

1.0 INTRODUCTION

1.1 INTRODUCTION TO THE PROPOSED ACTION

Caithness Big Sandy, L.L.C. (Caithness) proposes to construct the Big Sandy Energy Project, a 720-megawatt (MW) natural gas-fired electricity generating facility, on private lands near Wikieup, Arizona. The Project would be a merchant plant – meaning it would not be owned by a utility or by a utility affiliate selling power to its utility, nor would it be supported by a long-term power purchase agreement with a utility. Caithness could instead sell power to customers and the spot market. Power purchases by customers would be voluntary and all economic costs would be borne by Caithness.

A detailed description of the Proposed Action (Project) is provided in Section 2.2, and the location of the proposed power plant is shown on Figure 2.2 within that section. The Proposed Action includes the following components:

- power plant and associated facilities, including the plant cooling system
- 500-kilovolt (kV) substation, with associated transmission line modifications and communications systems
- water supply system consisting of deep groundwater wells and associate pipelines
- new county access road
- natural gas supply pipeline and interconnection facilities
- development of land for agricultural purposes
- actions to reduce or prevent environmental impacts

The proposed power plant and associated facilities would be built on private property

owned by Caithness in Section 5, Township 15 North, Range 12 West (T15N, R12W) about 4 miles southeast of Wikieup, and about 2 miles east of where U.S. Highway 93 (US 93) crosses the Big Sandy River. The groundwater supply wells, which would provide a maximum of 4,850 acre-feet of potable and cooling water annually to the Project from a deep aquifer (more than 1,000 feet below the ground surface), would be completed nearby on private property located in the western half of Section 7, (T15N, R12W). Land and water would be supplied to the Mohave County Economic Development Authority (MCEDA) for agricultural use on private land in Section 7, (T15N, R12W). A buried natural gas pipeline would bring high-pressure natural gas to the power plant for the gas-fired turbines from at least one of the three existing natural gas transmission lines located about 39 miles north of the proposed power plant site near Interstate 40 (I-40). The gas pipeline would be constructed generally from I-40 south along Hackberry Road, the Mead-Phoenix Project 500-kV transmission line, and US 93 to the proposed power plant site. Two alternative corridors within which the pipeline also could be constructed are presented.

Caithness, a private energy development and operating company, has applied to the Western Area Power Administration (Western) for interconnection with the existing Mead-Phoenix Project 500-kV transmission line. Western is a participant (with others) in this transmission line project and is responsible for certain maintenance and operation activities. Caithness also has applied for authorization to build portions of the natural gas pipeline and the permanent access road, water pipeline system, and electrical and control lines to water wells across public lands administered by the Bureau of Land Management (BLM).

1.2 READER'S GUIDE TO THIS DOCUMENT AND THE EIS PROCESS

The National Environmental Policy Act (NEPA) of 1969 requires that an environmental impact statement (EIS) be prepared for any Federal actions that may significantly affect the human environment. Since the proposed power plant would interconnect with the transmission system managed by Western and the proposed water and gas pipelines would cross public lands managed by BLM, the proposed Project constitutes a Federal action for NEPA purposes. BLM guidelines (NEPA Handbook H-1790-1) require proposed actions that may affect public lands or resources under BLM jurisdiction be reviewed for NEPA compliance. Equivalent U.S. Department of Energy (DOE) NEPA regulations and guidance documents are located on DOE's website at <http://tis.eh.doe.gov/nepa/>. This section describes ways to find information in, and related to, this document and provides an overview of the EIS process.

1.2.1 Reader's Guide

Desired information can be located in the following ways:

- review the Table of Contents to find the page numbers for broad subjects of interest
- use the index in the back of the document to locate particular subjects and the pages on which they are found

Much of the organization of this Draft EIS is dictated by Federal regulations implementing NEPA; these regulations are codified at Title 40 Code of Federal Regulations (CFR) Parts 1500-1508 (40 CFR 1500-1508) and, for Western, 10 CFR 1021. This Draft EIS contains the following major section headings and information:

Section 1.0, Introduction – presents the underlying purpose and need to which BLM and Western are responding, and lists the permits

and approvals required for construction and operation of the Proposed Action.

Section 2.0, Description of the Proposed Action and Alternatives – presents details of the Proposed Action and alternatives, describes alternatives considered but eliminated from further consideration, and presents a comparative summary of the impacts of the Proposed Action and alternatives. Measures incorporated into the Proposed Action to reduce or prevent environmental impacts also are described.

Section 3.0, Affected Environment and Environmental Consequences – contains a description of existing environmental conditions, analyses of potential impacts from the Proposed Action and alternatives, and presents mitigation measures to reduce or eliminate environmental effects and/or enhancement measures not incorporated into the Proposed Action.

Section 4.0, Cumulative Impacts – presents the incremental impacts of the Proposed Action when added to other past, present, and reasonably foreseeable future actions.

Section 5.0, Other Required Considerations – describes any irreversible and irretrievable commitments of resources which would occur if the Proposed Action were implemented, and the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity. Existing Indian trust assets are described, and impacts on these resources are summarized.

Section 6.0, Consultation and Coordination – describes the EIS scoping process and other past and planned agency consultation and public involvement activities. A list of agencies, organizations, and individuals to whom this Draft EIS were sent also is presented.

Section 7.0, List of Preparers and Contributors – presents the names and qualifications of the persons responsible for preparing this Draft EIS.

Section 8.0, References – provides full citation information for all references cited within the document. Most cited documents are reasonably available from other sources and many of the cited documents are available for public review at public reading room(s) (refer to Section 6.4 for exact location(s)).

Section 9.0, Glossary – provides an alphabetized list of definitions of terms used in this Draft EIS.

Section 10.0, Index – provides an alphabetized list of subjects addressed in this Draft EIS and the pages on which they are located.

Appendices – include additional documents that substantiate analysis or provide other information directly relevant to the EIS.

The following additional features have been incorporated into this document to aid the reader:

- a list of the many abbreviations and acronyms used is included in the front of the document
- lists of tables and figures within the document are included after the Table of Contents; graphical presentation of information has been maximized to the extent practical
- occasional “sidebars” of boxed text provide additional explanatory or background information

1.2.2 EIS Process

The process for preparing an EIS is determined by the Federal regulations implementing NEPA. The major steps in the EIS process are described below.

Notice of Intent (NOI) – The EIS process began when BLM and Western issued a NOI on April 6, 2000; it was published in the *Federal Register* on April 18, 2000. The NOI announced Western’s and BLM’s intention to prepare an EIS and hold a public scoping meeting on May

3, 2000 concerning the Project proposed by Caithness.

Scoping Period – The purpose of scoping is to identify public and agency issues, and possible alternatives to be considered in the EIS. The scoping process included notifying the general public, and Federal, state, local, and tribal agencies of the Proposed Action. BLM and Western held a public information and scoping meeting on May 3, 2000 in Wikieup, Arizona. The scoping period, its results, and additional agency and public participation are described in Section 6.0.

Draft EIS – This document is the Draft EIS. This Draft EIS provides a description of the Proposed Action, considers public and agency comments received during the public scoping process, assesses the potential impacts, and identifies potential measures to mitigate those impacts. A Notice of Availability (NOA) for the Draft EIS was published in the *Federal Register*.

Comment Period and Public Hearings – The public and agencies may review and comment on the Draft EIS during a 45-day comment period. BLM and Western will hold a public workshop to provide interested parties an opportunity to ask questions about the Draft EIS analysis and Western will hold a public hearing to receive comments; these are further described in Section 6.0.

Final EIS – The purpose of the Final EIS is for BLM and Western to assess, consider, and respond to public and agency comments received on the DEIS. A NOA will be published in the *Federal Register* when the Final EIS is available. BLM and Western will encourage public review of the Final EIS for 30 days after it is published.

Records of Decision (RODs) – BLM and Western each will publish independent RODs. BLM and Western each will explain the factors taken into consideration in making its decisions. BLM and Western will encourage public review of the RODs. Western will take no action on its

decision until its ROD is made available to the public.

Mitigation Action Plan (MAP) – After its ROD is published, Western will prepare a MAP that will address mitigation commitments expressed in its ROD. BLM’s ROD will contain similar information.

EIS PROCESS
<i>Notice of Intent</i>
<i>Scoping Period</i>
<i>Draft EIS</i>
<i>Comment Period and Public Hearings</i>
<i>Final EIS</i>
<i>Record of Decision</i>
<i>Mitigation Action Plan</i>

1.3 AGENCY ROLES AND RELATIONSHIPS

This section presents roles and responsibilities of both lead and cooperating government agencies in this EIS process. Some relationships between the EIS process and agency policies, plans, and programs also are described and background information is presented to help the reader understand these roles and relationships.

1.3.1 Lead Agencies

Lead agencies are those preparing or having taken primary responsibility for preparing the EIS. Lead agencies for this Draft EIS are BLM and Western.

1.3.1.1 Western Area Power Administration

An interconnection with the existing Mead-Phoenix Project 500-kV transmission line has been requested for the Proposed Action. As a result, Western must comply with NEPA and

has agreed to be a co-lead agency for this Draft EIS process. In addition, Western is the lead agency for purposes of Section 106 of the National Historic Preservation Act, and applicable regulations codified at 36 CFR 800.

The electric industry currently is in transition from a highly regulated industry to one where market forces develop and shape decisions in the generation, transmission, and purchase of energy. Making wholesale and retail power markets more competitive is consistent with congressional policy reflected in the Energy Policy Act of 1992. In particular, the authority of the Federal Energy Regulatory Commission (FERC) is expanded in Section 211 of the Federal Power Act (FPA) to require transmission services be provided upon application. The FPA also created a new category of power producers called exempt wholesale generators (EWGs). Open access to non-discriminatory transmission services is essential to competitive power markets, and is similarly essential to EWGs. Access to available transmission capacity allows EWGs to provide electrical energy to the marketplace. Experience has shown that in an open market, the price to electricity is very elastic. Competition can drive the price down; however, the price can be high during periods of peak demand.

In Arizona, 20 power plants currently are in the development stages, with a combined generation capacity of approximately 17,000 MW. Most of these are being proposed as merchant plants, meaning that they will operate without long-term power contracts for the purpose of selling power on the wholesale electric market to the highest bidder. Some of this capacity is needed to meet growing peak power demands in Arizona. According to an article in the *Arizona Republic* (Jarman 2000), by 2002, the state’s peak power demand will exceed the existing capacity by 6,000 MW and by 2008, by 8,500 MW.

On April 7, 1995, FERC issued a Notice of Proposed Rulemaking for Open Access Transmission Service, published at 60 *Federal Register* 17662. The proposed rulemaking was

addressed in an EIS (FERC/EIS-0096) issued in April 1996. The proposed rule addressed in the Final EIS requires all public utilities owning or controlling interstate transmission facilities to offer non-discriminatory open access transmission services. That is, a utility must offer to provide third parties, to the maximum extent possible, with transmission service that the utility could provide itself on its system. FERC's goal was to encourage lower electricity rates by facilitating the development of competitive wholesale electric power markets through the prevention of unduly discriminatory practices in the provision of transmission services. The final rulemaking was promulgated as FERC Order Nos. 888 and 888-A on April 24, 1996, and March 4, 1997, respectively.

Western was established on December 21, 1977, pursuant to Section 302 of the U.S. Department of Energy (DOE) Organization Act, Public Law 95-91. Historically, Western, by law, marketed Federal power resources predominately to public utilities. Although Western is not specifically subject to the requirements of the FERC Final Order Nos. 888 and 888-A, the DOE has issued a Power Marketing Administration Open Access Transmission Policy that supports the intent of the FERC's Notice of Proposed Rulemaking for Open Access Transmission, which does apply to Western. To comply with FERC Orders 888 and 888A, Western published in the *Federal Register* on January 6, 1998 its Notice of Final Open Access Transmission Service Tariff (Tariff).

Under the Tariff, Western offers transmission service for the use of available transmission capacity in excess of the capacity Western requires for the delivery of long-term firm capacity and energy to current contractual electric service customers of the Federal government. Under the Tariff, Western will provide firm and non-firm point-to-point transmission service and network integration transmission service to the extent that Western has available transmission capability. Western will also perform the necessary studies or assessments for evaluating requests for transmission service as set forth in the Tariff.

Any facility construction or interconnection necessary to provide transmission service will be subject to Western's General Requirements for Interconnection, which are available upon request. Since Western's rates are developed by region under separate public processes pursuant to applicable Federal laws and regulations, the rates and charges for specific services provided under the Tariff are determined from the appropriate regional rate schedules.

Western's Desert Southwest Regional Office (DSWR) manages transmission facilities in the states of Arizona, California, and Nevada. DSWR manages a control area operations center through its DSWR office located in Phoenix, Arizona. The DSWR transmission facilities are interconnected with transmission facilities of several non-Federal entities. For this Project, applicable rates of the Mead-Phoenix Project 500-kV transmission line will be used. Through Western's interconnections with the neighboring transmission systems that have filed open access transmission tariffs pursuant to Order No. 888, an EWG located along the Mead-Phoenix Project 500-kV transmission line would have access to markets throughout the western United States.

Environmental impacts anticipated to be created by construction and operation of the Mead-Phoenix Project 50-kV transmission line were described in the following documents:

- Environmental Analysis of the Changes to the Proposed Mead-Phoenix Transmission Project (Western 1989)
- Mead Phoenix \pm 500-kV DC Transmission Line Project Final EIS (DOE 1983)

1.3.1.2 Bureau of Land Management

The *Kingman Resource Area Proposed Resource Management Plan and Final Environmental Impact Statement* (BLM 1993, adopted in 1995) guides the management of public lands within the regions of influence of the Proposed Action. Public lands in this area are rich in wildlife, archaeological, scenic,

recreational, mineral, and forage values. BLM's mission is to sustain the health, diversity, and productivity of public lands for the use and enjoyment of present and future generations. BLM planning regulations (43 CFR 1600) equate land use planning with problem solving and issue resolution.

With the passage of the Federal Land Policy and Management Act (FLPMA) in 1976, the BLM was directed to manage rights-of-way. As defined in 43 CFR 2880 and 2880, a right-of-way grant is required to use a specific piece of public land for certain projects, including roads, pipelines, transmission lines, and communication sites. Titles I and II of the Mineral Leasing Act (MLA) of 1920 are the authorities for granting, amending, and renewing right-of-way through Federal land for oil and gas pipelines. The regulations covering processing and monitoring of right-of-way issued under the MLA are in 43 CFR 2883.

The goals of the BLM right-of-way program are as follows:

- coordinate the actions of individuals, government, and business
- promote the sharing of rights-of-way
- protect the quality of land resources
- prevent unnecessary environmental damage to lands and resources
- protect the holder's investments in improvements on the right-of-way

The Proposed Action would require rights-of-way for a permanent access road, natural gas pipeline, water pipeline system, and electrical and control lines on public lands managed by BLM. As stated in BLM NEPA Handbook H-1790-1, "All internally or externally proposed actions on or affecting public lands or resources under BLM jurisdiction must be reviewed for NEPA compliance." As a result, BLM has agreed to be a co-lead agency for the EIS process.

1.3.2 Federal Cooperating Agencies

Consistent with Federal regulations implementing NEPA (40 CFR 1501.5, 1501.6, 1508.5, and 1508.16), the lead agencies (BLM and Western) are responsible for establishing liaison with all Federal, state, local, and tribal agencies that have jurisdiction by law or special expertise with respect to any environmental impact involved in a proposed action and for requesting its participation as a cooperating agency on an EIS, as appropriate.

The following agencies with jurisdiction, special expertise, or interest in the Proposed Action have agreed to participate in the EIS process as cooperating agencies:

- Arizona Department of Water Resources (ADWR)
- Arizona Game and Fish Department (AGFD)
- Arizona Department of Transportation (ADOT)
- Mohave County (through the Planning and Zoning Department)
- Hualapai Tribe
- U.S. Fish and Wildlife Service (USFWS)

The roles and responsibilities of these respective agencies with respect to the EIS process are described in the following paragraphs.

1.3.2.1 Arizona Department of Water Resources

ADWR does not require any permits or approvals associated with the proposed Project. However, because the proposed Project could result in potential impacts on local water resources, and because of its special expertise, ADWR has been involved in providing hydrogeological information and data used to evaluate environmental impacts associated with

the Proposed Action. In addition, ADWR is involved in reviewing interim reports produced as part of the EIS process. Also, an ADWR representative is on the Arizona Power Plant/Transmission Line Siting Committee, to which Caithness has submitted an Application for a Certificate of Environmental Compatibility.

1.3.2.2 Arizona Game and Fish Department

In accordance with the U.S. Fish and Wildlife Coordination Act and Arizona Revised Statutes (ARS) 17-102 and 17-231, AGFD is designated as an authority for fish and wildlife management in the state of Arizona. Although AGFD has no permitting or approval system, AGFD has been consulted regarding measures to minimize disturbance of riparian habitat and wildlife crossings and corridors occurring as part of the Proposed Action.

1.3.2.3 Arizona Department of Transportation

A right-of-way permit is required from ADOT for access upon US 93 and for natural gas pipeline right-of-way along state roads. In addition, Crossing Permits are required for pipeline crossings of Federal and state highways.

ADOT has been implementing planned improvements to US 93 in the vicinity of the Proposed Action. Documents describing these improvements and their environmental impacts include the following:

- Draft Environmental Assessment for U.S. 93 Concept Design Study – Wikieup to Interstate 40 (ADOT 2000)
- Draft Environmental Assessment: Wickenburg – Kingman Highway Segment 2: Santa Maria River – Wikieup Project STP 035-1 (ADOT 1995).
- Design Concept Report Big Sandy Bridge in Mohave County (Cannon & Associates, Inc. 1990).

In addition to its review and approval responsibility related to right-of-way permits, ADOT has provided information on cultural resources in the Project area.

1.3.2.4 Mohave County Planning and Zoning Department

Mohave County zoning regulations require that power plants proposed for private lands be constructed and operated on lands zoned for industrial use. Because the 120-acre property on which the proposed power plant would be located is an area previously designated as an agricultural-residential/36-acre minimum lot size zone, rezoning the property to a heavy manufacturing zone designation was required. In addition, an amendment to the land use designation of the 120-acre property from a rural development area to an urban development area, heavy industrial in the Mohave County General Plan was required.

The requests for rezoning and amendment to the Mohave County General Plan were presented by MCEDA representing Caithness at a special meeting of the Mohave County Board of Supervisors on April 17, 2000. As stated in Resolution Nos. 2000-149 and 2000-150, the Mohave County Planning and Zoning Commission recommended approval for a rezone subject to 11 conditions, and approval for an amendment to the General Plan subject to 6 conditions. The rezone request and amendment request were approved by the Board of Supervisors on April 17, 2000.

As stipulated in Resolution Nos. 2000-149 and 2000-150, the following conditions would be met prior to power plant construction and/or operation:

- Legal access with a road and utility right-of-way would be dedicated to Mohave County on behalf of the public.
- A Hydrology Report would be submitted to Mohave County demonstrating that the water supply is adequate for the proposed Project.

- A site plan would be completed in accordance with Section 27.P (Site Plan Requirements).
- Appropriate zoning, building, environmental, and floodplain permits would be obtained prior to construction.

In addition, an excavation/grading permit would be obtained from the Mohave County Planning and Zoning Department for road construction and a permit to “Build in Roadway” would be obtained from the Mohave County Public Works Department for access road construction.

1.3.2.5 Hualapai Tribe

The Hualapai Tribe requested to participate as a cooperating agency due to its interest in the natural and cultural resources of the Big Sandy Valley. Three parcels of tribal land are located in the upper Big Sandy Valley, approximately 18 miles north of the proposed power plant site, and the entire valley is within the tribe’s traditional cultural territory. The tribe’s role as a cooperating agency involves identifying specific tribal concerns, providing information, and reviewing studies prepared in support of this Draft EIS.

Federally recognized Indian tribes are domestic dependent nations, and the relationship between the Federal government and those tribes is characterized as one of guardian to ward. In that guardian role, the Federal government is obligated to protect tribal interests, a duty that is referred to as trust responsibility. This trust doctrine is defined through treaties, laws, executive orders, judicial decisions, and agreements.

Indian trust responsibility commonly is thought of as encompassing the following three areas:

1. protection of trust land, assets, and resources
2. protection of tribal sovereignty and self-government
3. provision of services

The Hualapai Department of Cultural Resources also conducted an ethnographic study to address potential impacts on places of traditional cultural concern. In addition, a tribal member participated in the cultural resource survey conducted to support this document.

1.3.2.6 U.S. Fish and Wildlife Service

Section 7 of the Endangered Species Act of 1973 requires that Federal agencies consult with the USFWS regarding the potential adverse effects of proposed actions on listed threatened and/or endangered species or their listed habitats. As required by the Endangered Species Act a Biological Assessment will be prepared by BLM and Western and submitted to USFWS because the Project may have an adverse effect on one or more species listed under the Act.

The Section 7 process is described in more detail in Section 3.14. If BLM and Western determine that the Proposed Action likely could affect a threatened or endangered species, and the USFWS concurs, formal consultation will be initiated with the USFWS. USFWS will review the information provided by BLM and Western and will issue a Biological Opinion.

The USFWS has provided technical expertise and information related to threatened and endangered species that potentially could be adversely affected by the Proposed Action, particularly the southwestern willow flycatcher, an endangered bird species found along the Big Sandy River west of the proposed power plant site. This information has been used in compiling the Affected Environment and Environmental Consequences section of this Draft EIS.

1.4 PURPOSE AND NEED

Federal regulations implementing NEPA state:

“The statement [the EIS] shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action.” (40 CFR 1502.13)

The purpose and need for the Proposed Action are described below in terms of each of the proponents and lead Federal agencies involved in this Project.

1.4.1 Underlying Needs for the Proposed Action

1.4.1.1 Proponents' Needs for Proposed Action

The proponents' (Caithness and MCEDA) underlying needs for the proposed Project are detailed below.

Caithness seeks to accomplish the following:

- Generate and consistently deliver competitively priced electrical energy, to short- and mid-term electric energy markets in the western United States in response to market demands, using available capacity of the Mead-Phoenix Project 500-kV transmission line.
- Construct and operate a power plant on private land, in compliance with:
 - (1) applicable laws and regulations;
 - (2) industry standards for reliability; and
 - (3) Caithness' corporate environmental objectives to generate power with minimal impact on the environment.
- Support MCEDA's objective for economic development in the Big Sandy Valley by providing land adjacent to the proposed facility and water from the proposed power plant for agricultural purposes.

MCEDA seeks to accomplish the following:

- Generate economic benefits, encourage economic development, and support the agricultural sector in the Big Sandy Valley of Mohave County.

1.4.1.2 Agencies' Needs for the Proposed Action

The underlying needs for the lead Federal agencies (BLM and Western) regarding the proposed Project are detailed below.

BLM seeks to accomplish the following:

- Respond to Caithness's request for rights-of-way across lands managed by the BLM to the proposed power plant site for portions of an access road, a natural gas pipeline, water supply pipeline, and electrical and control lines.

Western seeks to accomplish the following:

- Respond to Caithness's request to provide interconnection of the proposed power plant to the existing Mead-Phoenix Project 500-kV transmission line.

1.4.2 Purpose for the Proposed Action

Caithness' purpose is to construct a 720-MW power plant to generate and sell new, competitively priced electrical energy and capacity in the western United States market, using the Mead-Phoenix Project 500-kV transmission line and associated transmission capacity.

MCEDA's purpose is to further the economic development of the Big Sandy Valley and support agriculture there in partnership with Caithness.

BLM's purposes are to ensure that natural gas pipelines constructed on public lands are safe and reliable and ensure reclamation of public lands that would be disturbed.

Western's purpose is to meet the intent of the requirements of FERC Order No. 888 in providing transmission service to Caithness consistent with statutory obligations without degrading reliability or service to existing customers.

1.5 PERMITS AND APPROVALS REQUIRED

Construction and operation of the proposed Project would require compliance with a number of Federal, state, and local regulations and would require specific permits and permissions.

Table 1-1 summarizes the environmental regulatory requirements for the proposed Project.

Authorizing Agency	Law or Regulation	Type of Permit/ Approval/Action/Constraint
Western Area Power Administration (Western) and Bureau of Land Management (BLM)	National Environmental Policy Act of 1969 (NEPA) and Implementing Regulations (40 CFR 1500-1508)	<ul style="list-style-type: none"> • Record of Decision by Western for transmission line interconnection • Record of Decision by BLM for rights-of-way across public lands administered by BLM
	National Historic Preservation Act (NHPA) of 1966 as amended	<ul style="list-style-type: none"> • Cultural Resources Data Recovery Plan • Native American Consultations
	Archaeologic Resources Protection Act (ARPA) of 1979	<ul style="list-style-type: none"> • Cultural Resources mitigation • Native American Consultations
	Native American Graves Protection and Repatriation Act (NAGPRA)	<ul style="list-style-type: none"> • Protection of remains and funerary objects • Native American Consultations
	Executive Order 11988	<ul style="list-style-type: none"> • Floodplain management
	Executive Order 11990	<ul style="list-style-type: none"> • Protection of wetlands
	Executive Order 12898	<ul style="list-style-type: none"> • Environmental Justice in minority populations and lower income populations
	Executive Order 13007	<ul style="list-style-type: none"> • Protection of Indian sacred sites and their religious practices
	Executive Order 13186	<ul style="list-style-type: none"> • Protection of migratory birds
	Endangered Species Act	<ul style="list-style-type: none"> • Biological Assessment and consultation with USFWS
BLM	Federal Land Policy and Management Act (FLPMA)	<ul style="list-style-type: none"> • Right-of-Way Grants for access road, water and natural gas pipeline, and electrical and control lines crossing of public lands administered by the BLM
Western	Compliance with Floodplain/Wetlands Environmental Review Requirements (10 CFR 1022)	<ul style="list-style-type: none"> • Statement of findings
U.S. Army Corps of Engineers (COE)	Clean Water Act	<ul style="list-style-type: none"> • Section 404 Permit authorization for pipelines and access road
U.S. Fish and Wildlife Service (USFWS)	Endangered Species Act	<ul style="list-style-type: none"> • Section 7 Consultation (Biological Opinion)
	Migratory Bird Treaty Act	<ul style="list-style-type: none"> • Depredation permits

**TABLE 1-1
BIG SANDY ENERGY PROJECT
ENVIRONMENTAL REGULATORY REQUIREMENTS**

Authorizing Agency	Law or Regulation	Type of Permit/ Approval/Action/Constraint
U.S. Environmental Protection Agency (EPA)	Clean Water Act	<ul style="list-style-type: none"> Stormwater Discharge Permits for construction and operation at power plant site. National Pollutant Discharge Elimination System (NPDES) Permit
Arizona Corporation Commission	Arizona Revised Statutes	<ul style="list-style-type: none"> Certificate of Environmental Compatibility for siting of power plant
Arizona Department of Environmental Quality (ADEQ)	Clean Water Act	<ul style="list-style-type: none"> Aquifer Protection Permit (APP) for construction and operation of the evaporation ponds Stormwater Discharge Permits for construction and operation at power plant site Spill Prevention Control and Countermeasure Plans for construction and operation Section 401 Certification NPDES Permit
	Clean Air Act	<ul style="list-style-type: none"> Air Quality Permits to Construct and Operate (PSD and Title V) for emissions of regulated pollutants from plant Fugitive Dust Permit
	Arizona Ambient Air Quality Guidelines	<ul style="list-style-type: none"> Toxic Air Pollutants Standards for emissions of formaldehyde
	Superfund Amendments and Reauthorization Act (SARA) Title III	<ul style="list-style-type: none"> Community Right-to-Know Reporting
	Resource Conservation and Recovery Act (RCRA)	<ul style="list-style-type: none"> Hazardous waste and hazardous materials storage and handling permits
	Arizona Game and Fish Department	U.S. Fish and Wildlife Coordination Act
Arizona State Historic Preservation Office	National Historic Preservation Act (NHPA)	<ul style="list-style-type: none"> Permits on state-owned lands Cultural Resources consultation with Western, BLM, and COE
	Archaeologic Resources Protection Act (ARPA) of 1979	<ul style="list-style-type: none"> Cultural Resources Data Recovery Plan Native American Consultations
	Native American Graves Protection and Repatriation Act (NAGPRA)	<ul style="list-style-type: none"> Protection of remains and funerary objects Native American Consultations

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ENVIRONMENTAL REGULATORY REQUIREMENTS**

Authorizing Agency	Law or Regulation	Type of Permit/ Approval/Action/Constraint
Arizona State Lands Department	State Statutes	<ul style="list-style-type: none"> • Right-of-way Permit for portions of pipeline crossing state lands
Arizona Department of Transportation (ADOT)	State Statutes	<ul style="list-style-type: none"> • Crossing Permit for pipeline crossings of Federal and state highways • Permit for use of right-of-way
Arizona Department of Agriculture	Native Plant Law	<ul style="list-style-type: none"> • Salvage or Removal Permit. • Notice of clearing on private lands, salvage on state lands
Mohave County	County Ordinances	<ul style="list-style-type: none"> • Zoning Permit • Septic/Sewage Package Permit • Building Permit • Excavation Permit (pipeline) • Grading Permit • Amendment to Mohave County General Plan • Night-sky Ordinance