Report to Congress:

Corridors and Rights-of-Way on Federal Lands

U.S. Department of Agriculture

U.S. Department of the Interior

U.S. Department of Energy

Council on Environmental Quality

November 7, 2005

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CONTENTS

CONTENTS (Cont.)

TABLES

NOTATION

The following is a list of the acronyms, abbreviations, and units of measure used in this document. (Some acronyms used only in tables may be defined only in those tables.)

ACRONYMS AND ABBREVIATIONS

BLM	Bureau of Land Management
CFR	*Code of Federal Regulations*
CO	Colorado
DOE	U.S. Department of Energy
FLPMA	Federal Land Policy and Management Act
FO	field office
FR	*Federal Register*
FS	Forest Service
GMP	General Management Plan
ID	Idaho
in.	inch(es)
kV	kilovolt(s)
LRMP	Land and Resource Management Plan
MFP	Management Framework Plan
MT	Montana
NCA	National Conservation Area
NM	New Mexico
OR	Oregon
PEIS	programmatic environmental impact statement
RMP	Resource Management Plan
USC	*United States Code*
UT	Utah
WA	Washington

EXECUTIVE SUMMARY

This report was prepared in response to Section 1221(b), Reports to Congress on Corridors and Rights of Way on Federal Lands, of Section 1221, Siting of Interstate Electric Transmission Facilities, in Title XII of the Energy Policy Act of 2005, Public Law 109-58. Congress requested that the Secretaries of Agriculture, Energy, and Interior and the Chairman of the Council on Environmental Quality prepare a report identifying the following:

- All existing designated transmission and distribution corridors on Federal land;
- The status of work related to proposed transmission and distribution corridor designations under Title V of the Federal Land Policy and Management Act of 1976 (FLPMA) and any impediments to completing the work;
- The number of pending applications to locate transmission facilities on Federal land; and
- The number of existing transmission and distribution rights-of-way (ROWs) on Federal land that will come up for renewal within the next 5-, 10-, and 15-year periods and how those renewals will be managed.

Authority to grant, issue, or renew electric transmission ROWs on Federal land is held by the Forest Service (FS) of the U.S. Department of Agriculture and the Bureau of Land Management (BLM) of the U.S. Department of the Interior pursuant to Title V of FLPMA. The FS and the BLM contributed the information presented in this report.

ES.1 DEFINITIONS

In the absence of standard or regulatory definitions for these Section 1221(b) terms, "existing designated transmission and distribution corridors" and "transmission facilities," FS and BLM representatives established consensus definitions for the terms to normalize data gathering and reporting. The following working definitions were developed for those terms for the purposes of this report:

Existing designated transmission and distribution corridors on Federal land are defined as all electric transmission line ROW corridors that have been formally designated by law, Secretarial order, land use planning process, or other management decision.

Transmission facilities include 69 kV and greater transmission lines and ancillary facilities.

ES.2 FINDINGS

ES.2.1 Existing and Proposed Designated Transmission Corridors

There are approximately 66 existing BLM resource management plans (RMPs) that have designated transmission and distribution corridors on Federal lands. The FS has designated 317 transmission and distribution corridors through its land and resource management plans (LRMPs). The FS has also identified 14 utility corridors that do not preclude use for transmission facilities.

The approximate number of new RMPs and RMPs being revised or amended to designate transmission and distribution corridors by BLM is 35. The FS is proposing to designate 44 transmission and distribution corridors.

The impediments to processing proposals for transmission and distribution corridors under FLPMA include legal challenges to the land use planning decision, backlogs of other agencies involved in the approval process, requests for extended comment periods, the complexity of some requests, and competing priorities affecting BLM and FS agency staff resources and workloads.

ES.2.2 Pending Applications for Transmission Facilities

Some of these same impediments also contribute to delays in processing pending applications for transmission facilities. Presently, 46 applications are pending with the BLM and 13 with the FS. Applications for transmission facilities may also be pending at the applicant's request to place the application on hold, or because the agency is waiting for additional information from the applicant. Table ES.1 lists the number of pending transmission facility applications and identifies the facility sizes associated with the applications.

TABLE ES.1 Pending BLM and FS Transmission Facility Applications

		Facility Size (kV)		
Agency	No. of Applications Pending	138 and Lower	230	345–500
Bureau of Land Management	46[a]	23	10	14
Forest Service	13[a]	10	b	4
Total	59	33	10	18

[a] The totals do not add up arithmetically because applications proposed more than one facility.

[b] None reported.

ES.2.3 Renewals of Existing Transmission and Distribution Rights-of-Way

Together, the BLM and FS face a significant number — 5,958 — of transmission and distribution ROW renewals over the next 15 years. The greatest number, 2,255 renewals, is expected in 2010; Table ES.2 provides more detailed renewal data.

The BLM revised its FLPMA ROW regulations in 2005 to accommodate its future renewal activity. The revised regulations require ROW holders to apply for the renewal 120 calendar days before the ROW grant expires, allow the BLM to charge a renewal processing fee, and authorize the BLM to issue ROWs for electric distribution and transmission lines for terms longer than the traditional 30-year grant.

Similarly, the FS is proposing to recover the administrative costs for processing special use applications and monitoring those authorizations to position itself to respond to the increase in ROW renewals. It also plans to grant national transmission line easements for long-term use of FS lands, rather than special use permits, to expedite future renewals of transmission and distribution ROWs.

The findings reported here are from the best currently available BLM and FS data. The data must be viewed with the understanding that the agencies have differing terms and processes for identifying and granting ROWs for transmission and distribution facilities and have, through time, refined and revised their policies and regulations on corridors and ROWs. These differences and changes complicate accurate data interpretation. The BLM and FS worked closely to align their data-gathering and reporting processes with the understanding that there may be some inconsistencies in the results presented here.

The inconsistencies are expected to be reduced with regard to the 11 contiguous western States upon completion of the West-Wide Energy Corridor Programmatic Environmental Impact Statement (PEIS) that is being conducted pursuant to Section 368, Energy Right-of-Way Corridors on Federal Land, of the Energy Policy Act of 2005. That study will gather and interpret information on all energy corridors — oil, gas and hydrogen pipelines, and electricity transmission and distribution facilities — in Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. A similar study will be conducted for the remaining contiguous States by August 2009.

TABLE ES.2 Expected BLM and FS Transmission and Distribution ROW Renewals

	Year in Which Existing Transmission and Distribution ROWs on Federal Land Come up for Renewal			
Agency	2010	2015	2020	Total
Bureau of Land Management	1,105	1,532	1,518	4,155
Forest Service	1,150	353	300	1,803
Total	2,255	1,885	1,818	5,958

1 INTRODUCTION

1.1 CONGRESSIONAL DIRECTION

This report was prepared in response to Section 1221(b), Reports to Congress on Corridors and Rights of Way on Federal Lands, of Section 1221, Siting of Interstate Electric Transmission Facilities, in Title XII of the Energy Policy Act of 2005, Public Law 109-58. Section 1221(b) reads as follows:

> Not later than 90 days after the date of enactment of this Act, the Secretary of the Interior, the Secretary, the Secretary of Agriculture, and the Chairman of the Council on Environmental Quality shall submit to Congress a joint report identifying--
>
> (1)(A) all existing designated transmission and distribution corridors on Federal land and the status of work related to proposed transmission and distribution corridor designations under title V of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1761 et seq.);
> (B) the schedule for completing the work;
> (C) any impediments to completing the work; and
> (D) steps that Congress could take to expedite the process;
> (2)(A) the number of pending applications to locate transmission facilities on Federal land;
> (B) key information relating to each such facility;
> (C) how long each application has been pending;
> (D) the schedule for issuing a timely decision as to each facility; and
> (E) progress in incorporating existing and new such rights-of-way into relevant land use and resource management plans or the equivalent of those plans; and
> (3)(A) the number of existing transmission and distribution rights-of-way on Federal land that will come up for renewal within the following 5-, 10-, and 15-year periods; and
> (B) a description of how the Secretaries plan to manage the renewals.

The following sections describe the agencies of the U.S. Department of Agriculture and the U.S. Department of the Interior with authority over transmission and distribution corridor ROWs and the assumptions used by them in developing the information presented in this report.

1.2 RESPONSIBLE AGENCIES

The Forest Service (FS), an agency of the U.S. Department of Agriculture, was established in 1905. It manages 193 million acres of public lands within National Forest System lands. Currently, there are approximately 13,800 miles of electric transmission and distribution lines within National Forest System lands; the total number of authorized electric facilities as of

March 2005 is 2,545, which includes 2,488 authorized electric transmission and distribution lines.

The Bureau of Land Management (BLM) is an agency of the U.S. Department of the Interior. It manages 261 million surface acres and 700 million acres of subsurface mineral estate. The total length of authorized BLM rights-of-way (ROWs) for transmission lines in 2004 was 71,613 miles, and the total number of electric transmission and distribution lines is 13,383.

These agencies derive their authority regarding electric transmission ROWs from Title V of the Federal Land Policy and Management Act (FLPMA). Section 501 of the Act authorizes these agencies to "grant, issue, or renew rights-of-way over, upon, under, or through such lands for … systems for generation, transmission, and distribution of electric energy…" (Title 43, *United States Code*, Section 1761(a) [43 USC 1761(a)]). FLPMA and the agencies' regulations and policies provide a well-defined process for developing the land use plans that describe appropriate land uses and provide for utility ROWs.

1.3 BACKGROUND

Siting new transmission facilities is a complex process. Short- and long-term decisions about the most appropriate potential uses of the Nation's land and resources must be made within the context of accommodating the obligations and responsibilities of the local, State, Tribal, and Federal governments and agencies with jurisdiction over the proposed facilities. In addition, all stakeholders must be involved to ensure the transparency and acceptability of the siting process.

Planning the uses of Federal land to accommodate transmission facilities cannot be overly prescriptive. Certain areas should be protected and some uses should be allowed, but opportunities for future possible uses should not be foreclosed. Requests for increased transmission capacity, changes in response to improved technology, market demands, and financing arrangements are among the factors affecting the siting of transmission facilities.

Adding to the complexity of Federal land use planning and siting transmission facilities is the involvement of local and Tribal governments and State and Federal agencies. These governments and agencies have legitimate roles in the process and must be involved to ensure that their specific environmental or economic concerns are addressed. Members of the public and owners of electric utilities also have economic and natural resource use concerns and they too must be involved in the siting process.

Recommendations to expedite the transmission facility siting process have come from several quarters. In the 2002 *National Transmission Grid Study*, the U.S. Department of Energy (DOE) (DOE 2002) called for an open, regional transmission planning process marked by the coordinated reviews of affected State and Federal agencies to expedite facility permitting.

These suggestions were supported and built upon in a 2005 report by the Keystone Center, *Regional Transmission Projects: Finding Solutions* (Keystone Center 2005). To expedite the coordinated review proposed in the DOE study, the report recommended the selection of a single

decisional authority that would serve as the lead entity in analyzing siting proposals and managing the siting and permitting process. Models of how the lead agency approach could be accomplished are provided.

The *Finding Solutions* report also recommended implementation of a corridor identification process for regions of the country where it is feasible. The report described a designated ROW corridor as a "parcel of land with specific boundaries identified through land-use planning or another suitable public process as the preferred location for future" ROW activities. Identifying these corridors would require intergovernmental and interagency cooperation conducted in coordination with all relevant stakeholders.

1.4 ASSUMPTIONS

In the absence of standard or regulatory definitions for key Section 1221(b) terms, "designated transmission and distribution corridors" and "transmission facilities," the responsible agencies established consensus definitions for the terms to normalize data gathering to the maximum extent possible. Those working definitions are provided in Chapter 2 of this report.

The FS and the BLM have differing terms and processes for identifying, describing, and granting ROWs for transmission and distribution facilities. In addition, through time, the agencies themselves have refined and revised their policies and regulations on corridors and ROWs. These differences and changes complicate accurate data interpretation, especially given the 90-day deadline for this report. The agencies worked closely to align their data-gathering processes with the provisions of Section 1221(b), with the understanding that there may be some inconsistencies in the results presented here.

These inconsistencies are expected to be reduced with regard to the 11 contiguous western States upon completion of the West-Wide Energy Corridor Programmatic Environmental Impact Statement (PEIS) that is being conducted pursuant to Section 368, Energy Right-of-Way Corridors on Federal Land, of the Energy Policy Act of 2005. That study will gather and interpret information on all energy corridors in Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. A similar study will be conducted for the remaining contiguous States by August 2009.

2 DEFINITIONS

2.1 WORKING DEFINITIONS

Several key terms in Section 1221(b) of the Energy Policy Act are not defined in applicable laws or regulations or agency policy. For purposes of this report, the BLM and the FS developed the following working definitions for these key terms.

- *Existing designated transmission and distribution corridors on Federal land*: All electric transmission line ROW corridors that have been formally designated by law, Secretarial order, land use planning process, or other management decision.

- *Proposed transmission and distribution corridors*: Proposals included in new or revised land use plans or plan amendments to designate electrical transmission ROW corridors.

- *Schedule for completing work on proposed transmission and distribution corridors*: Target completion date of the new or revised land use plan, or amendments that propose to designate electrical transmission line ROW corridors.

- *Transmission facilities*: 69 kV and greater transmission lines and ancillary facilities.

2.2 ESTABLISHED DEFINITIONS

Other key terms in Section 1221(b) or used in this report that are established in regulations or agency policy are as follows:

- *Land and Resource Management Plan (LRMP)*: The term the FS applies to its land use plans as required by the *Code of Federal Regulations*, Title 36, Part 219 (36 CFR Part 219). The plans identify areas within the National Forest System as generally suitable for uses, including energy transmission and distribution, that are compatible with the desired conditions and objectives for those areas.

- *Resource Management Plan (RMP)*: The term used by the BLM to apply to its land use plans. The plan generally establishes in a written document the land areas for limited, restricted, or exclusive use; designation; allowable resource uses; resource condition goals and objectives; program constraints and general management practices; and any requirements for specific plans or actions (43 CFR 1601.0-5(k)).

- *Right-of-Way*: An easement, lease, permit, or license to occupy, use, or traverse public lands granted for the purposes established in Title V of FLPMA (43 USC 1702(f)). One of those purposes is systems for generation, transmission, and distribution of electric energy (43 USC 1761(a)(4)).

3 METHODOLOGY

Personnel from the BLM, the FS, the DOE, and the Council on Environmental Quality agreed upon common, working definitions for the data requested in Section 1221(b). This was necessary because several of the terms used in the section are not commonly used by the agencies, and the agencies differ in their use of other terms.

If the information required by Section 1221(b) was not readily available through the agencies' headquarters offices, data calls were sent to the appropriate agency officials. The data calls issued by the FS and the BLM described the report requirements of Section 1221(b), relayed the working definitions to be used, and suggested reporting formats.

4 EXISTING AND PROPOSED DESIGNATED TRANSMISSION AND DISTRIBUTION CORRIDORS

For purposes of this chapter, "existing designated transmission and distribution corridors" on Federal land means all electric transmission line ROW corridors that have been formally designated by law, Secretarial order, land use planning process, or other management decision. This description is generally consistent with the following definition of a designated ROW corridor used by the BLM:

> … a parcel of land with specific boundaries identified by law, Secretarial order, the land-use planning process, or other management decision, as being a preferred location for existing and future rights-of-way and facilities. The corridor may be suitable to accommodate more than one type of right-of-way use or facility or one or more right-of-way uses or facilities which are similar, identical, or compatible (43 CFR 2801.5(b)).

"Proposed transmission and distribution corridors designations" is used here to mean the proposals included in new or revised land use plans or plan amendments to designate electric transmission ROW corridors.

4.1 BUREAU OF LAND MANAGEMENT

The BLM tallied its existing and proposed designated transmission and distribution corridors through examining its RMPs and their status. Table 4.1 presents data derived from the RMP review and includes the date the relevant RMP was approved or the target date for completion of new or revised RMPs, or the amendments to them that were in response to applications for ROWs.

Accurate, up-to-date land use plans are integral to the effective management of the Nation's public lands because planning decisions form the basis for most of the BLM's on-the-ground management actions. Transmission and distribution corridors are designated through the BLM resource management land use planning process. Therefore, the BLM's ability to designate these corridors is dependent on its ability to update (i.e., amend and revise) its land use plans on a timely basis.

In February 2000, the BLM submitted a report, *Report to the Congress: Land Use Planning for Sustainable Resource Decisions* (DOI 2000), which provided the basis for increasing the land use planning budget to update or revise many of the BLM's original 162 land use plans that were developed in the 1970s and 1980s. Beginning with the 2001 Appropriations for the Department of the Interior and Related Agencies, Congress increased funding to the BLM to develop new plans and amend or revise its existing land use plans, where appropriate, to address changing resource demands, growth in the West, and new laws.

Notwithstanding this 5-year-old planning effort, the BLM stated in a 2003 report to the Office of Management and Budget that the timely completion of RMPs and corridor designations may be complicated by factors such as the following:

- Competing priorities affecting planning project staff resources and workloads;
- The need for additional time for collaborative planning often results in cooperating agencies and/or planning participants asking for more time for public input and comment during the development of plans;
- Other regulatory agencies have backlogged consultations; these Federal agencies often ask for plan schedule extensions; and
- Some land use plans require additional time to address complex resource and legal issues, as well as requiring higher levels of funding to address them.

4.2 FOREST SERVICE

The FS reports that there are presently 317 designated transmission and distribution corridors under its auspices and 44 proposed designated corridors. In addition, the FS identified 14 utility corridors that do not preclude use for transmission facilities. Table 4.2 lists the existing designated corridors and provides basic information about them. Table 4.3 contains information on proposed electric transmission and distribution corridors and when LRMP action is scheduled.

The obstacles to completing the work on the proposed transmission and distribution corridors include the complexity of the proposed activity, accommodating the workloads and schedules of other agencies involved in the approval process, requests for extended comment periods, and competing priorities within the agency.

TABLE 4.1 Existing and Proposed BLM-Designated Transmission Corridors[a]

State	Name of RMP	Existing RMP		New RMP		Revision to RMP		Amendment to RMP		Approval Date
		Yes	No	Yes	No	Yes	No	Yes	No	
Arizona										
	Lower Gila North MFP	X								1983 March
	Lower Gila South RMP	X								1988 June
	San Pedro River Riparian Management Plan	X								1989 August
	Phoenix RMP	X								1989 September
	Arizona Strip District	X								1992 January; amended 1994 and 1998
	Safford District RMP	X								1992 September
	Las Cienagas RMP	X								2003 July
	Lower Gila North MFP and Lower Gila South RMP Amendment	X								2005 July
	Lake Havasu FO RMP			X						2006 June
	RMP for the AZ Strip FO, Vermilion Cliffs, NM, and BLM portion of Grand Canyon-Parashant, NM; and a GMP for the NPS portion of Grand Canyon-Parashant, NM			X						2007 March
	Bradshaw Foothills Harquahala RMP			X						2006 October
	Agua Fria National Monument RMP			X						2006 October
	Yuma FO RMP			X						2007 July
	Lower Sonoran RMP			X						2007 September
	Sonoran Desert NM RMP			X						2007 September

TABLE 4.1 (Cont.)

State	Name of RMP	Existing RMP Yes	Existing RMP No	New RMP Yes	New RMP No	Revision to RMP Yes	Revision to RMP No	Amendment to RMP Yes	Amendment to RMP No	Approval Date
Arizona (Cont.)										
	Ironwood Forest NM RMP			X						2007 December
Arizona/California										
	Yuma District RMP	X								1987
California										
	California Desert Conservation Area Plan[b]	X								1980 as amended
	Ukiah[c]			X						Spring 2006
	Northeast California[d]			X						Fall 2006
	Hollister					X				Summer 2006
	Folsom			X						Summer 2007
Colorado										
	Royal Gorge	X								1996 May
	Uncompahgre Basin as amended	X								1989 July
	Gunnison Gorge NCA	X								2004 November
	San Juan/San Miguel	X								1985 September
	White River	X								1987 August
	Gunnison RMP	X								1993 February
	Grand Junction	X								1987 January
	Little Snake	X								April 1989
	Little Snake RMP revision					X				January 2008
	San Luis	X								December 1991
Idaho										
	Bruneau MFP	X								June 1983
	Bruneau RMP			X						July 2007
	Birds of Prey RMP					X				2007
Montana										
	Dillion RMP[e]			X						2005 April (FEIS)
	Upper Missouri Breaks National Monument[f]			X						2006 FY

TABLE 4.1 (Cont.)

State	Name of RMP	Existing RMP Yes	Existing RMP No	New RMP Yes	New RMP No	Revision to RMP Yes	Revision to RMP No	Amendment to RMP Yes	Amendment to RMP No	Approval Date
Montana (Cont.)										
	Judith Valley, Phillips 1994[g]	X								1994
	South Dakota	X								1986
New Mexico										
	Tri-County Plan					X				2007
	Mimbres RMP Amendment	X								1993
	Carlsbad RMP	X								1997
	Special Status Species RMP Amendment			X						2007 February
	Socorro RMP	X								1989
	Socorro RMP					X				2007 January
	Rio Puerco RMP	X								1986
	Tao RMP	X								1987
	Farmington RMP	X								2003
	Roswell RMP	X								1997
Nevada										
	Las Vegas RMP	X								1998 October
	Wells RMP	X								1985 June
	Elko RMP	X								1987 March
	Tonopah RMP	X								1997 October
	Falcon to Gonder 345 kV[h]							X		2001 December
	Shoshone Eureka RMP	X								1986 March
	Consolidated RMP (Lohantan and Walker)	X								2001 May
	Caliente RMP							X		2000 September
	Egan RMP	X								1987 February
	Schell MFP	X								1983 July
	Ely RMP (replaces Caliente, Egan, and Schell)			X						2007 January
	Black Rock Desert-High Rock Canyon RMP	X								2004 July
	Winnemucca RMP			X						2008 February

TABLE 4.1 (Cont.)

State	Name of RMP	Existing RMP		New RMP		Revision to RMP		Amendment to RMP		Approval Date
		Yes	No	Yes	No	Yes	No	Yes	No	
Oregon/Washington										
	Salem RMP	X								1995 May
	Eugene RMP	X								1995 May
	Roseburg RMP	X								1995 May
	Medford RMP	X								1995 May
	Cascade Siskiyou National Monument RMP			X						2005 December
	Coos Bay RMP	X								1995 May
	Klamath Falls RMP	X								1995 May
	Lakeview RMP	X								2003 November
	Three Rivers RMP	X								1992 September
	Andrews-Steen RMP	X								2005 August
	John Day Basin RMP		X							1985
	Brothers-LaPine RMP	X								1989
	Upper Deschutes RMP					X				2005 October
	Two Rivers RMP	X								1986
	Southeast Oregon RMP	X								1992 September
	Baker RMP	X								1989
	Spokane RMP	X								1987
Utah										
	Warm Springs RMP	X								1986
	House Range RMP	X								1987
	Pony Express RMP	X								1988
	Grand Staircase Escalante Management Plan (plan identifies corridor designated by PL 105-355)	X								1999
	Cedar-Beaver-Garfield-Antimony RMP	X								1986
	St. George RMP	X								1998

TABLE 4.1 (Cont.)

State	Name of RMP	Existing RMP Yes	Existing RMP No	New RMP Yes	New RMP No	Revision to RMP Yes	Revision to RMP No	Amendment to RMP Yes	Amendment to RMP No	Approval Date
Utah (Cont.)										
	Mountain Valley MFP	X								1982
	San Rafael RMP	X								1991
	Henry Mountain MFP	X								1982
	Grand RMP	X								1985
	Price MFP	X								1982
	Book Cliffs RMP	X								1984
	Diamond Mountain RMP	X								1994
	San Juan RMP	X								1991
	Vernal RMP[i]					X				2006
	Price RMP[j]					X				2007
	Richfield RMP[k]					X				2008
	Monticello RMP[l]					X				2008
	Moab RMP[m]					X				2008
Wyoming										
	Rawlins RMP	X				X				2007 December
	Pinedale RMP	X				X				2007 December
	Casper RMP	X				X				2007 December
	Kemmerer RMP	X				X				2007 December

[a] Abbreviations: AZ = Arizona; FO = Field Office; GMP = General Management Plan; MFP = Management Framework Plan; NCA = National Conservation Area; NM = New Mexico; NPS = National Park Service; PL = Public Law; and RMP = Resource Management Plan.

[b] California Desert Conservation Area Plan has 16 designated corridors and 10 contingent corridors.

[c] Ukiah, Northeast California (Alturas, Eagle Lake, and Surprise Field Offices), Hollister, and Folsom plans will analyze corridors for renewable energy facilities (e.g., wind, geothermal).

[d] This new RMP consolidates 18 former land use plans and amendments in three planning areas: Alturas, Eagle Lake, and Surprise.

[e] Pending resolution of protests. Will designate two corridors.

[f] Draft RMP/environmental impact statement out for public review and comment October 2005.

[g] 1994 RMP designated seven corridors across the Missouri River.

[h] ROW-specific RMP amendment.

[i] Vernal RMP to replace Diamond Mountain RMP and Book Cliffs RMP.

[j] Price RMP to replace Price MFP and San Rafael RMP.

[k] Richfield RMP to replace Mountain Valley MFP and Henry Mountain MFP.

[l] Monticello RMP to replace San Juan RMP.

[m] Moab RMP to replace Grand RMP.

TABLE 4.2 Existing FS-Designated Transmission and Distribution Corridors[a]

State	Corridor Name	National Forest/ Grassland	Facility Size[b] (kV)
Alaska			
	Chugach Electric Association transmission line – forest boundary near Girdwood to Quartz Creek Substation	Chugach	115 kV from Girdwood at forest boundary to Lawing Substation, (portions of this line are 138 kV, 15.7 miles)
	Seward Highway – forest boundary near Girdwood to Seward, Alaska	Chugach	Unknown
	City of Seward transmission line – Quartz Creek Substation to Seward	Chugach	115 kV from Dave's Creek to Lawing Substation; 69 kV from Lawing Substation to Seward
	Homer Electric transmission line – Quartz Creek Substation to forest boundary near Russian River	Chugach	69 kV 115 kV
	Sterling Highway – beginning at junction with Seward Highway going west to forest boundary near Russian River	Chugach	Unknown
	Portage Glacier Highway – beginning at Junction with Seward Highway to Bear Valley	Chugach	24 kV
	Hope Highway – beginning at junction with Seward Highway ending at Hope	Chugach	69 kV
	Exit Glacier Road – National Forest System lands from intersection with Seward Highway to National Parks Service Boundary	Chugach	Unknown
	Copper River Highway – beginning near Eyak Lake and ending at Million Dollar Bridge	Chugach	Unknown
	Potential access to Berring River coal fields	Chugach	Unknown
	Blind Slough	Tongass	25 kV
	Kake Powerline	Tongass	25 kV
	Tyee Lake	Tongass	138 kV
	Blue Lake powerline	Tongass	69 kV
	Juneau-Greens Creek Intertie	Tongass	69 kV
	Glacier Highway Reconstruction	Tongass	69 kV
	Mile 2, Glacier Highway	Tongass	69 kV
	Craig-Klawock-Hollis-Hydaburg	Tongass	35 kV
	Swan-Tyee	Tongass	69 kV
	Westmin Boliden	Tongass	35 kV

TABLE 4.2 (Cont.)

State	Corridor Name	National Forest/ Grassland	Facility Size[b] (kV)
Alaska (Cont.)			
	Swan Lake-Ketchikan	Tongass	69 kV
	Thorne Bay	Tongass	35 kV
Arkansas			
	Highway 27, Norman to Danville		Unknown
Arizona			
	Joseph City-Tonto Village	Apache-Sitgreaves	345 kV
	Joseph City-Young	Apache-Sitgreaves	500 kV
	North Chevelon	Apache-Sitgreaves	500 kV
	Page to Phoenix	Coconino	345 kV
	Flagstaff to Cottonwood	Coconino	230 kV
	Mountainaire to Cottonwood	Coconino	69 kV
	Flagstaff to Williams	Coconino	69 kV
	Sedona to Oak Creek	Coconino	69 kV
	Flagstaff to Winslow	Coconino	69 kV
	Childs to Cottonwood	Coconino	69 kV
	Tucson to Nogales	Coronado[c]	
	Patagonia	Coronado[c]	
	Canelo Hills	Coronado	Unknown
	Dragoon Mountains	Coronado[d]	
	Winchester Mountains	Coronado[c]	
	Stockton Pass	Coronado	69 kV
	Mt. Graham International Observatory-University of Arizona	Coronado	25 kV
	Williams-Bellmont	Kaibab	69 kV
	Williams-Ashfork	Kaibab	69 kV
	Grand Canyon	Kaibab	69 kV
	Prescott-Flagstaff	Prescott	115 kV
	Williams Substation to Grand Canyon	Kaibab	69 kV
	North Kaibab	Kaibab	69 kV
	Four Corners-El Dorado Substation	Kaibab	500 kV
	Jerome Extension	Prescott	69 kV
	Verde River	Prescott	69 kV
	Prescott-Childs	Prescott	69 kV
	Prescott-Bagdad	Prescott	115 kV
	Navajo Project	Prescott	500 kV
	Flagstaff-Verde	Prescott	230 kV
	Quail Springs-McGuireville	Prescott	69 kV
	Ashfork to Prescott	Prescott[e]	

TABLE 4.2 (Cont.)

State	Corridor Name	National Forest/ Grassland	Facility Size[b] (kV)
Arizona (Cont.)			
	Chino to Sedona	Prescott[f]	
	Sycamore	Tonto	69 kV
	Glen Canyon-Pinnacle Peak	Tonto	345 kV
	Four Corners-Phoenix	Tonto	345 kV (2)
	Prescott-Childs	Tonto	69 kV
	Payson-Irving Consolidation	Tonto	69 kV
	Cholla-Saguaro	Tonto	500 kV
	Coronado-Kyrene	Tonto	500 kV
	Coronado-Silver King	Tonto	230 kV 500 kV
	Superior-Miami	Tonto	110 kV 115 kV
	Goldfield-Stewart Mountain	Tonto	115 kV
	Roosevelt Dam-Magma Mine Corridor	Unoccupied	
California			
	Old Ridge Route	Angeles	500 kV (2)
	Ranaldi Department Water Power	Angeles	500 kV
	Gorge Ranaldi	Angeles	500 kV
	BPL	Angeles	500 kV
	Vincent Gould	Angeles	500 kV
	Vincent Rio Hondo	Angeles	500 kV
	3-P Line	Angeles	500 kV
	Midway Vincent	Angeles	500 kV
	Vincent Pardee	Angeles	230 kV
	Interstate 5 (Tejon Pass)	Angeles	500 kV (2) 220 kV (2)
	Saugus-Del Sur	Angeles	66 kV 500 kV
	Saugus-Mesa	Angeles	500 kV
	Valley-Serrano	Cleveland	500 kV
	Midway Vincent #1 and #2	Los Padres	500 kV (2)
	Bonneville Power Administration	Modoc	230 kV 345 kV
	Western Area Power Administration	Modoc	500 kV
	Pacific Gas and Electric Company	Modoc	500 kV
	Interstate 15 (Cajon Pass)	San Bernardino	237 kV (2) 500 kV (3)
	Interstate 5	Shasta-Trinity	500 kV

TABLE 4.2 (Cont.)

State	Corridor Name	National Forest/ Grassland	Facility Size[b] (kV)
California (Cont.)			
	California-Oregon Intertie	Shasta-Trinity	500 kV
	Pacific Power and Light Lines 38 and 44	Six Rivers	230 kV
	Humboldt Cottonwood #1	Six Rivers	115 kV
	Humboldt Cottonwood #2	Six Rivers	115 kV
	Interstate 80	Tahoe	60 kV 115 kV (2)
California/Nevada			
	Truckee Canyon (1)	Humboldt-Toiyabe and Tahoe	Unknown
	Truckee Canyon (2)	Humboldt-Toiyabe and Tahoe	Unknown
	Truckee Canyon (3) Interstate 80	Humboldt-Toiyabe and Tahoe	Unknown
	Hawthorne (1)	Humboldt-Toiyabe and Inyo	Unknown
	Hawthorne (2)	Humboldt-Toiyabe and Inyo	Unknown
Colorado			
	Red Feather Lakes-Poudre Canyon	Arapaho-Roosevelt	115 kV
	Hayden-Archer-Blue Ridge	Arapaho-Roosevelt	345 kV
	Pole Hill-Estes Park	Arapaho-Roosevelt	115 kV
	Boulder-Winter Park (Fraiser-Winter Park portion)	Arapaho-Roosevelt	138 kV
	Idaho Springs-Loveland Pass	Arapaho-Roosevelt	115 kV
	Vasquez-Blue Ridge	Arapaho-Roosevelt	69 kV
	Granby pumping plant-Windy Gap	Arapaho-Roosevelt	69 kV
	Wyoming-Briggsdale	Pawnee National Grassland[g]	
	Wyoming-Keota	Pawnee National Grassland	345 kV
	Wyoming-New Raymer	Pawnee National Grassland[h]	
	Poncha Pass to Monarch Pass	San Isabel	230 kV
	Kasssler to LaSall Pass	Pike	240 kV
	Weston Pass	Pike	115 kV
	Leadville to Gillman	San Isabel	115 kV
	Mosquito Pass to Red Mountain	Pike	230 kV
	Kenosha Pass to Grant	Pike	230 kV

TABLE 4.2 (Cont.)

State	Corridor Name	National Forest/ Grassland	Facility Size[b] (kV)
Colorado (Cont.)			
	Woodland Park to Monument	Pike	115 kV
	Fryingpan	White River	230 kV
	Eagle River	White River	230 kV
	Tenmile	White River	230 kV
	Blue River	White River	345 kV
	Western Area Power Administration	San Juan	Unknown
	Colorado Ute Electric Transmission	San Juan	Unknown
	San Miguel Electric Transmission	San Juan	Unknown
	Tri-State Electric Generation	San Juan	Unknown
	La Plata Electric Transmission	San Juan	Unknown
	Western Regional Corridor	Alamosa to Durango	Unknown
Idaho			
	Anderson Ranch-Mt. Home	Boise	115 kV
	Brownlee-Boise Bench #3 and #4	Passes through Boise National Forest Boundary, not located on National Forest System lands	
	Emmett-Warm Lake Junction-Warm Lake	Boise	69 kV
	Oneida Montpelier Line	Caribou-Targhee	130 kV
	Naughton Treasureton Line	Caribou-Targhee	230 kV
	Jim Bridger Kinport Line	Caribou-Targhee	345 kV (2)
	Brownlee Dam-Paddock-Boise Bench	Payette	230 kV (5)
	Pine Creek-Hells Canyon	Payette	60 kV
	Oxbow-McCall	Payette	138 kV
	Cambridge-New Meadows	Payette	69 kV being upgraded to 138 kV
	New Meadows-McCall	Payette	69 kV being upgraded to 138 kV
	Lemhi Pass to Salmon	Salmon	69 kV
	Salmon to Cobalt	Salmon	69 kV
Montana			
	Basin (East Helena)	Beaverhead-Deerlodge	100 kV
	Rees Pass to West Yellowstone (Bonneville Power Administration)	Gallatin	115 kV
	Targhee Pass to West Yellowstone (Fall River Coop.)	Gallatin	45 kV
	Emigrant to Gardiner	Gallatin	69 kV
	Big Sky-Gallatin Canyon	Gallatin	69 kV
	South Butte to Clyde Park	Gallatin	161 kV

TABLE 4.2 (Cont.)

State	Corridor Name	National Forest/ Grassland	Facility Size[b] (kV)
Montana (Cont.)			
	Mill Creek to Wilsall	Gallatin	230 kV
	Garrison to Taft (Bonneville Power Administration)	Lolo	500 kV
	Garrison to Hot Springs to Thompson Falls	Lolo	115 kV
	Garrison to Taft along Interstate 90	Lolo	161 kV
New Mexico			
	Taos-Raton	Carson	365 kV
	Talpa-Penasco	Carson	69 kV
	Taos-Ojo Caliente	Carson	110 kV
	Abiqui-Colorado	Carson	365 kV
	Taos-Trinidad	Carson	365 kV
	Red River-Tres Piedras	Carson	69 kV
	Tierra Amarilla-Abiqui, Highway 84	Carson	110 kV
	Cebolla-Las Viejas	Carson	69 kV
	Jicarilla Apache-Simms Mesa	Carson[i]	
	Simms Mesa-Chama	Carson[j]	
	N. Zuni Mountains	Cibola[k]	
	Zuni Mountains	Cibola[k]	
	San Mateo Mountains	Cibola	230 kV
	Manzano	Cibola	115 kV
	Interstate 40	Cibola[l]	
	Placitas	Cibola[g]	
	Springerville to Tucson	Gila	345 kV (2)
	Guadalupe Mountains	Lincoln	345 kV
	Highway 82	Lincoln	69 kV
	Cloudcroft-Timberon	Lincoln	34.5 kV
	Highway 380	Lincoln	34.5 kV
	Highway 48	Lincoln	34.5 kV
	Highway 37	Lincoln	34.5 kV
	Highway 70	Lincoln	115 kV
	Ojo to San Juan	Santa Fe	345 kV
	Cuba Mesa to Los Alamos	Santa Fe[m]	
	La Bajada to Los Alamos	Santa Fe	115 kV
	Algodones to Buckman	Santa Fe	345 kV
	Santa Fe to Las Vegas	Santa Fe	115 kV
	Forest Road 128	Cibola	14.4 kV
	Highway 60	Cibola	14.4 kV

TABLE 4.2 (Cont.)

State	Corridor Name	National Forest/ Grassland	Facility Size[b] (kV)
New Mexico (Cont.)			
	Montosa	Cibola	14.4 kV
Nevada/California			
	US 395 Corridor (Reno, NV, to Alturas, CA)	Humboldt-Toiyabe and Tahoe	120 kV 345 kV
	Aurora Corridor (Yerrington, NV, to Mono Lake, CA)	Humboldt-Toiyabe	750 kV
Nevada			
	North Toiyabe	Humboldt-Toiyabe	Unknown
	Jarbridge Mountain./City	Humboldt-Toiyabe	Unknown
	Independence	Humboldt-Toiyabe	Unknown
	South Shell Creek (1)	Humboldt-Toiyabe	Unknown
	South Shell Creek (2)	Humboldt-Toiyabe	Unknown
	South Shell Creek (3)	Humboldt-Toiyabe	Unknown
	Currant Summit	Humboldt-Toiyabe	Unknown
Oregon/California			
	Happy Camp Line #33 Cave Junction Substation – Siskiyou-Klamath forest boundary	Rogue River- Siskiyou and Klamath	69 kV 115 kV
	O'Brien Line #38 Cave Junction Substation – Siskiyou-Six Rivers forest boundary	Rogue River-Siskiyou and Six Rivers	115 kV
	Whiskey Creek Line #44 Cave Junction Substation – Siskiyou-Six Rivers forest boundary	Rogue River-Siskiyou and Six Rivers	115 kV
Oregon			
	Midpoint to Malin "500 line"	Fremont-Winema	500 kV
	PacifiCorp Line-Summer Lake Substation to BLM	Fremont-Winema	500 kV
	Redmond to Klamath Falls Chiloquin "Line 52"	Fremont-Winema	239 kV
	Chiloquin to John Mansville Plant "Line 60"	Fremont-Winema	69 kV
	Soda Springs-Lemolo Lake	Umpqua	69 kV
	Toketee-Roseburg	Umpqua	69 kV
	Roseburg-Red Butte	Umpqua	69 kV
	Roseburg-Prospect	Umpqua	33 kV
	Red Butte-Soda Springs	Umpqua	No current development
	Windigo Pass	Umpqua	No current development

TABLE 4.2 (Cont.)

State	Corridor Name	National Forest/ Grassland	Facility Size[b] (kV)
Oregon (Cont.)			
	Redmond to Klamath Falls Chemult	Fremont-Winema	69 kV 230 kV
	Bonneville Power Administration: Big Eddy-Redmond	Crooked River National Grassland	230 kV
	Bonneville Power Administration: Celilo-Sylmar	Crooked River National Grassland	750 kV
	Bonneville Power Administration: John Day-Grizzly-Malin, aka Buckley-Summer (also serves as Pacific Gas and Electric Grizzly-Malin)	Crooked River National Grassland	500 kV
	Portland General Electric: Round Butte-Redmond #1	Crooked River National Grassland	230 kV
	Portland General Electric: Round Butte-Grizzly	Crooked River National Grassland	500 kV
	PacifiCorp: Cove-Madras	Crooked River National Grassland	Unknown
	Midstate E: Redmond-LaPine	Deschutes	69 kV
	Midstate E: Pringle Falls	Deschutes	69 kV
	Bonneville Power Administration: Pilot Butte to La Pine	Deschutes	230 kV
	Bonneville Power Administration: La Pine to Ft. Rock	Deschutes	115 kV
	Bonneville Power Administration: Sandsprings (also Pacific Gas and Electric)	Deschutes	500 kV (3)
	Hells Canyon to Walla Walla	Umatilla	230 kV
	Interstate 84 Corridor	Wallowa-Whitman	230 kV
	Forest Road 53 & Forest Road 52	Umatilla	Unknown
	Blalock Mountain to Troy, OR, would be branch of Hells Canyon to Walla Walla line	Umatilla	Unknown
Pennsylvania			
	Warren-Bradford	Allegheny	230 kV
	Erie-Warren	Allegheny	230 kV
	Warren-Ridgeway	Allegheny	230 kV
South Carolina			
	Duke Power	Sumter, Long Cane	7.2 kV
	Duke Power	Sumter, Enoree	7.2 kV
	South Carolina Electric & Gas	Sumter, Enoree	115 kV
	South Carolina Electric & Gas	Francis Marion	13.8 kV

TABLE 4.2 (Cont.)

State	Corridor Name	National Forest/ Grassland	Facility Size[b] (kV)
South Carolina (Cont.)			
	South Carolina Electric & Gas	Sumter, Long Cane	115 kV
	Lockhart Power	Sumter, Enoree	2.4 kV
	South Carolina Public Service Authority	Francis Marion	230 kV
	Central Electric Coop	Francis Marion	69 kV
	Central Electric Coop	Sumter, Enoree	115 kV
	Berkeley Electric Coop	Francis Marion	34.5 kV
	Broad River Electric Coop	Sumter, Enoree	7.2 kV
South Dakota			
	Spearfish-Sugar Loaf	Black Hills	69 kV
	Spearfish -Edgemont	Black Hills	69 kV
	Deadwood-Four Corners, WY	Black Hills	69 kV
	Silver City-Pactola	Black Hills	69 kV
	Pactola-Rapid City	Black Hills	Unknown
	Custer-Newcastle	Black Hills	69 kV
	Hot Springs-Dewey-Newcastle	Black Hills	69 kV
	Custer-Hot Springs	Black Hills	69 kV
	Hot Springs-Edgemont	Black Hills	69 kV
	Angostora	Black Hills	69 kV
Utah			
	Johns Valley	Dixie	230 kV
	North-South through Pine Valley	Dixie	138 kV (2) 345 kV (1) 500 kV (1)
	Sigurd-Cedar City (Interstate 70 Clear Creek Cyn; Sevier Cyn-Sulphurdale)	Fishlake	7.2 kV 46 kV 138 kV
	Sigurd-Cedar City	Fishlake	230 kV
	Huntington-Sigurd (Sigurd-Emery, Interstate 70 Salina Cyn)	Fishlake	345 kV
	Utah-Nevada Intertie (Sigurd-NV; Leamington)	Fishlake	12.5 kV 230 kV 345 kV
	Lynndyl-Mona (Leamington-Nephi)	Fishlake	12.5 kV 34 kV
	Deseret Generating and Transmission Line	Uinta (Indian Creek, Spanish Fork Canyon, South Nebo Mountain)	345 kV

TABLE 4.2 (Cont.)

State	Corridor Name	National Forest/ Grassland	Facility Size[b] (kV)
Utah (Cont.)			
	Utah Power & Light Spanish Fork Canyon #1	Uinta (Spanish Fork Canyon lower elevation line)	50 kV
	Utah Power & Light Spanish Fork Canyon #2	Uinta (Spanish Fork Canyon mid-elevation line)	50 kV
	Utah Power & Light Spanish Fork Canyon #3	Uinta (Spanish Fork Canyon upper elevation line)	50 kV
	Olmstead-Springville	Uinta (Provo Canyon to Springville)	46 kV
	Moon Lake Electric	Uinta (Strawberry Valley)	14.2 kV 24.9 kV
	North Ogden Canyon	Wasatch-Cache	138 kV
	Ogden Canyon	Wasatch-Cache	46 kV
	Box Elder Canyon	Wasatch-Cache	46 kV
	Weber Canyon	Wasatch-Cache	46 kV
	Meridian Peak	Wasatch-Cache	7.2 kV
	Little Mountain and Parleys Canyon	Wasatch-Cache	46 kV
	Wasatch Front	Wasatch-Cache	46 kV
	Ward Canyon	Wasatch-Cache	12.5 kV
	Blacksmith Fork Canyon	Wasatch-Cache	46 kV
	Monte Cristo	Wasatch-Cache	230 kV
	Huntington-Mona – 345-kV transmission line	Manti-La Sal	345 kV
	Thistle-Mona – 345-kV transmission line	Manti-La Sal	345 kV
	Rattlesnake-Paradox – 69-kV transmission line	Manti-La Sal	25 kV (proposed upgrade to 69 kV in 2006)
Virginia			
	Kilns	Jefferson	34.5 kV
	Pine Mountain Lookout	Jefferson	69 kV
	Bearpen Branch	Jefferson	138 kV
	Little Stone Mountain	Jefferson	69 kV
	Big Stone Gap	Jefferson	69 kV
	McQueen Gap	Jefferson	< 66 kV
	Dismal-Walker	Jefferson	138 kV
	Kimberling-Draper	Jefferson	765 kV
	Cascade-Brush	Jefferson	34.5 kV

TABLE 4.2 (Cont.)

State	Corridor Name	National Forest/ Grassland	Facility Size[b] (kV)
Virginia (Cont.)			
	Hemlock Tap	Jefferson	138 kV
	Craig Creek	Jefferson	138 kV
	Balcony Falls	Jefferson	765 kV
	Broad Run	Jefferson	69 kV
	Snowden	Jefferson, George Washington	115 kV
	Ivory Hill	George Washington	7.2 kV
	Naola	George Washington	7.2 kV
	Long Mountain Wayside	George Washington	7.2 kV
	FAA Rocky Mountain	George Washington	7.2 kV
	Millers Knob	George Washington	230 kV
	Fox Grape	George Washington	72 kV
	Lex-Lowmoor	George Washington	230 kV
	Low-Cov 1	George Washington	44–230 kV
	Low-Cov 2	George Washington	230 kV
	Dameron-Crows	George Washington	44 kV
	Lewis Tunnel 1	George Washington	44 kV
	Lewis Tunnel 2a	George Washington	44 kV
	Lewis Tunnel 2b	George Washington	44 kV
	Massanutten	George Washington	230 kV
	Bird Knob	George Washington	12 kV
	Roosevelt	George Washington	7.2 kV
	Cove-Rock Run	George Washington	34.5 kV
	Great North	George Washington	12 kV
	Little Mountain	George Washington	7.2 kV
	Warm Spring Mtn.	George Washington	7.2 kV
	Back Creek	George Washington	46 kV
Washington			
	Colville-Spirit	Colville	230 kV
	Spirit-Metaline	Colville	115 kV
	Bell-Boundary 1, 2, 3	Colville	230 kV
	Boundary-Cranbrook 1	Colville	230 kV
	Box Canyon Tap	Colville	115 kV
	Addy-Cusick	Colville	230 kV
	Colville-Republic	Colville	115 kV

TABLE 4.2 (Cont.)

State	Corridor Name	National Forest/ Grassland	Facility Size[b] (kV)
Washington (Cont.)			
	NA-Cascade-White (connects with the Mt. Baker-Snoqualmie corridor of same name); crosses Stampede Pass	Wenatchee	230 kV
	Hyak-Rattlesnake (connects with the Mt. Baker-Snoqualmie corridor of same name); crosses Snoqualmie Pass	Wenatchee	230 kV
	McKenzie-Beverly (connects with the Mt. Baker-Snoqualmie corridor of same name); crosses Stevens Pass	Wenatchee	115 kV
	Loup Loup Pass (State Route 20)	Okanogan	115 kV
	Snoqualmie Corridor – South Fork Snoqualmie Watershed Hyak-Rattlesnake	Mt. Baker-Snoqualmie	230 kV
	Snoqualmie Corridor – South Fork Snoqualmie Watershed Rocky Reach-Maple Valley	Mt. Baker-Snoqualmie	500 kV
	Skykomish Corridor – South Fork Skykomish Watershed McKenzie-Beverly	Mt. Baker-Snoqualmie	115 kV
	Skykomish Corridor – South Fork Skykomish Watershed	Chief Joseph-Monroe	500 kV
	Skykomish Corridor – South Fork Skykomish Watershed	Chief Joseph-Snohomish 3&4	345 kV
	Stampede Pass Corridor – Green River Watershed Cascade White	Mt. Baker-Snoqualmie	230 kV
	Stampede Pass Corridor – Green River Watershed Bonneville Power Administration	Mt. Baker-Snoqualmie	Unknown
	Stampede Pass Corridor – Green River Watershed	Schultz-Raver No.1 Schultz-Raver No.3	500 kV
	Stampede Pass Corridor – Green River Watershed	Schultz-Raver No.4	500 kV
	Stampede Pass Corridor – Green River Watershed	Schultz-Echo Lake No. 1	500 kV
	Stampede Pass Corridor – Green River Watershed	Covington-Columbia No. 3	230 kV
	Stampede Pass Corridor – Green River Watershed	Olympia-Grand Coulee No.1	287 kV

TABLE 4.2 (Cont.)

State	Corridor Name	National Forest/ Grassland	Facility Size[b] (kV)
West Virginia/Virginia			
	Pendleton-Rockingham	George Washington	500 kV
Wyoming			
	Sundance-Hulett	Black Hills	69 kV

[a] Abbreviations: CA = California; NV = Nevada; OR = Oregon; WY = Wyoming.

[b] The number in parentheses represents the number of facilities.

[c] Natural gas line; forest plans do not preclude new uses in these corridors.

[d] Electric transmission line; forest plans do not preclude new uses in these corridors.

[e] 25-in.-diameter natural gas pipeline; forest plans do not preclude new uses in these corridors.

[f] 6- and 4-in.-diameter natural gas pipeline; forest plans do not preclude new uses in these corridors.

[g] Oil and gas pipelines; forest plans do not preclude new uses in these corridors.

[h] Oil and gas pipelines, fiber optic line; forest plans do not preclude new uses in these corridors.

[i] 10- and 18-in.-diameter natural gas pipeline; forest plans do not preclude new uses in these corridors.

[j] Natural gas pipeline corridor; forest plans do not preclude new uses in these corridors.

[k] No existing line; forest plans do not preclude new uses in these corridors.

[l] Telephone line; forest plans do not preclude new uses in these corridors.

[m] Crosses Valles Caldera; gas pipeline; forest plans do not preclude new uses in these corridors.

TABLE 4.3 Proposed FS-Designated Transmission and Distribution Corridors[a]

State	Corridor Name	National Forest/ Grassland	Facility Size (kV)	Completion Date
Alaska				
	Angoon Hydro	Tongass	12.47/7.2-kV submarine cable and transmission line	2007
Arkansas				
	Highway 27 in Arkansas	Ouachita	Unknown	2005 November
Colorado				
	Monarch Pass West	Grand Mesa-Umcompahgre-Gunnison	Unknown	2007
	Rifle to San Juan Western Area Power Administration Line	Grand Mesa-Umcompahgre-Gunnison	Unknown	2007
Idaho				
	Post Falls to Eastport (Bonneville Power Administration-Western Utility Group)	Idaho Panhandle	115 kV 230 kV	2006
	Post Falls to Butte (Bonneville Power Administration-Western Utility Group, North Route, Taft Bell)	Idaho Panhandle	500 kV (2)	2006
	Post Falls to Butte (Avista-Western Utility Group, Interstate 90, South Route, Pine Creek to Rathdrum)	Idaho Panhandle	115 kV	2006
	Spokane to Billings (Avista, Bonneville Power Administration-Western Utility Group, Cabinet-Rathdrum)	Idaho Panhandle	230 kV (2)	2006
	Dworshak-Taft (Bonneville Power Administration-Western Utility Group, Hot Springs)	Idaho Panhandle	500 kV	2006
	Noxon-Wallace-Pine Creek (Bonneville Power Administration)	Idaho Panhandle	230 kV	2006
	Albeni Falls-Rathdrum (Avista)	Idaho Panhandle	115 kV	2006
	Bronx-Cabinet (Avista)	Idaho Panhandle	115 kV	2006
	Burke A and B (Avista)	Idaho Panhandle	115 kV	2006
	Benewah-Pine Creek (Avista)	Idaho Panhandle	115 kV 230 kV	2006
Montana				
	Bannack Pass (Millcreek-Antelope)	Beaverhead-Deerlodge	230 kV	2007
	North Fork	Flathead	15 kV	2006
	Middle Fork	Flathead	15 kV	2006
	South Fork to Dam	Flathead	300 kV	2006
	Swan Valley	Flathead	15 kV	2006

TABLE 4.3 (Cont.)

State	Corridor Name	National Forest/ Grassland	Facility Size (kV)	Completion Date
Montana (Cont.)				
	Island Unit	Flathead	300 kV	2006
	East Shore	Flathead	15 kV	2006
	Stillwater	Flathead	15 kV	2006
	Columbia Falls-Trego (Bonneville Power Administration)	Kootenai	115 kV	2006
	Noxon-Conkelley (Bonneville Power Administration)	Kootenai	230 kV	2006
	Libby Flathead Electric Cooperative, part of Libby-Bonners Ferry (Bonneville Power Administration)	Kootenai	115 kV	2006
	Cabinet-Noxon (Avista)	Kootenai	230 kV	2006
	Noxon-Pine Creek (Avista)	Kootenai	230 kV	2006
	Rock Creek Mine	Kootenai	Unknown	2006
	Montanore Mine	Montana, Kootenai	Unknown	2006
Nevada				
	Interstate 80 Corridor (Elko to West Wendover)	Humboldt-Toiyabe	69 kV, 120 kV	2007 August
	Potosi Corridor (Las Vegas to CA state line)	Humboldt-Toiyabe	Unknown	2007 August
	Aurora Corridor (Yerrington, NV, to Mono Lake, CA)	Humbolt-Toiyabe	750 kV	2007 August
Nevada/California				
	Aurora Corridor (Yerrington, NV, to Mono Lake, CA)	Humboldt-Toiyabe	750 kV	2007
Oklahoma				
	Highway 259 in Oklahoma	Ouachita	Unknown	2005 November
Oregon				
	Portland General Electric: Round Butte-Bethel	Ochoco	230 kV	2010
	Three “windows” identified in forest plan for future energy transmission planning if the need arises. a. Suttle L. west b. Waldo L. east c. Oregon Cascades Recreation Area	Deschutes	Unknown	Unknown
Utah				
	No Name – Northern Edge Pine Valley Road	Dixie	138 kV	2006
	No Name – Parowan to Brian Head Line	Dixie	69 kV	2006
	No Name – Boulder to Henrieville Line	Dixie	69 kV	2006

TABLE 4.3 (Cont.)

State	Corridor Name	National Forest/ Grassland	Facility Size (kV)	Completion Date
Wyoming				
	Highway 450 East-west from Highway 59 through Grasslands	Thunder Basin National Grassland	69–230 kV	2006
	Highway 59 South of Wright	Thunder Basin National Grassland	69–230 kV	2006
	Teckla Substation	Thunder Basin National Grassland	69–230 kV (multiple lines)	2006
Wyoming/Idaho				
	Bonneville Power Administration	Teton Pass from Caribou	115 kV	2008
Wyoming				
	Lower Valley Energy – Snake River Corridor	Bridger-Teton	Unknown	2008

[a] Abbreviations: CA = California; NV = Nevada.

5 PENDING APPLICATIONS FOR TRANSMISSION FACILITIES ON FEDERAL LAND

The working definition of "transmission facility" for this report is a transmission line that is 69 kV or greater and ancillary facilities. Information deemed "key" for purposes of this section of the report are the State, name, length, and size of the proposed transmission facility. The table at the end of this chapter summarizes the total number of pending applications and breaks out that total by size of proposed facility.

5.1 BUREAU OF LAND MANAGEMENT

As of August 8, 2005, 46 applications for transmission facilities were pending with the BLM; information on those applications is provided in Table 5.1. The BLM may start processing an incomplete application for a transmission facility when enough information is provided to allow an analysis to begin. Oftentimes, the BLM cannot initiate processing an application until it is complete. For purposes of this report, the amount of time an application has been pending begins when the application is complete as opposed to when it is filed. However, if the agency did not have sufficient information to determine if an application is complete, the pending period begins when the application was filed.

5.2 FOREST SERVICE

The FS reports a total of 13 pending applications for transmission facilities. The FS will formally accept a proposal as an application even though not all information is currently available. In Table 5.2, the amount of time an application has been pending begins when the proposal has been formally accepted, and months are counted through November 1, 2005. The table identifies new proposed transmission facilities and applications to upgrade existing facilities.

TABLE 5.1 Pending BLM Transmission Facility Applications

State	Serial No.	Name of Project	Length (miles)	Proposed Facility (kV)	Application Pending (months)	Completion (target date)
Alaska						
	F-94222	Golden Valley Electric Association	3	138 kV	17	Unknown[a]
	F-94322	Golden Valley Electric Association	1	138 kV	14	Unknown[b]
Arizona						
	AZA-23805	Southern California Edison	278	500 kV	c	2006 October
	AZA-29063	Citizens Utility Company	42	230 kV & 69 kV	42	2006 February
	AZA-30892	Dine Power Authority	470	500 kV	84	2005 December
	AZA-31746	Tucson Electric Power	60	345 kV	54	Unknown
	AZA-31850	New Mexico Public Service	Unknown	345 kV	49	Unknown
	AZA-32503	Western Area Power Administration	12.2	230 kV	27	2006 May
	AZA-32639	Arizona Public Service	54	500 kV	22	2005 November
	AZA-32906	Salt River Project	0.30	115 kV	14	2005 November
	AZA-31576	Arizona Public Service	Unknown	500 kV	58	Unknown[d]
California						
	CACA 45220	Los Angeles Department of Water & Power – Pine Tree Wind Park	> 10	230 kV	31	Unknown
	CACA 46446	Southern California Edison	> 1	115 kV	14	2006 May[e]
	CACA 29070	Cottonwood Bear Valley Transmission and Substation	>10	115 kV	170	Unknown[f]
	CACA 44491	Imperial Irrigation District – Desert SW Transmission Line	±118	230 kV	61	2006 Spring
	CACA 47441	Imperial Irrigation District –Renewal	> 20	92 kV	2	2006 Summer
Colorado						
	COC 66840	Tri-State Generation & Transmission Montrose to Cahone, CO	118	115 kV	30	Unknown[g]
	COC 68283	Tri-State Generation & Transmission Montrose to Hotchkill, CO	30	115 kV	32	2006 January[h]
	COC 68992	Tri-State (Delta, CO)	12	115 kV	170	Unknown[i]

TABLE 5.1 (Cont.)

State	Serial No.	Name of Project	Length (miles)	Proposed Facility (kV)	Application Pending (months)	Completion (target date)
Idaho						
	IDI 34745	Raft River Electric Coop	64.4	138 kV	17	2005 December
	IDI 18212	Idaho Power	70	138/230 kV	11	2005 November
	IDI 34804	Idaho Power Replacement	100	230 kV	15	2006 February
	IDI 34805	Idaho Power Replacement	102	230 kV	15	2006 February
	IDI 34806	Idaho Power Replacement	11	230 kV	15	2006 February
	IDI 34807	Idaho Power	21	230 kV	15	2006 February
Montana						
	MTM0022831	Northwestern Energy	3.4	69 kV	5	2005 October
New Mexico						
	NMNM 108812	Tri-State Generation Transmission Blazer to Tularosa	18	115 kV	29	2006 March
Nevada						
	N 75566	Sierra Pacific Power	13	120 kV	43	2005 October
	N 77792	Nevada Wind	120–150	500 kV	24	Unknown[j]
	N 78091	White Pine Energy	30	345–500 kV	19	2007 March
	N 78991	Earth Power Resources	24	120 kV	14	Unknown[k]
	N 46728	Sierra Pacific Power	27	120 kV	4	2007 January[l]
	N 49807	Sierra Pacific Power	79	120 kV	4	2007 January[l]
	N 78567	Granite Fox Power	8	500 kV	16	2007 January[l]
	N 78568	Granite Fox Power	Not final	500 kV	16	2007 January[l]
	N 78989	Granite Fox Power	Not final	345–500 kV	13	2007 January[l]
	N 79935	Granite Fox Power	15	120 kV	5	2007 January[l]
	N 61806	Dine Power Authority	375	500 kV	84	2006 January
	N 74209	Nevada Power	4	500 kV	57	Unknown[m]
	N 77524	Overton Power District	1	69 kV	26	2007 December
	N 77605	Valley Electric Associates	13	138 & 230 kV	25	2005 November
Oregon/Washington						
	OR 57393	California Oregon Border (COB) Energy	7.2	500 kV	41	Unknown[n]
	OR 61277	PacificCorp	3	69 kV	5	2006 January
	WAOR 61064	Public Utility District 1 Chelan County	0.6	230 kV	5	2005 December
Utah						
	UTU 80812	Rattlesnake	21	69 kV	23	Unknown[o]

TABLE 5.1 (Cont.)

State	Serial No.	Name of Project	Length (miles)	Proposed Facility (kV)	Application Pending (months)	Completion (target date)
Wyoming						
	154734	Two Elks Power Plant	Unknown	Unknown	52	Unknown

[a] Will be completed within 90 days after Army at Fort Wainwright provides nonobjection.

[b] Will be completed within 90 days after the State concurs. Concurrence required by Alaska National Interest Lands Conservation Act 906(k).

[c] ROW was authorized August 11, 1989, but was never constructed. New environmental impact statement is in process in anticipation of construction in the near future.

[d] On hold per applicant's request.

[e] Renewal of existing transmission line. Working with Edwards Air Force Base, which is impacted by transmission line.

[f] Draft environmental impact statement issued February 1999; application continues to be in litigation that does not involve the BLM or FS.

[g] Waiting on applicant providing the environmental assessment.

[h] Environmental assessment received in July 2005. Waiting for biological opinion from U.S. Fish and Wildlife Service (3 months). Anticipate Record of Decision and Right-of-Way Grant in January 2006.

[i] Application is incomplete pending resolution of routing issues (e.g., major view shed, wilderness study area, threatened and endangered species).

[j] On hold per applicant's request.

[k] Waiting for applicant to sign cost-recovery agreement.

[l] Associated with the proposed Granite Fox power plant.

[m] On hold per applicant's request, July 2004.

[n] Generation for line not constructed.

[o] FS is lead.

TABLE 5.2 Pending FS Transmission Facility Applications

State	Applicant	Managing Unit (National Forest)	Length (miles)	Proposed Facility (kV)	Application Pending (months)	Completion (target date)
Arizona						
	Dine Power Authority	Kaibab	19	500 kV	97	Unknown[a]
	Arizona Public Service	Prescott	3	69 kV	17	2006 February
	Tucson Electric Power	Coronado	14	345 kV	56	Unknown[b]
California						
	Southern California Edison	Angeles	12.61	500 kV	9	2006 October
	Elsinore Valley Municipal Water District	Cleveland	30	500 kV	Coordinated with Federal Energy Regulatory Commission (FERC) license application	2006 December
	Plumas-Sierra Rural Electric Cooperative	Plumas	3	69 kV	11	Unknown
Colorado						
	Western Area Power Administration	Arapaho-Roosevelt	~1.5	69 kV & 138 kV	5	Unknown[c]
	Delete row					
Idaho						
	Idaho Power Company	Payette	1	Upgrade from 69 kV to 138 kV	.5	2006 May
Kentucky						
	East Kentucky Power	Daniel Boone	4.8	138 kV	Pending litigation	Unknown
	East Kentucky Power	Daniel Boone	1.1	69 kV	5	Unknown
South Carolina						
	Central Electric Coop.	Francis Marion & Sumter	10	115 kV	16	2007 December
Utah						
	PacifiCorp	Manti-LaSal	8.5	69 kV	28	2006 January
Wyoming						
	Powder River Energy Corp	Medicine Bow-Routt	0.33	69 kV	Unknown	Unknown

[a] Applicant commitment to project varies.

[b] Final environmental impact statement issued January 2005.

[c] Applicant has not supplied a time frame.

TABLE 5.3 Total BLM and FS Pending Applications by Facility Size

Facility Size (kV)	No. of Applications[a]
Pending applications by size	
138 and lower	33
230	10
345–500	18
Total pending applications	59

[a] The total does not add arithmetically because applications proposed more than one facility.

6 RENEWALS OF EXISTING TRANSMISSION AND DISTRIBUTION RIGHTS-OF-WAY

6.1 BUREAU OF LAND MANAGEMENT

The total number of ROW renewals facing the BLM in the upcoming 15 years is 4,155. That total is broken into 5-year increments in Table 6.1.

The BLM has been aware for several years of the increasing workload associated with renewing electric distribution and transmission ROWs authorized pursuant to FLPMA. To address this increasing renewal workload, the BLM revised its FLPMA ROW regulations in 2005 to provide for longer term ROWs and to improve administrative procedures. The revised regulations became effective on June 21, 2005.

To better plan for and manage the renewal workload, holders of a ROW who wish to renew the grant must apply 120 calendar days before the grant expires. In addition to the new renewal process, the BLM will, pursuant to the regulations, charge the holder of the grant a fee to process a renewal application. The potential processing fees range from $97 to the full reasonable cost of processing the renewal application; the BLM anticipates that the vast majority of renewal applications will be charged either a $97 or $343 processing fee. A detailed explanation of the BLM ROW application and management regulations is available at 70 FR 20970 (2005).

TABLE 6.1 BLM Transmission and Distribution ROW Renewals

	Year in Which Existing Transmission and Distribution Rights-of-Way on Federal Land Come up for Renewal			
State	2010	2015	2020	Total
Alaska	6	5	2	13
Alabama	2	0	0	2
Arizona	130	155	151	436
California	47	31	40	118
Colorado	15	20	16	51
Florida	2	0	0	2
Louisiana	3	0	0	3
Idaho	180	206	213	599
Michigan	1	0	0	1
Minnesota	1	2	1	4
Montana	15	11	14	40
New Mexico	190	309	429	928
Nevada	151	211	271	633
Oregon/Washington	42	46	65	153
Utah	35	47	32	114
Wyoming	285	489	284	1,058
Total	1,105	1,532	1,518	4,155

The BLM took a further step to address the future term ROW renewal workload. The regulations state that the time necessary to accomplish the purpose of the ROW grant is a relevant factor in fixing the duration of the grant. This new provision allows the BLM, where appropriate, to issue ROWs for electric distribution and transmission lines for terms up to 75 years. It is also conceivable that in certain very special situations grants can be issued in perpetuity. By significantly lengthening the term of future grants, the current practice of renewing on 30-year cycles will end.

The new practice provides the holder of the grant greater certainty of tenure and reduces the BLM's renewal workload. The BLM continues to protect the public interest by requiring all ROWs issued for 20 or more years to be reviewed at the end of the 20th year and subsequently at 10-year intervals. The BLM has the ability to change the terms and conditions of the grant as a result of the reviews. In addition, the BLM can immediately suspend activities within a ROW to protect the public health, safety, or the environment.

The BLM has addressed the ROW renewal workload in a very proactive, far-sighted manner. The BLM looks forward to a long-term reduction in the ROW renewal workload and a financial environment that provides timely and environmentally responsible processing of renewal applications.

6.2 FOREST SERVICE

The FS estimates that 1,803 ROWs will be up for renewal within the next 15 years. Table 6.2 illustrates how many of the renewals will occur in the following three 5-year segments — 2010, 2015, and 2020.

An explanation for the high number of ROW renewals for 2010 involves several components. First, the FS authorizes many distribution lines, including smaller lines (i.e., down to 7.2 kV) that reach individual houses and businesses.

Second, some individual lines may now be part of a utility company's master authorization; thus, the number may be reduced through database maintenance. Lastly, the number of renewals may be reduced through additional database maintenance from rolling the old database system into the new.

Acting on these renewals can be enhanced through implementing cost-recovery regulations that allow the agency to recover administrative costs for processing special use applications and monitoring special use authorizations. Retaining these recovered costs, and possibly eventually retaining land use fees, at the local level would provide additional resources and funds to act on these renewals in a timely manner.

To reduce the number of renewals arising in the future, the FS is developing a long-term national electric transmission easement. With this capability, the agency can authorize electric transmission facilities on Federal lands for longer time frames.

TABLE 6.2 FS Transmission and Distribution ROW Renewals

State	Year in Which Existing Transmission and Distribution Rights-of-Way on Federal Land Come up for Renewal			
	2010	2015	2020	TOTAL
Alaska	14	1	2	17
Alabama	14	5	14	33
Arkansas	4	5	4	13
Arizona	28	10	20	58
California	285	41	42	368
Colorado	102	39	18	159
Florida	7	1	1	9
Georgia	7	4	2	13
Idaho	42	21	15	78
Illinois	10	2	1	13
Indiana	5	3	10	18
Kansas	4	0	1	5
Kentucky	38	1	2	41
Louisiana	6	0	1	7
Maine	1	0	1	2
Michigan	16	6	2	24
Minnesota	13	1	6	20
Missouri	30	2	1	33
Mississippi	16	7	3	26
Montana	28	20	16	64
North Carolina	10	13	3	26
North Dakota	21	1	1	23
Nebraska	0	0	2	2
New Hampshire	24	2	1	27
New Mexico	32	14	9	55
Nevada	47	17	12	76
Ohio	15	2	4	21
Oklahoma	2	1	1	4
Oregon	55	21	22	98
Pennsylvania	11	5	10	26
Puerto Rico	1	0	0	1
South Carolina	20	5	0	25
South Dakota	6	4	0	10
Tennessee	1	1	2	4
Texas	32	12	9	53
Utah	92	45	26	163
Virginia	20	0	4	24
Vermont	1	2	2	5
Washington	38	20	10	68
Wisconsin	23	2	0	25
West Virginia	18	7	2	27
Wyoming	11	10	18	39
Total	1,150	353	300	1,803

7 REFERENCES

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