EXHIBIT 17

DRAFT
ENVIRONMENTAL IMPACT STATEMENT
May 2007

Desert Rock Energy Project

Prepared for:

Prepared by:

URS

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Navajo Region
P. O. Box 1060
Gallup, New Mexico 87305

TAKE PRIDE IN AMERICA

MAY 1 1 2007

Dear Reader:

Enclosed for your review and comment is the Draft Environmental Impact Statement (EIS) for the Desert Rock Energy Project. The project consists of the construction and operation of a coal-fired power plant and associated facilities on land leased from the Navajo Nation and extension of surface coal mining within the BHP Navajo Coal Company lease area within the Navajo Indian Reservation. The proposed project is approximately 30 miles southwest of Farmington, San Juan County, New Mexico. This document provides an evaluation of this proposed project in accordance with the National Environmental Policy Act of 1969 and associated regulations.

The purpose of this document is to assist the Bureau of Indian Affairs (BIA) and the cooperating agencies in their decision-making processes. As the lead Federal agency for this EIS, BIA welcomes your comments on the Draft EIS. Comments on this document may be submitted orally or in writing at the scheduled public meetings or in writing by e-mail at the website address listed below.

Written comments sent by first-class or priority U.S. Postal Service mail should be sent to:

Harrilene Yazzie, Regional NEPA Coordinator
Desert Rock Energy Project EIS
Bureau of Indian Affairs, Navajo Regional Office
P.O. Box 1060
Gallup, New Mexico 87305

Written comments sent by U.S. Postal Service express mail or by courier service should be sent to:

Harrilene Yazzie, Regional NEPA Coordinator
Desert Rock Energy Project EIS
Bureau of Indian Affairs, Navajo Regional Office
P.O. Box 1060
Gallup, New Mexico 87305

Since the BIA currently lacks email access, comments can also be submitted electronically via the project website at www.desertrockenergy.com.

To ensure consideration in the Final EIS, **all written comments must be received by the end of the public review period, which ends 60 days after the publication of the U.S. Environmental Protection Agency Notice of Availability in the *Federal Register***. BIA will continue to consider comments received after that date, as practicable. Where possible, include in your comments, references to the specific pages and paragraphs on which you are commenting.

The public meetings will be held on the Navajo Indian Reservation; in San Juan County, New Mexico and LaPlata and Montezuma Counties, Colorado. Dates and addresses for these meetings will be announced in the *Federal Register*, advertised in the local news media, and listed on the Website: www.desertrockenergy.com. During the meetings, information will be displayed to explain the environmental process and the document. Oral comments will be transcribed for consideration in the Final EIS.

Comments, including names and street addresses of respondents, will become a part of the public record and may be published as part of the Final EIS. Individual respondents may request confidentiality. If you wish to withhold your name or street address from public review or from disclosure under the Freedom of Information Act or any other law, you must state this prominently at the beginning of your written comment. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety. Oral comments received at the meetings and written comments received by BIA during the public review period will be considered fully and evaluated in preparing the Final EIS.

Sincerely,

Omar Bradley, Regional Director
Bureau of Indian Affairs, Navajo Region

Enclosures

U.S. Department of the Interior
Bureau of Indian Affairs

Desert Rock Energy Project

Draft Environmental Impact Statement
DOI DES 07-23

May 2007

Type of Action: Administrative

Prepared by the
Bureau of Indian Affairs

In cooperation with the
U.S. Department of the Interior
Office of Surface Mining Reclamation and Enforcement
Bureau of Land Management
U.S. Environmental Protection Agency
Navajo Nation
U.S. Army Corps of Engineers

Omar Bradley
Regional Director, Navajo Region
Bureau of Indian Affairs

BUREAU OF INDIAN AFFAIRS

The Bureau of Indian Affairs is responsible for administering Federal Indian policy; fulfilling its Federal trust responsibilities to American Indians, Tribal Governments, and Alaska Natives; and promoting tribal self-determination and self-governance.

DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE DESERT ROCK ENERGY PROJECT, NAVAJO NATION, NEW MEXICO

Draft (X) **Final ( )**

LEAD AGENCY:	**U.S. Department of the Interior, Bureau of Indian Affairs**
COOPERATING AGENCIES:	**U.S. Environmental Protection Agency** **Navajo Nation** **U.S. Army Corps of Engineers** **Office of Surface Mining Reclamation and Enforcement** **Bureau of Land Management**
JURISDICTION:	**Navajo Nation**
CONTACT INFORMATION:	**Correspondence on this Draft Environmental Impact Statement should be directed to:** **Harrilene Yazzie** **Bureau of Indian Affairs, Navajo Regional Office** **PO Box 1060** **Gallup, New Mexico 87305** **(505) 863-8286**

ABSTRACT

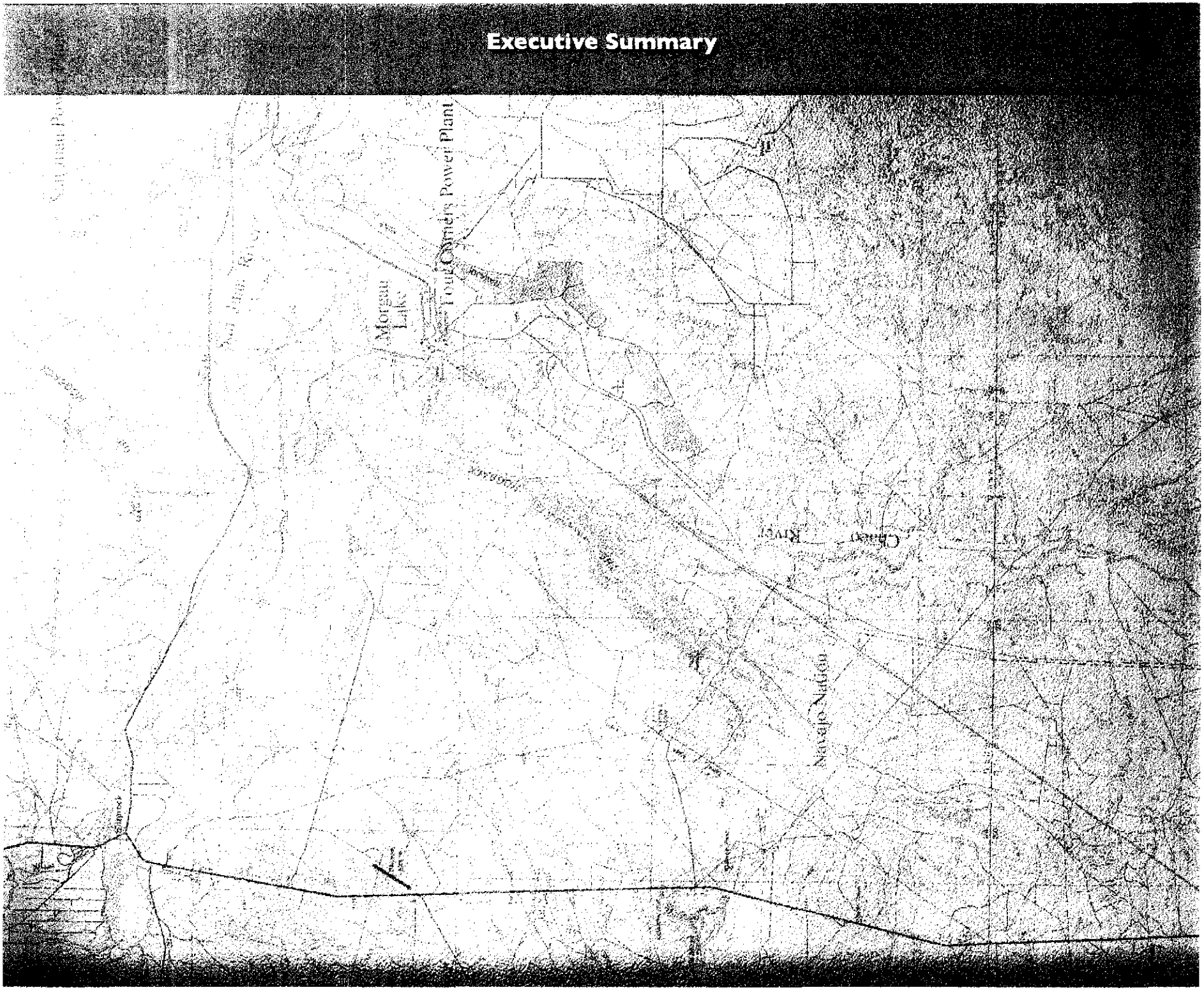
This Draft Environmental Impact Statement (EIS) evaluates the environment impacts of the proposed project that would result from the construction and operation of the Desert Rock Energy Project. The proposed project would include a coal-fired power plant with a capacity of generating up to 1,500 megawatts (two units), transmission lines, a water-supply system, access roads, extension of surface coal mining within the BHP Navajo Coal Company lease area, coal preparation facilities, and other associated facilities.

Several alternative actions are evaluated in this EIS as No Action, Proposed Action with Alternative locations. The No Action Alternative is a no-build scenario. The Proposed Action Alternative includes the implementation of the proposed project. Alternative locations for the transmission lines, well fields, and access roads also are evaluated. A second action alternative that is considered in this EIS is to construct and operate a single-unit, 750-megawatt coal-fired power plant and associated facilities that would be located on the same area as the Proposed Action Alternative.

This Draft EIS is available for public review in accordance with the National Environmental Policy Act of 1969 and associated regulations. To ensure consideration for the Final EIS, comments on this Draft EIS must be received within 60 days following the date that the U.S. Environmental Protection Agency Notice of Availability is published in the Federal Register.

APPROVED:

Omar Bradley, Regional Director
Bureau of Indian Affairs – Navajo Region


Four Corners Power Plant
Morgan Lake
Navajo Nation

EXECUTIVE SUMMARY

This environmental impact statement (EIS) is being prepared in compliance with the National Environmental Policy Act (NEPA) to analyze and disclose environmental effects that could occur with implementation of the proposed Desert Rock Energy Project (also referred to as the proposed project). The three project proponents— Diné Power Authority (DPA), Desert Rock Energy Company LLC (an affiliate of Sithe Global Power LLC), and BHP Navajo Coal Company (BNCC)—are proposing the following:

- DPA and Desert Rock Energy Company LLC jointly propose to develop, construct, and operate a coal-fired electrical power plant with a capacity to generate up to 1,500 megawatts (MW) of power. Supporting facilities would include a well field that would draw 4,500 acre-feet per year (af/yr) from the Morrison Aquifer for project-related purposes and an additional 450 af/yr for local municipal use, a water-supply pipeline from the well field to the power plant, 500 kilovolt (kV) transmission lines, other upgrades and ancillary facilities required for the production and transmission of electricity, and new access roads.
- BNCC proposes to expand existing surface-coal-mining operations at the Navajo Mine, which is located within the existing BNCC lease area (see Figure ES-1), to provide fuel for the power plant. Under this proposal, mining operations and related facilities would extend into coal resource Areas IV North, VI South, and V within the lease area. These operations would require construction of additional facilities. All mined areas would be reclaimed as mining operations are completed.

The proposed project would be located entirely within the Navajo Indian Reservation approximately 30 miles southwest of Farmington in San Juan County, New Mexico (Figure ES-1). The power plant would occupy about 150 acres of a 592-acre parcel of land immediately adjacent to and west of the BNCC lease area. This parcel would be leased from the Navajo Nation. The coal fuel supply would be mined from Areas IV South and V (approximately 17,500 acres) and transported by conveyor system to a coal preparation facility that would be located in Area IV North of the BNCC lease area, near the power plant.

The purpose and need of the proposed project is to:

- Support the Navajo Nation's objective for economic development by providing long-term employment opportunities and revenue cash-flow streams from the development of Navajo natural resources.
- Use Navajo Nation coal to generate electricity.
- Help meet demand for up to 1,500 MW of electrical power in the rapidly growing southwestern United States.
- Provide fuel diversity and a more economically stable and predictable power supply for utilities in the Southwest.

The proposed project requires a long-term (50 year) lease between the Navajo Nation and DPA, and a corresponding sublease between DPA and Desert Rock Energy Company LLC. Because the project would be located within the Navajo Indian Reservation (land held in trust by the Federal Government for the Navajo Nation), the lease would require approval by the U.S. Department of Interior's Bureau of Indian Affairs (BIA), the lead Federal agency responsible for the preparation of this EIS. BIA has

determined that approval of the lease and other aspects of the proposed project would be a major Federal action and thus requires the preparation of an EIS. Other Federal agencies and the Navajo Nation are cooperating with BIA in preparation of this EIS: the Bureau of Land Management (BLM), Office of Surface Mining Reclamation and Enforcement (OSM), U.S. Environmental Protection Agency Region IX (USEPA), and U.S. Army Corps of Engineers (USACE). This EIS is intended to satisfy NEPA requirements vis-à-vis each agency's decision-making responsibilities related to the siting, construction, operation, and maintenance of the proposed project and to aid other Federal, Navajo Nation, State, and local permitting authorities with their permitting responsibilities regarding surface coal mining, CCB disposal, and reclamation activities that would take place on the BNCC lease area under the Surface Mining Control and Reclamation Act of 1977 (SMCRA).

PROPOSED PROJECT AND ALTERNATIVES

Three alternatives are evaluated in detail in this Draft EIS:

- Alternative A is the no action alternative—no project would be built.
- Alternative B is the action proposed by DPA, Desert Rock Energy Company LLC, and BNCC—construction and operation of a 1,500 MW power plant and associated facilities and expansion of Navajo Mine operations to support the plant.
- Alternative C is an alternative to the proposed action—construction and operation of a 550 MW power plant and associated facilities and expansion of Navajo Mine mining operations to support the plant.

A number of alternative locations, technologies, and fuel sources were evaluated and eliminated before detailed analysis. These alternatives and the reasons they were eliminated are described in Section 2.4 in Chapter 2.

The three alternatives evaluated in detail in the EIS are briefly described below. Additional detail is provided in Section 2.2 in Chapter 2.

Alternative A – No Action

Council of Environmental Quality regulations implementing NEPA require that an agency consider no action as one alternative to a proposed action (Title 40, Code of Federal Regulations, Section 1502.13(d) [40 CFR 1502.13(d)]). Under the No Action Alternative considered here, approvals for the long-term lease, rights-of-way, mining permits, and other permits needed for the proposed power plant and associated facilities would not be granted. Without these approvals and permits, the project would not be implemented.

For analysis purposes, the effects of taking no action serve as the baseline of environmental information against which impacts from the proposed project would be predicted to occur if the necessary agency actions are taken.

Alternative B – Proposed Action

Under Alternative B, the facilities and activities that would be associated with the proposed action alternative include (1) the power plant and associated infrastructure, (2) construction activities, (3) operation and maintenance activities for the proposed power plant, (4) mining operations in the BNCC lease area, and (5) decommissioning activities.

The proposed facilities would include up to two 750 MW generation units and a plant-cooling system, coal-handling and processing facilities, power transmission lines and interconnection facilities, a water-supply system, an access road to the plant site, waste-management operation facilities, and other ancillary facilities associated with the generation and transmission of electricity. Table ES-1 summarizes the acreage requirements for each major facility for each action alternative.

Table ES-1 Acreage Requirements for Proposed Facilities and Infrastructure under Alternatives B and C

Facility	Acres	
	Alternative B	Alternative C
Power Plant		
Leased site	592	592
Footprint	149	110
Coal Preparation Facilities on BNCC Lease Area	101	101
Infrastructure		
Proposed Transmission Line (Segments A, C, D)	1,205	766
Alternative Transmission Line (Segments B, C, D)	1,373	829
Proposed Water Well Field B	890	792
Alternative Water Well Field A (includes utility corridor)	1,040	942
Main Power Plant Access Road	21	21

Power Plant. The power plant would be a supercritical pulverized-coal type facility. Use of a single reheat, supercritical steam cycle and other design features would enable this plant to operate with higher net efficiency than existing coal-fired power plants in the region.

The power plant would be constructed within a 592-acre leased area east of the Chaco River and north of the Pinabete Wash. The footprint of the plant and associated facilities would occupy about 149 acres within that area (see Figure ES-1). Air pollutants would be reduced through use of the emission controls described in Chapter 2.

Access Road. The proposed access road would access the power plant site from BIA 5082 (Burnham Road) and run west across the BNCC lease area along the boundary between Areas IV North and IV South. This alignment would interconnect with BNCC's proposed Burnham Road Realignment Project as shown on Figure ES-1.

Transmission Line. Two single-circuit 500 kV transmission lines, each within a 250-foot-wide right-of-way, would leave the power plant site and parallel the east side of the Chaco River (Segments A and C on Figure ES-1) in a northerly direction for approximately 14.9 miles to Arizona Public Service's Four Corners Generating Station. From the generating station, one single-circuit 500kV transmission line would parallel an existing 230kV transmission line within a 250-foot-wide right-of-way, across the San Juan River, to interconnect with the proposed Navajo Transmission Project transmission line, a distance of approximately 10.8 miles (Segment D on Figure ES-1). The proposed typical structure for the transmission line would be a self-supporting, four-legged, steel-lattice structure approximately 135 feet in height with a nominal spacing of 1,200 to 1,600 feet between structures.

An alternative transmission line corridor evaluated in this EIS would be composed of Segments B, C, and D (Figure ES-1), which would be longer than the proposed alignment by nearly 3 miles. The primary difference between the two corridors is that Segment B would parallel the Chaco River on the west side, and Segment A on the east side. In addition, Segment B would be collocated with existing transmission lines for about 8.8 miles of its length.

Water-Supply System. The average annual water consumption demand for Alternative B is estimated to be 4,500 af/yr, or 2,795 gallons per minute (gpm) on average, of continuous flow for a period of 50 consecutive years. Water re-use would be optimized for a zero-liquid discharge. An additional 450 af/yr would be made available to meet Navajo municipal demand. Based on evaluation of the hydrogeologic characteristics of the Morrison aquifer in the study area and the results of the well impact analysis, it was estimated that 10 to 20 new production wells would meet this demand (URS Corporation 2005). Ground water from nearby deep wells that access the Morrison aquifer would be the primary water supply.

The proposed well field area would occupy 890 acres within the power plant site lease area and along the proposed transmission line Segment A if adequate space is not available for all of the project wellheads within the lease area (see Proposed Well Field Area B on Figure ES-1). The 10 to 20 wells generally would be placed equally apart at a minimum of 0.25-mile spacing, as practicable based on surface characteristics and hydrology. Each well would be networked to the water-transmission pipeline mains, which would deliver the water to the onsite 2.5-million-gallon water storage tank. Each well would be equipped with a submersible pump powered by an electric motor. The final size of the pumps and motors would not be determined until after test wells were drilled and properly developed. The wells would be controlled via telemetry by the water level in the storage tank. The telemetry system would likely be connected by fiber optic cable buried in the pipeline trench.

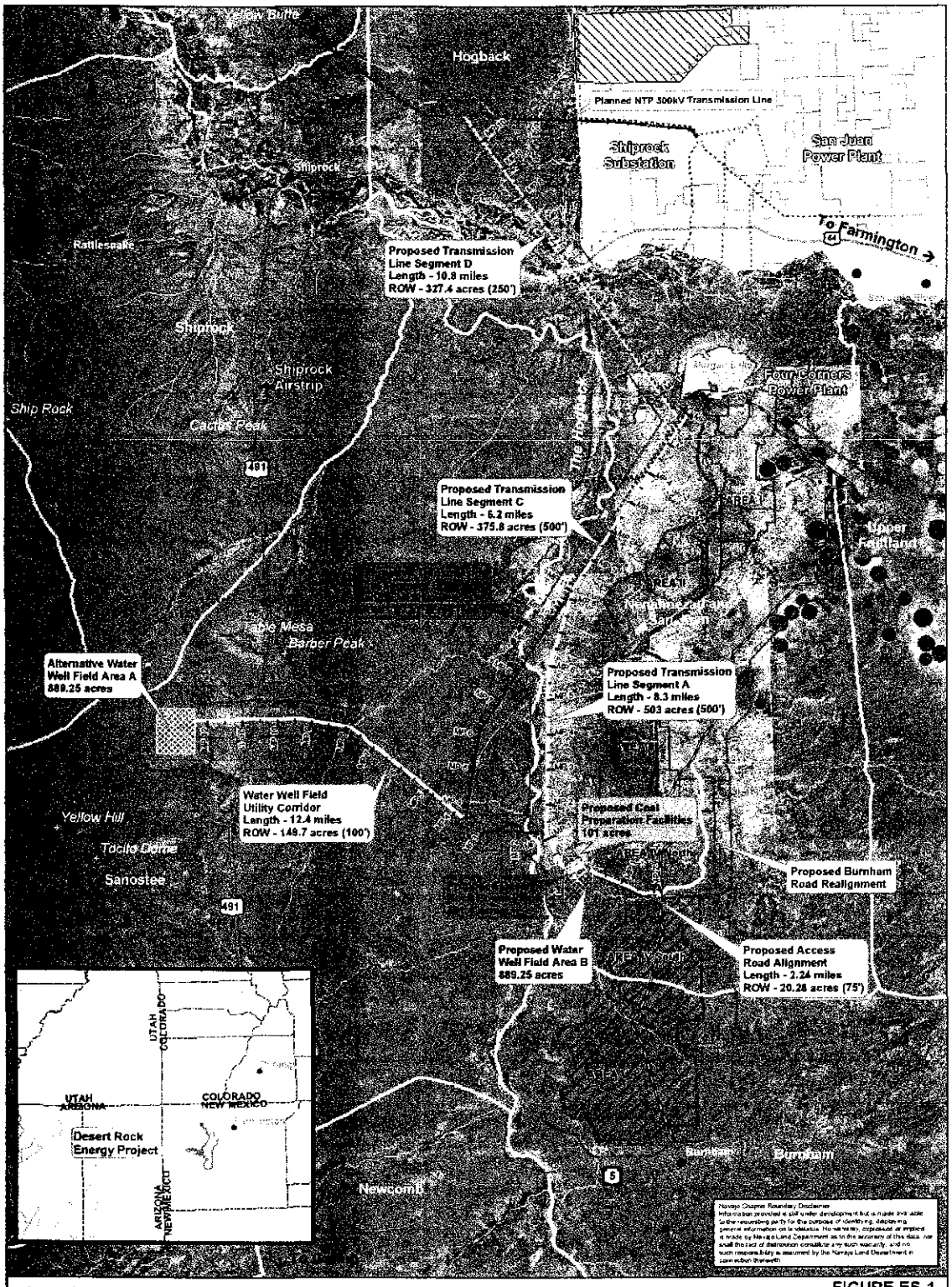
An alternative well field location also is evaluated in this EIS. Alternative Well Field Area A would be located west of Highway 491 and south of Table Mesa, on nearly 890 acres about 12.4 miles northwest of the proposed plant site (see Well Field Area A on Figure ES-1). A 100-foot-wide utility corridor would be required to supply electricity to the wells.

For either well field alternative, a system of collector and water-transmission pipelines would be constructed to deliver water to the plant site. Appurtenant facilities would include isolation valves, control valves, access manways, air release/vacuum valves and vaults, blow-off valves, fiber-optic splice vaults, cathodic-protection facilities where necessary, and pipeline-alignment markers.

Overhead or underground power lines would be constructed to supply electricity to the wells. The power lines would be constructed in the same right-of-way and paralleling the pipelines, with appropriate spacing between the utilities as needed to ensure safety. The length of each power line would be determined upon completion of design and engineering studies. Control of the well pumps would be from the power plant control room via telemeterized digital control system.

If production wells are located outside the plant boundary, road access to the wells would be needed for construction, operation, and maintenance. Unpaved access roads would be approximately 15 feet wide and constructed in accordance with BIA and/or Navajo Nation road standards.

Mining Operations in the BNCC Lease Area. A new surface mine (the proposed Navajo Mine Extension Project) would be developed to provide coal to the power plant. The mine would be located in areas IV South and V within the existing BNCC lease area, which are adjacent to the proposed power plant site (see Figure ES-1). At full production, 6.2 million tons of coal would be mined per year for the proposed project. The mine would have a life of 50 years.



Legend

- Planned NTP 500kV Transmission Line
- Existing 230kV Transmission Line
- Existing 345kV Transmission Line
- Existing 500kV Transmission Line
- Navajo Chapter Boundaries
- BHP Navajo Coal Company Lease Area (approximate)
- Burnham Road (Navajo Route 5082)
- Proposed Burnham Road Realignment
- Rivers/Streams
- Facilities Study Area
- Bureau of Land Management
- Navajo Nation
- Private Land
- State Land
- Area of Uncertain Ownership

Project Components

- Proposed Plant Site
- Proposed Coal Preparation Facilities

Transmission Facilities

- Proposed Transmission Line
- Alternative Transmission Line

Other Facilities

- Water Well Field Utility Corridor

Access Road

- Proposed Access Road Alignment

Well Field

- Alternative Water Well Field Area A
- Proposed Water Well Field Area B

Coal Source

- Areas IV South and V of the BHCC Lease Area

Source:
URS Corporation 2005, 2006
Navajo Nation Land Department 2006
BHP Billiton 2005
Bureau of Land Management 2004
Environmental Systems Research Institute 2004
New Mexico Resource Geographic Information System (RGIS) 1998

0 2.5 5 Miles

FIGURE ES-1

Desert Rock Energy Project

Sithe Global Power, LLC
Desert Rock
Energy Project

Alternative C – 550 MW Subcritical Facility

The purpose of this alternative is to provide a basis for comparing and considering the potential impacts of the proposed action. Alternative C is modeled after the Cottonwood Energy Project, which was proposed by BNCC in 2002 for the same site as that proposed for the 1,500 MW project under Alternative B. Relative to Alternative B, power generation under this alternative would be less efficient and there would be greater emissions and water usage per unit of power produced, but overall emissions and water consumption would be lower because of the reduced size of the unit. Coal usage under Alternative C would be 10 to 15 percent higher per megawatt-hour because of the higher heat rate of the subcritical plant.

The project location would remain the same under this alternative. Facilities would include one 550 MW generation unit, a plant-cooling system, coal handling facilities, power transmission interconnection facilities, a water-supply system, an access road to the plant site, and waste-management operation facilities.

Power Plant. The smaller, 550 MW power plant would also be constructed within the 592-acre lease area east of the Chaco River and north of the Pinabete Wash. The footprint of the plant and associated facilities would occupy about 110 acres within that area (39 acres fewer than Alternative B). Air pollutants would be reduced through emission controls (see Chapter 2).

Access Road. The access road to the power plant under Alternative C would be the same as that under Alternative B.

Transmission Line. The transmission line alternatives for Alternative C would follow the same corridors as in Alternative B. However, the right-of-way requirements would be reduced because one single-circuit transmission line would be constructed. The proposed transmission line would require about 766 acres under Alternative C, a reduction of about 439 acres from Alternative B. The alternative transmission line corridor would require 829 acres under Alternative C, or 544 acres fewer than Alternative B.

The proposed typical structure for the transmission line would be a self-supporting, four-legged, steel-lattice structure approximately 135 feet in height with a nominal spacing of 1,200 to 1,600 feet between structures. These characteristics would be the same as the proposed project under Alternative B.

Water-Supply System. The anticipated needs for water would be 4,000 af/yr, which would be a reduction in water usage of about 12 percent compared to Alternative B. An additional 450 acre-feet would be provided for Navajo municipal use annually, assuming the same water agreement would apply for both Alternatives B and C. The proposed water source would be groundwater from the Morrison aquifer, similar to Alternative B. Based on evaluations of the hydrogeologic characteristics of the Morrison aquifer, it was estimated that 9 to 18 new production wells would meet this anticipated water demand. The alternative locations for the well field would be the same as evaluated under Alternative B; however, the well field itself would be about 11 percent smaller.

Each well would be networked to the water-transmission pipeline mains that would deliver the water to the onsite 1.5-million gallon water-storage tank. Each well would be equipped with a submersible pump powered by an electric motor. The wells would be controlled via telemetry by the water level in the regulating/storage reservoir. The collector pipelines would be connected to manifolds on the water-transmission pipeline mains that would deliver the groundwater to the water-storage tank at the power plant site.

Mining Operations in the BNCC Lease Area. A new surface mine (the Navajo Mine Extension Project) would be developed within Area IV South of the BNCC lease area to provide coal to the power plant. Under Alternative C, Lease Area V would not be required to supply adequate coal. At full production, 2.4 million tons of coal would be mined per year to support the power plant operations. The mine would have a life of 50 years.

AFFECTED ENVIRONMENT

Chapter 3 describes the existing conditions of the human and natural environments that could potentially be affected by the action alternatives. The descriptions of existing conditions are based on the most recent data available in professional literature, published and unpublished reports, and agency databases. Field reconnaissance and interviews were conducted as necessary to verify specific information (such as biological resources, land use, and traditional and cultural resources). The environmental resources described include air, water, geology, soils, wetlands, vegetation, fish and wildlife, cultural, visual, noise, land use, and socioeconomics.

ENVIRONMENTAL CONSEQUENCES

The potential environmental consequences of each alternative were determined using the description of the existing conditions of the environment provided in Chapter 3 as a baseline to identify and measure potential impacts. Best management practices, conservation measures, and the effectiveness of mitigation measures were considered in assessing the impacts on each resource. The full discussion of the impact assessment is provided in Chapter 4.

The cumulative effects of the project were considered as part of the analysis (see Chapter 5). Cumulative effects result from the proposed action's incremental impacts when these impacts are added to the impacts of other past, present, and reasonably foreseeable future actions, regardless of the agency or person who undertakes them (Federal or non-Federal).

The impact of most consequence under Alternative A would be the non-realization of project-related economic development (though it is possible that BNCC's Lease Areas IV South and V could be developed to support a different project in the future, for purposes of analysis, is was assumed that the area would remain undeveloped). Under this scenario, there would be no gain in project-generated direct wage income, induced income, and tax and royalty payments to the Navajo Nation (an estimate of $43 million under Alternative B, and $18 million under Alternative C). This impact would have great resonance in a disproportionately low-income Navajo community characterized by high unemployment and lack of economic opportunity. Because the project would not be built under this alternative, most environmental resources would remain unchanged.

The environmental consequences under Alternatives B and C—the action alternatives—would include effects on the natural environment as well as socioeconomic effects. The differences between the two action alternatives would be primarily differences in scale: the types of impacts would be the same. The components of the project would be in the same general locations, but the smaller 550-MW facility under Alternative C would result in an overall smaller footprint for the power plant and associated facilities. With the smaller unit, fewer acres would be disturbed and less water and coal would be required, but the smaller plant would use resources less efficiently: it would burn more coal and emit more air pollutants per kilowatt generated. In addition, the economic impact of the two plants would vary. Key differences in impacts between Alternatives B and C are described below, presented by the resource area that would be affected. Table ES-2 summarizes and compares the key impacts that would result from Alternatives A, B, and C.

The key socioeconomic impacts under the action alternatives would be related to the economic benefits associated with each project. It is estimated that many of the workforce would originate from the local area, where qualified workers reside and employment is needed. Alternative B would provide more jobs relative to Alternative C (about 420 permanent jobs versus 255 permanent jobs, plus construction employment for both alternatives). Tax and royalty payments to the Navajo Nation would also be greater under Alternative B (estimated at $43 million, compared to $18 million under Alternative C).

Air quality would be affected under both action alternatives as the result of power plant emissions, vehicle emissions, and emission of pollutants from earthmoving activity during construction. Mining and coal-handling operation would also generate fugitive dust. However, mitigation measures would reduce fugitive dust, particularly during construction, and the Federal National Ambient Air Quality Standards (NAAQS) would not be exceeded under either alternative. The smaller facility under Alternative C would emit about 39 percent of the pollutants relative to the facility proposed under Alternative B. However, the project proponents have committed to voluntarily employing mitigation measures that were developed with the National Park Service and U.S. Forest Service. These measures provide for the project proponents to invest in third-party capital improvements that would reduce sulfur dioxide (SO_2) in the region. The actions stipulated in the mitigation agreement would reduce SO_2 in the region by 110 percent of the proposed project emissions, and also include a commitment to controlling mercury emissions. Several trends influence the potential for project-related cumulative impacts on regional air quality, notably the increase in energy development projects and overall reductions of SO_2 from existing sources in the region. Modeling of cumulative air quality in the region indicates that the proposed project would not result in additive degradation to existing air quality because of SO_2 reductions on other projects.

The risk to human health under both action alternatives was analyzed, primarily as it is related to air emissions. As mentioned, the health-protective NAAQS criteria would not be exceeded under either alternative, and risks associated with residential exposure to air toxics would be below target health goals. The cumulative cancer risk is greater than USEPA's acceptable risk range; however, nearly all of that risk is due to existing concentrations of arsenic in soil and native vegetation and the contribution of arsenic from the operation of the proposed facility would be slight. Arsenic is naturally occurring in soil and background concentrations of arsenic commonly result in health risks in excess of USEPA's target health goals because of the toxicity of the chemical.

Potential impacts on both surface and ground water resources were assessed. General construction of the power plant site and associated facilities could indirectly affect surface water resources by increased stormwater runoff from the site carrying sediment and contamination loads into surface water and by contamination from construction equipment and activities infiltrating area surface waters. These impacts would be mitigated by measures including stormwater-runoff control, revegetation, and erosion control measures. Surface waters in the proposed project area could be impacted by filling, bridging, or the installation of culverts during construction activities. Commitments to reduce impacts on Waters of the U.S. would be made through the USACE permitting process in accordance with the Clean Water Act.

As part of both action alternatives, a well field would provide groundwater for use by the project - 4,500 af/yr (plus 450 af/yr for Navajo municipal uses) for Alternative B and 4,000 af/yr (plus 450 af/y for Navajo municipal uses) for Alternative C. A groundwater predictive computer model was constructed to evaluate the impacts on groundwater drawdown that would be associated with various combinations of well locations. It was concluded that the 10-foot drawdown contour line would reach one well registered by the New Mexico State Engineer's Office, but this level of drawdown would not constitute a significant adverse impact. The project proponents would continue to refine and calibrate the ground water model following construction, installation, testing, and logging of test and monitoring wells.

Initial studies to analyze samples from artesian well locations in Burnham and Sanostee Chapters were conducted to evaluate the potential for a relationship between those water sources and the Morrison aquifer. The Burnham Chapter artesian wells and the Morrison Aquifer analysis showed the two water sources have dissimilar geochemical "footprints" (MBE 2007a). The geochemical comparisons of samples from the Sanostee Chapter do not conclusively indicate a similarity or dissimilarity with respect to the geochemical "footprints" of either water source (MBE 2007b). Further sampling from test wells at the proposed water well field B will assist in determining classification of the water supply and any geochemical footprint between the Morrison Aquifer and seeps and springs, as well as provide more information on the depth and quality of groundwater.

Concern has been voiced by stakeholders about the disposal of coal combustion byproducts (CCBs) such as fly ash. A 2006 study by the National Academy of Sciences (NRC 2006) identified potential impacts on water quality from CCBs. The study suggested that, while there were no cases where water quality exceedences were directly attributable to the burial of CCBs, concern about proper management was warranted. Characterization of a mine CCB disposal site and of the materials placed in it was essential and the report recommended that characterization methods, including leach tests that are currently used by OSM permittees on the Navajo Nation, were the correct approach. The report suggested that SMCRA be amended to disseminate these methods throughout the industry. Reclamation plans need to specify how CCBs would be used and what sorts of covers are placed to prevent root invasion and uptake of trace elements. The report also suggested that monitoring plans be designed to target potential releases from CCB disposal areas, and establish performance standards. The current Navajo Mine SMCRA permit stipulates all of these conditions and has been approved by OSM and the Navajo Nation. It is expected that these stipulations would also exist in the permit for BNCC Lease Areas IV South and V.

The primary impacts on biological resources under both action alternatives would be associated with surface disturbance: vegetation removal and associated habitat loss or fragmentation, and changes to wildlife movement or corridors as a result of increased human activity. The types of impacts would be the same under both alternatives, but surface disturbance would be less under Alternative C due to the smaller footprint for facilities. Surface disturbance could also cause soil erosion and affect productivity, but mitigation measures and best management practices would be employed to reduce effects on soils. The biggest difference in surface disturbance between the two action alternatives is that coal would not be extracted from Lease Area V under Alternative C, and thus no mining operations would occur in that area as a result of the project. Impacts on biological resources would be mitigated through reclamation of temporary right-of-way and control of noxious and invasive weeds. Under both alternatives, impacts on federally listed or sensitive species would be localized and not likely to result in a loss of species viability nor cause a trend towards federal listing. Mitigation measures to protect the Mesa Verde cactus and avoid impacts on other species that may inhabit the area have been identified, including biological monitoring.

Both alternatives would cause small increases in mercury and selenium deposits that could reach the San Juan River or Morgan Lake; however, the change in water quality under both alternatives would be nominal relative to established standards. Mercury and selenium are bioaccumulative, meaning it accumulates in the tissues of aquatic wildlife. Unlike mercury, concentrations of selenium do not increase significantly (biomagnify) in animals at each level of the food chain going from prey to predator. Potential adverse impacts to area aquatic resources from incremental increases in mercury and selenium concentrations would be minor and long term. These impacts are not likely to result in a loss of species viability range-wide, nor cause a trend to Federal listing. The subsequent minor change in water quality may affect, is likely to adversely affect federally listed aquatic species (Colorado Pikeminnow and razorback sucker).

Impacts on land uses along the transmission lines could be avoided under both action alternatives by adjusting the tower locations to avoid sensitive land uses. Leased homesites on the mining lease areas would be displaced; Alternative B would displace 14 such homesites and Alternative C would displace 8. Holders of impacted homesites, grazing permits, and customary-use areas would be compensated for the value of disrupted livestock production and relocation or replacement of improvements to their grazing area or homesite in accordance with 13 Navajo Tribal Code Section 1401-1403, which requires compensation for all surface use.

The project would impact visual resources in the project area under both action alternatives. Residential viewers who would be able to view the facilities would be most affected by these changes. Although the stack height would be higher under Alternative B, the primary impact of the introduction of a new industrial facility in this location would be essentially the same for the two action alternatives.

Cultural resources in the project area would potentially be affected under both action alternatives. The residual effects (after mitigation) would be the same under both action alternatives. Mitigation would include sensitive placement of transmission towers to avoid cultural sites, and adherence to the measures outlined in the project-specific programmatic agreement regarding the treatment of cultural properties. In addition, potential adverse impacts on traditional cultural properties and Navajo burials would be addressed in accordance with the Navajo Nation's Policy for the Protection of *Jishchaa'*: Gravesites, Remains, and Funerary Items.

Environmental justice is a concern under all three alternatives due to the disproportionately minority and low-income population in the project area. Any deterioration of environmental quality would be disproportionately borne by this population. A key issue raised during scoping was air quality and associated effects on human health. The emissions of air pollutants would increase under both of the action alternatives; however, modeling indicates that the cumulative impacts would be below health-protective Federal standards. The cumulative impacts analysis identifies that this region is home to two other coal-fired power plants as well as other energy and mining projects. Thus, the local population is disproportionately impacted by the cumulative land use and visual effects of these facilities, which generate power for a much larger area.

Under both action alternatives, alternative locations for the transmission lines and the well field are also evaluated. Table ES-3 highlights the key distinctions in the infrastructure alternatives.

The primary difference between the two transmission line routes would be the use of Segment A versus Segment B (refer to Figure ES-1). Segment B would result in more surface disturbance than Segment A because of the longer route. This would translate to somewhat more stress on vegetation and habitat and fugitive dust from earthmoving activity during construction. Two residences would be within the right-of-way for Segment B, but fewer cultural sites are present. Potential impacts on cultural resources would be avoided through sensitive tower placement or mitigated in accordance with the programmatic agreement or the Navajo Nation's policy for the Protection of *Jishchaa'*.

The proposed well field area B would be co-located with the power plant lease area and a portion of the proposed transmission line. The alternative well field A would be located west of the power plant site and would require construction of a water pipeline to link the two facilities. Well field alternative A would require more surface disturbance than the alternative B well field, since a water pipeline would be required. Mesa Verde cactus populations were identified along the water pipeline corridor, increasing the possibility of impacts on this sensitive plant.

CONSULTATION AND COORDINATION

The analyses for this Draft EIS were completed in consultation with other agencies and the public. The BIA invited the Navajo Nation and six federal agencies to participate in the preparation of the Desert Rock Energy Project EIS; BIA received five acceptance responses, from (1) Navajo Nation, (2) USEPA, Region IX, (3) OSM, (4) BLM, and (5) USACE. The U.S. Fish and Wildlife Service was the sixth agency invited to be a cooperating agency; however, its participation occurred as part of consultation for Section 7 under the Endangered Species Act. The BIA has and will continue to work closely with the cooperating agencies throughout the EIS process.

BIA hosted a total of nine public scoping meetings, four in December 2004, and another five meetings in March 2005, which were attended by a total of 372 people in three states and numerous local communities. A detailed report of comments and issues heard from the public was developed and placed on the proponent's Desert Rock Energy Project web site at www.desertrockenergy.com, and an informational newsletter (also on the website) detailing the results of the scoping period and the remaining milestones for the EIS was distributed in September 2006.

In addition to the public scoping meetings, Desert Rock Energy Company LLC and its affiliate, Sithe Global, LLC, and DPA held over 50 meetings with local Navajo Chapter residents, Chapter officials, Navajo grazing officials and others in the communities adjacent to the proposed project from 2004 to the present. Comments and information obtained during those meetings were used in developing alternatives and in refining the preliminary project design. Additional information on this and other consultation and coordination efforts is provided in Chapter 6 and Appendix L.

BIA will conduct public hearings on the Draft EIS in June 2007, and comments received during the public review period will be considered and incorporated into the Final EIS.

AGENCIES' PREFERRED ALTERNATIVE

The BIA has proposed a preferred alternative, as follows:

Alternative B – Approval of the long-term lease, rights-of-way, and all associated components of the Desert Rock Energy Project.

Power Plant

Approval of the long-term business land lease between the Navajo Nation and DPA and the sublease between DPA and Desert Rock Energy Project LLC (BIA).

Approval of a National Pollutant Discharge Elimination System (NPDES) permit associated with the power plant (USEPA).

Approval of an individual permit for the proposed power plant under Section 404 of the Clean Water Act and to ensure compliance with the Clean Water Act (USACE).

Approval of water quality certification under Section 401 of the Clean Water Act for the power plant (Navajo Nation).

Coal Supply and Coal Combustion Byproduct (CCB) Disposal

Approval of a significant revision to the BNCC's NPDES permit associated with the mining and reclamation operations and coal preparation facilities (USEPA).

Approval of revisions to BNCC's current SMCRA permit to allow development of coal processing facilities, conveyance systems, and infrastructure in Area IV North of the BNCC lease area (OSM).

Approval of a future SMCRA permit to allow coal mining, CCB disposal, and reclamation activities in Area IV South and Area V of the BNCC lease area (OSM).

Approval of the Resource Recovery and Protection Plan or a Mine Plan of Operations for Area IV South and Area V of the BNCC lease area (BLM).

Approval of nationwide permits or an individual permit for under Section 404 of the Clean Water Act for the mining operations in Area IV South and Area V, and to ensure compliance with Section 404 of the Clean Water Act (USACE).

Approval of water quality certification under Section 401 of the Clean Water Act for the mining operations in Area IV South and Area V (Navajo Nation).

Water-Supply System

Approval to grant the rights-of-way requested for the water-supply system (BIA, Navajo Nation).

Approval of an individual permit for the proposed water-supply system including pipelines under Section 404 of the Clean Water Act and to ensure compliance with Section 404 of the Clean Water Act (USACE).

Approval for use of tribal water resources (Navajo Nation).

Transmission Line (Segments A, C, and D)

Approval to grant the right-of-way requested for the proposed transmission lines (BIA, Navajo Nation).

Approval of an individual permit for the proposed transmission lines under Section 404 of the Clean Water Act and to ensure compliance with Section 404 of the Clean Water Act (USACE).

Access Roads

Approval to grant the right-of-way requested for the proposed access roads (BIA, Navajo Nation).

Approval of an individual permit for the proposed access roads under Section 404 of the Clean Water Act and to ensure compliance with Section 404 of the Clean Water Act (USACE).