

contractors may be used for reconductoring, so it is not possible to predict the effects of reconductoring with any degree of accuracy. Reconductoring is, however, infrequent, occurring generally at intervals of decades. When reconductoring is necessary, the operators of the line would inform and consult with BLM to develop mitigation for any impacts to biological resources according to engineering, environmental, and regulatory conditions prevailing at the time.

#### **4.11.5 Cultural Resources**

Operations and maintenance of the proposed transmission lines would use principally the access roads and work areas used during construction. Mitigation for cultural resource impacts of construction would include data recovery from all archaeological sites that could be affected by construction, and consequently, of all sites that would be expected to be affected by operations and maintenance.

Off-road activity associated with the access roads, as discussed in Section 4.10.4 above, could adversely affect cultural resources as well as biological resources. As with biological resources, the possible impacts to cultural resources are not possible to quantify and probably are impossible to effectively prevent.

If conductors are replaced, additional areas of temporary activity and disturbance may be needed for pull sites. Different techniques and different contractors may be used for reconductoring, so it is not possible to predict the effects of reconductoring with any degree of accuracy. Reconductoring is, however, infrequent, occurring generally at intervals of decades. When reconductoring is necessary, the operators of the line would inform and consult with BLM to develop mitigation for any impacts to cultural resources according to engineering, environmental, and regulatory conditions prevailing at the time.

### **4.12 Interrelated Projects and Cumulative Impacts**

#### **4.12.1 Transmission Line Construction and Operation Impacts**

Two other transmission line projects have been identified as interrelated to the proposed project (see Section 2.4 of this EA). These two projects, like the proposed project, are intended to increase the ability to import electrical power generated in Mexico to the United States, and specifically into the southern California power grid. All are a response to the power crisis in California and other western states. It should be noted that these other projects are occurring independently of and are not associated with the proposed project. The two other projects are:

- SDG&E's proposed rebundling of the SDG&E 230 kV circuit position from the international border to the IV Substation; and

- SDG&E's plan to build a second circuit on the existing 230 kV transmission line from the international border to the IV Substation.

#### **4.12.1.1 SDG&E 230kV Circuit Position Rebundling**

Work on the SDG&E 230kV Circuit Position Rebundling project began on August 14, 2001, and was completed on October 5, 2001. Construction was conducted within the right-of-way of the SDG&E transmission line from the IV Substation to the international border, so it affects the same general area as the proposed BCP and SER transmission lines project. The SDG&E project differs from the BCP and SER projects in that the SDG&E project did not construct new structures, require new right-of-way, or result in new permanent impacts. While it will result in increased transmission capacity for the SDG&E line, it is more like an operations and maintenance project than a new transmission line.

SDG&E has been coordinated with the BLM separately to assure the protection of and to minimize impacts to cultural and biological resources during the rebundling project. Existing access roads were being used for construction as much as possible, and work near the lattice towers and poles was of a type that would be expected as the result of operations and maintenance activities compatible with the grant of the right-of-way from the BLM. SDG&E consulted with the BLM to minimize any adverse environmental effects of the SDG&E project. Archaeological and biological monitoring was employed by SDG&E to avoid adverse effects to sensitive resources.

The SDG&E project has been completed before the beginning of the BCP and SER projects. If mitigation measures recommended in this EA are implemented, both projects would be employing similar measures for the protection of resources, and cumulative impacts of the two projects would be mitigated.

#### **4.12.1.2 SDG&E 230 kV Second Circuit**

The SDG&E 230 kV Second Circuit project would add a second circuit to the SDG&E 230 kV transmission line from the IV Substation to the international border. SDG&E's current schedule calls for this second circuit to be in service around November 2002, and construction would be expected to take place after the BCP and SER transmission line project is completed. The second circuit would be installed in the empty position on the existing support structures. Therefore, the construction activity affecting the physical environment would be similar to that of the rebundling project, as described above. That is, existing access roads would be used as much as possible, there would be work areas around the support structures, and pull sites would be needed to string the conductors. Pull sites would have to be aligned with the insulators, so it would not be possible to reuse pull sites that were used for either the rebundling project or the BCP and SER project.

Since the new conductors would be installed in the empty position on existing structures, new structural construction would not be needed. For the protection of cultural and biological resources, it is anticipated that mitigation measures would be required similar to the ones that would be required of the rebundling project and of the BCP and SER project, as appropriate. It is anticipated that the second circuit project would be subject to review by the DOE and the BLM, and that appropriate measures to avoid and protect environmental resources would be required. Under those circumstances, the combination of the second circuit with the other interrelated projects would not be expected to result in substantial cumulative impacts.

#### **4.12.2 Power Plant Cumulative Impacts – Project Area**

This section considers the possible effects in the U.S. of all known new electric generating facilities that could affect the project area. Although there have been rumors that other power projects are to be sited in the border region, these have been found to be unsubstantiated, and DOE and BLM are not aware of any electric generating facilities in the project area other than the LRPC and TDM facilities actually being planned. Therefore, additional generation projects in the project area are not reasonably foreseeable. See section 4.12.4 for a discussion of generating facilities outside of the project area.

Air dispersion modeling analysis was conducted using the ISCST3 model to analyze the combined impacts from the entire LRPC, comprising three EAX turbines and one EBC combustion turbine, plus the TDM facility. LRPC generates power both for export to the U.S. and for domestic use in Mexico. The TDM facility generates power only for export to the U.S. The meteorological driver and receptor grids were the same as those used in the ISCST3 modeling for BCP described in Appendix B. The results of this analysis are shown in Table 4.12.1.

The increases in ambient concentrations of air pollutants along the U.S./Mexico border and points north resulting from air pollutant emissions from the entire LRPC and TDM generating facilities can be seen to remain below SLs established by U.S. EPA. As described earlier, SLs may be generally regarded as thresholds of impact on air quality below which impact is not viewed to be significant. Hence, in reference to these benchmark SLs, it may be viewed that there is little impact on U.S. air quality from all of the emissions from the entire LRPC and TDM facilities in Mexico that generate power for both the U.S. and Mexico, regardless of whether the generated power is for export to the U.S., or for use in Mexico.

#### **4.12.3 Pipeline Project Cumulative Impacts**

The natural gas to fuel the TDM, EBC, and EAX electric generating facilities will be provided by a new international pipeline system (see Section 1.4.3.1). The FERC has

**TABLE 4.12.1**  
**CUMULATIVE POWER PLANT EMISSIONS**

Pollutant	Averaging Period	Significance Level (SL)	Concentration Increase at U.S. Receptors
Nitrogen dioxide	Annual	1.0 $\mu\text{g}/\text{m}^3$	0.8 $\mu\text{g}/\text{m}^3$
Carbon monoxide	1-hour	2,000 $\mu\text{g}/\text{m}^3$	70.0 $\mu\text{g}/\text{m}^3$
Carbon monoxide	8-hour	500 $\mu\text{g}/\text{m}^3$	30.8 $\mu\text{g}/\text{m}^3$
Particulate matter	24-hour	5.0 $\mu\text{g}/\text{m}^3$	4.5 $\mu\text{g}/\text{m}^3$
Particulate matter	Annual	1.0 $\mu\text{g}/\text{m}^3$	0.3 $\mu\text{g}/\text{m}^3$

issued a draft environmental impact statement (EIS) for the U.S. portion of this system (FERC/EIS-0132D), in conjunction with applications for a Certificate of Public Convenience and Necessity for an interstate pipeline and for a Presidential Permit for an international border crossing by North Baja Pipeline, LLC. That EIS discusses the emissions from electric generating facilities which will receive gas from the system. These include seven other individual units, in addition to the TDM, EBC, and EAX export units. Also discussed are impacts to vegetation and wildlife (including the flat-tailed horned lizard and burrowing owl), land use and visual resources, among others. NBP, LLC has recently submitted information in the FERC proceeding projecting that existing sources of air emissions in Mexico will switch from more polluting fuels to natural gas after the new pipeline system is in place, resulting in improved air quality in the U.S. (see Appendix E).

#### **4.12.4 Other Cumulative Impacts – Project Area**

In the Yuha Desert east of the Westside Main Canal, there are a number of activities that take place on a more or less continuing basis that may have impacts on environmental resources, particularly cultural and biological resources. These activities include legal and illegal off-road activities, Border Patrol activities, potential disturbance offered by the presence of access by way of SR-98, California Department of Transportation maintenance of SR-98, and camping and recreational uses. There are also two sand and gravel extraction sites near SR-98 leased from the BLM by the County of Imperial, although no active extraction is being conducted.

All of these activities have the potential to adversely affect plants and wildlife in the Yuha Desert area, and some may also have the potential to directly or indirectly adversely affect cultural resources. All may also contribute to adverse effects on environmental resources by increasing human presence and activity, and the potential for access to undisturbed or sensitive areas, in the area. Although the direct effects of the proposed project on biological and cultural resources could be mitigated by the measures recommended in this EA, incremental contributions to the kind of cumulative impacts herein described appear to be unavoidable. Because of the geographic attributes of the area involved, and in some cases the legal entitlement to continue the contributing activity, it appears that full avoidance or even specific measures for fully effective mitigation of the adverse effects are not available or possible.

### **4.13 Summary**

Sempra Energy Resources and Baja California Power, Inc. propose to construct two double-circuit, 230 kV transmission lines between the Imperial Valley Substation and the international border for the purpose of importing electrical power generated in Mexico into the United States. In order to implement the project, SER and BCP would require the approval of Presidential permits by DOE to allow the international border crossing by