteria for evaluating proposals and applications for using Section 368 energy corridors. The IOPs are similar to BMPs, but they are mandatory and apply to all proposals, applications, and authorizations for energy transmission projects in Section 368 energy corridors administered by the BLM and USFS. The IOPs are presented in Appendix B of both RODs.

The Agencies have determined that the IOPs are sometimes poorly understood and inconsistently utilized. Therefore, in addition to identifying potential revisions, deletions, and additions to the IOPs in the regional reviews, the Agencies are evaluating how to enhance understanding and consistent application of the IOPs.

The Region 1 Report identified the need for three new IOPs related to: habitat connectivity as an ecological resource, lands with wilderness characteristics, and National Scenic Trails (NSTs) and NHTs ([Region 1 Report](#)). In addition, the Region 1 Report identified the need to revise three existing IOPs related to: visual resources, vegetation management, and DoD coordination. New IOPs could be added and existing IOPs could be revised through internal guidance or manuals or handbooks.

3.4.1 Potential IOP Additions

During the Regions 2 and 3 review, the Agencies identified the following potential new IOPs for wildlife migration corridors and tribal concerns and ethnographic studies:

Ecological Resources. In addition to the IOP on habitat connectivity, the Agencies should consider adding an IOP related to wildlife migration corridors and habitat. This would help ensure that appropriate consideration of wildlife migration corridors and habitat occurs in connection with evaluation of proposed development in Section 368 energy corridors. Secretarial Order 3362, “Improving Habitat Quality in Western Big-Game Winter Range and Migration Corridors” should be adhered to and further coordination with the Western Governors Association should be performed when developing the potential new IOP.

Tribal Concerns and Ethnographic Studies. In addition to an existing IOP on tribal engagement, the Agencies could revise or add an IOP which emphasizes the importance of working with tribes to conduct ethnographic studies to increase the Agencies' understanding of significant resources of concern to tribes. This would help facilitate better understanding of those resources in connection with evaluation of proposed development in Section 368 energy corridors.

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Endnotes and References

¹ IOPs are intended and designed to foster long-term, systematic planning for energy transport development in the West, provide industry with a coordinated and consistent interagency permitting process, and provide practicable measures to avoid or minimize environmental harm from future development within the corridors.

² Corridors of concern are corridors identified by plaintiffs in the Settlement Agreement as having specific environmental issues. Corridors of concern and the specific environmental issues are located in Appendix A of the Settlement Agreement.

³ The term “pinch points” refers to corridor segments with a considerably reduced capacity for new project infrastructure compared to the rest of the corridor. Examples include reduced corridor width due to challenging terrain or jurisdictional land ownership patterns; existing conflicting surface use activities such as airfields, quarries, or mining in or immediately adjacent to the corridor path; and existing infrastructure such as transmission and distribution lines, pipelines, roads, railroads, power generation facilities, or pipeline booster or compressor stations in the corridor path, which may impede the future placement of new project infrastructure within the corridor.

⁴ For this regional review, underground only and pipeline only are synonymous and may include aboveground facilities or components.

⁵ U.S. District Court for the Northern District of California, San Francisco Division, 2012, *Settlement Agreement between The Wilderness Society et al. v. United States Department of the Interior et al.*, No. 3:09-cv-03048 JW, Joint Motion to Dismiss Case Pursuant to Fed. R. Civ. P. 41(a)(2), July 9. Available at http://corridoreis.anl.gov/documents/docs/Settlement_Agreement_Package.pdf. Accessed March 16, 2017.

⁶ BLM 2009 *Approved Resource Management Plan Amendments/Record of Decision (ROD) for Designation of Energy Corridors on Bureau of Land Management-Administered Lands in the 11 Western States*, BLM/WO-GI-09-005-1800, U.S. Department of the Interior, Bureau of Land Management, Jan.

⁷ USFS, 2009, *Record of Decision, USDA Forest Service Designation of Section 368 Energy Corridors on National Forest System Land in 10 Western States, Decision by Secretary of Agriculture To Amend Land Management Plans Described as the Environmentally Preferred Alternative*, U.S. Department of Agriculture, Forest Service, Jan. 14.

⁸ The plaintiffs include The Wilderness Society, BARK, Center for Biological Diversity, Defenders of Wildlife, Great Old Broads for Wilderness, Klamath-Siskiyou Wildlands Center, National Parks Conservation Association, National Trust for Historic Preservation, National Resources Defense Council, Oregon Natural Desert Association, Sierra Club, Southern Utah Wilderness Alliance, Western Resource Advocates, Western Watersheds Project, and County of San Miguel, Colorado.

⁹ White et al., 2016, *Section 368 Corridor Study*, ANL/EVS-16/6, prepared by the Environmental Science Division, Argonne National Laboratory, Argonne, Ill., for Bureau of Land Management, U.S. Forest Service, and U.S. Department of Energy, May.

¹⁰ The Western Interconnection spans 14 states, the Canadian provinces of British Columbia and Alberta, and the northern portion of Baja California in Mexico. It is made up of approximately 136,000 miles of transmission lines, including long high-voltage lines built to connect remotely located generating resources with distant population centers along the West Coast as well as transmission lines to carry power from hydroelectric resources in the Pacific Northwest to California and other states.

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- ¹¹ U.S. Department of Energy (DOE). 2015a. Natural Gas Infrastructure Implications of Increased Demand from the Electric Power Sector (Technical Report). Washington, D.C.
- ¹² BLM and DOE (U.S. Department of Energy), 2012, *Final Programmatic Environmental Impact Statement (PEIS) for Solar Energy Development in Six Southwestern States*, FES 12-24, DOE/EIS-0403, U.S. Department of the Interior, Bureau of Land Management and U.S. Department of Energy, July.
- ¹³ BLM, 2012a, *Approved Resource Management Plan Amendments/Record of Decision (ROD) for Solar Energy Development in Six Southwestern States*, U.S. Department of the Interior, Bureau of Land Management, Oct.
- ¹⁴ The BLM SEZs and BLM Arizona renewable energy development areas (REDAs) can be displayed as a separate GIS layer in the Section 368 Energy Corridor Mapping Tool.
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