

## **2.0 Proposed Action and Alternatives**

The objective of this EA is to evaluate the proposed action and alternatives in accordance with NEPA. The proposed action is the issuing of Presidential permits by DOE to allow the construction, operation, maintenance, and connection of two double-circuit, 230 kV lines in adjacent 120-foot-wide rights-of-way to be secured from BLM between the Mexican border and SDG&E's Imperial Valley Substation. The objective is to connect transmission lines in Mexico to the SDG&E grid serving southern California to import electrical power generated in Mexico. The associated generating plants and transmission lines in Mexico have already been approved by Mexican authorities and are under construction. Direct environmental effects are evaluated in this EA for the transmission lines in the United States only. Neither the U.S. nor agencies of the State of California, have jurisdiction over the regulation, permitting, or control of air pollutant emissions in Mexico—such as those from the LRPC and TDM facilities—regardless of any potential impact in the U.S. Nonetheless, consistent with the role of this EA to assess the impacts in the U.S. of the construction and operation of the BCP and SER transmission lines, this EA assesses any impacts in the U.S. of air pollutant emissions transported to the U.S. from the TDM and LRPC generating facilities and on water resources within the U.S.

The alternatives evaluated in this EA are (1) the proposed action consisting of two double-circuit, 230 kV electrical transmission lines running parallel to and east of the existing SDG&E 230 kV transmission line from the IV Substation to the international border and (2) the No Action Alternative. Alternative locations for the proposed transmission lines were also considered but rejected and are briefly discussed below. DOE and/or BLM could also choose to issue permits or grant right-of-way for either one of the two transmission lines but not the other. That situation would be a variant of the proposed action in which environmental effects attributable to one of the transmission lines would occur as described in this EA but effects attributable to the other transmission line would not occur.

### **2.1 No Action Alternative**

Under the No Action Alternative, neither of the two transmission lines would be constructed, operated, maintained, and connected. No Presidential permit or electricity export authorization would be issued by DOE, and no right-of-way would be granted by BLM. The purpose and need for the action, as defined in Section 1.3 of this EA, would not be realized. Potential impacts, whether short-term or long-term, direct or indirect, project-specific or cumulative, would not occur.

If the proposed transmission lines are not built, there would be no connection for the TDM and EBC generating plants now under construction west of Mexicali, Mexico to export electrical power to the United States. However, the EAX turbine currently

designated for export would still be built and its electrical output export to the U.S. over the existing IV-La Rosita 230-kV transmission line.

If DOE were to deny one or both of the permit applications, TDM and EBC would be unable to export electric power to the U.S. In that event, TDM and EBC would need to decide whether to complete construction of their respective generating plants and operate them to produce power for the Mexican market. If the owners elected to proceed with the plants in the same manner as described in this EA, the impacts in the U.S. from their operation, as analyzed herein, would still occur. If the owners elected not to complete construction of the plants, the impacts in the U.S. from their operation would not occur.

## **2.2 Proposed Action**

The proposed action would allow implementation of the following four components, which constitute the proposed project:

- The construction, operation, maintenance, and connection of a double-circuit, 230-kV, transmission line for about six miles between the U.S./Mexico international border and the SDG&E Imperial Valley Substation by Sempra Energy Resources.
- The construction, operation, maintenance, and connection of a double-circuit, 230-kV transmission line for about six miles between the U.S./Mexico international border and the SDG&E Imperial Valley Substation by Baja California Power, Inc.
- Relocation of six poles near the Imperial Valley Substation of the existing SDG&E 230 kV, single-circuit transmission line. Approximately 2,000 feet of the SDG&E line would be relocated.
- Relocation of two poles of an existing 230 kV, single-circuit transmission line owned and operated by the Imperial Irrigation District near the Imperial Valley Substation.

This EA considers the environmental effects in the U.S. that would result directly or indirectly from the implementation of these components and also any environmental effects from Mexican components of the generating and transmission facilities that could affect the United States. The proposed federal actions are:

- The granting of separate Presidential permits by DOE to SER and BCP to allow the connection of the proposed transmission lines at the international border;
- The granting of separate rights-of-way for the two new transmission lines by BLM;

- The granting of separate electricity export authorizations by DOE as actions secondary and dependent on the granting of Presidential permits for the SER and BCP transmission lines;
- The modification by BLM of the existing right-of-way to SDG&E to allow for the relocation of the SDG&E transmission line in the area immediately adjacent to the Imperial Valley Substation;
- The modification by BLM of the existing Imperial Irrigation District right-of-way to allow for the relocation of two poles of the IID transmission line in the area immediately adjacent to the Imperial Valley Substation; and
- Granting by BLM of authorization that would allow SER and BCP to lease the use of fiber optic communication lines to a subsidiary.

### **2.2.1 Overview of the Proposed Project**

The information in the following sections of this EA is based on preliminary plans. Such information as the exact number and location of support structures is subject to change as plans are refined. Most of the information on project features in this EA is based on information supplied by BCP and SER. All information such as the area of impact should therefore be regarded indicating the general extent and scope of the project and related features rather than a precise evaluation of the final design. The impacts attributable to the project have been conservatively estimated (overestimated) in this EA, and it is likely that the actual impacts would be less than those described.

The project site is located in the Yuha Basin in the Colorado Desert in the southwest portion of Imperial County, California, about 10 to 12 miles southwest of the town of El Centro (Figures 2.1 and 2.2). This project proposes to construct two double-circuit, 230 kV transmission lines from the existing SDG&E Imperial Valley Substation, continuing southerly approximately six miles (10 kilometers) to the U.S./Mexican border, where each line would connect with a corresponding transmission line in Mexico (Figures 2.3 through 2.6). The transmission lines would be carried on steel lattice towers from the border to just south of the IV Substation, where steel monopoles would be used for each transmission line to allow the crossing of the Southwest Power Link. The Southwest Power Link is a 500 kV transmission line that enters the IV Substation from the east at the substation's southeast corner. Suspended on the steel monopoles, the proposed transmission lines would be carried along the east side of the substation to enter it from the north, similar to the way the existing SDG&E transmission line is connected to the IV Substation.

From the international border to the last tower south of the 500 kV line at the substation, both the BCP and SER rights-of-way would parallel the existing SDG&E transmission