

Introduction

On December 18, 2007, Baja Wind U.S. Transmission, LLC (now, Energia Sierra Juarez U.S. Transmission, LLC [referred to herein as ESJ-U.S.]), a subsidiary of Sempra Generation (Sempra), applied to the U.S. Department of Energy (DOE) for a Presidential permit in accordance with Executive Orders (E.O.) 10485 and 12038, and 10 Code of Federal Regulations (CFR) §205.320 *et seq.*¹ The Presidential permit (OE Docket Number PP-334), if issued, would authorize ESJ-U.S. to construct, operate, maintain, and connect the United States (U.S.) portion of an electric transmission line that would cross the international border between the U.S. and Mexico, near the town of Jacumba, California (Figures 1-1 and 1-2). The U.S. portion of the double-circuit 230-kilovolt (kV) or single-circuit 500-kV transmission line (referred to herein as the ESJ U.S. Transmission Line project) would be 0.65 mile (1.05 kilometers) in length, and would transmit up to 1,250 megawatts (MW) of wind-generated electricity (Figure 1-1).

The Presidential permit (OE Docket Number PP-334), if issued, would authorize ESJ-U.S. to construct, operate, maintain, and connect the United States (U.S.) portion of an electric transmission line that would cross the international border between the U.S. and Mexico, near the town of Jacumba, California. A project overview is provided below, and additional project details are provided in Section 2.0 (Proposed Action and Alternatives). Project details are based on the ESJ-U.S. December 18, 2007, application letter to DOE, as amended on March 19, 2008, and August 25, 2008. Additional project details were provided by ESJ-U.S. to the County of San Diego during 2009; these materials were also used in this Environmental Impact Statement (EIS). ESJ-U.S. application documents are available on the project Web site at <http://www.ESJProjectEIS.org>, and on the DOE Web site at http://www.oe.energy.gov/permits_pending.htm (see PP-334).

DOE has determined that issuance of a Presidential permit would constitute a major federal action that may have a significant impact upon the environment within the context of the National Environmental Policy Act of 1969 (NEPA). DOE prepared this draft EIS in compliance with the requirements of NEPA, the Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 Code of Federal Regulations [CFR] 1500–1508), and with its NEPA implementing procedures (10 CFR Part 1021).

¹ According to Sempra's August 28, 2009, letter to DOE (available on the project Web site), in its initial application, Sempra made reference to Baja Wind, S. de R.L. de C.V. (Baja Wind), a subsidiary of Sempra Energy Mexico, as the entity undertaking the development in Mexico of the La Rumorosa Wind Energy Project. Baja Wind, S. de R.L. de C.V. was renamed Energia Sierra Juarez S. de R.L. de C.V. (ESJ Wind) to more accurately reflect the location of the project. Sempra Energy no longer refers to the project as La Rumorosa Wind or any such derivatives and instead uses the term Energia Sierra Juarez, ESJ, or ESJ Wind. Energia Sierra Juarez S. de R.L. de C.V. remains a subsidiary of Sempra Energy Mexico.

This draft EIS was prepared to meet the following key objectives:

- Identify and assess potential impacts on the natural and human environment that would result from implementation of the proposed project in the U.S.;
- Describe and evaluate reasonable alternatives to the proposed project in the U.S. that would avoid or minimize adverse effects to the environment, including the No Action Alternative; and
- Identify specific mitigation measures, as appropriate, to minimize environmental impacts.

For the purposes of this EIS, the term “ESJ U.S. Transmission Line project” or “ESJ U.S. project” refers to all ESJ-U.S. project-related transmission line activities within the U.S, and the term “ESJ Wind project” refers to all project-related activities within Mexico.²

Within the U.S., the transmission line is proposed to be constructed on private land. There would be no construction on federal land, and DOE is the only federal agency with direct permitting authority over the proposed project.

A Major Use permit would be required from the County of San Diego; in July 2009, ESJ-U.S. applied to the County for the permit. Additional application information was filed with the County in November 2009 and February 2010.

As a cooperating agency in this NEPA EIS, the County of San Diego has provided information to DOE related to topics within the County’s jurisdiction and expertise. The County does not expect to use this EIS to help fulfill its obligations under the California Environmental Quality Act (CEQA).

1.1 BACKGROUND

1.1.1 Overview of the ESJ U.S. Transmission Line Project Presidential Permit Process

Table 1.1-1 provides a timeline for the project that lists the milestones and sequence of events for ESJ-U.S. and DOE actions that pertain to the Presidential permit review, including the environmental review process that led to the publication of this EIS.

1.1.2 Description of the ESJ U.S. Transmission Line Project

The ESJ U.S. Transmission Line project is described in the December 18, 2007, application letter to DOE as amended on March 19, 2008, and August 25, 2008. (All of these documents are available on the project Web site and the DOE Web site).

ESJ-U.S. would construct either a double-circuit 230-kilovolt (kV) transmission line or a single-circuit 500-kV electric transmission line to connect to the Imperial Valley-Miguel segment of the

² The term “transmission” is used throughout this document for purposes of clarity. It is understood that, in accordance with Federal Energy Regulatory Commission (FERC) terminology, the proposed transmission line would be a Generator-tie line (“Gen-Tie”). As such, the transmission line, if approved and constructed, would not be required to provide open access transmission capability, as defined in applicable FERC regulations.

Southwest Powerlink³ (SWPL) 500-kV transmission line and provide up to 1250 megawatts (MW) of energy from renewable energy generators to be located in the general vicinity of La Rumorosa, Northern Baja California, Mexico. Delivery within California of the output of ESJ Wind turbines in Mexico would be scheduled by the California Independent System Operator (Cal-ISO)⁴.

**Table 1.1-1
ESJ-U.S. Application Time Line**

Date	Activity
December 18, 2007	DOE received Baja Wind (now ESJ-U.S.) project application
March 19, 2008	DOE received amended Baja Wind (now ESJ-U.S.) project application, including additional information on the 230-kV alternate transmission line design
August 4, 2008	DOE issued <i>Federal Register</i> Notice of Intent (NOI) to Prepare an Environmental Assessment (EA)
August 25, 2008	DOE received second letter amendment to the Baja Wind project application to change the project name from Baja Wind U.S. Transmission, LLC, to Energia Sierra Juarez U.S. Transmission, LLC (ESJ-U.S.)
August 26, 2008	Public scoping meetings in Jacumba, California
September 3, 2008	Scoping period ended
February 25, 2009	DOE issued <i>Federal Register</i> NOI to Prepare an EIS
March 27, 2009	End of period to submit additional comments on the scope of the EIS
September 22, 2009	Scoping Report published and available on the ESJ-U.S. project website

The proposed transmission line would have a total length of approximately 1.65 miles (2.65 kilometers [km]), including both the U.S. and Mexican portions of the line. The proposed line would be constructed on lattice towers or steel monopoles, extending south from the point of interconnection with SWPL for about 0.65 mile (1.05 km) to the U.S.-Mexico international

³ San Diego Gas and Electric Company's project documents state: "San Diego Gas & Electric's (SDG&E) single 500-kV interconnection to the grid is the Southwest PowerLink (SWPL), a 500-kV transmission line connecting the Palo Verde Nuclear Generating Station in Arizona and SDG&E's Miguel Substation in California. The SWPL is owned jointly by SDG&E, Arizona Public Service, and the Imperial Irrigation District." (http://www.sdge.com/sunrisepowerlink/info/PEA/Chapter_1/Chapter1_executive_summary.pdf)

⁴ The Cal-ISO is the independent system operator of California's wholesale power grid, maintaining reliability and directing the flow of electric power along the long-distance, high voltage power lines that connect California with neighboring states, as well as Mexico and British Columbia. The Cal-ISO evaluates energy schedules in the so-called "day-ahead" and "hour-ahead" markets and allocates the available transmission capacity to support the implementation of these schedules.

border. From the international border, the proposed line would continue south for approximately 1 mile (1.6 km) to its first point of interconnection inside Mexico. Both the double-circuit 230-kV and single-circuit 500-kV facilities would require connection to a new substation that would be built in the U.S. by San Diego Gas and Electric Company (SDG&E) as parts of its East County (ECO) Substation Project. If the ESJ U.S. transmission line is a 230-kV facility, the 230/500 kV transformation would occur at that new substation. If the ESJ U.S. transmission line is a 500-kV facility, a substation would be required in Mexico.

The proposed action considered in this EIS is the issuance of a Presidential permit that would authorize the U.S. portion of the proposed transmission line. In addition, the EIS considers potential impacts within the U.S. from connected transmission facilities in Mexico and from the associated ESJ Wind project in Mexico (e.g., visual impacts in the U.S. from transmission lines and wind turbine facilities in Mexico or dust from construction in Mexico entering the U.S.). The ESJ U.S. Transmission Line project transmission line would include up to five support structures, either monopole towers or steel lattice towers similar to the existing 500-kV SWPL structures. Towers would be spaced approximately 1,500 feet (457 meters [m]) apart. The towers or poles would be 150 feet (46 m) tall, except that if the ESJ U.S. transmission line is a 500-kV facility the monopoles would be 170 feet (52 m) tall.

The ECO Substation switchyards would occupy approximately 58 acres (23.5 hectares [ha]) between the ESJ U.S. Transmission Line project and Old Highway 80, in close proximity to the existing SWPL. The specific design, location, and acreage requirement for the ECO Substation switchyards are expected to be determined as a result of a decision process between SDG&E and the California Public Utilities Commission (CPUC). According to SDG&E's application to the CPUC, the purpose of the SDG&E ECO Substation Project is to meet several objectives identified by SDG&E and CPUC.⁵ These objectives include: provide an interconnection hub for various renewable generation sources, thus eliminating the need for multiple switching stations along SWPL; expand the interconnection capability of the southeastern transmission system to accommodate planned generation in the region, as well as future as-yet-unplanned generation; improve control, increase operational flexibility, and enhance the reliability of the regional transmission system; increase the reliability of electrical service for Boulevard, Jacumba, and other surrounding communities; and, maximize the use of existing utility rights-of-way and access roads. The proposed ECO Substation switchyards are not a part of the ESJ U.S. Transmission Line project, but they are considered a connected action for the purpose of this EIS because the ESJ U.S. Transmission Line would interconnect directly to this facility. Additional infrastructure that SDG&E proposes as a part of the ECO Substation Project includes a loop-in to SWPL; an approximately 13.3 mile (21.4 km) 138-kV transmission line to Boulevard Substation; and associated upgrades to the Boulevard Substation (located west of the project area near the community of Boulevard). It is DOE's position that only the first points of interconnection with the electrical transmission grid (i.e., SDG&E's ECO Substation switchyard facility and SWPL loop-in) are connected actions; therefore, the additional SDG&E ECO Substation Project components beyond the switchyards and loop-in are not considered connected actions to the ESJ U.S. Transmission Line project.

⁵ The ECO Substation application documents, including the Proponent's Environmental Assessment (PEA) is available online at: http://www.cpuc.ca.gov/environment/info/dudek/ECOSUB/PEA_ECOSUB.htm

The ESJ Wind project in Mexico would be constructed in phases, with up to 52 wind turbines constructed in Phase 1, resulting in up to 130 MW of power (assuming 2.5 MW per turbine). Phase 1 would be constructed on the furthest north land leased by ESJ (an area referred to as the Jacume lease area), north of the town of La Rumorosa, Mexico. Expansion of the ESJ Wind project in Mexico would generate up to 1,000 MW of additional power.⁶ The timing and location for installation of subsequent phases have not been determined, but current leaseholds would place the location of those subsequent phases south of the town of La Rumorosa. The location and scale of additional development is considered in the EIS to the extent that such development could result in effects in the U.S.

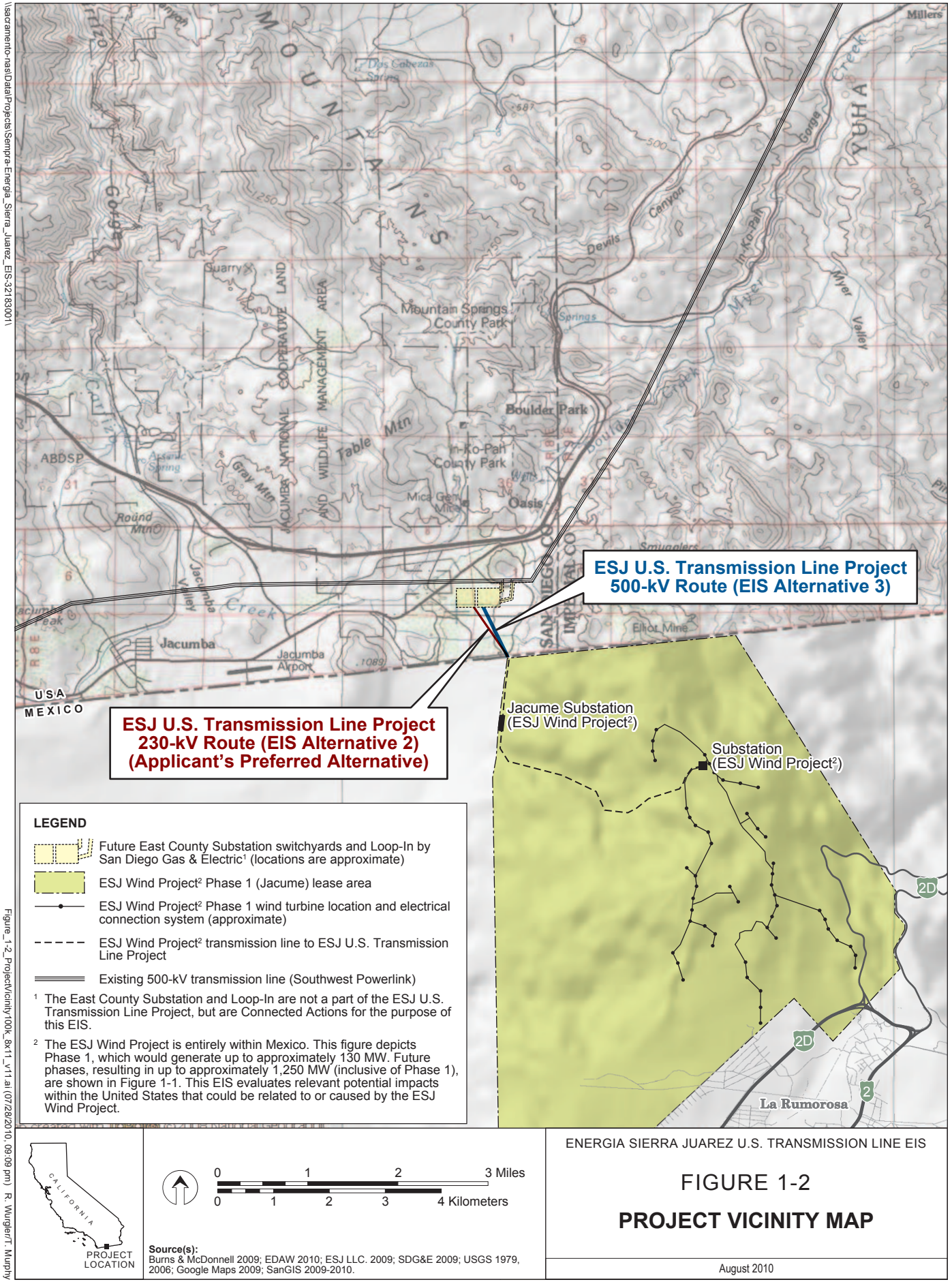
Figure 1-1 depicts the regional location of the ESJ U.S. Transmission Line project. Figure 1-2 provides a map of both the ESJ U.S. Transmission Line project and Phase 1 of the ESJ Wind project locations. The wind turbine locations shown on Figure 1-2 are preliminary and subject to refinement based on ongoing siting studies. The wind turbines nearest to the U.S. would be approximately 0.7 mile (1.1 km) south of the U.S. border. Section 2 provides additional details of the ESJ U.S. Transmission Line project components that are proposed to be constructed in the U.S.

1.2 PURPOSE AND NEED

ESJ-U.S. has applied to DOE for a Presidential permit for its project. The permit would allow the company to construct, operate, maintain, and connect approximately 0.65 mile (1.05 km) of new single-circuit 500-kV or double-circuit 230-kV transmission line in the U.S. that would cross the U.S.-Mexico border to connect with transmission to be built in Mexico.

The purpose and need for DOE's action is to respond to the ESJ-U.S. request for a Presidential permit. DOE may issue or amend a Presidential permit if it determines that the action is in the public interest and after obtaining favorable recommendations from the U.S. Departments of State and Defense. In determining whether a proposed action is in the public interest, DOE considers the impact of the proposed action on the environment pursuant to NEPA, the proposed action's impact on the reliability of the U.S. electric power supply system, and any other factors that DOE may consider relevant. If DOE determines that granting a Presidential permit is in the public interest, the information contained in the EIS will provide a basis upon which DOE decides which alternative(s) to authorize and which potential mitigation measures, if any, are appropriate for inclusion as conditions of the permit. A decision in the form of a Record of Decision (ROD) will be issued no sooner than 30 days after the U.S. Environmental Protection Agency's (EPA) publication of a "Notice of Availability of the Final EIS" in the Federal Register. The Presidential permit, if approved, would be issued subsequent to the ROD.

⁶ According to Sempra's August 28, 2009, letter to DOE, ESJ-U.S. requests that the import capacity in the Presidential permit be limited to the physical capacity of the transmission line (1,250 MW) and that power on this line be limited to renewable energy projects. To date, Sempra has submitted three interconnection requests to Cal-ISO, totaling 1,120 MW. Although it is possible to submit interconnection requests to completely fill the physical capacity of the transmission line, interconnection requests to the Cal-ISO are very expensive and have a limited shelf life. It is unclear how long it would take for the ESJ Wind project to reach the 1,120 MW that it currently has in interconnection requests, and therefore Sempra concluded that it is not prudent to submit additional requests to completely fill the line's capacity.



I:\sacramento-nasa\Data\Projects\Sempre_Energia_Sierra_Juarez_EIS-321830011

Figure 1-2: Project Vicinity Map. 8x11_V11.ai (07/28/2010, 09:09 pm) R. Wang/RT/Mapity

**ESJ U.S. Transmission Line Project
230-kV Route (EIS Alternative 2)
(Applicant's Preferred Alternative)**

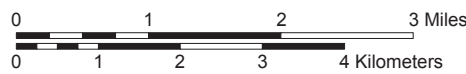
**ESJ U.S. Transmission Line Project
500-kV Route (EIS Alternative 3)**

LEGEND

- Future East County Substation switchyards and Loop-In by San Diego Gas & Electric¹ (locations are approximate)
- ESJ Wind Project² Phase 1 (Jacume) lease area
- ESJ Wind Project² Phase 1 wind turbine location and electrical connection system (approximate)
- ESJ Wind Project² transmission line to ESJ U.S. Transmission Line Project
- Existing 500-kV transmission line (Southwest Powerlink)

¹ The East County Substation and Loop-In are not a part of the ESJ U.S. Transmission Line Project, but are Connected Actions for the purpose of this EIS.

² The ESJ Wind Project is entirely within Mexico. This figure depicts Phase 1, which would generate up to approximately 130 MW. Future phases, resulting in up to approximately 1,250 MW (inclusive of Phase 1), are shown in Figure 1-1. This EIS evaluates relevant potential impacts within the United States that could be related to or caused by the ESJ Wind Project.



Source(s):
Burns & McDonnell 2009; EDAW 2010; ESJ LLC. 2009; SDG&E 2009; USGS 1979, 2006; Google Maps 2009; SanGIS 2009-2010.

ENERGIA SIERRA JUAREZ U.S. TRANSMISSION LINE EIS

**FIGURE 1-2
PROJECT VICINITY MAP**

August 2010

1.3 ESJ-U.S. PROJECT OBJECTIVES

The ESJ-U.S. stated objective for the proposed transmission line is to transport electrical power generated by the ESJ Wind project in Mexico to the U.S. In its December 18, 2007 application, ESJ-U.S. indicated that all power generated by its proposed ESJ Wind project would be exported to the U.S. and that, “...*the proposed transmission line is expected to reduce the region’s dependence upon conventional fossil fuel fired generation plants, and improve the region’s ability to meet future electrical energy requirements.* The ESJ projects would also help California utilities meet the renewable portfolio standards specified in California Executive Order S-14-08, which requires that by the end of 2020, 33% of retail electricity sales be generated from renewable energy sources.⁷

1.4 COOPERATING AGENCY

On February 1, 2010, the County of San Diego accepted DOE’s invitation to be a cooperating agency for preparation of this EIS. Separate from the DOE Presidential permit application process, ESJ-U.S. has applied to the County of San Diego for a Major Use Permit (MUP) for the project, and the County must review the environmental impacts of that permit in accordance with CEQA. As a responsible agency under CEQA, the County of San Diego expects to use the East County (ECO) Substation Environmental Impact Report (EIR)/EIS for its permitting processes. The U.S. Bureau of Land Management and the California Public Utilities Commission (CPUC) are preparing the ECO Substation EIR/EIS to address San Diego Gas and Electric Company’s [SDG&E] proposed ECO Substation project (including switchyards and a loop-in [connection] to the Southwest Power Link [SWPL]), Iberdrola Renewables Tule Wind Energy project, and the ESJ U.S. Transmission Line project. Following certification of the EIR/EIS by the CPUC, the County would use the ECO Substation EIR/EIS to make the appropriate CEQA findings for its discretionary action under CEQA. The County of San Diego Planning Commission would consider two separate MUPs as follows: the first MUP would be for groundwater extraction (Section 6550 of the County’s Zoning Ordinance) from the Jacumba Community Service District (for use of groundwater primarily during project construction); the second MUP would be for the ESJ U.S. Transmission Line project, for Major Impact Service Utility (Section 1350 of the County’s Zoning Ordinance). Other County permits and approvals that ESJ-U.S. would need to build the project include County right-of-way permits for construction, excavation, and road encroachment; grading permit; and improvement plans.

As a cooperating agency in this NEPA EIS, the County of San Diego has provided information to DOE related to topics within the County’s jurisdiction and expertise. The County does not expect to use this EIS to help fulfill its obligations under CEQA.

⁷ <http://gov.ca.gov/executive-order/11072/>

1.5 PUBLIC PARTICIPATION AND THE NEPA PROCESS

1.5.1 Public Scoping and Comment Period

DOE initially determined that the appropriate level of environmental review under NEPA for considering whether to grant the requested Presidential permit was an Environmental Assessment (EA). On August 4, 2008, DOE published in the Federal Register its *Notice of Intent to Prepare an Environmental Assessment and to Conduct Public Scoping Meetings; Baja Wind U.S. Transmission, LLC* (73 FR 45218) (NOI). The NOI explained that DOE would be assessing potential environmental impacts and issues associated with the proposed project. The NOI was sent to interested parties, including federal, state, and local officials; agency representatives; tribes; conservation organizations; local libraries and newspapers; and local stakeholder organizations and individuals in the vicinity of the proposed transmission line. Issuance of the EA NOI opened a 30-day public comment period that closed September 3, 2008. The NOI also stated that, “[if] at any time during preparation of the EA DOE determines that an Environmental Impact Statement (EIS) rather than an EA is needed, DOE will issue a Notice of Intent to prepare an EIS in the *Federal Register*. In that case, this scoping process will serve as the scoping process that normally would follow a Notice of Intent to prepare an EIS. Accordingly, DOE will consider any comments on the scope of the EA received during this scoping process in preparing such an EIS.”

DOE conducted two scoping meetings in San Diego County, California, during the public comment period following the NOI for EA preparation. Both meetings were held in the town of Jacumba on August 26, 2008. The meetings provided the public with the opportunity to learn more about the proposed project and to provide comments on potential environmental issues associated with the project. A total of 18 people spoke at the meetings, and their comments were transcribed by a court reporter. Transcripts of the scoping meetings are posted on the project Web site and on the DOE Web site. In addition, DOE received scoping comments in the form of eight letters from private citizens, government agencies, and non-governmental organizations. All comments received are available on the project Web site.

The following key issues were identified during the scoping process:

- visual impacts;
- avian mortality;
- impacts on protected, threatened, endangered, or sensitive species of animals or plants, or their critical habitats;
- impacts on cultural or historic resources;
- impacts on human health and safety, with particular focus on wildfire hazards due to presence of the proposed transmission line;
- impacts on air quality and water resources;
- impacts on land use; and
- impacts from development of wind generation.

In addition, several commenters stated that an EA was not adequate, and that an EIS should be prepared.

Based on these comments and the potential for significant impacts, DOE determined that an EIS would be the more appropriate NEPA document. On February 25, 2009, DOE issued in the *Federal Register* a second NOI: *Notice of Intent to Prepare an Environmental Impact Statement; Energia Sierra Juarez U.S. Transmission, LLC* (74 FR 8517). The EIS NOI was also sent to federal, state, and local officials; agency representatives; tribes; conservation organizations; local libraries and newspapers; and local stakeholder organizations and individuals in the vicinity of the proposed project. The EIS NOI did not announce the opening of an additional scoping period, but it did indicate that any additional comments received by March 27, 2009, would be considered by DOE in defining the scope of the EIS, and that comments received or postmarked after that date would be considered to the extent practicable. In response to the EIS NOI, DOE received seven letters or emails from private citizens, government agencies, and non-governmental organizations, including one letter from a Native American Tribe (Quechan Tribe). A Scoping Report was prepared to summarize the scoping comments. The EIS NOI and Scoping Report are provided in Appendix A, and all comments received in response to the two NOIs are available on the project Web site.

DOE also sent letters to various federal and California state agencies specifically requesting their input. Several agencies have responded to these letters, providing information for the EIS, and/or indicating an interest to review the draft EIS and participate in project meetings. All comments received to date in response to the agency letters are available on the project Web site.

Native American Consultation

Native American consultation has occurred through responses to the NOI. In addition, pursuant to regulatory guidance (E.O. 13084), DOE contacted the appropriate Native American groups to offer them the opportunity to consult with DOE regarding the ESJ U.S. project on a government-to-government basis. A total of 13 Native American contacts were made based on the results of a sacred lands search for the project corridor from the Native American Heritage Commission (NAHC). The following discussion summarizes the results of consultations to date.

On March 9, 2009, DOE received an email from the Quechan Tribe in response to the NOI. In its response letter dated April 14, 2009, DOE acknowledged the Tribe's concern about potential cumulative impacts from several projects within the Quechan Indian Tribe's traditional land area, and invited the Tribe to participate in government-to-government consultation. In its initial correspondence to DOE, the Tribe indicated that the project is within the Quechan Tribe's traditional land area and there are several resources affiliated with the Tribe in the area. The Tribe requested that they be allowed to participate in the cultural resource evaluation. They also stated that the EIS should consider the cultural and biological resources within the project area and in the natural landscape. After further correspondence between DOE representatives and the Tribe, a Quechan representative indicated on November 30, 2009, that upon further review of the project location, the project lies outside of the traditional land area of the Quechan, and that the Quechan would defer comments on this project to the Kumeyaay Nation and support that Tribe as needed.

On June 29, 2009, DOE received a letter from the Campo Band of the Kumeyaay Nation in response to DOE's May 28, 2009, letter. The Campo Band requested a consultation meeting between the Campo Band and DOE on this project to discuss cultural resources and historic preservation activities. A DOE representative met with the Campo Band on September 16, 2009, to discuss the project and provide for further coordination during EIS preparation. DOE's consultation with the Campo Band did not identify any significant cultural resources issues. DOE will continue to coordinate with the Campo Band to the extent appropriate during the EIS process.

Appendix D provides copies of consultation letters regarding the preparation of this EIS that were sent to and received from Native American Tribes. This correspondence is also posted on the project Web site.

1.5.1.1 Issues Within the Scope of the EIS

The issues summarized below were raised by commenters during scoping and are addressed in the draft EIS.

Visual Resources. Commenters raised concerns about changes in the visual character of the project area due to the placement of industrial facilities in a rural, open space setting. Specific concerns were raised regarding the daytime and nighttime views of the proposed wind turbines along prominent ridgelines of the Sierra Juarez Mountains; the proposed ESJ U.S. Transmission Line; and other planned projects that would place new infrastructure in the project area, including the ECO Substation switchyards and related transmission line improvements. These issues are addressed in Section 3.2 (Visual Resources).

Birds. Commenters raised concerns about avian mortality due to transmission line and wind turbine construction and operation. They also suggested that birds protected by the Migratory Bird Treaty Act (MBTA) should be addressed in the impact analysis. These issues are addressed in Section 3.1 (Biological Resources).

Protected or Sensitive Species and Critical Habitats. Commenters suggested that the analysis should discuss critical habitat and wildlife movement for protected species in the project area, including Peninsular bighorn sheep, Quino checkerspot butterfly, and California condor; and include measures to mitigate potential impacts to these species and their habitats. Commenters also expressed concerns related to potential impacts on present and potential future preserve lands within the Las Californias Binational Conservation Initiative and suggested avoidance of land that would be necessary to meet preserve objectives. These issues are addressed in Section 3.1 (Biological Resources).

Cultural and Historic Resources. Cultural resource concerns raised by commenters related to potential disturbance to buried archeological resources in the project area and consideration of the broader cultural landscape. DOE has consulted with the Quechan Tribe and the Campo Band. These issues are addressed in Section 3.5 (Cultural Resources).

Human Health and Safety, Fire Hazards, and Homeland Security. Commenters suggested that the project would introduce a new fire hazard area in a remote area of existing high fire hazards. Concerns were also expressed regarding increased electric and magnetic fields, road

construction that could lead to increased illegal activity related to the U.S.-Mexico border, and vulnerability of the transmission line to damage due to illegal border activity. In accordance with DOE NEPA guidance, the EIS also considers potential consequences of intentional destructive acts such as sabotage and terrorism. These issues are addressed in Section 3.8 (Public Health and Safety) and Section 3.9 (Fire and Fuels Management).

Air Quality. Commenters suggested that the analysis address traffic-induced dust due to increased off-road vehicle traffic and increased U.S. Border Patrol traffic, as well as greenhouse gas emissions. These issues are addressed in Section 3.10 (Air Quality).

Water Resources. Commenters indicated that groundwater is scarce in the project area and suggested that the analysis should address groundwater impacts and groundwater impact minimization measures. These issues are addressed in Section 3.11 (Water Resources).

Land Use. Commenters indicated that the County of San Diego is in the process of updating its General Plan, and the County intends for the project area to remain rural. The comments suggested that the ESJ U.S. Transmission Line project and other proposed development projects could alter the rural character of the project area by introducing industrial development, and that these projects should be reviewed for consistency with the applicable General Plan (including the Mountain Empire Subregional Plan), codes and ordinances. These issues are addressed in Section 3.3 (Land Use).

Connected Actions. Commenters asked for the EIS to include assessment of the impacts of SDG&E's ECO Substation project as a connected action. The proposed SDG&E ECO Substation Project has several elements, including the ECO Substation switchyards, a loop-in to the existing SWPL transmission line; an approximately 13.3-mile (21.4 km) 138-kV transmission line to Boulevard Substation; and associated upgrades to the Boulevard Substation (located west of the project area near the community of Boulevard). DOE has assessed the ECO Substation switchyards and SWPL Loop-In components of the project as connected actions because the ESJ U.S. Transmission Line would interconnect directly to the ECO Substation facility and Loop-In. These issues are addressed in Section 4.0 (Connected Actions - ECO Substation and SWPL Loop-In).

Refer to the Scoping Report in Appendix A for additional discussion of issues raised. The Scoping Report and the actual comments are available on the project Web site at <http://ESJProjectEIS.org>.

1.5.1.2 Issues Outside the Scope of the EIS

DOE has determined that the following issues that were raised by commenters during scoping are outside the scope of the EIS.

Emergency Outage Plans. Commenters requested that emergency outage plans be examined as part of the EIS, particularly in relation to homeland security issues. The development of emergency outage response plans is the purview of local public safety officials and is outside the scope of the EIS. Also, outside of the NEPA process, DOE will perform an electric reliability study to ensure that the existing U.S. power supply system would remain fully operational upon the sudden loss of power, regardless of the cause of the outage.

Impacts in Mexico. Several commenters asked DOE to evaluate the impacts associated with the construction and operation of wind turbines and associated development activities on the environment in Mexico, not just in the U.S. DOE does not agree that such an analysis is appropriate for several reasons.

First, the Federal action evaluated in the EIS is not the building of the wind turbines, but the permitting of the construction, operation, maintenance, and connection of an electric transmission facility at the U.S. international border.

Secondly, NEPA does not require an analysis of environmental impacts that occur within another sovereign nation that result from actions approved by that sovereign nation. E.O. 12114 (January 4, 1979) requires Federal agencies to prepare an analysis of significant impacts from a Federal action in certain defined circumstances and exempts agencies from preparing analyses in others. The E.O. does not require Federal agencies to evaluate impacts outside the U.S. when the foreign nation is participating with the U.S. or is otherwise involved in the action [Section 2-3(b)]. The Mexican government has been involved in the evaluations of the environmental impacts associated with the wind project in Mexico. Further, the ESJ Wind project would be constructed in accordance with all applicable Mexican laws, standards, rules, and regulations. The agencies in Mexico with potential jurisdiction over the activities proposed within Mexico include the Comisión Federal de Electricidad, Comisión Reguladora de Energía, Secretaría de Medio Ambiente y Recursos Naturales, and Instituto Nacional de Ecología.

Finally, the Federal action would not affect the global commons (e.g., outer space, Antarctica), and the Federal action would not produce a product, emission, or effluent that is “prohibited or strictly regulated by Federal law in the U.S. because its toxic effects on the environment create a serious public health risk” or which involves regulated or prohibited radioactive materials.

Sunrise Powerlink Project. Several commenters suggested that SDG&E’s application for construction of the Sunrise Powerlink project should be assessed as a connected action to the ESJ U.S. Transmission Line project. The CEQ NEPA regulations require EISs to assess the environmental impacts of connected actions. Connected actions are actions closely related to the proposed action addressed in an EIS. They are further defined (in 40 CFR 1508.25(a)⁸) as actions that:

- Automatically trigger other actions that may require environmental impact statements;
- Cannot or will not proceed unless other actions are taken previously or simultaneously; or
- Are interdependent parts of a larger action and depend on the larger action for their justification.

Commenters suggested that the Sunrise Powerlink is a connected action because the ESJ U.S. Transmission Line project would depend upon construction of the Sunrise Powerlink to provide adequate electrical transmission line capacity (i.e., due to the currently inadequate capacity of the existing SWPL). While the Sunrise Powerlink and ESJ U.S. Transmission Line projects are complementary in that they would facilitate the operation of the electricity-generating facilities

⁸ <http://ceq.hss.doe.gov/nepa/regs/ceq/1508.htm#1508.25>

in Mexico, they are independent actions that serve distinct objectives and that can proceed separately.⁹ The Sunrise Powerlink was the subject of a separate EIR/EIS prepared for BLM under NEPA and the CPUC under CEQA. The Sunrise Powerlink is planned for operation in 2012. In this EIS, impacts of the Sunrise Powerlink are considered as cumulative impacts for the ESJ U.S. Transmission Line project.

SDG&E ECO Substation Project Additional Infrastructure. As noted above, the proposed SDG&E ECO Substation Project has several elements, including the ECO Substation switchyards, a loop-in to SWPL, an approximately 13.3-mile (21.4 km) 138-kV transmission line to Boulevard Substation; and associated upgrades to the Boulevard Substation. DOE considers the ECO Substation switchyards and the loop-in to SWPL to be connected actions for the purpose of this EIS because the ESJ U.S. Transmission Line would interconnect directly to this facility. Several commenters suggested that additional proposed infrastructure associated with SDG&E's application for construction of the ECO Substation Project should also be assessed as connected actions to the ESJ U.S. Transmission Line project because the ESJ U.S. Transmission Line project would depend upon interconnection to the SWPL and/or to Sunrise Powerlink. Only the first point of interconnection with the U.S. electrical transmission grid is a connected action for the ESJ U.S. Transmission Line project. The additional SDG&E ECO Substation Project components beyond the switchyards and loop-in are independent of the ESJ U.S. Transmission Line project; that is, the ESJ U.S. Transmission Line project does not depend on these components, and these components are neither triggered by nor dependent on the project. Therefore, these elements are not connected actions for the purpose of this EIS, but are considered as potential sources of cumulative impacts.

Cumulative Impacts from Speculative Future Renewable Energy Projects. Commenters requested that the cumulative impact analysis in the EIS consider the impacts of numerous potential renewable energy projects, particularly projects to be sited in northern Baja, Mexico, that have been announced by various developers or mentioned in media accounts. Guidance from the CEQ on conducting cumulative impact assessments recommends that the consideration of impacts from future projects be limited to projects that are reasonably foreseeable. DOE has limited its identification of reasonably foreseeable projects to those proposals with the potential

⁹ In its May 30, 2008, letter to DOE, Sempra provided the following explanation regarding the relationship between the ESJ U.S. and Sunrise Powerlink projects:

Although one of the attributes of the Sunrise project is that it would address the previously discussed SPS [Special Protection System] limitation, this would benefit all potential generators seeking interconnection to SWPL or the Imperial Valley Substation, including renewable projects located in Imperial Valley. These Sunrise benefits will occur regardless of whether the generation associated with Baja Wind U.S. [now ESJ] is built or not. Thus, the decision to build the Sunrise project will be made regardless of the potential existence or not of Baja Wind U.S. [now ESJ] or its associated generation.

Conversely, if Sunrise is not built, Sempra Generation would seek to have the CAISO [California Independent System Operator] and SDG&E evaluate alternative transmission to accommodate Sempra Generation's interconnection requests. Order No. 888 requires transmission facility owners to offer transmission to generators to their interconnection to grid. The Sunrise and Baja Wind [now ESJ] projects have different purposes and justifications, are proposed by different entities, have independent utility and different triggers and actions are necessary to implement projects. In conclusion, the Sunrise and Baja Wind U.S. [now ESJ] projects are completely independent projects and decisions to proceed with each project will be made separately and independently of the outcome of the other.

to be executed within the next 10 years; that is, they are funded for future implementation or are included in firm near-term plans. Projects predicted to be developed after 10 years are generally presumed to be speculative and thus are not reasonably foreseeable.

Use of the Proposed Transmission Line for Non-Renewable Energy Projects. Commenters expressed concern that the proposed transmission line could eventually be used to support non-renewable energy generation projects in Mexico that would have additional effects in the U.S. (e.g., impacts due to the construction and operation of natural gas-fired power plants in Mexico that might use the proposed transmission line to export electricity to the U.S.). Commenters pointed out that Sempra has constructed other infrastructure in Mexico near the project area (including a natural gas pipeline from its Natural Gas Liquids facility in Ensenada and a water pipeline) that could facilitate such development. ESJ-U.S. has indicated to DOE that the proposed electrical transmission line is intended to be used only for renewable generation. Accordingly, any alternative future use of the transmission corridor would require a new or revised Presidential permit application to be filed with DOE and would be subject to a separate NEPA review. Therefore, the possible use of the line for non-renewable energy is outside the scope of this EIS.

1.5.2 Public Review of the Draft EIS

The draft EIS has been distributed to interested agencies, organizations, and the general public for review and comment. It is also available on the ESJ U.S. project Web site: <http://www.ESJProjectEIS.org/index.htm>. Notification of draft EIS availability has been sent to those on the project Web site mailing list. DOE will hold public hearings on the draft EIS during the comment period. The dates and times of the hearings will be announced on the project Web site and in local news media. The hearings will provide interested parties with an additional opportunity to comment on the draft EIS and to participate in the decision-making process. The hearings will include a presentation by DOE and an oral comment session in which attendees will be invited to formally enter their comments on the draft EIS into the public record. Transcripts of the public hearings will be recorded by a court reporter and will be available on the project Web site and in the final EIS.

1.5.3 Final EIS and Record of Decision

After the end of the public comment period on the draft EIS, DOE, in coordination with the County of San Diego (cooperating agency), will consider the comments received and prepare a final EIS. The final EIS will provide responses to the comments received on the draft EIS, identify DOE's preferred alternative, and include any changes to the draft EIS needed to respond to comments or new information received. At the time of publication of this draft EIS DOE does not have a preferred alternative, but DOE will identify its preferred alternative in the final EIS in accordance with 40 CFR 1502.14.

DOE will publish and circulate the final EIS as required by 40 CFR 1502.19, and EPA will publish a Notice of Availability in the *Federal Register*.

DOE's decision will be issued in the form of a Record of Decision (ROD) no sooner than 30 days after EPA publishes its "Notice of Availability of the Final EIS" in the *Federal Register*. The Presidential permit, if approved, would be issued subsequent to the ROD.

1.6 ORGANIZATION OF THIS ENVIRONMENTAL IMPACT STATEMENT

This EIS contains 13 sections and 8 appendices. Brief summaries of the main components of the EIS follow:

- **Section 1** introduces the EIS, discussing pertinent background information; describes the purpose of and need for the DOE and applicant actions, public participation, and EIS organization.
- **Section 2** describes the alternatives considered in the EIS, and the connected actions.
- **Section 3** discusses the environmental setting in the area of the project; the potential environmental impacts of the alternatives; recommended measures to avoid or reduce impacts; and unavoidable adverse effects.
- **Section 4** discusses the potential impacts of connected actions (ECO Substation switchyard and SWPL loop-in).
- **Section 5** discusses the potential cumulative impacts.
- **Section 6** discusses the major irreversible and irretrievable commitments of natural and man-made resources.
- **Section 7** discusses the relationship between short-term use of the environment and long-term productivity.
- **Section 8** identifies the applicable environmental laws, regulations, permits, and DOE Orders.
- **Section 9** provides a list of agencies and individuals contacted during preparation of this EIS.
- **Section 10** lists references cited in the main text of the EIS.
- **Section 11** lists the name, education, and experience of persons who helped prepare the EIS, and the subject areas for which each preparer was responsible.
- **Section 12** provides a glossary of technical terminology used in the EIS.
- **Section 13** provides a distribution list for recipients of this EIS.
- **Appendix A** provides the EIS NOI and September 2009 Scoping Report. This report summarizes the comments received during public scoping and provides an index for major issues that arose in scoping. (The Scoping Report and actual comment letters are also available on the project Web site).
- **Appendix B** provides supplemental engineering details of the ESJ U.S. Transmission Line project.
- **Appendix C** provides supplemental biological resources data and copies of correspondence with the U.S. Fish and Wildlife Service (USFWS).
- **Appendix D** provides cultural resource technical reports, consultation letters regarding the preparation of this EIS that were sent to and received from Native American Tribes, and copies of other correspondence with Native American Tribes.

- **Appendix E** provides data in support of the noise analysis.
- **Appendix F** provides data in support of the air quality analysis.
- **Appendix G** provides copies of consultation letters regarding the preparation of this EIS that were sent to and received from federal and state agencies.
- **Appendix H** provides a contractor disclosure statement.