

Generally, it is not possible to tell, based on surface investigations, whether significant fossils are present in underlying formations or sediments. Slope wash and weathering of surface strata make the prospect of finding intact fossils on the surface very small.

In general, the surface deposits in the project area consist of alluvial deposits of Quaternary age (less than 10,000 years old). Some of these are lacustrine deposits associated with ancient Lake Cahuilla. Because they are relatively recent in origin, these deposits would not be expected to contain significant fossils. Especially in the southern part of the proposed route, however, older Quaternary alluvial deposits intrude from the west. Significant fossils may be more likely to be present in these deposits.

### **3.9 Socioeconomics**

Demographic and economic data incorporated below were obtained from literature searches, statistical reports from the U.S. Department of the Census, the State of California Department of Finance, the U.S. Department of Housing and Urban Development, the State of California Employment Development Department (EDD), and from personal communication with state and local government staff. Additional personal communication was conducted with the engineering companies associated with the construction of the proposed project, VFL Energy Technologies, Inc. and Cableados Industriales, S.A. de C.V.

Portions of the following discussion are based heavily upon data derived from the U.S. Census. When the following text was written, the 1990 Census was the most recent set of fully comparable data. As of July 2001, only partial results from Census 2000 have been released. Although the new census data would provide a more accurate picture of the demographic and socioeconomic setting of the project site and surrounding area, the existing relevant economic statistics are sufficient for the purposes of this evaluation, especially given the sparse population of the study area.

#### **3.9.1 Population**

According to recently released Census 2000 data, the population of Imperial County numbered 142,361 persons. Since 1990, the population of the county has increased from 109,303 persons, a gain of 33,058 persons or 30.2 percent. This equates to an annual increase of 3.02 percent over the period. This figure is more than double the growth in neighboring San Diego County, where the population increased by 12.6 percent between 1990 and 2000. Imperial County's growth rate also eclipsed that of California's, which was 13.81 percent over the same period.

As of 2000, the city of Calexico had a population of 27,109 persons, an increase of 8,476 persons since 1990 or 45.4 percent. This amounts to an annual increase of 4.54 percent. The city of El Centro had a population numbering 37,835 persons as of 2000, an increase

of 6,451 persons or 20.55 percent since 1990, equating to an annual increase of 2.05 percent.

### **3.9.2 Income and Employment**

The median household and average per capita incomes for Imperial County in 1990 were \$22,422 and \$9,208, respectively. In the city of El Centro the figures were \$25,147 and \$9,898, respectively. The former figure was 12.1 percent above the county average while the latter was 7.4 percent above. In the city of Calexico, the corresponding figures were \$18,635 and \$6,595, respectively; both were considerably below the corresponding county averages at 16.8 percent and 28.3 percent, respectively. Recent figures for Imperial County showed that the county ranked last within California (58th) for income in 1999.

The California EDD reports that agriculture is the dominant industry within Imperial County. By value of agriculture receipts, the county ranked tenth in the state and twelfth nationally, according to the 1997 Census of Agriculture. Total agricultural gross receipts in the Imperial Valley were in excess of \$1 billion in 1999.

The agriculture industry also accounted for over 30 percent of the county's employment in 1999. To a lesser extent, government (28 percent) and retail trade (15 percent) are also significant employers. The California EDD reported that Imperial County had an unemployment rate of 23.2 percent in 1999, significantly higher than California's rate of 5.2 percent and the highest unemployment rate of California counties. This high rate is due in part to the marked seasonal fluctuations characteristic of the county's agricultural and tourism-based economy.

### **3.9.3 Local Government and Public Services**

El Centro is served by a Police Department and offices of the California Highway Patrol, U.S. Marshals, and the Imperial County Sheriff's Department. Calexico is served by a Police Department and a Highway Patrol office. Calexico and El Centro both have city fire departments. The El Centro Regional Medical Center is a 107-bed hospital with a staff of over 100 and is the largest facility in the area. The medical center also has eight clinics within El Centro and several in Calexico. There is also an Air Ambulance service in El Centro.

### **3.9.4 Transportation**

Major transportation links in the project vicinity include Interstate 8, that passes through El Centro, and State Route 78 linking El Centro to Brawley. State Route 98 parallels Interstate 8 on the south for about 55 miles, passing through Calexico and the proposed transmission line route. The city of El Centro operates a small airport. The proposed project study area is proximate to several major urban areas including San Diego (120

miles west of El Centro), Los Angeles (200 miles northwest of El Centro), and Phoenix, Arizona (240 miles northeast of El Centro).

### **3.9.5 Temporary Accommodation**

The nearest populated areas within the vicinity of the project are the cities of El Centro and Calexico, which both support numerous visitor servicing accommodations. These include hotels, motels, and some smaller “Bed and Breakfast” type establishments. The city of El Centro has approximately 1,000 guest rooms and Calexico has approximately 185 rooms. There are also several RV parks within the Calexico and El Centro areas.

In general, these areas see a marked increase in visitors and associated increase in demand for temporary accommodations from October through March. During that period, the availability of temporary accommodation is somewhat more limited. According to interviews with lodging representatives, the “high” season, when guest accommodations are most limited, peaks around January.

## **3.10 Water Quality**

Water volume and quality issues associated with the proposed project are dominated by the water used and discharged by the LRPC and TDM power plants in Mexico. The power plants will require water for the cooling and steam generation processes. Steam is produced in the HRSGs (heat recovery steam generators) for the steam turbine, which utilizes steam to generate electric power. The steam leaves the steam turbine and is recondensed in the cooling towers to start the process again. The water utilized by the power plants is mostly replacement for the water that is evaporated in the cooling towers and the steam generation process.

The water utilized is treated prior to use. Gray water is brought to the power plants and is chlorinated, lime-softened, and clarified. A portion of the water, after being clarified, is utilized as make-up for the cooling towers. The remaining water, that is not sent to the cooling towers, is sent to a filtering and demineralizing system, which prepares the water to be used in the steam generation process. There will be no water usage or discharge in the United States associated with the proposed transmission lines north of the international border. National Pollutant Discharge Elimination System stormwater construction permits will be required for the construction of the transmission lines in the U.S.

### **3.10.1 U.S.-Mexico Water Law**

There exist treaties pertaining to water rights and water issues between the United States and Mexico. The treaties address a number of issues, including quality of flows between the countries, for particular river bodies.