Section 4.16
Transportation and Traffic

4.16.1 Introduction

This section of the Environmental Impact Report (EIR) addresses potential impacts of the proposed project on transportation and traffic, and describes the environmental and regulatory settings. Mitigation measures that would reduce impacts, where applicable, are also discussed. Information pertaining to surface traffic analysis within this report was provided primarily by the Preliminary Traffic Assessment North Sky River Wind Energy Project, Kern County, California April, 2011, prepared by CH2M Hill, and the Traffic Study Jawbone Wind Energy Project, Kern County, California November 2010, prepared by Ruettgers & Schuler. Both of these traffic studies are included as Appendix K of this EIR and incorporated by reference herein.

Potential project impacts to existing traffic levels and roadways were determined for both construction and operation of the proposed project using the most recently published roadway traffic volumes and project proponent prepared vehicle trip calculations. Discussion of additional transportation facilities is based on site surveys and applicable thresholds where indicated.

4.16.2 Environmental Setting

Regional and Local Roadway Facilities

The primary regional transportation corridors within the study area include State Route (SR) 14 and SR 58. The local circulation system near the project site consists of Jawbone Canyon Road, South Kelso Valley Road, and Pine Tree Canyon Road (see Figure 4.16-1). The local roadway characteristics are generally rural in nature, with limited access control. Traffic volumes on the major roadways in the project vicinity are under capacity and the roadways currently operate at acceptable levels of service. The following describes these regional and local access roadways.

SR 14 (also called the Antelope Valley Freeway in the project area) is the principal regional access route leading to the project site. SR 14 is a two- and four-lane north/south state highway that, along with U.S. Highway 395 (US 395), connects the community of Mojave, south of the project site, to the communities of Lone Pine, Big Pine, Bishop, and the Mammoth Mountain Resort areas to the north. Access to the project is provided via a “T” intersection controlled by a stop sign on Jawbone Canyon Road. Near this intersection, SR 14 carries less than 7,000 average daily trips (Caltrans, 2011a). According to the most recently published Caltrans Transportation Concept Reports for SR 14, the level of service (LOS) assignment for SR 14 south of SR 58 is LOS C, with the segment north of SR 58 designated LOS D (Caltrans, 2004a).

SR 58 provides for interregional and interstate travel, and is one of two major east/west thoroughfares through Kern County. SR 58 also serves as an alternative route to Interstate 5, to and from the Central Valley. The route accommodates significant volumes of heavy trucks traveling between central and southern California. Within the vicinity of the project area, SR 58 connects regional traffic with SR 14 and provides two lanes in each direction. Interchanges along SR 58 in the area are located at Bealville Road, Hart Flat Road, Woodford-Tehachapi Road, Broome Road,
Figure 4.16-1
Regional Roadways and Transportation Facilities

SR 202 (West Tehachapi Boulevard,) and North Mill Street. A future interchange is planned at Dennison Road, which is currently an under-crossing. SR 58 carries less than 14,000 average daily trips near its junction with SR 14 (Caltrans, 2011a). According to the most recently published Caltrans Transportation Concept Reports for SR 58, the LOS assignments for SR 58 east of SR 14 are a Year 2004 LOS A, with a projected Year 2015 LOS B (Concept report). West of the SR 58/ SR 14 junction, this segment of roadway operates at LOS A, with a projected Year 2015 designation of LOS A (Caltrans, 2004b).

**Jawbone Canyon Road** is a County-maintained road of 25 feet in width that runs northwest from its intersection with SR 14 to the Sequoia National Forest. At its junction with SR 14, the road travels westerly through the Jawbone Canyon OHV Area for 6 miles, at which point it turns northward. As it exits the Jawbone Canyon OHV Area, the road becomes a dirt road. On private property within the OHV Area, the road right-of-way (ROW) is 60 feet wide. Heading up into the mountains of the Sequoia National Forest (at 7,000 feet) the road becomes very steep and windy. The ROW grant on U.S. Bureau of Land Management (BLM) land is 25 feet wide (the width of the road). Traffic volumes on this roadway are generally very low. However, use increases considerably on holiday weekends and winter weekends as recreational users visit the Jawbone Canyon OHV Area. The roadway and surrounding hills in the OHV Area are used by off-road vehicles for recreation. Access to the project is proposed from Jawbone Canyon Road via SR 14.

**South Kelso Valley Road** is a north-south road running between Jawbone Canyon Road to the south and SR 178 (Isabella Walker Pass Road) to the north. The road is paved for one mile from the intersection of SR 178; however, the remainder of the road is unpaved. South Kelso Valley Road provides access to remote residences in the Kelso Valley and connects up to the Onyx Ranch Headquarters near SR 178.

**Pine Tree Canyon Road** is a dirt road located south of Jawbone Canyon Road that runs west from its intersection with SR 14. This roadway is very lightly traveled. It is maintained by the Los Angeles Department of Water and Power (LADWP) to provide access to transmission facilities and two Los Angeles Aqueducts.

**Project Site Access**

Jawbone Canyon Road provides the main local access into the project site. There is currently a network of internal project site roads (primarily unpaved) that would need to be improved for construction and operational purposes.

**Transportation Facilities**

**Railway**

Figure 4.16-1 identifies the railway facilities within the proposed project area. The nearest railroad to the proposed project is a Southern Pacific Railroad (SPRR) line that runs northeast along SR 14, 7 miles east of the project site. The rail line bends further east just north of the intersection of SR 14 and Jawbone Canyon Road. The SPRR continues northeast to the town of Searles, where it splits and continues briefly east and for a considerable distance north along US 395 and the eastern Sierra Nevada Mountains. In the community of Mojave, the railroad intersects several other lines running to the south, east, and west. While the number of daily rail operations is unknown, visual site reconnaissance has indicated that the railway is actively used (Aspen, 2011).
Aircraft Traffic and Military Aviation

Figure 4.16-1 identifies the airport and aviation facilities within the proposed project area. As shown, the closest airport to the project site is an unpermitted private airstrip located 0.25 mile from the project’s water parcel and 1.2 miles northwest of the boundaries of the wind turbine development area. This two-runway airport is privately owned and is not open to the public, and currently has not activated local land use permits (Airport-Data, 2011). California City Municipal, the next closest airport (16.6 miles southeast of the project site), is open to the public and has a single runway (AirNav, 2011a). For the 12-month period ending May 12, 2010, this airport averaged 102 aircraft operations per day (AirNav, 2011a). Tehachapi Municipal, also a public single-runway airport, is located 20 miles southwest of the project site. For the 12-month period ending May 12, 2010, this airport averaged 30 aircraft operations per day (AirNav, 2011b). The Mojave Air and Space Port has three runways, is accessible for public use, and is 20 miles from the project site. For the 12-month period ending May 13, 2010, this airport averaged 48 aircraft operations per day (AirNav, 2011c). Meadows Field Airport, located in Bakersfield, has two runways and can accommodate large planes. This airport is 50 miles from the project site. For the 12-month period ending December 31, 2008 (most recently published statistic), this airport averaged 344 aircraft operations per day (AirNav, 2011d). Additionally, a number of small, private airstrips can be found throughout eastern Kern County.

Nearby military installations that have aircraft overflights above the proposed project site include China Lake Naval Air Weapons Station (NAWS) to the northeast and Edwards Air Force Base (AFB) to the southeast of the project. The project site falls inside the boundaries of the Special Use Airspace of the Joint Service Restricted R-2508 Complex. This complex is considered an extension of the airspace of the military installations within the complex (Edwards AFB, China Lake NAWS, and Fort Irwin/National Training Center) and covers 20,000 square miles.

Using the longitude and latitude of the site center point, the proposed project was run through the California Military Land Use Compatibility Analysis (CMLUCA) database to determine if the site is located within 1,000 feet of a military installation, is located within military based special use airspace, or is located beneath a military designated low-level flight path (CMLUCA, 2011). Based on the CMLUCA report, the proposed project is located within special use airspaces and beneath an area designated for low-level military flight paths (CMLUCA, 2011).

4.16.3 Regulatory Setting

Federal

Department of Defense

The Department of Defense Office of Economic Adjustment prepared a Joint Land Use Study (JLUS) in March 2008 regarding the R-2508 Complex, which was a collaborative planning effort between active military installations, surrounding counties and cities, and other affected agencies in the area. The JLUS process is managed by the California Governor’s Office of Planning and Research. The JLUS is not an adopted plan but rather a recommended set of compatibility guidelines that can be implemented by local jurisdictions, Native American tribal governments, agencies, and organizations to guide their future compatibility efforts. While the strategies in the JLUS are not mandatory obligations, they were developed with representatives of the stakeholders involved, thereby providing a set of strategies designed to meet local needs.