FINDING OF NO SIGNIFICANT IMPACT

DOE Environmental Assessment EA-1391

Baja California Power Inc. (FE Docket PP- 234)
and
Sempra Energy Resources (FE Docket PP- 235)

In separate actions, Baja California Power, Inc., (BCP) and Sempra Energy Resources (SER) filed applications with the Office of Fossil Energy (FE) of the Department of Energy (DOE) for Presidential permits to construct, operate, maintain, and connect electric transmission facilities crossing the international border between the United States and Mexico. BCP and SER each propose constructing separate double-circuit, 230,000 volt (230-kV) transmission lines extending approximately six miles south from the existing Imperial Valley Substation (IV Substation), owned and operated by San Diego Gas and Electric Company (SDG&E), to the U.S.-Mexican border. Both BCP and SER propose to connect the proposed transmission lines to natural gas-fueled electric generating plants being constructed in Mexico for the purpose of importing electrical power into the United States onto the southern California electrical grid. In addition, both BCP and SER have also filed applications for electricity export authorizations to use these same international transmission facilities to export small amounts of electricity to the generating facilities in Mexico for the start-up and emergency purposes.

Prior to issuing a Presidential permit or electricity export authorization, DOE must evaluate the environmental impacts of the proposed federal action and reasonable alternatives pursuant to the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321, et. seq.). In compliance with NEPA, DOE has prepared an Environmental Assessment (EA; DOE/EA-1391) entitled "*Environmental Assessment for Presidential Permit Applications for Baja California Power, Inc., and Sempra Energy Resources*" for the federal actions of granting a Presidential permit for either or both of the proposed cross-border transmission lines and for authorizing electricity exports over the same facilities.

The two proposed projects are separate and independent actions by BCP and SER. Transmission facilities, if approved, would be constructed and operated separately by BCP and SER. However, the two transmission lines would affect nearly the same area, are planned for construction at nearly the same time, could be constructed by the same contractor, require similar federal approvals for implementation, and would have similar environmental effects. Therefore, DOE has prepared a single EA for both projects.

BCP filed its application for a Presidential permit on February 27, 2001. The proposed BCP transmission line would connect at the U.S.-Mexican border with similar transmission

facilities being constructed in Mexico by Energia de Baja California (EBC). This line would be used to import electric power from the La Rosita Power Complex (LRPC) electric generating facility currently under construction. The complex will contain four generating units: one owned by EBC and three owned by Energia Azteca X (EAX). The electrical output of the EBC generating unit (310 megawatts [MW]) would be dedicated to the U.S. market and be delivered to the southern California electric grid exclusively over the proposed BCP transmission line. The electrical output of one of the EAX generating units (250 MW) also would be delivered to the U.S. market but it would use both the proposed BCP line and the existing 230-kV international transmission line connecting SDG&E's IV Substation with the LRPC.

SER filed its application for a Presidential permit on March 6, 2001. The proposed SER transmission line would connect at the U.S.-Mexican border with similar transmission facilities being constructed in Mexico by Termoelectrica de Mexicali (TDM). The SER transmission line would be used to import electric power from a TDM electric generating facility (600 MW) into the United States.

Both applicants have proposed to build their lines parallel to the existing SDG&E 230-kV transmission line[1] that runs from the U.S.-Mexican border to the IV Substation. BCP proposes to build its line on a 120-foot right-of-way, such that its centerline would be 120 feet east of the centerline of the existing SDG&E 230-kV transmission line. SER has proposed to build its line on a 120-foot right-of-way with its centerline 120 feet east of the centerline proposed by BCP. All three lines, therefore, would be parallel. Within the United States, all lines would be entirely on federal land managed by the Bureau of Land Management (BLM) and currently designated as Utility Corridor N of the BLM's California Desert Conservation Area Plan. In addition to their Presidential permit applications, each company has filed with the BLM an "Application for Transportation and Utility Systems and Facilities on Federal Lands."

In addition to the construction of the transmission lines, the proposed projects would require the relocation of six existing transmission line poles near the Imperial Valley Substation that are owned by SDG&E and two transmission line poles near the substation owned by the Imperial Irrigation District.

DOE has consulted with the BLM which agreed to be a cooperating agency in the preparation of this EA. DOE distributed copies of the draft EA to the California State Clearinghouse, the State's single point of contact, and to the California Public Utility Commission, directly. Comments were received from the California Department of Transportation and the California Air Resources Board. Comments from Federal agencies included the International Boundary & Water Commission and the Environmental Protection Agency, Region IX. DOE also received comments from the Imperial County Air Pollution

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[1]On December 20, 1983, in Presidential Permit PP-79, DOE authorized SDG&E to construct two 230-kV transmission circuits, on the same structure, from Mexico's La Rosita Substation to SDG&E's IV Substation. To satisfy its NEPA responsibilities, on November 22, 1983, DOE adopted the environmental assessment issued by the BLM on October 14, 1983, prepared in association with the SDG&E right-of-way proceeding.

Control District, Imperial County Planning/Building Department, Imperial County Department of Public Works, Congressman Bob Filner, Congressman Duncan Hunter, the Border Power Plant Working Group, the American Lung Association, and a private citizen of Mexico.

After the close of the comment period on the pre-approval EA, DOE received approximately 400 substantially identical letters via electronic mail requesting that DOE prepare an environmental impact statement to study the impacts of powerplant construction in the U.S.-Mexico border region. These letters also raised concern about the impacts associated with air emissions from and water use by these powerplants. The major issues summarized below also address the concerns and comments contained in those electronic mail letters.

In addition to the proposed action, the EA considers the No Action Alternative. Other alternative locations were also identified but were not considered reasonable. This EA is available upon request.

Conclusion

Based on the information contained in the EA, DOE has determined that issuance of a Presidential permit and an electricity export authorization to SER, BCP, or both, for the proposed actions, would not constitute a major Federal action significantly affecting the quality of the human environment and, therefore, does not require preparation of an environmental impact statement.

Environmental Consequences of the Proposed Action

The project study area is located in Imperial County, California, just north of the U.S.-Mexican border. The area is part of the Yuha Desert, one of the hottest and driest areas in California. The area is entirely on federal lands under the jurisdiction of the BLM. Areas to the north and east of the study area include land that is almost entirely privately owned and used for agricultural purposes.

Air Quality Impacts

- Impacts due to construction and operation of the proposed transmission lines would be minor, short in duration and local in nature (road dust, exhaust emissions from construction equipment and other vehicles).

- Once placed in service, operation and maintenance of the proposed transmission lines would have a negligible effect on dust. The transmission lines would require only periodic maintenance of the transmission towers, insulators, and conductors by motor vehicle and should not be noticeable due to existing traffic conditions.

- The proposed action is within an ozone and PM_{10} non-attainment area in Imperial County. For actions in a non-attainment area, the U.S. Environmental Protection Agency (EPA) established a conformity criteria and procedures to ensure that federal actions conform to the State Implementation Plan (SIP) and meet the provisions of the Clean Air Act. Actions are exempted when totals of direct and indirect emissions are below specified levels. This specified level for PM_{10} is 100 tons per year. PM_{10} emissions for the proposed projects are expected to be approximately nine tons in the year of construction and much less in subsequent years for maintenance. Ozone is not directly emitted but is formed in the atmosphere as a secondary pollutant. There is presently no U.S. EPA-approved modeling procedure for ozone. However, a grid model was used of the small amount of precursors transported to the U.S. from the export turbines and found to be virtually indistinguishable above background ozone levels.

- The new generation units in Mexico ("the export turbines") to which the proposed transmission lines would connect will be located three miles south of the border. The EA assessed the impacts in the U.S. of air pollutant emissions (NO_2, CO, and PM_{10}) transported to the U.S. from the Mexican export turbines. Air quality modeling indicates that the increase in ambient concentrations of NO_2, CO, and PM_{10} at the U.S.-Mexican border resulting from air emission from the export turbines would be below the Significance Levels for these pollutants established by the EPA.

- The potential impact in the U.S. of a secondary pollutant, ozone, which could originate from the generating facilities in Mexico, was examined. Ozone is formed from precursor gases such as NOx and VOCs, and is not directly emitted. The calculated levels in the U.S. of NOx emitted from the generating facilities in Mexico and transported to the U.S. were so small that it can be concluded the associated impact on ozone levels in the U.S. would be minimal.

Geology, Soils, And Seismicity

- Topography throughout the area is gently sloping, almost level. Access roads, therefore, will not require significant cuts and fill grading. Nearby roads do not exhibit excessive erosion; therefore, erosion is not expected for new access roads.

- The area is seismically active, but none of the proposed routes lie within the Alquist-Priolo fault-rupture hazard zone. Surface fault rupture is unlikely to occur along the route taking into account the well-delineated fault lines through the region.

- Soil and geologic conditions appear to offer adequate support for the proposed transmission structures.

Vegetation

- Limited clearing and trampling of vegetation may occur at work areas around the support structure sites and pull sites.

Cultural Resources Impacts

- Four prehistoric sites may be directly impacted during construction of the new transmission lines. Direct impacts to archaeological sites located east of the transmission lines could occur. Indirect impacts associated with new access roads may require inclusion of additional sites. In order to protect the information that is present in the region, a treatment plan has been developed by the applicants and submitted to the BLM for approval. The plan includes protection measures, monitoring steps, Native American consultation, and long-term protection of the study area resources.

Land Resource Impacts

- Sensitive areas under the jurisdiction of BLM are designated as Wilderness Area or Areas of Critical Environmental Concern. The study area includes no Wilderness Areas. It is located entirely within the Yuha Basin Area of Critical Concern designated in the California Desert Conservation Plan, but is completely within a designated utility corridor within that area.

- The applicants' proposals would run parallel to an existing SDG&E 230-kV transmission line, as close to the current line as practical considering engineering requirements. Adjacent lands are either vacant or contain other electrical facilities. No changes in land use would be required and the proposed use would be compatible with nearby and adjacent uses.

- The BLM has jurisdiction over the entire area that would be impacted and it is entirely federal land. BLM plans have designated the area a utility corridor. Impacts to the Area of Critical Environmental Concern would be limited to the footings for the transmission structures and the roads needed to construct and maintain those structures. The project would be compatible with the land use plans and policies of BLM.

- No urban uses are in the vicinity of the proposed transmission lines. Recreational uses in the area are primarily off-road vehicle uses. The nearest agricultural uses are a half mile to mile away and impacts to mineral resource activities will not be substantial. There are no geothermal leases or mining claims in the area, and though the transmission lines would cross two sand and gravel leaseholds, no extraction is occurring on either leasehold.

Water Resource Impacts/Aquatic Ecology/Floodplains and Wetlands Impacts

- The only 100-year floodplain and largest drainage course in the proposed alignment is Pinto Wash. Two smaller desert washes are also in the alignment, though they are not in the 100-year floodplain. No wetlands within Pinto Wash would be affected by the proposed projects. The footings of towers at location No. 21 would be within the 100-year floodplain. Therefore, only minimal permanent change to conditions in the floodplain would occur.

- No major water bodies are within the study area. Surface water within the study area is expected to be unchanged as a result of the proposed transmission lines. Storm runoff, flow duration, low flow, and water quality characteristics should not experience any major alterations.

- Groundwater near the IV Substation has been encountered at a depth of 25 feet. If monopole footings reach groundwater levels casings can be used to pour the footings.

- The Mexican generating units that would connect to the proposed transmission lines will use water for steam production and cooling. Water will be obtained from the local Mexican water authority. After use in the generating facilities, water will be discharged into drains and, ultimately, into the New River which is a tributary of the Salton Sea.

- Operation of the associated Mexican generating units (including the two EAX generating units not designated for export to the U.S.) will reduce water flow into the Salton Sea by 0.79 percent and increase the salinity of the Salton Sea by 0.142 percent. The magnitude of both of these impacts is minimal and below the threshold of detection of most measuring instruments.

Wildlife/Biological Resources

- The applicants have agreed to limit watering to reduce dust during construction because of the threat of encouraging invasive non-native species. Such impacts seem to have occurred near the IV Substation.

- The proposed projects would not impact any sensitive plant communities or plants listed as threatened or endangered, but they could disturb 23 plant species considered sensitive by the California Native Plant Society.

- The applicants have agreed to mitigation measures to minimize impacts to the flat-tailed horned lizard and the western burrowing owl, and other sensitive biological species. The measures include those listed in the BLM's "Flat-Tailed Horned Lizard Rangewide Management Strategy."

Visual Resources

- Visual simulations indicate that the project would not be a visually prominent addition to the existing landscape.

- Visual impact analysis indicates that the project may attract attention, but will not dominate views. View from the nearest residence would not be significantly affected, given the similar transmission line already present.

- Socioeconomic impacts would be minimal and temporary.

- The transmission line will not result in significant electric or magnetic fields or ion generation. Potential effects would be reduced or eliminated by appropriate design.

- With regard to environmental justice, there are no residents living within the immediate area of the proposed project. Therefore, the construction and operation of the proposed project would have no disproportionately high and adverse impacts on minority or low-income residents.

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