

D.9 Transportation and Traffic

Section D.9.1 provides a summary of the environmental setting/affected environment, including existing major study area roadways, transit and rail service, airports, and bicycle facilities located in the vicinity of the Proposed PROJECT. Section D.9.2 describes the regulatory setting for transportation and traffic, and Section D.9.3 provides analysis of transportation and traffic impacts/environmental effects resulting from construction and operation of the Proposed PROJECT, and discusses mitigation for these impacts. Project alternatives are analyzed in Sections D.9.4 through D.9.7. Section D.9.8 provides mitigation monitoring, compliance, and reporting information. Section D.9.9 addresses residual effects of the project, and Section D.9.10 lists the references cited in this section.

D.9.1 Environmental Setting/Affected Environment

Methodology and Assumptions

Existing roadway classifications and conditions identified in this section are based on review of the County of San Diego (County) General Plan Circulation Element (1994), Mountain Empire Subregional Plan (County of San Diego 1995), the Proponent's Environmental Assessment (PEA) prepared for the ECO Substation Project (SDG&E 2009), the Applicant's Environmental Document for the Tule Wind Project (Iberdrola Renewables, Inc. 2010), and San Diego Association of Governments (SANDAG) and California Department of Transportation (Caltrans) traffic data. In addition, a Traffic Impact Study was prepared for the Tule Wind Project (LLG 2010) and was reviewed during preparation of this Environmental Impact Report (EIR)/Environmental Impact Statement (EIS). Level of service (LOS) data were not available for all roadways identified in the study area. Aerial photographs of the study area were reviewed to obtain relevant existing conditions information, and site visits were conducted for all roadways that could be directly affected by the Proposed PROJECT. The Campo, Manzanita, and Jordan wind energy projects are being analyzed at a program level in this EIR/EIS as no site-specific survey data is available. Due to the close proximity of these wind energy projects to the ECO Substation, Tule Wind, and ESJ Gen-Tie projects, a similar transportation and traffic setting is assumed.

D.9.1.1 General Overview

As shown in Figure D.9-1, Transportation Facilities in the Project Area, project components would be located in close proximity to regional and local transportation facilities, including Interstate 8 (I-8), State Route (SR) 94, Old Highway 80, the San Diego and Arizona Eastern Railway (SD&AE), county and private airstrips, and one regional bus route. In addition, numerous local roads and unnamed dirt roads are spread throughout the area.

A description of the major transportation facilities in the area is provided as follows:

Interstate 8 (I-8) is currently built as an east–west, four-lane interstate freeway (providing two lanes in each direction) with a posted speed limit of 70 miles per hour (mph). The section of I-8 in southeastern San Diego County is heavily used by recreational vehicles and container trucks and also as a transportation route between California and Arizona. In the project vicinity, a local interchange is provided at Ribbonwood Road, and an eastbound off-ramp is provided at Carrizo Gorge Road.

State Route 94 (SR-94) is currently built as an east–west, two-lane roadway in the project area. Beginning in the City of San Diego, SR-94 travels east through the communities of Jamul, Dulzura, and Campo and then north to Boulevard, finally terminating at Old Highway 80 (approximately 0.5 mile west of Ribbonwood Road).

According to the County Draft General Plan Mountain Empire Mobility Network, SR-94 is classified within the project area as a Community Collector with Improvement Options (County of San Diego 2009).

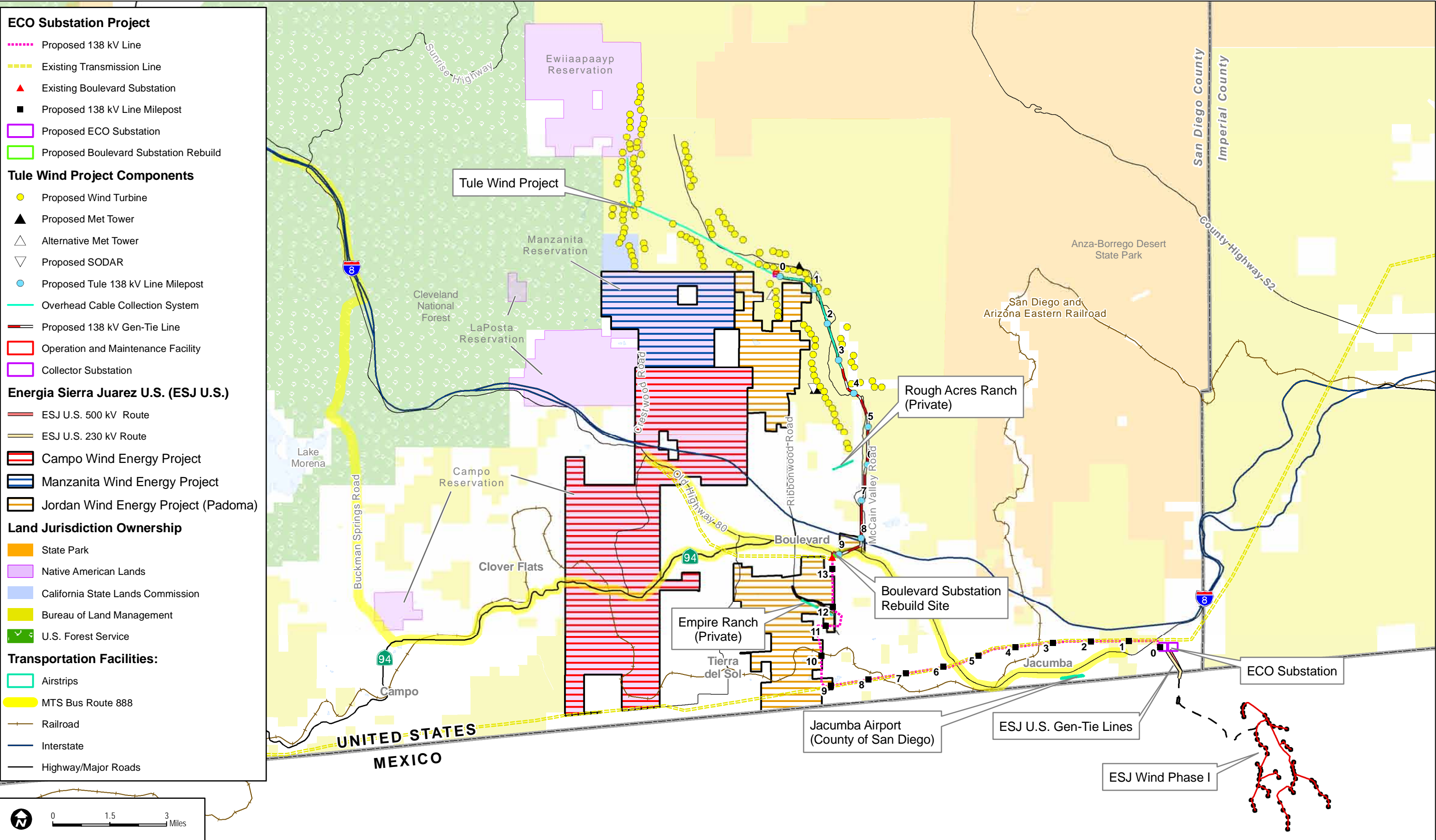
Old Highway 80 is currently built as a two-lane roadway providing access between the communities of Boulevard and Jacumba in the project area. The current County General Plan classification for Old Highway 80 is Major Road with bike lanes. According to the County Draft General Plan Mountain Empire Mobility Network, Old Highway 80 (between SR-94 and Jacumba Street) is classified as a Light Collector with Improvement Options (County of San Diego 2009).

The transportation facilities occurring in the vicinity of the Proposed PROJECT are discussed in the following sections. Tables D.9-1 through D.9-3 identify roadways in the specific project area and roadways spanned by project components. Roadways are described in terms of jurisdiction, classification, number of lanes, and LOS.

D.9.1.2 ECO Substation Project

Roadway Network

Table D.9-1, Potentially Affected Roadways within the ECO Substation Project Area, lists the roadways potentially affected by project construction and operations, including the ECO Substation and 138-kilovolt (kV) transmission line components. Data were not available for each potentially affected roadway (several of the roadways crossed by the alignment are unpaved, and LOS/usage data were limited).



DUDEK SOURCE: Tule Wind Project: HDR Engineering 2010; ESJ U.S. Project: ENTRIX 2009; ESJ Wind Project: ENTRIX 2010; ECO Substation Project: SDG&E 2009

6168-01 **East County Substation/Tule Wind/Energia Sierra Juarez Gen-Tie Projects - EIR/EIS**

FIGURE D.9-1 Transportation Facilities in the Project Area

INTENTIONALLY LEFT BLANK

Table D.9-1
Potential Affected Roadways within the ECO Substation Project Area

Roadway	Jurisdiction	Classification ¹	Lanes	Traffic Volumes		LOS ¹
				Year	ADT	
Interstate 8	Caltrans	Freeway	4	2008	13,900-17,300	A-C
Highway 94	Caltrans	Community Collector with Improvement Options	2	2008	1,250 ²	A-C
Old Highway 80	County of San Diego	Light Collector with Improvement Options	2	2006	6,400 ³	A-C, D
Ribbonwood Road	County of San Diego	Light Collector	2	N/A	N/A	A ⁴
McCain Valley Road	County of San Diego	Local Rural Collector (north of Old Highway 80)	2	2010	110 ⁴	A ⁵
Tule Jim Lane	County of San Diego	Local	1	N/A	N/A	N/A

Sources: SDG&E 2009 ; Caltrans 2010 ; SANDAG 2010 ; LLG 2010.

Notes:

- ¹ The County of San Diego does not actively maintain traffic counts for these roadways.
- ² Average daily traffic (ADT) is the average ADT for SR-94 from Jewel Valley Road/Ribbonwood Road to I-8 in the vicinity of Boulevard.
- ³ ADT identified is the ADT given for Old Highway 80 between McCain Valley Road and Carrizo Gorge Road and Carrizo Gorge Road and I-8 as reported by SANDAG 2010.
- ⁴ LOS for Ribbonwood Road identified in Traffic Impact Study for the Tule Wind Project (LLG 2010).
- ⁵ ADT and LOS for McCain Valley Road (north of Old Highway 80) identified in Traffic Impact Study for the Tule Wind Project (LLG 2010).

Table D.9-2, Roadways Spanned by the Proposed ECO Substation Project 138 kV Transmission Line, includes the roadways crossed by the proposed 138 kV transmission line; the approximate milepost (MP) location of the crossing; and classification, number of lanes, and LOS of the spanned roadway.

Table D.9-2
Roadways Spanned by the Proposed ECO Substation 138 kV Transmission Line

Roadway	Approximate Milepost (MP)	Classification	Number of Lanes	LOS ¹
Old Highway 80	0.3	Light Collector with Improvement Options	2	A-C
Jacumba National Cooperative	0.5	Local	1	N/A
Carrizo Creek Road	1.4	Local	2	A-C
Carrizo Gorge Road	2.4	Light Collector with Improvement Options	2	N/A
Old Highway 80	5.6	Light Collector with Improvement Options	2	A-C
Jewell Valley Road	11.2	Local	2	N/A
Tule Jim Lane	11.9	Local	1	N/A
Tule Jim Lane	13.2	Local	1	N/A

Source: SDG&E 2009.

Note:

- ¹ The County of San Diego does not actively maintain traffic counts for these roadways.

Bus

San Diego Metropolitan Transit Service (MTS) Bus Route 888 is the only bus route providing service in the ECO Substation Project area. Route 888 operates on Mondays and Fridays only and provides service between the Westfield Parkway Shopping Center in El Cajon and the end of the line in Jacumba via I-8 and Old Highway 80 (MTS 2007). Transfer points are provided in Boulevard near the Boulevard Deli at 39335 Old Highway 80 and in Jacumba at the intersection of Old Highway 80 and Campo Street (MTS 2007).

Rail

The MTS owns and operates the SD&AE Railway, which facilitates freight service between San Diego and Plaster City, California. The Union Pacific Railroad connects with the railway in Plaster City and provides service throughout the United States and Mexico. MTS contracts with the Carrizo Gorge Railway (a shortline operator on the SD&AE Desert Line and on the portion of the SD&AE Railway located in Mexico) to provide freight service on the SD&AE (SANDAG 2007). The proposed 13.3-mile, 138 kV transmission line would span SD&AE Railway track at three locations (approximately MPs 3.4, 7.6, and 10.1; see Figure D.9-1).

Air Transportation

As shown on Figure D.9-1, the 1.3-acre, County–operated Jacumba Airport is located on Old Highway 80 approximately 1 mile east of the unincorporated community of Jacumba and 1 mile south of the proposed 138 kV transmission line near MP 2.5. According to the County, the airport is unattended, unlighted, and consists of a single 2,510-foot gravel runway (used mostly on the weekends by gliders) and a helipad (County of San Diego 2009). The proposed 138 kV transmission line would be located in the Airport Influence Area (Review Area 2) as identified in the Jacumba Airport Land Use Compatibility Plan (San Diego Airport Land Use Commission 2006) and would be subject to review by the County Airport Land Use Commission. The Jacumba Airport Land Use Compatibility Plan and the County Airport Land Use Commission are further discussed in Section D.9.2.3.

In addition to the Jacumba Airport, a private nonregistered airstrip, Empire Ranch, is also located within the ECO Substation Project area (see Figure D.9-1). The County is currently working to abate this illegal airfield, which is considered a zoning and grading violation. Based on a review of aerial photographs, the gravel airstrip is approximately 4,500 feet long and approximately 80 feet wide. The southern end of the runway would be located approximately 300 feet west of the nearest proposed 138 kV distribution replacement pole, WD-10 (near MP 12.0).

Bicycle Facilities

SR-94 and Old Highway 80 are designated as part of the County of San Diego's Circulation Element Bicycle Network Program (County of San Diego 1994, Circulation Element Map, Sheet 7 (Campo/Jacumba)). The Bicycle Network provides an alternative circulation plan for the County and seeks to link population centers with scenic and natural areas (County of San Diego 1994). According to map symbols seen on the current County General Plan Circulation Element Sheet 7, both roadways are designated as bicycle network facilities.

According to the County's Draft General Plan Mountain Empire Mobility Network, SR-94 is a designated Class II Bike Lane, while Old Highway 80 is a designated Class III Bike Route (County of San Diego 2010a). According to the City of San Diego's Bicycle Master Plan (2002), an existing bikeway network does not exist at this time in the project vicinity. SR-94 is a Priority 1 Proposed Bikeway, and Old Highway 80 is a Priority 2 Proposed Bikeway.

Planned Roadway Improvement Projects

Construction of the proposed ECO Substation Project would extend approximately 24 months (SDG&E 2009). During construction of the ECO Substation Project, planned roadway improvements in the project area may occur simultaneously. To identify potential conflicts with planned roadway improvements, the following documents were reviewed: the Regional Transportation Improvement Program prepared by the San Diego Association of Governments (SANDAG), a list of major construction projects by the California Department of Transportation (Caltrans), a map of advertised and tentative upcoming projects prepared by Caltrans (Caltrans 2009b), and the Five Year Capital Improvement Plan, FY 2008–09 thru FY 2012–13 (County of San Diego 2008).

A brief description of the planned roadway improvements that may be potentially affected by the ECO Substation Project is provided below. Planned roadway improvements are discussed by jurisdictional agency.

Caltrans

The San Diego County component of the Caltrans-planned I-8 Pavement Rehabilitation Project would be located approximately 0.75 mile north of the ECO Substation 500 kV and 230/138 kV yards. Construction of the project is expected to begin in 2016 and end in 2017; it would occur between the intersection of I-8/Crestwood Road and the Imperial County line (approximately 11.75 miles). Also, Caltrans has plans to reconstruct a maintenance building located on Old Highway 80 in the unincorporated community of Boulevard; construction is expected to begin in 2010 and end in 2011 (SDG&E 2009).

County of San Diego

As identified in Table D.9-2, the proposed 138kV transmission line of the ECO Substation Project would traverse five County roads. Based on a review of the County of San Diego Five Year Capital Improvement Plan, the only improvement project planned in the vicinity of the project area is the Ribbonwood Road Sightline Improvement Project (County of San Diego 2008). Located in the community of Boulevard, the project consists of improving the sightline of a section (approximately 270 feet) of Ribbonwood Road featuring a horizontal curve (County of San Diego 2008). The improvement, which is expected to be completed by spring 2011, is located north of I-8, approximately 0.25 mile south of Opalocka Road, and would not be crossed by any component of the ECO Substation Project.

D.9.1.3 Tule Wind Project

Roadway Network

Primary access to the proposed wind turbine, collector cable system, collector substation, and operations and maintenance (O&M) facility locations would be provided by I-8 and Ribbonwood Road. McCain Valley Road would be used for smaller construction vehicles during construction activities and by O&M staff once construction is complete. During construction, the western portion of the project could be accessed by Crestwood Road. A general description of Ribbonwood Road, McCain Valley Road, and Crestwood Road is provided below.

Ribbonwood Road is currently classified and built as a two-lane Rural Collector roadway north of I-8. Ribbonwood Road is paved for approximately 1.65 miles north of I-8. Beyond this point, Ribbonwood Road is a dirt road providing local access to ranches and rural residential homes. The posted speed limit on Ribbonwood Road between I-8 and Old Highway 80 is 55 mph.

According to the County of San Diego Draft General Plan Mountain Empire Mobility Network, Ribbonwood Road (between I-8 and Old Highway 80) is classified as a Light Collector with Improvement Options (County of San Diego 2010a).

McCain Valley Road is currently built as a two-lane Rural Collector roadway north of I-8. McCain Valley Road is a paved roadway for approximately 1.8 miles north of I-8. At the entrance to the McCain Valley National Cooperative Land and Wildlife Management Area and north through Bureau of Land Management (BLM)-administered lands, McCain Valley Road is a dirt road. North of I-8, McCain Valley Road provides access to several ranches and BLM-recreational facilities, including the Sacatone Overlook, Lark Canyon Off-Highway Vehicle (OHV) Area and Campground, and the Cottonwood Campground. The posted speed limit on the paved portion of McCain Valley Road is 35 mph.

According to the County of San Diego Draft General Plan Mountain Empire Mobility Network, McCain Valley Road is an unclassified roadway (County of San Diego 2010a).

Crestwood Road is a north–south, two-lane roadway located off I-8. The County General Plan Circulation Element does not assign an official roadway classification to Crestwood Road. However, the Traffic Impact Study prepared for the Tule Wind Project (LLG 2010) does assign a functional classification/designation of Rural Collector to this road; for purposes of this analysis, the Rural Collector classification is used. Crestwood Road would be used as a haul route, and if utilized, construction vehicles would traverse the Campo and Manzanita Indian Reservations along Bureau of Indian Affairs (BIA) Road 12.

According to the County Draft General Plan Mountain Empire Mobility Network, Crestwood Road is an unclassified roadway (County of San Diego 2010a).

To provide additional access to the Tule Wind Project area, Pacific Wind Development is negotiating with the Manzanita and Campo Indian tribes to obtain access through tribal lands along BIA Road 12. To date, an access agreement has not been reached. If access through the Manzanita Reservation cannot be obtained, then additional access through the Ewiiapaayp Reservation (via Thing Valley Road off La Posta Truck Trail) may be required.

Table D.9-3, Roadways within the Tule Wind Project Area, lists the roadways potentially affected by construction and operation of the Tule Wind Project.

Table D.9-3
Roadways within the Tule Wind Project Area

Roadway	Jurisdiction	Classification ¹	Lanes ²	Traffic Volumes		LOS ³
				Year	ADT	
Interstate 8	Caltrans	Freeway	4	2008	13,900-17,300	A
Old Highway 80	County of San Diego	Light Collector with Improvement Options	2	2010	990 ⁴	A
Ribbonwood Road	County of San Diego	Rural Collector (north of I-8)	2	2010	270	A
		Light Collector (I-8 to Old Highway 80)	2	2010	1,230	A
McCain Valley Road	County of San Diego	Rural Collector (north of Old Highway 80)	2	2010	110	A
Crestwood Road	County of San Diego	Local Road/Unclassified ⁵	2	2010	1,060 ⁵	A ⁵
Lost Valley Road ⁶	County of San Diego	Unclassified (unpaved)	1	N/A	N/A	N/A
Rocky Knoll Road ⁶	County of San Diego	Unclassified (unpaved)	1	N/A	N/A	N/A
Public Road ⁶	County of San Diego	Unclassified (unpaved)	1	N/A	N/A	N/A

Table D.9-3 (Continued)

Roadway	Jurisdiction	Classification ¹	Lanes ²	Traffic Volumes		LOS ³
				Year	ADT	
Manzanita Cottonwood Road ⁶	BLM	Unclassified (unpaved)	1	N/A	N/A	N/A
Thing Valley Road ⁶	USFS /BIA	Unclassified (unpaved)	1	N/A	N/A	N/A

Sources: LLG 2010; Iberdrola Renewables, Inc. 2010.

Notes:

- ¹ Roadways identified as "Unclassified" do not appear on the County of San Diego Circulation Element Map.
- ² Roadways designated as having one lane do not have any formal lanes, shoulders, medians, or markings. These are dirt roadways.
- ³ N/A - The County of San Diego does not actively maintain traffic counts for these roadways.
- ⁴ Average daily traffic (ADT) identified for Old Highway 80 from Ribbonwood Road to McCain Valley Road (LLG 2010).
- ⁵ According to the County of San Diego General Plan Circulation Element, Crestwood Road is an undesignated roadway; however, the Traffic Impact Study prepared for the Tule Wind Project (LLG 2010) assigns a functional classification/designation of Rural Collector. ADT and LOS data were also provided by LLG (2010).
- ⁶ These roadways were not included in the Traffic Impact Study prepared for the Tule Wind Project. They are included here because they would be located in the project area and represent additional access routes for the Tule Wind project.

The average daily traffic (ADT) on I-8 ranges from 13,900 to 17,300 vehicles in the vicinity of the Tule Wind Project (Caltrans 2010).

The proposed 138 kV transmission line would span several unpaved and paved roadways between the collector substation and the rebuilt Boulevard Substation. Within the McCain Valley National Cooperative Land and Wildlife Management Area, McCain Valley Road would be spanned several times. The transmission line would generally parallel McCain Valley Road between the northern extent of Rough Acres Ranch and I-8 and would span several unnamed dirt roads. The transmission line would span I-8 and Old Highway 80 before interconnecting with the rebuilt Boulevard Substation.

Transit and Rail Service

Similar to the proposed ECO Substation Project, San Diego MTS Bus Route 888 and the SD&AE Railway are the only transit and freight rail operators in the area. However, unlike for the ECO Substation Project, components of the Tule Wind Project would not span SD&AE track.

Air Transportation

As shown on Figure D.9-1, several airstrips are located in the vicinity of the proposed Tule Wind Project. The southernmost proposed wind turbine would be located approximately 0.4 mile north of a former private airstrip on Rough Acres Ranch (at its nearest point, the proposed 138 kV transmission line would be located approximately 0.2 mile east of the same airstrip). Located north of I-8 and west of McCain Valley Road, the unregistered private airstrip features an approximately 3,200-foot-long gravel runway and an adjacent hangar and residence. Based on communications with the current property owner, the airstrip is not active and will remain

nonoperational (HDR Engineering 2010). The nearest active airport is the Jacumba Airport, which is located more than 6 miles southeast of the Tule Wind Project. According to the Jacumba Airport Land Use Compatibility Plan, the Tule Wind Project is not within the Jacumba Airport Influence Area and would not be subject to review by the San Diego County Airport Land Use Commission (San Diego Airport Land Use Commission 2006).

Two other airstrips are located within the general vicinity of the Tule Wind Project boundary. Located approximately 10 miles north of the Tule Wind Project boundary, the registered, privately owned Rancho Vallecito Airport features an approximately 2,500-foot-long, asphalt-bituminous concrete runway (pilotoutlook.com 2009a). A hangar and a residence are adjacent to the Rancho Vallecito Airport runway. Located approximately 10 miles northeast of the Tule Wind Project boundary, the registered, publicly owned Agua Caliente Airport features an approximately 2,500-foot-long, asphalt-bituminous concrete runway (pilotoutlook.com 2009b).

Bicycle Facilities

Old Highway 80 is the only bicycle facility in the vicinity of the Tule Wind Project

Planned Roadway Improvement Projects

Construction of the proposed Tule Wind Project would extend approximately 24 months (Iberdrola Renewables, Inc. 2010). During construction of the Tule Wind Project, planned roadway improvements in the project area may occur simultaneously. A brief description of the planned roadway improvements that may be potentially affected by the Tule Wind Project is provided in the following paragraphs. Planned roadway improvements are discussed by jurisdictional agency.

County of San Diego

As identified in the County's Department of Public Works Five Year Capital Improvement Plan (2008), the Ribbonwood Road Sightline Improvement project consists of improving the sightline on a curve on a 270-foot-long portion of Ribbonwood Road north of I-8. The project is anticipated to be completed by spring 2011. Construction of the Tule Wind Project is anticipated to occur shortly after acquisition of all required permits and right-of-way (ROW)/property acquisitions, and according to the preliminary construction schedule presented in Section B (see Table B-9) of this EIR/EIS, construction is anticipated to begin in December 2010. Therefore, construction of the proposed Tule Wind Project and the Ribbonwood Road Sightline Improvement Project could occur concurrently over a period of several months. The conflicting construction schedules would be an issue because Ribbonwood Road is one of two roads providing access to the Tule Wind Project area.

D.9.1.4 ESJ Gen-Tie Project

Due to proximity, the transit, rail, and air transportation services operating in the vicinity of the project are the same as those operating in the vicinity of the ECO Substation Project. The planned roadway improvements identified above for the ECO Substation Project would also apply to the ESJ Gen-Tie Project.

D.9.2 Applicable Regulations, Plans, and Standards

Construction activities of the Proposed PROJECT could potentially affect traffic flow, access, transit operations, and bicycle facilities on public streets and highways. Therefore, the individual project applicants and/or their construction contractors would be required to obtain encroachment, construction, excavation, and/or traffic control permits, or similar legal agreements, from the public agencies responsible for the affected roadways and other applicable ROWs. Such permits are needed for ROWs that would be crossed by the transmission lines, as well as where construction activities would require the use of ROWs and easements for parallel installations. For the Proposed PROJECT, permits would be required from Caltrans and the County Department of Public Works. For proposed rail crossings, MTS would issue permits. Helicopter construction activities associated with the ECO Substation and ESJ Gen-Tie projects would be required to comply with all appropriate regulations of the Federal Aviation Administration (FAA). At this time, the Tule Wind Project does not propose the use of helicopters during construction and it is unknown whether the Campo, Manzanita, and Jordan wind energy projects would use helicopters during construction.

In addition to the federal regulations identified below, the Campo and Manzanita wind energy projects may be subject to Bureau of Indian Affairs (BIA) policies and regulations and tribe-specific policies and plans.

D.9.2.1 Federal Regulations

Federal Aviation Administration

The Code of Federal Regulations (CFR) (14 CFR 77) establishes the standards and notification requirements set forth by the FAA for construction activities that would result in obstructions to FAA-regulated airspace. Therefore, to ensure compliance with federal regulations, San Diego Gas and Electric (SDG&E) would need to obtain permit(s) to construct the ECO Substation Project near the Jacumba Airport (the ESJ Gen-Tie Project may also be required to obtain permits). To obtain a permit to construct, the FAA requires applicants to submit a “Notice of Proposed Construction or Alteration” form (7460-1) and receive FAA approval prior to the initiation of construction activities associated with the Proposed PROJECT. The Code of Federal Regulations defines an aviation impact as construction or alteration that installs any equipment

or structures measuring more than 200 feet above the ground or construction, or alteration, that is located within an instrument approach area (14 CFR 77.13(a)(4)).

The FAA and Department of Defense (DOD) have developed a Preliminary Screening Tool to provide developers with a preview of potential impacts to long-range and weather radar, military training routes, and special airspace. This internet-based tool requires users to input the latitude and longitude of the project area and then generates a map relating the area to any of the resources of the DOD, Department of Homeland Security, and National Oceanic and Atmospheric Administration previously listed. According to Pacific Wind Development, the Tule Wind Project area is identified as follows:

- The project area is identified as a ~~red~~ "red" area, with a high likelihood to impact Air Defense and Homeland Security radars, of which an aeronautical study is required.
- The project area is identified as a ~~green~~ "green" area with minimal to no impact to Weather Surveillance Radar-1988 Doppler radar weather operation. National Telecommunication and Information Administration notification is advised.
- Preliminary review does not indicate any likely impacts to military airspace, although contact with the U.S. Air Force Regional Environmental Coordinator is advised for confirmation and documentation.

The project applicant filed a Notice of Proposed Construction of Alteration (7460-1) with the FAA on December 15, 2006, and a determination of no hazard was received on February 18, 2007. An extension of studies would be valid through November 25, 2010 (Iberdrola Renewables, Inc. 2010). Additional information is presented in Section D.10, Public Health and Safety, of this EIR/EIS.

BLM Eastern San Diego County Resource Management Plan

All existing routes on BLM-administered lands in the Eastern San Diego County Planning Area are classified as motorized or non-motorized and as open, limited, or closed. Motorized routes are open to all vehicles and may have limitations regarding permitted vehicle size and use (BLM 2008). These routes are often unmaintained.

The Lark Canyon OHV Area (a designated limited OHV Management area) is further discussed in Section D.5, Wilderness and Recreation, of this EIR/EIS.

D.9.2.2 State Laws and Regulations

California Public Utilities Commission

General Order 26-D regulates the minimum clearance requirements for railroads and street railroads. As stated in Section 14, “all electrical construction over, above, adjacent to, along or across railroads shall conform to the requirements specified in General Order 95” (CPUC 1948).

General Order 95, Rules for Overhead Electric Line Construction, establishes uniform requirements for overhead electrical line construction. According to General Order 95, Rule 36 (Section III, Table 1), the minimum allowable vertical clearance for supply cables, 22.5–300 kV, for crossings above railroad tracks that transport freight cars is 34 feet (CPUC 2009). The minimum side clearance between an electrical transmission line pole, tower, or structure and the center line of the adjacent railroad track is 8 feet, 6 inches (CPUC 2009). In addition, Section XI states that poles or towers supporting crossing spans shall be located outside of the railroad companies ROW wherever practical (CPUC 2009). For urban and rural thoroughfares, the minimum allowable vertical clearance for supply cables, 22.5–300 kV, is 30 feet (CPUC 2009).

Caltrans

The Proposed PROJECT would be located within Caltrans District 11. Caltrans requires that an encroachment permit be obtained prior to the initiation of any non-transportation activities (including utility construction) occurring within the ROW of the state highway system. Encroachment permits are obtained from the local Caltrans office (District 11). According to the Caltrans Encroachment Permit Application Guide, utility construction projects are not required to submit or prepare a Traffic Control and Detour Plan. However, traditional construction projects are required to prepare a Traffic Control and Detour Plan. Caltrans “Guidelines for Traffic Control Plans” are located in Section 2-205 of the Caltrans *Construction Manual* (Caltrans 2009a, p. 2-2.3). The Caltrans *Construction Manual* also contains provisions for nighttime construction work within the state highway system ROW.

Caltrans also requires transportation permits for the movement of vehicles or loads exceeding the limitations on the size and weight contained in Division 15, Chapter 5, Article 1, Section 35551, of the California Vehicle Code (1983). Due to the likelihood of heavy truck loads, the ECO Substation, Tule Wind, and ESJ Gen-Tie projects would need to obtain transportation permits.

D.9.2.3 Regional Policies, Plans, and Regulations

San Diego Association of Governments (SANDAG)

Congestion Management Program (CMP)

SANDAG is the designated congestion management agency for the San Diego region and is responsible for preparing the Regional Transportation Plan (RTP), of which the CMP is an element used to monitor transportation system performance, develop programs to address near- and long-term congestion, and better integrate land use and transportation planning decisions. The CMP includes a requirement for enhanced California Environmental Quality Act (CEQA) review applicable to certain large developments that generate an equivalent of 2,400 average daily vehicle trips or 200 or more peak hour vehicle trips. These larger projects must complete a traffic analysis that identifies the project's impacts on CMP system roadways, their associated costs, and appropriate mitigation. Early project coordination with affected public agencies, the MTS and the North County Transit District, is required to ensure that the impacts of new development on CMP transit performance measures are identified.

San Diego County

Department of Public Works

San Diego County requires an encroachment permit for the placement of any structures on, over, or under county roads. Several roadways owned and maintained by the County would potentially be affected by project construction. Encroachment permits are issued by the Department of Public Works for the installation of any tower, pole, or structure of any kind within, over, or under a County road ROW.

In addition to encroachment permits, the County Department of Public Works would also require the Proposed PROJECT to obtain construction and traffic control permits. A construction permit is required prior to initiation of any work within the County ROW, and a traffic control permit is typically required in concurrence with an encroachment and/or construction permit to ensure the safe travel of vehicles within a construction work zone.

County of San Diego General Plan Public Facility Element

The County of San Diego's existing General Plan Public Facility Element establishes policies and implementation measures regarding the assessment and mitigation of traffic impacts on new development. One of the goals of the Public Facility Element is to provide "a safe, convenient, and economical integrated transportation system including a wide range of transportation modes" (County of San Diego 2005). The Public Facility Element also identified an objective in the Transportation Section to provide a "Level of Service C or better on County Circulation Element roads" (County of San Diego 2005). The Public Facility Element,

however, established LOS D as an off-site mitigation limit for discretionary projects. When an existing LOS is already D, ~~“a~~ LOS of D” may be allowed (County of San Diego 2005). According to the Public Facility Element, projects that significantly increase congestion on roads operating at LOS E or F must provide mitigation, which can consist of a fair share contribution to an established program or project to mitigate the project’s impacts. ~~“If~~ impacts cannot be mitigated, the project will be denied unless a specific statement of overriding findings is made pursuant to Sections 15091 and 15093 of the State CEQA Guidelines to approve the project as proposed” (County of San Diego 2005).

County of San Diego Existing General Plan Circulation Element

The County of San Diego General Plan Circulation Element identifies roadways and bike paths included in the Countywide Bicycle Network. Roadways and bike paths are designated as Class I, II, or III bikeways, based on bicycle facilities. Circulation Element definitions for Class I, II, and III bikeways are as follows (County of San Diego 1994):

- **Bike Path or Bike Trail – Class I Bikeway.** Provides a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized.
- **Bike Lane – Class II Bikeway.** Provides a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted.
- **Bike Route – Class III Bikeway.** Provides a right-of-way designated by signs or permanent markings and shared with pedestrians or motorists.

County of San Diego Draft General Plan Update Mobility Element

The following policies of the San Diego County Draft General Plan Update, Chapter 4, Mobility Element (County of San Diego 2010a) are associated with transportation and traffic and applicable to the Proposed PROJECT:

- **Policy Mobility (M)-2.1: Level of Service Criteria.** Require development projects to provide associated road improvements necessary to achieve a level of service of ~~“D”~~ or higher on all Mobility Element roads except for those where a failing level of service has been accepted by the County pursuant to the criteria specifically identified in the accompanying text box (Criteria for Accepting a Road Classification with Level of Service E/F).

Criteria for Accepting A Road Classification with Level of Service E/F. Identified below are the applicable situations, and potential improvement options, for accepting a road

classification where a Level of Service E/F is forecast. The instances described below specify when the adverse impacts of adding travel lanes do not justify the resulting benefit of increased traffic capacity. In addition, adding capacity to roads can be growth inducing in areas where additional growth is currently not planned, which is not consistent with County Global Climate Change strategies.

- **Policy M-2.2: Access to Mobility Element Designated Roads.** Minimize direct access points to Mobility Element roads from driveways and other non-through roads to maintain the capacity and improve traffic operations.
- **Policy M-2.3: Environmentally Sensitive Road Design.** Locate and design public and private roads to minimize impacts to significant biological and other environmental and visual resources. Avoid road alignments through floodplains to minimize impacts on floodplain habitats and limit the need for constructing flood control measures. Design new roads to maintain wildlife movement and retrofit existing roads for that purpose. Utilize fencing to reduce road kill and to direct animals to under crossings.
- **Policy M-3.3: Multiple Ingress and Egress.** Require development to provide multiple ingress/egress routes in conformance with state law, and local regulations.
- **Policy M-4.4: Accommodate Emergency Vehicles.** Design and construct public and private roads to allow for necessary access for appropriately-sized fire apparatus and emergency vehicles while accommodating outgoing vehicles from evacuating residents.
- **Policy M-4.5: Context Sensitive Road Design.** Design and construct roads that are compatible with the local terrain and the uses, scale and pattern of the surrounding development. Provide wildlife crossings in road design and construction where it would minimize impacts in wildlife corridors.

Draft Boulevard Subregional Planning Area Community Plan

The following goals and policies of the Draft Boulevard Subregional Planning Area Community Plan are associated with transportation and traffic and are applicable to the Proposed PROJECT (County of San Diego 2010a):

- **Goal CM 3.1:** Avoid the proliferation of unauthorized access to private property via improperly located, authorized, or secured fire access routes.
- **Policy CM 3.1.1:** Require secondary fire access/egress routes to connect to a public road unless the approval of the Boulevard Planning Group and all impacted property and road owners is granted, along with the legally required deeded easement grants.

- **Policy CM 3.1.2:** Permit secondary access road only on the condition that they must meet emergency ingress and egress requirements while remaining locked at all times, other than during an emergency.

Mountain Empire Subregional Plan

The Circulation Element of the existing Mountain Empire Subregional Plan contains policies and goals intended to improve the local transportation system to provide for safe travel in the subregion. One circulation element, Policy 1, is seemingly relevant to the Proposed PROJECT. Policy 1 directs projects to “discourage on-street truck parking in the Country Town areas” (County of San Diego 1995).

Jacumba Airport Land Use Compatibility Plan

The ECO Substation and ESJ Gen-Tie projects would be located in Review Area 2 of the Jacumba Airport Land Use Compatibility Plan and would be subject to height restrictions (see FAA discussion in Section D.9.2.1).

According to Section 1.6.2 of the Jacumba Airport Land Use Compatibility Plan (San Diego Airport Land Use Commission 2006), the following Other Land Use Actions are subject to ALUC review:

Any project having the potential to create electrical or visual hazards to aircraft in flight, including electrical interference with radio communications or navigational signals; lighting which could be mistaken for airport lighting; glare or bright lights (including laser lights) in the eyes of pilots of aircraft using the airport; and impaired visibility near the airport;

Any project having the potential to cause an increase in the attraction of birds or other wildlife that can be hazardous to aircraft operations in the vicinity of an airport.

When reviewing land use project proposals other than general plans, specific plans, zoning ordinances, or building regulations, the Commission has three choices of action:

- (a) Find the project consistent with the Compatibility Plan;
- (b) Find the project consistent with the Compatibility Plan, subject to compliance with such conditions as the Commission may specify. Any such conditions should be limited in scope and described in a manner that allows compliance to be clearly assessed (e.g., the height of a structure); or

- (c) Find the project inconsistent with the Compatibility Plan. In making a finding of inconsistency, the Commission shall note the specific conflicts upon which the determination of inconsistency is based.

Upon receipt of a project proposal, the ALUC will review the proposal and provide a finding within 60 days.

Metropolitan Transit System

The MTS owns the SD&AE Railway. MTS requires projects encroaching upon MTS ROW to obtain a right-of-entry permit prior to the initiation of construction. Individual freight operators also typically require encroachment permits for construction work potentially affecting freight lines. However, according to MTS, the proposed ECO Substation Project (the Tule Wind and ESJ Gen-Tie projects would not encroach on the railway ROW) would only be required to obtain a right-of-entry permit from MTS (Banister, pers. comm. 2009). An entitlement permit would be issued upon completion of construction to allow operation of the utility line. A permit for each individual crossing of the SD&AE Railway would be required.

D.9.3 Environmental Effects

D.9.3.1 Definition and Use of CEQA Significance Criteria/Indicators under NEPA

The significance criteria are based on the CEQA Checklist in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and a review of environmental documentation for other utility projects in California. Traffic/transportation impacts would be significant if one or more of the following conditions resulted from construction:

- The Proposed PROJECT would require the temporary closure of a roadway, resulting in a temporary but substantial disruption to traffic flow and/or increased traffic congestion.
- Construction activities associated with the Proposed PROJECT would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units), and there are no reasonable alternative access routes available.
- Increases in vehicle trips associated with construction worker commutes or equipment transportation associated with the Proposed PROJECT would result in:
 - Unstable flow, or fluctuations in volumes of traffic that temporarily restrict flow
 - An unacceptable reduction in performance of the circulation system, as defined by an applicable plan (including a congestion management program), ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.

- The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Construction would substantially disrupt bus or rail transit service, and there would be no suitable alternative routes or stops; or would impede pedestrian movements or bike trails, and there are no suitable alternative pedestrian/bicycle access routes or accommodation through construction zones; or would conflict with planned transportation projects in the project area.
- Construction or staging activities associated with the Proposed PROJECT would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies.
- A noticeable increase in deterioration of roadway surfaces used for the Proposed PROJECT's construction zones would occur as a result of heavy truck or construction equipment movements.
- A project structure, crane, or wires would be positioned such that it/they could adversely affect aviation activities, or a proposed land use would conflict with the applicable Airport Land Use Compatibility Plan.

The National Environmental Policy Act (NEPA) provides no specific thresholds of significance for the assessment of project impacts on transportation and traffic; therefore, significance conclusions for individual impacts are not required for compliance with NEPA.

D.9.3.2 Applicant Proposed Measures

ECO Substation

SDG&E has not proposed Applicant Proposed Measures (APMs) to reduce impacts related to transportation and traffic.

Tule Wind Project

Iberdrola Renewables, Inc. proposed APMs TULE-TRA-1 (Transportation Plan), TULE-TRA-2 (Traffic Management Plan), and TULE-TRA-3 (Caltrans Design Requirements) to reduce impacts related to transportation and traffic. For a complete description, refer to Section B.4.4 of this EIR/EIS.

ESJ Gen-Tie Project

Energia Sierra Juarez U.S. Transmission, LLC, has not proposed APMs to reduce impacts related to transportation and traffic.

Campo, Manzanita, and Jordan Wind Energy Projects

At the time this EIR/EIS was prepared, the project proponents for these three wind energy projects have not developed project-specific APMs.

D.9.3.3 Direct and Indirect Effects

Table D.9-4 lists the impacts and classifications of the impacts under CEQA identified for the ECO Substation, Tule Wind, and ESJ Gen-Tie projects. Cumulative effects are analyzed in Section F of this EIR/EIS.

Table D.9-4
Transportation and Traffic Impacts

Impact No.	Description	Classification
ECO Substation – Transportation and Traffic Impacts		
ECO-TRA-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
ECO-TRA-2	Construction activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units), and there are no reasonable alternative access routes available.	Class II
ECO-TRA-3	Construction activities would result in unstable flow, or fluctuations in volumes of traffic that temporarily restrict flow; or in an unacceptable reduction in performance of the circulation system, as defined by an applicable plan (including a congestion management program), ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.	Class II
ECO-TRA-4	The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Class III
ECO-TRA-5	Construction would substantially disrupt bus or rail transit service, and there would be no suitable alternative routes or stops; or would impede pedestrian movements or bike trails, and there are no suitable alternative pedestrian/bicycle access routes or accommodation through construction zones; or would conflict with planned transportation projects in the project area.	Class II
ECO-TRA-6	Construction or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies.	Class III
ECO-TRA-7	A noticeable increase in deterioration of roadway surfaces used for the construction zone would occur as a result of heavy truck or construction equipment movements.	Class II
ECO-TRA-8	A project structure, crane, or wires would be positioned such that it/they could adversely affect aviation activities, or a proposed land use would conflict with the applicable Airport Land Use Compatibility Plan.	Class II
Tule Wind – Transportation and Traffic Impacts		
Tule-TRA-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
Tule-TRA-2	Construction activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units), and there are no reasonable alternative access routes available	Class II

Table D.9-4 (Continued)

Impact No.	Description	Classification
Tule-TRA-3	Construction activities would result in unstable flow, or fluctuations in volumes of traffic that temporarily restrict flow; or in an unacceptable reduction in performance of the circulation system, as defined by an applicable plan (including a congestion management program), ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.	Class II
Tule-TRA-4	The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Class III
Tule-TRA-5	Construction would substantially disrupt bus or rail transit service, and there would be no suitable alternative routes or stops; or would impede pedestrian movements or bike trails, and there are no suitable alternative pedestrian/bicycle access routes or accommodation through construction zones; or would conflict with planned transportation projects in the project area.	Class II
Tule-TRA-6	Construction or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies.	Class III
Tule-TRA-7	A noticeable increase in deterioration of roadway surfaces used for the construction zone would occur as a result of heavy truck or construction equipment movements.	Class II
Tule-TRA-8	A project structure, crane, or wires would be positioned such that it/they could adversely affect aviation activities, or a proposed land use would conflict with the applicable Airport Land Use Compatibility Plan.	Class II
ESJ Gen-Tie – Transportation and Traffic Impacts		
ESJ-TRA-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
ESJ-TRA-2	Construction activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units), and there are no reasonable alternative access routes available	Class III
ESJ-TRA-3	Construction activities would result in unstable flow, or fluctuations in volumes of traffic that temporarily restrict flow; or in an unacceptable reduction in performance of the circulation system, as defined by an applicable plan (including a congestion management program), ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.	Class III
ESJ-TRA-4	The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Class III
ESJ-TRA-5	Construction would substantially disrupt bus or rail transit service, and there would be no suitable alternative routes or stops; or would impede pedestrian movements or bike trails, and there are no suitable alternative pedestrian/bicycle access routes or accommodation through construction zones; or would conflict with planned transportation projects in the project area.	Class III
ESJ-TRA-6	Construction or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies.	No Impact
ESJ-TRA-7	A noticeable increase in deterioration of roadway surfaces used for the construction zone would occur as a result of heavy truck or construction equipment movements.	Class III
ESJ-TRA-8	A project structure, crane, or wires would be positioned such that it/they could adversely affect aviation activities, or a proposed land use would conflict with the applicable Airport Land Use Compatibility Plan.	Class II

Table D.9-4 (Continued)

Impact No.	Description	Classification
Proposed PROJECT (COMBINED including Campo, Manzanita, and Jordan Wind Energy)		
TRA-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
TRA-2	Construction activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units), and there are no reasonable alternative access routes available.	Class II
TRA-3	Construction activities would result in unstable flow, or fluctuations in volumes of traffic that temporarily restrict flow; or in an unacceptable reduction in performance of the circulation system, as defined by an applicable plan (including a congestion management program), ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.	Class II
TRA-4	The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Class III
TRA-5	Construction would substantially disrupt bus or rail transit service, and there would be no suitable alternative routes or stops; or would impede pedestrian movements or bike trails, and there are no suitable alternative pedestrian/bicycle access routes or accommodation through construction zones; or would conflict with planned transportation projects in the project area.	Class II
TRA-6	Construction or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies.	Class III
TRA-7	A noticeable increase in deterioration of roadway surfaces used for the construction zone would occur as a result of heavy truck or construction equipment movements.	Class II
TRA-8	A project structure, crane, or wires would be positioned such that it/they could adversely affect aviation activities, or a proposed land use would conflict with the applicable Airport Land Use Compatibility Plan.	Class II

Environmental Impacts/Environmental Effects

Direct and Indirect (Note: cumulative effects are addressed in Section F of this EIR/EIS)

Impact TRA-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.

ECO Substation Project

The ECO Substation Project construction personnel would generally drive to the worksite at the beginning of the day and leave at the end of the day, which would amount to approximately 50 to 60 trips per day during peak construction times.

To grade and develop the proposed substation site, construction would require approximately 140,000 cubic yards, or an estimated total of 10,000 truckloads of imported fill. The haul trucks would run periodically and as needed to facilitate the grading phase of construction. A maximum of 60 truck trips per day for an estimated 8 months would be required to complete the proposed

substation grading. In addition, approximately 200 additional trips are anticipated for delivery of materials and equipment during the 8-month grading period.

Construction of the ECO Substation would require up to 30 million gallons of water. If enough water cannot be located on site or purchased from nearby sources, water would be imported from the City of San Diego or the Sweetwater Authority. Assuming use of 4,000-gallon trucks, an additional 7,500 truck trips would be required to transport this water to the ECO Substation Project site. A maximum of 43 truck trips per day, delivering approximately 172,000 gallons of water, would be used to supply water during construction. Therefore, approximately 7,500 trips would be required over 8 months in order to supply the required 30 million gallons of water. All vehicles and equipment would enter the ECO Substation site from Old Highway 80. Trucks using Old Highway 80 would disrupt traffic during construction, especially when trucks slowly pull into or out of the construction driveway.

Old Highway 80 is classified as having an LOS range of A–D, indicating that traffic can travel at a “free-flow” rate and is well below capacity. The current average daily traffic near the ECO Substation site is approximately 14,800 vehicles per day. The additional traffic due to substation construction, which would amount to a peak of approximately 70 vehicles per day, would account for an increase of approximately 0.5% in San Diego County.

For construction of the 138 kV transmission line, project-related traffic would result in a slight increase in the existing daily traffic. The roadways that would be used to access—or that would be spanned by—the new transmission line all operate at a LOS better than D, indicating that traffic flows freely and the roads are below capacity. In addition, this increase in traffic would be dispersed over the 13.3-mile-long line, and it would be short term (lasting a maximum of 9 months).

Once the transmission line structures have been installed, road closures may be required at Old Highway 80 during wire-pulling activities. The road may be closed for 10 to 15 minutes during the pull of each conductor, for a total of six closures at each crossing. Traffic flow may also be disrupted during the installation and removal of clearance structures or if flaggers are used instead of temporary clearance structures during pulls. SDG&E would be required to obtain encroachment permits from the County of San Diego to cross these roadways and would perform work according to permit requirements.

Impacts to traffic during the reconstruction of the Boulevard Substation would be similar to that described for the ECO Substation in terms of construction workers traveling to and from the site from outside the immediate area. A new, paved driveway from Old Highway 80 to the rebuilt Boulevard Substation, approximately 400 feet in length and 25 feet wide, would be used to access the substation. Construction of the substation rebuild may require up to approximately

4,000 cubic yards, or an estimated total of 280 to 340 haul truckloads, of imported fill; and up to approximately 24,000 cubic yards, or an estimated total of 1,710 to 1,980 haul truckloads, of exported material. A maximum of 30 truck trips per day, extending for approximately 3 months, would be required to complete the substation expansion. In addition, for delivery of materials and equipment, an average of six truck trips per day would occur for the duration of construction.

Based on the previous discussion, the following conclusions were determined:

- Access to the ECO and Boulevard substation sites for construction vehicles and equipment would be periodic and short term
- The increase in traffic resulting from installation of the 138 kV transmission line would be dispersed over the 13.3-mile-long line and would be short term (lasting a maximum of 9 months)
- Road closures would be isolated, temporary, short term in duration, and coordinated with the local regulatory agencies
- All trenching activities required to construct the underground portion of the 138 kV transmission line would occur outside of public roadways and, as a result, would not require any road closures
- Old Highway 80 and the surrounding road network have adequate capacity.

Nonetheless, construction of the ECO Substation components would cause temporary road and lane closures that would temporarily disrupt traffic flow and could be considered substantial; hence, identified impacts would be adverse. Therefore, Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

MM TRA-1: Prepare and implement a traffic control plan. At minimum, the plan will include the following:

- Applicant will encourage carpooling to the construction site to reduce personal vehicle traffic in the project area to the greatest extent possible.
- Applicant will consider the specific object sizes, weights, origin, destination, and unique handling requirements, and evaluate alternative transportation approaches.
- Measures such as informational signs and flaggers shall be implemented when equipment may result in blocked roadways, and traffic cones or similar shall be implemented to identify any necessary changes in temporary lane configuration.

- Flaggers and directional guidance for bicyclists along Old Highway 80 shall be used.
- All Caltrans' standards for utility encroachments shall be met.
- The plan shall be prepared in accordance with Caltrans' Manual on Uniform Traffic Control Devices and the Work Area Traffic Control Handbook (WATCH) Manual.
- Clearances or overhead crossings shall conform to regulations of the CPUC, and the number of crossings shall be minimized.
- New installations under an existing roadbed shall be made by the boring-and-jacking method. No trenching under the traveled way will occur.
- For freeways and expressways, the placement of longitudinal encroachments is prohibited within controlled-access ROWs.
- Utilities shall not be located in median areas.
- Transverse crossings shall be normal (90°) to the highway alignment where practical. If impractical, skews of up to 30° from normal may be allowed.
- Supports for overhead lines crossing freeways shall be located outside the controlled-access ROW and not on cut-or-fill slopes, and shall not impair sight distances. All installations shall be placed as close to the ROW line as possible. Aboveground utilities shall be outside the clear recovery zone (20 feet from edge-of-travel way for conventional highways and 30 feet for freeways and expressways). Allowance shall be made for future widening of the highways.
- New installations shall not impair sight distances.
- Applicant shall coordinate in advance with the applicants for the other two connected actions. This effort shall include coordinating the timing of construction of the various projects to reduce potential conflicts.
- Applicant will coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles. The County and cities will then notify respective police, fire, ambulance, and paramedic services. Applicant will notify counties and cities of the proposed locations, nature, timing, and duration of any construction activities, and advise of any access restrictions that could impact their effectiveness.

Tule Wind Project

Project construction is expected to occur over an 18- to 24-month period. A typical day during the peak of the construction period would generate approximately 200 truck trips, which would include the transportation of turbine components, movement of heavy equipment, and transport of material and concrete, as well as trips for water delivery and pump trucks and subcontractor trucks. A total of up to 325 construction workers (125 on site and 200 delivery drivers) are expected at the project site on a typical day during the peak of the construction period.

Approximately 250,000 gallons of water per day over a period of 60 to 72 days is anticipated to be needed for dust suppression and for construction, while installation of concrete turbine foundations and road construction activities would be conducted simultaneously. This would require approximately 60 truck trips per day to supply water, assuming a truck capacity of 4,000 gallons. When turbine foundations and road construction activities would not be occurring simultaneously, the project is expected to require a maximum of 30 truck trips per day to supply water. These trips would be within the maximum truck traffic of 200 per day; therefore, the water trucks would not generate trips that are not otherwise accounted for. Where on-site wells can supply water, truck trips would be reduced.

The construction project trip generation is therefore based on 125 employees and 200 trucks. To estimate the employee trips, the traffic study prepared for the Tule Wind Project assumed that 80% of the employees (approximately 100 employees) would travel to the work area during the normal commuter peak hours (7 a.m. to 7 p.m.). This is considered conservative because the project trip generation does not account for potential carpooling, which is likely to occur given the remote location of the project.

There may be traffic impacts to the adjacent roadway system during the construction and decommissioning periods, which include construction worker (employee) trips in passenger vehicles/light trucks, as well as equipment/material delivery trips made in heavy vehicles (trucks). Once construction is complete, the amount of traffic generated by the Tule Wind Project would be very low, for routine O&M purposes.

The project traffic also consists of heavy vehicles (trucks). The assumed average daily trips to occur during the peak hour for truck traffic is 15% because the truck trips are expected to be equally spread throughout the day, with little more in the peak hours.

Access to the project site would be via Crestwood Road, Ribbonwood Road, and McCain Valley Road. Crestwood Road and Ribbonwood Road interchange with I-8, and it is anticipated that the majority (80%) of the construction traffic would use these two access routes. Depending on the location of the construction work zone, some construction traffic may also use McCain Valley

Road. To access McCain Valley Road, trucks would need to use Ribbonwood Road and drive east along Old Highway 80. A passenger car equivalent (PCE) factor of 2.5 for trucks is used to account for the effects of heavy vehicles in the traffic flow. PCE is defined as the number of passenger cars that are displaced by a single heavy vehicle of a particular type under the prevailing traffic conditions. Heavy vehicles have a greater traffic impact than passenger cars since they are larger than passenger cars and, therefore, occupy more roadway space; their performance characteristics are generally inferior to passenger cars, leading to the formation of downstream gaps in the traffic stream (especially on upgrades), which cannot always be effectively filled by normal passing maneuvers.

The total project is expected to generate 1,250 average daily trips during the construction phase. Modifications to roadways may be necessary to accommodate large trucks delivering equipment and construction vehicles. Temporary widening of existing roadways and the construction of additional dirt roadways will be necessary for the construction of the project. Where roadway widths are insufficient, temporary widening of the roadway with gravel or full depth widening of the pavement structure would be necessary. Efforts would be made to avoid and minimize impacts to features such as wetlands/waterways (including associated culverts) and identified cultural areas. Intersections that cannot accommodate construction vehicles may require larger turning radii, which may include but not be limited to relocation of utility poles, traffic signs, or other features adjacent to the roadway.

The project would be accessed by trucks. No helicopter use is anticipated for turbine delivery at this time. The project proposes the construction of 90 new roadways and improvements to 21 existing roadways to access the project area. Roadways between turbines would be constructed or expanded to 36-foot widths to allow for the movement of large cranes. Upon completion of construction activity, existing and proposed access roads located on land under the jurisdiction of the County of San Diego will be improved to 24 feet (28-foot-graded extent) to comply with the Department of Public Works Private Road Standard. The main project roads (Ribbonwood Road and McCain Valley Road) throughout the project site will be improved to a maximum of 20 feet to comply with the California Fire Code Standards. Spur roads to the turbines will be improved to a maximum of 18 feet wide to comply with State Responsibility Areas (SRA) Fire Safe Regulations.

For decommissioning of the Tule Wind site, heavy earth-moving equipment such as bulldozers, graders, excavators, front-end loaders, cranes, and dump trucks would likely be used. It is anticipated that the decommissioning phase would require fewer vehicles than the construction phase of the project, but would require similar construction-related activities associated with the removal of turbines and associated facilities. All management plans, best management practices,

and stipulations developed for the construction phase will be applied to similar activities during the decommissioning phase.

Based on the previous discussion, the following conclusions were determined:

- Access to the Tule Wind site for construction vehicles and equipment would be periodic and short term.
- The total project is expected to generate 1,250 average daily trips during the construction phase.
- Road closures would be isolated, temporary, short term in duration, and coordinated with the local regulatory agencies.
- The surrounding road network has adequate capacity.

Overall, construction of the Tule Wind components would cause temporary road and lane closures that would temporarily disrupt traffic flow and could be considered substantial. Identified impacts would be adverse; therefore, Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

APMs TULE-TRA-1, TULE-TRA-2, and TULE-TRA-3 would reduce construction impacts. Implementation of Mitigation Measure TRA-1, which incorporates and supersedes APMs TULE-TRA-1 through TULE-TRA-3, will reduce potential impacts to less than significant (Class II).

ESJ Gen-Tie Project

Access to the ESJ Gen-Tie Project area would be provided by Old Highway 80. Project construction would require approximately 20 to 25 workers per day for up to 6 months. The bulk of the work would be completed in late 2011. There would be approximately 5 to 15 construction vehicles operating on site during construction, with approximately 10 to 20 worker vehicles entering or leaving the site each day.

Project construction would require approximately 780,000 gallons of water (assumes use of two 2,500-gallon water trucks per day and a 6-day work week) for watering of roads and minimizing dust generated from traffic and excavation activities, and for aid in soil compaction. It is anticipated that water would be trucked onto the site in tank trucks, although a temporary groundwater well could be drilled for use during construction. Temporary on-site storage of water may be possible. Very little water would be needed when the facilities are in

operation and would mainly consist of the occasional pressure washing of the insulators to remove dirt accumulation.

Construction of the ESJ Gen-Tie would cause temporary road and lane closures that would temporarily disrupt traffic flow and could be considered substantial. Identified impacts would be adverse; therefore, Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Proposed PROJECT

Construction impacts would cause substantial temporary road and lane closures that would temporarily disrupt traffic flow. If the ECO Substation, Tule Wind, and ESJ Gen-Tie projects are constructed simultaneously, a maximum of approximately 1,600 truck trips per day would be required. Although it is unknown how many construction trips per day would be required during construction of the Campo, Manzanita, and Jordan wind energy projects, given their proximity to the ECO Substation, Tule Wind, and ESJ Gen-Tie projects, these projects would likely use similar construction routes and if lane closures were required for extended durations, traffic flow would be disrupted. Identified impacts would be adverse; therefore, Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-2: Construction activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units), and there are no reasonable alternative access routes available.

ECO Substation Project

Proposed access roads are described in detail in Section B.3 of this EIR/EIS. New roads would be constructed to provide permanent access to project facilities and components, including the ECO Substation, Southwest Powerlink (SWPL) Loop-In structures, 138 kV transmission line poles, and the rebuilt Boulevard Substation.

Emergency access would not be directly impacted during construction because all streets would remain open to emergency vehicles at all times throughout construction. Increased vehicle traffic and brief closures (approximately 10 to 15 minutes in duration) may occur while pulling the conductor across roadways or during the installation and removal of guard structures. Emergency response and evacuation procedures would be conveyed to construction personnel and implemented in the event of an emergency. As indicated for Impact TRA-1, a traffic control plan would be prepared that would help reduce any hazards associated with the proposed ECO Substation Project and would provide adequate emergency accessibility to the project area. In

particular, the final bullet in Mitigation Measure TRA-1 specifies that the applicant will coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles.

Operation and maintenance of the proposed ECO Substation Project would not result in a substantial amount of additional traffic as compared with pre-project conditions and would not require any road closures. Impacts to emergency vehicle access would occur from O&M activities. Identified impacts would be adverse; therefore, Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Tule Wind Project

Proposed access roads are described in detail in Section B.4. In order to access proposed turbine locations and facilitate delivery of wind turbine components, approximately 27.6 miles of existing roadways in the project area would be improved, and approximately 36.4 miles of new access roads would be constructed.

The project roadways would be sufficient in width for adequate emergency access. Emergency response and evacuation procedures would be conveyed to construction personnel and implemented in the event of an emergency. As indicated for Impact TRA-1, a traffic control plan would be prepared that would help reduce any hazards associated with the proposed Tule Wind Project and would provide adequate emergency accessibility to the project area. In particular, the final bullet in Mitigation Measure TRA-1 specifies that the applicant will coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles. Identified impacts would be adverse; therefore, Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

ESJ Gen-Tie Project

Proposed access roads are described in detail in Section B.5. A gen-tie tower access road would generally be located adjacent to the 500 kV or 230 kV gen-tie route and would provide access to the gen-tie support structures via the legal property access road and Old Highway 80. The property access road is located off Old Highway 80, approximately 4 miles east of the unincorporated community of Jacumba, 0.5 mile south of I-8, and approximately 200 feet south of the proposed ECO Substation.

Access to the ESJ Gen-Tie Project area is provided by a legal property access road off Old Highway 80. As required by the Rural Fire Protection District, the existing access road would be widened to 28 feet and a new turnaround area within a 40-foot-wide easement would be

constructed (portions of the property access road already exist and will be improved while other portions do not exist and will be newly constructed). Also, a permanent, unpaved gen-tie tower access road would be constructed and would parallel the selected gen-tie route. The gen-tie tower access road would be approximately 12 feet wide and would consist of graded dirt.

The proposed ESJ Gen-Tie Project would not result in inadequate emergency access. The project is not served by a dead-end road that exceeds the maximum cumulative length permitted by the Consolidated Fire Code for the 17 fire protection districts in San Diego County, and therefore would meet County road standards. Identified impacts would be adverse; therefore, Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Proposed PROJECT

Construction of the Proposed PROJECT, including the Campo, Manzanita, and Jordan wind energy projects, may indirectly and temporarily impact emergency access during construction activities. In particular, the final bullet in Mitigation Measure TRA-1 specifies that the applicant will coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles. Identified impacts would be adverse; therefore, Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-3: Construction activities would result in unstable flow, or fluctuations in volumes of traffic that temporarily restrict flow; or in an unacceptable reduction in performance of the circulation system, as defined by an applicable plan (including a congestion management program), ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.

ECO Substation Project

As previously discussed in Impact TRA-1, the ECO Substation Project-related construction traffic would result in a less-than-significant increase in the existing daily traffic. Roads spanned by the project may require temporary closure to through traffic (for approximately 10 to 15 minutes at a time), but this would occur during nonpeak traffic times to the extent possible.

In addition, traffic delays could occur when large trucks enter and exit the roadway at designated access points. Because the existing LOS standards for vicinity roads all range from LOS A–D (indicating free-flowing traffic), the existing network of roads in the area have adequate capacity to handle the increase in traffic volume resulting from construction. As previously discussed in

Impact TRA-1, the ECO Substation Project would not result in changes to the current LOS in the project vicinity.

Operation of the ECO Substation would require that a single pickup truck visit the site several times a week for switching. Routine maintenance is expected to necessitate approximately six trips per year. Routine maintenance would require one or two workers in a light utility truck to visit the substation on a weekly basis. Typically, a major maintenance inspection would take place annually, requiring approximately 20 personnel for approximately 1 week. On average, O&M activities would require less than one vehicle trip per day. This negligible amount of traffic would not impact traffic in or around the project area or alter traffic patterns. Therefore, O&M activities will not have an impact on the current LOS.

Operation and maintenance activities for the SWPL would include routine inspection, maintenance, and repair activities similar to those already being conducted for the existing SWPL transmission line. These activities would include both routine preventive maintenance and emergency procedures to maintain loop-in integrity. Some of the inspection work may include the use of helicopters for aerial patrol of the facilities, as well as ground patrol. At a minimum, routine land or aerial inspections will take place on an annual basis. Because these activities are already being performed on the existing SWPL, O&M of the proposed SWPL Loop-In would have a negligible impact on traffic.

The 138 kV transmission line would be regularly inspected, maintained, and repaired following completion of its construction. Operation and periodic maintenance activities would involve both routine preventive maintenance and emergency procedures to maintain service continuity. Aerial and ground inspections would be performed. The impacts to traffic would be minimal because these inspections already occur in the area of SDG&E's existing facilities and the new transmission line's access roads would be used as the primary method of access.

The rebuild of the Boulevard Substation would have a minor effect on the O&M practices currently employed at the site. The rebuilt substation would still operate unmanned and would be monitored and controlled by a remote control center. Maintenance activities would be performed by the same number of crew and at the same frequency as the existing substation. With implementation of Mitigation Measure TRA-1, a traffic control plan will ensure that adequate flow is maintained.

As presented above, SANDAG is the designated congestion management agency for the San Diego region. SANDAG is responsible for preparing the RTP, of which the CMP is an element used to monitor transportation system performance, develop programs to address near- and long-term congestion, and better integrate land use and transportation planning decisions. The CMP includes a requirement for enhanced CEQA review applicable to certain large developments that

generate an equivalent of 2,400 ADT or 200 or more peak hour vehicle trips. These larger projects must complete a traffic analysis that identifies the project's impacts on CMP system roadways, their associated costs, and appropriate mitigation.

Overall, increases in vehicle trips associated with construction worker commutes or equipment transportation associated with the ECO Substation Project would not result in unstable flow or fluctuations in traffic volumes and would not result in an unacceptable reduction in performance of the circulation system. The ECO Substation Project would not meet the 2,400 ADT or 200 peak hour vehicle trip thresholds and therefore would be consistent with the CMP. Identified impacts would be adverse; therefore, Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Tule Wind Project

As discussed in Impact TRA-1, the project roadways currently have a designation of LOS A, which is considered sufficient with no delays in traffic load and capacity. The project will impact the area traffic with deliveries of equipment and construction vehicles, although the traffic control plan identified in Mitigation Measure TRA-1 will control the operating conditions along routes to reduce area impacts. The construction phase of the project is anticipated to generate 1,250 additional ADT. The peak a.m. and p.m. totals amount is estimated to add 165 ADT. The County guidelines (modified February 2010) for congested road segments have an ADT level of 200 and above to reduce the LOS. The anticipated traffic would be below the County threshold of 200 ADT. The project would not meet the 2,400 ADT or 200 peak hour vehicle trip thresholds and therefore would be consistent with the CMP. The project is not anticipated to increase traffic to a point that would cause an increase in the traffic load and street system capacity. The project will create construction-related traffic generated from contractors, heavy trucks, and construction personnel accessing the project site during the construction phase. However, construction-related activities would be temporary and would not create a substantial increase in traffic to the surrounding area over time.

The project would require five permanent full-time and five part-time employees during the O&M phase. These employees would be on site during regular business hours. This would only add an additional 20 trips per day to the existing traffic conditions, which is considered minimal.

It is anticipated that the decommissioning phase would require fewer vehicles than the construction phase of the project, but it would require similar construction-related activities associated with the removal of turbines and associated facilities. Construction-related activities associated with the decommissioning of the project would be temporary and would not create a substantial increase in traffic to the surrounding area over time.

Overall, identified impacts would be adverse; therefore, Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

ESJ Gen-Tie Project

During operation of the facility, one or two personnel would be required to patrol and visually inspect the ESJ Gen-Tie Project on a periodic basis. O&M-related traffic would consist of approximately two vehicles entering and leaving the site weekly. Road maintenance activities would occur no more than twice per year on average and would be performed on an as-needed basis.

The proposed ESJ Gen-Tie Project would result in less than one additional vehicle trip per day. As such, the project would not conflict with any performance measures establishing effectiveness of the circulation system because the project trips do not exceed any of the County's Guidelines for Determining Significance to Traffic and Transportation (County of San Diego 2010b). As identified in the County's Guidelines for Determining Significance for Traffic and Transportation, the project trips would not result in a substantial increase in the number of vehicle trips, volume of capacity ratio on roads, or congestion at intersections in relation to existing conditions. The ESJ Gen-Tie Project would not meet the 2,400 ADT or 200 peak hour vehicle trip thresholds and therefore would be consistent with the CMP. Therefore, the project would not conflict with any policies establishing measures of the effectiveness of the performance of the circulation system.

Overall, the ESJ Gen-Tie Project is not anticipated to create a substantial increase in traffic that would result in unstable flow or an unacceptable reduction in performance of the circulation system. Identified impacts would not be adverse. Under CEQA, impacts would be considered less than significant (Class III).

Proposed PROJECT

If the ECO Substation, Tule Wind, and ESJ Gen-Tie Projects are constructed simultaneously, a maximum of approximately 1,600 truck trips per day would be required. Although the exact number of construction trips per day required during construction of the Campo, Manzanita, and Jordan wind energy projects is unknown, construction traffic would result in a short-term traffic increase which could also result in unstable flow or an unacceptable reduction in performance of the circulation system. Identified impacts would be adverse; therefore, Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-4: **The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**

ECO Substation Project

Proposed access roads are described in Section B.3 and above under Impact TRA-2. New roads would be constructed to provide permanent access to project facilities and components, including the ECO Substation, SWPL Loop-In structures, 138 kV transmission line poles, and the rebuilt Boulevard Substation. All entrances to the substations would be locked and monitored remotely to limit access.

Access roads would be designed to appropriate sizing to allow safe passage of construction vehicles, including oversized trucks. Sharp curves or dangerous intersections are not proposed. Caltrans requires that an encroachment permit be obtained prior to the initiation of any non-transportation activities (including utility construction) occurring within the ROW of the state highway system. Caltrans also requires transportation permits for the movement of vehicles or loads exceeding the limitations on the size and weight contained in the California Vehicle Code (Division 15, Chapter 5, Article 1, Section 35551; 1983). Due to the likelihood of heavy truck loads, the ECO Substation Project would be required to obtain transportation permits and encroachment permits.

In addition to encroachment permits, the County Department of Public Works would also require the project to obtain County construction and traffic control permits. These permits would ensure the safe travel of vehicles within construction work zones.

Identified impacts would not be adverse. Under CEQA, impacts would be considered less than significant (Class III).

Tule Wind Project

The project proposes improvements to approximately 27.6 miles of existing roadways and 36.4 miles of new roads. All project-related access roads will have a permanent impact of 20 feet. Roads to and between turbines will have an additional temporary impact of 16 feet outside of the 20-foot permanent impact area. The improvements to existing roads would result in temporary impacts by expanding typical 20-foot-wide existing roads by 8 feet on each side to an ultimate 36-foot width to allow large cranes (required to hoist and mount turbine components) to move between turbines.

Upon completion of construction activity, existing and proposed access roads located on land under the jurisdiction of the County of San Diego will be improved to 24 feet (28-foot-graded

extent) to comply with the Department of Public Works Private Road Standards. The main project roads (Ribbonwood Road and McCain Valley Road) throughout the project site will be improved to a maximum of 20 feet to comply with the California Fire Code Standards. Spur roads to the turbines will be improved to a maximum of 18 feet wide to comply with State Responsibility Area (SRA) Fire Safe Regulations.

Oversized construction trucks would be required to haul in turbine and other project components. Some construction vehicles are oversized trucks with up to 38 wheels and would require accompanying pilot trucks. Iberdrola Renewables, Inc. is required to obtain relevant encroachment and traffic permits from Caltrans and the County, and, as part of the permit process, will be required to ensure the safe travel of vehicles within construction work zones.

Identified impacts would not be adverse. Under CEQA, impacts would be considered less than significant (Class III).

ESJ Gen-Tie Project

A gen-tie tower access road would generally be located adjacent to the 500 kV or 230 kV gen-tie route and would provide access to the gen-tie support structures via the legal property access road and Old Highway 80. Access roads associated with the 500 kV gen-tie would require 5.3 acres of land and would include improvements to the approximate 0.9-mile legal property access road and a less-than-1-mile gen-tie tower access road. Access roads associated with the 230 kV gen-tie would require 5.4 acres of land and would include improvements to the approximate 0.9-mile legal property access road and an approximate 0.6-mile gen-tie tower access road.

As with the ECO Substation and Tule Wind projects, the ESJ Gen-Tie Project would employ oversize construction vehicles. The applicant is required to obtain relevant encroachment and traffic permits from Caltrans and the County, and, as part of the permit process, will be required to ensure the safe travel of vehicles within construction work zones.

Identified impacts would not be adverse. Under CEQA, impacts would be considered less than significant (Class III).

Proposed PROJECT

Considering the above project components together, each project would employ oversize construction vehicles. Similarly, the Campo, Manzanita, and Jordan wind energy projects would utilize similar construction techniques and oversize vehicles. Each applicant is required to obtain relevant encroachment and traffic permits from Caltrans and the County, and, as part of the permit process, will be required to ensure the safe travel of vehicles within construction work zones.

Overall, identified impacts would not be adverse. Under CEQA, impacts would be considered less than significant (Class III).

Impact TRA-5: Construction would substantially disrupt bus or rail transit service, and there would be no suitable alternative routes or stops; or would impede pedestrian movements or bike trails, and there are no suitable alternative pedestrian/bicycle access routes or accommodation through construction zones; or would conflict with planned transportation projects in the project area.

ECO Substation Project

The ECO Substation Project is in a rural area with limited alternative transportation corridors or pedestrian or bike paths. The SD&AE Railway is inactive, and bicycle routes are shared with motorists. Construction would occur within an existing transmission corridor and would not involve activities that would conflict with transportation policies, plans, or programs, including bus transportation in the area.

Per CPUC's General Orders 26-D and 95, SDG&E is required to obtain encroachment permits to conduct work in the public ROW and would ensure that access for motorists, pedestrians, and bicyclists remains open during construction. Additionally, for rail crossings, the proposed ECO Substation Project would be required to obtain a right-of-entry permit from MTS (Banister, pers. comm. 2009). An entitlement permit would be issued upon completion of construction to allow operation of the utility line. A permit for each individual crossing of the SD&AE Railway would be required.

The construction phase of the project, including stringing of the transmission lines, may directly affect bike routes on Old Highway 80, which is designated as a Class III Bikeway and provides a striped lane for one-way bike travel on a street or highway. Construction of the proposed transmission line along Old Highway 80 may require a temporary closure of the bike lane. The traffic control plan identified in Mitigation Measure TRA-1 will provide safety measures and directional guidance to deter bicyclists to a safer route along the highway during this phase. Considering the rural nature and limited population of the area, impacts to alternative transportation plans or programs are not anticipated.

The O&M activities for the project would require less than one vehicle trip, on average, per day. Rail, bus, pedestrian, and bicycle traffic would not be altered by O&M activities.

With incorporation of Mitigation Measure TRA-1, the ECO Substation Project will not conflict with planned transportation projects in the area. Identified impacts would be adverse; therefore, Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA,

impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Tule Wind Project

There is no bus service to the general Tule Wind Project area. As described for the ECO Substation Project, the only identified transportation program that may be affected by the proposed Tule Wind Project are bike routes. The project would not conflict with adopted policies, plans, or programs that support alternative transportation during the O&M phase; therefore, no impacts are identified.

The project may result in temporary impacts to the existing bike route along Old Highway 80 during the construction and decommissioning phase of the project. However, impacts would be minimal and temporary. The traffic control plan identified in Mitigation Measure TRA-1 will provide safety measures and directional guidance to deter bicyclists to a safer route along the highway during this phase. Construction of the project would be short term and temporary. Identified impacts would be adverse; therefore, Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

ESJ Gen-Tie Project

The proposed ESJ Gen-Tie Project is an electric generator-tie line and associated infrastructure and would generate less than one ADT. Project implementation would not result in the construction of any road improvements or new road design features that would interfere with the provision of public transit, bicycle, or pedestrian facilities. In addition, the project does not generate sufficient travel demand to increase demand for transit, pedestrian, or bicycle facilities. The project will not conflict with policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Identified impacts would not be adverse. Under CEQA, impacts would be considered less than significant (Class III).

Proposed PROJECT

Given the previous analysis for each of the project components, as well as the Campo, Manzanita, and Jordan wind energy projects, with incorporation of Mitigation Measure TRA-1 the Proposed PROJECT will not substantially disrupt bus or rail transit service, or pedestrian movements or bike trails, and would not conflict with planned transportation projects in the project area. Identified impacts would be adverse; therefore, Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-6: Construction or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies.

ECO Substation Project

No businesses, residents, or recreational facilities are located near the ECO Substation site or SWPL Loop-In site. Parking of crew vehicles and equipment would occur within the substation site limits or along designated access roads and staging areas.

Construction of the 138 kV transmission line, including transmission string activities, would necessitate parking vehicles and construction equipment along its proposed route. In most cases, parking would occur within the ROW, but on occasion, a few cars may park on the side of a public roadway. Construction of the transmission line would occur in a linear fashion, and parking would generally be in different locations each day. If construction-related parking occurs outside of the ROW, only a few cars would be parked for a short time; this is not expected to displace any parking area, given the rural setting of the ECO Substation Project.

Three residences are in close proximity to the existing Boulevard Substation. Reconstruction of the substation would not require the use of parking areas currently used by residents. All parking would occur within the substation site or along designated access roads.

The O&M of the substations, transmission line, and associated equipment will not require any additional parking spaces compared with pre-project conditions.

Overall, identified parking impacts would not be adverse. Under CEQA, impacts would be considered less than significant (Class III).

Tule Wind Project

The project includes a 10-acre parking lot adjacent to Rough Acres Ranch for general construction employee and equipment parking. This parking area would provide adequate parking capacity for contractors and visitors to the site during the construction and decommissioning phases of the project. The O&M building would have adequate parking on site for the personnel who would be utilizing the facility throughout the O&M phase of the project. The 10-acre parking area would be temporary throughout the construction and decommissioning phases and would be restored upon the completion of project construction and decommissioning. Overall, identified parking impacts would not be adverse. Under CEQA, impacts would be considered less than significant (Class III).

ESJ Gen-Tie Project

No on- or off-site parking is required or proposed. The proposed ESJ Gen-Tie Project is a high-voltage power line. The Zoning Ordinance, Section 6766, Parking Requirements (County of San Diego 1978), does not require a provision for on-site parking spaces. The project would be consistent with the ordinance for total parking requirements; therefore, the proposed ESJ Gen-Tie Project will not result in insufficient parking capacity (No Impact).

Proposed PROJECT

Construction of the Proposed PROJECT, as well as the Campo, Manzanita, and Jordan wind energy projects, would not substantially increase the demand for and/or reduce the supply of parking spaces. Overall, identified parking impacts would not be adverse. Under CEQA, impacts would be considered less than significant (Class III).

Impact TRA-7: A noticeable increase in deterioration of roadway surfaces used for the construction zone would occur as a result of heavy truck or construction equipment movements.

ECO Substation Project

Construction of the ECO Substation Project would not necessitate any modification to existing public roadways. No new structures would be installed within roads, and no modifications to public roads would occur. Operations and maintenance activities associated with the ECO Substation Project would occur within SDG&E's ROW. Access for these activities would be provided from existing public roads and newly constructed dirt access roads.

However, unexpected damage to roadways by construction vehicles and equipment (overhead line trucks, crew trucks, concrete trucks, etc.) along the project site could occur from vehicles entering and leaving roadways and construction of the transmission lines. As indicated in the discussion under Impact TRA-4, oversized construction trucks would be required to haul in turbine and other project components. Some construction vehicles are oversized trucks with up to 38 wheels that would require accompanying pilot trucks. These large construction vehicles have the potential to damage roadways over the course of project construction. Identified impacts would be adverse; therefore, Mitigation Measure TRA-2 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II). Mitigation Measure TRA-2 will ensure that the roads would be repaired and properly restored to the original condition. Implementation of Mitigation Measure TRA-2 will ensure that damaged roadways are restored to previous conditions and/or improved conditions.

MM TRA-2: Repair roadways damaged by construction activities. If damage to roads occurs, the applicant shall coordinate repairs with the affected public agencies to ensure that any impacts to area roads are adequately repaired at the applicant's cost. Roads disturbed by construction activities or construction vehicles shall be properly restored to ensure long-term protection of road surfaces. Care shall be taken to prevent damage to roadside drainage structures. Roadside drainage structures and road drainage features (e.g., rolling dips) shall be protected by regrading and reconstructing roads to drain properly. Said measures shall be incorporated into an access agreement/easement with the applicable governing agency prior to construction.

Tule Wind Project

For the Tule Wind Project, construction traffic would result in an additional 1,250 ADT. Operations and maintenance activities would result in a negligible increase in ADT. Upgraded roadways would be returned to their existing widths of 16 to 20 feet after construction is completed.

During construction, unexpected damage to roadways by construction vehicles and equipment (overhead line trucks, crew trucks, concrete trucks, etc.) along the project site could occur from vehicles entering and leaving roadways and construction of the project. Oversized construction trucks would be required to haul in turbine and other project components. Some construction vehicles are oversized trucks with up to 38 wheels that would require accompanying pilot trucks. These large construction vehicles have the potential to damage roadways over the course of project construction. Identified impacts would be adverse; therefore, Mitigation Measure TRA-2 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II). Mitigation Measure TRA-2 will ensure that the roads would be repaired and properly restored to the original condition. Implementation of Mitigation Measure TRA-2 will ensure that damaged roadways are restored to previous conditions and/or improved conditions.

ESJ Gen-Tie Project

Access to the ESJ Gen-Tie Project area is provided by Old Highway 80. The proposed ESJ Gen-Tie Project has two options for the property legal access road. The locations and alignments for both options require construction of a new 28-foot-wide road and turnaround within a 40-foot easement. The first option for the location of the project driveway would require road widening along Old Highway 80 to allow construction of a southbound left-turn lane onto the project driveway from the highway, and construction of a westbound acceleration lane from the project

driveway back onto Old Highway 80. The road widening would be necessary to meet sight distance requirements.

The second option for the location of the project driveway is also necessary to meet sight distance requirements. A safe and adequate sight distance is required at all intersections to the satisfaction of the director of the Department of Public Works. All road improvements would be constructed according to the County of San Diego Public and Private Road Standards. Accordingly, identified impacts would not be adverse. Under CEQA, impacts would be considered less than significant (Class III).

Proposed PROJECT

Given the previous analysis for each of the three project components, the Proposed PROJECT, as well as the Campo, Manzanita, and Jordan energy projects, could result in a noticeable increase in deterioration of roadway surfaces used for construction zones. During construction, unexpected damage to roadways by construction vehicles and equipment (e.g., overhead line trucks, crew trucks, concrete trucks) along the project site could occur from vehicles entering and leaving roadways and construction of the project. Also, deterioration of roadways could occur as construction traffic for the projects would utilize similar construction routes. Identified impacts would be adverse; therefore, mitigation has been provided that will mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II). Mitigation Measure TRA-2 will ensure that the roads would be repaired and properly restored to the original condition. Implementation of Mitigation Measure TRA-2 will ensure that damaged roadways are restored to previous conditions and/or improved conditions.

Impact TRA-8: A project structure, crane, or wires would be positioned such that it/they could adversely affect aviation activities, or a proposed land use would conflict with the applicable Airport Land Use Compatibility Plan.

ECO Substation Project

The project site is not within the Jacumba Airport Land Use Compatibility Plan's (ALUCP's) noise or safety zones (San Diego Airport Land Use Commission 2006).

Helicopters would be used for line work, particularly while installing new structures and stringing the new conductor, which would temporarily increase air traffic and encroach on navigable air space during construction. SDG&E or its contractor would coordinate flight patterns with local air traffic control and the FAA prior to construction to prevent any adverse impacts due to increased air traffic. In addition, a Helicopter Lift Plan would be prepared and

implemented for the construction phase of the proposed ECO Substation Project, as required by the FAA.

Cranes would be used to set up substation equipment, as well as to install the poles along the proposed 138 kV transmission line route. The tallest structure that would be installed as part of the ECO Substation Project would be the riser pole along the 138 kV transmission line, located approximately 440 feet southwest of the rebuilt Boulevard Substation. The structure would measure approximately 150 feet above ground surface. All work associated with structure installation would be below 200 feet in height, but would be within 10,000 feet of Jacumba Airport. Jacumba Airport's runway is approximately 2,510 feet long. The proposed heights of the ECO structures would require that an FAA Notice of Proposed Construction or Alteration (7460-1) be filed.

Jacumba Airport would be the closest public airstrip to the ECO Substation Project, located approximately 1 mile from the proposed 138 kV transmission line. The transmission line structures would be installed at a height of up to 150 feet above grade. At this distance, the 150-foot-tall structures would result in a 35:1 slope and therefore would not conform to the required 50:1 horizontal-to-vertical slope. As such, these structures could be classified as obstructions. The proposed heights of the ECO structures would require that an FAA Notice of Proposed Construction or Alteration (7460-1) be filed. The applicant would be required to notify the FAA of the proposed construction. The FAA will then review the project's compatibility to ensure that the project's transmission lines and other components do not present an obstacle or hindrance to aviation.

According to the Jacumba ALUCP, structures such as cell phone towers, wind turbines, and transmission lines are compatible land uses (i.e., they would not interfere with aircraft) when located at least 1,500 feet beyond either end of the runway (San Diego Airport Land Use Commission 2006). Therefore, the project would not interfere with aircraft activity.

The proposed ECO Substation Project maintenance activities would require the periodic use of a helicopter for transmission line inspection, which SDG&E already implements for its existing facilities in the area. SDG&E would notify the FAA and any additional local agencies, as necessary, prior to conducting maintenance activities requiring a helicopter.

Firefighting aircraft and crop-dusting flights could also originate from Jacumba Airport. As part of the applicant's requirements, prior to construction of project components located within the Jacumba Airport's review area, the applicant would be required to notify the FAA of the proposed construction. The FAA will then review the project's compatibility to ensure that the project's transmission lines do not present an obstacle or hindrance to these types of aviation.

The 138 kV transmission line parallels the existing SWPL transmission line for approximately 9 miles. Two incidents have occurred involving aircraft flying into the existing SWPL transmission line (CPUC and BLM 2008). Both these incidents occurred shortly after the SWPL was built, and since then SDG&E has worked to ensure such incidents do not occur again. While it is unlikely that such an incident would occur, transmission lines and towers would present a substantial obstacle to be avoided and would require additional attention from pilots.

Identified impacts would be adverse; therefore, Mitigation Measure TRA-3 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II). Implementation of Mitigation Measure TRA-3 will ensure that pilots and border patrol staff will be notified of the project location and components, and pilots will be alerted to significant dangers that will exist as a result of development of the project.

MM TRA-3: Consult with and inform U.S. Customs and Border Protection and FAA. The applicant shall consult with U.S. Customs and Border Patrol and FAA to determine where Border Patrol aircraft operate in the County. Prior to construction, the applicant shall provide written notification to all Border Patrol aircraft working in the County, and to the CPUC, stating when and where the new transmission lines and towers will be erected, and shall install markers as requested by the Border Patrol or FAA. The applicant shall also provide all Border Patrol aircraft, the Border Patrol, FAA, and the CPUC with aerial photos or topographic maps clearly showing the new lines and towers in relation to the U.S.–Mexico border within San Diego County.

Tule Wind Project

Each turbine would be a maximum of 492 feet tall, as measured from the ground to the turbine blade tip, and would be mounted on a concrete pad. Each turbine would have a turbine rotor and nacelle mounted on top of its tubular tower, giving a rotor hub height of up to 328 feet. All of the turbine components (towers, nacelles, and rotors) would be painted or finished using low-reflectivity, neutral white colors in compliance with FAA rules. Turbine facility lighting would meet FAA requirements.

The closest public airport in the vicinity of the project is Jacumba Airport, located approximately 7 miles to the southeast, and the project site is not within the Jacumba Airport ALUCP's noise or safety zones (San Diego Airport Land Use Commission 2006). According to the Jacumba ALUCP, structures such as cell phone towers, wind turbines, and transmission lines are compatible land uses (i.e., they would not interfere with aircraft) when located at least 1,500 feet

beyond either end of the runway (San Diego Airport Land Use Commission 2006). Therefore, the project would not interfere with aircraft activity.

The applicant has contacted FAA regarding the proposed Tule Wind Project to minimize any potential conflict with aviation requirements. Iberdrola Renewables, Inc. filed a Notice of Proposed Construction or Alteration (7460-1) with the FAA on December 15, 2006. A determination of no hazard was received on February 18, 2007, and an extension of studies is valid through November 25, 2010. Additional analysis is provided in Section D.10.9.2 of this EIR/EIS.

Turbines and transmission lines would present a substantial obstacle to be avoided and would require attention from pilots. Implementation of Mitigation Measure TRA-3 will ensure that pilots and border patrol staff will be notified of the project location and components to educate pilots to significant dangers that will exist as a result of project development. Identified impacts would be adverse; therefore, Mitigation Measure TRA-3 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

ESJ Gen-Tie Project

The proposed ESJ Gen-Tie Project is located outside of the Jacumba Airport ALUCP's noise and safety zones (San Diego Airport Land Use Commission 2006). Towers and transmission lines would present a substantial obstacle to be avoided and would require attention from pilots. The proposed heights of the ESJ Gen-Tie structures (up to 170 feet) would not require that an FAA Notice of Proposed Construction or Alteration (7460-1) be filed. According to the Jacumba ALUCP, structures such as cell phone towers, wind turbines, and transmission lines are compatible land uses (i.e., they would not interfere with aircraft) when located at least 1,500 feet beyond either end of the runway (San Diego Airport Land Use Commission 2006). Therefore, the project would not interfere with aircraft activity.

Implementation of Mitigation Measure TRA-3 will ensure that pilots and border patrol staff will be notified of the project location and components to educate pilots to significant dangers that will exist as a result of project development. Identified impacts would be adverse; therefore, Mitigation Measure TRA-3 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Proposed PROJECT

Considering all project components, the Proposed PROJECT (including the Campo, Manzanita, and Jordan wind energy projects) could significantly affect aviation activities; identified impacts would be adverse; therefore, Mitigation Measure TRA-3 has been provided to mitigate this

impact (Class II). Because components would be located more than 1,500 feet from the Jacumba Airport runway, the Proposed PROJECT would not propose a land use that conflicts with the applicable ALUCP (No Impact).

D.9.4 ECO Substation Project Alternatives

Table D.9-5 summarizes the impacts that have been identified for the ECO Substation Project alternatives.

Table D.9-5
Transportation and Traffic Impacts Identified for
ECO Substation Project Alternatives

Impact No.	Description	Classification
ECO Substation Alternative Site		
ECO-TRA-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
ECO-TRA-2	Construction activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units), and there are no reasonable alternative access routes available.	Class II
ECO-TRA-3	Construction activities would result in unstable flow, or fluctuations in volumes of traffic that temporarily restrict flow; or in an unacceptable reduction in performance of the circulation system, as defined by an applicable plan (including a congestion management program), ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.	Class II
ECO-TRA-4	The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Class III
ECO-TRA-5	Construction would substantially disrupt bus or rail transit service, and there would be no suitable alternative routes or stops; or would impede pedestrian movements or bike trails, and there are no suitable alternative pedestrian/bicycle access routes or accommodation through construction zones; or would conflict with planned transportation projects in the project area.	Class II
ECO-TRA-6	Construction or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies.	Class III
ECO-TRA-7	A noticeable increase in deterioration of roadway surfaces used for the construction zone would occur as a result of heavy truck or construction equipment movements.	Class II
ECO-TRA-8	A project structure, crane, or wires would be positioned such that it/they could adversely affect aviation activities, or a proposed land use would conflict with the applicable Airport Land Use Compatibility Plan.	Class II
ECO Partial Underground 138 kV Transmission Route Alternative		
ECO-TRA-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
ECO-TRA-2	Construction activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units), and there are no reasonable alternative access routes available.	Class II
ECO-TRA-3	Construction activities would result in unstable flow, or fluctuations in volumes of traffic that temporarily restrict flow; or in an unacceptable reduction in performance of the circulation	Class II

Table D.9-5 (Continued)

Impact No.	Description	Classification
	system, as defined by an applicable plan (including a congestion management program), ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.	
ECO-TRA-4	The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Class III
ECO-TRA-5	Construction would substantially disrupt bus or rail transit service, and there would be no suitable alternative routes or stops; or would impede pedestrian movements or bike trails, and there are no suitable alternative pedestrian/bicycle access routes or accommodation through construction zones; or would conflict with planned transportation projects in the project area.	Class II
ECO-TRA-6	Construction or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies.	Class III
ECO-TRA-7	A noticeable increase in deterioration of roadway surfaces used for the construction zone would occur as a result of heavy truck or construction equipment movements.	Class II
ECO-TRA-8	A project structure, crane, or wires would be positioned such that it/they could adversely affect aviation activities, or a proposed land use would conflict with the applicable Airport Land Use Compatibility Plan.	Class III
ECO Highway 80 138 kV Transmission Route Alternative		
ECO-TRA-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
ECO-TRA-2	Construction activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units), and there are no reasonable alternative access routes available.	Class II
ECO-TRA-3	Construction activities would result in unstable flow, or fluctuations in volumes of traffic that temporarily restrict flow; or in an unacceptable reduction in performance of the circulation system, as defined by an applicable plan (including a congestion management program), ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.	Class II
ECO-TRA-4	The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Class III
ECO-TRA-5	Construction would substantially disrupt bus or rail transit service, and there would be no suitable alternative routes or stops; or would impede pedestrian movements or bike trails, and there are no suitable alternative pedestrian/bicycle access routes or accommodation through construction zones; or would conflict with planned transportation projects in the project area.	Class II
ECO-TRA-6	Construction or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies.	Class III
ECO-TRA-7	A noticeable increase in deterioration of roadway surfaces used for the construction zone would occur as a result of heavy truck or construction equipment movements.	Class II
ECO-TRA-8	A project structure, crane, or wires would be positioned such that it/they could adversely affect aviation activities, or a proposed land use would conflict with the applicable Airport Land Use Compatibility Plan.	Class II

Table D.9-5 (Continued)

Impact No.	Description	Classification
ECO Highway 80 Underground 138 kV Transmission Route Alternative		
ECO-TRA-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
ECO-TRA-2	Construction activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units), and there are no reasonable alternative access routes available.	Class II
ECO-TRA-3	Construction activities would result in unstable flow, or fluctuations in volumes of traffic that temporarily restrict flow; or in an unacceptable reduction in performance of the circulation system, as defined by an applicable plan (including a congestion management program), ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.	Class II
ECO-TRA-4	The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Class III
ECO-TRA-5	Construction would substantially disrupt bus or rail transit service, and there would be no suitable alternative routes or stops; or would impede pedestrian movements or bike trails, and there are no suitable alternative pedestrian/bicycle access routes or accommodation through construction zones; or would conflict with planned transportation projects in the project area.	Class II
ECO-TRA-6	Construction or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies.	Class III
ECO-TRA-7	A noticeable increase in deterioration of roadway surfaces used for the construction zone would occur as a result of heavy truck or construction equipment movements.	Class II
ECO-TRA-8	A project structure, crane, or wires would be positioned such that it/they could adversely affect aviation activities, or a proposed land use would conflict with the applicable Airport Land Use Compatibility Plan.	Class III

D.9.4.1 ECO Substation Alternative Site

This alternative would not affect the impact conclusions resulting from implementation of the proposed Tule Wind and ESJ Gen-Tie projects as discussed in Section D.9.3.3.

Environmental Setting/Affected Environment

Sections D.9.1 and D.9.1.2 describe the environmental setting for the proposed ECO Substation Project. Because this alternative would only shift the proposed ECO Substation site 700 feet to the east, the setting would be the same as that described in Sections D.9.1 and D.9.1.2.

Environmental Impacts/Environmental Effects

Direct and Indirect (Note: cumulative effects are addressed in Section F of this EIR/EIS)

Impact TRA-1: When compared with the proposed ECO Substation Project, a similar amount of grading would be required to develop the project site, the same number of trucks would be required, and the same construction routes would be used. Therefore, as under the ECO

Substation Project, construction of this alternative would cause temporary road and lane closures that would temporarily disrupt traffic flow and could be considered substantial and adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-2: When compared with the proposed ECO Substation Project, the same construction routes would be used. Therefore, as under the proposed ECO Substation Project, impacts to movements of emergency vehicles would be adverse. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II) with implementation of Mitigation Measure TRA-1.

Impact TRA-3: When compared with the proposed ECO Substation Project, the same construction routes would be used, and the same construction trip generation would occur. Therefore, as under the proposed ECO Substation Project, impacts to the circulation system would be adverse. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II) with implementation of Mitigation Measure TRA-1.

Impact TRA-4: When compared with the proposed ECO Substation Project, the same construction routes would be used, the same construction trip generation would occur, and the same encroachment and traffic permits would be required from Caltrans and the County. Therefore, as under the proposed ECO Substation Project, identified impacts due to increased hazards would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-5: As analyzed in Section D.9.3.3, the proposed ECO Substation Project would likely not conflict with planned transportation projects in the area. Given the similarity of this alternative to the ECO Substation Project, impacts would be adverse. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II) with implementation of Mitigation Measure TRA-1.

Impact TRA-6: As under the proposed ECO Substation Project, parking impacts resulting from construction of the substation would be less than significant (Class III) because all parking would occur within the substation site or along designated access roads, and there would be adequate parking spaces for construction vehicles at the alternative ECO Substation site. Identified impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-7: Construction activity for this alternative, similar to the proposed ECO Substation Project, would not necessitate any modification to existing public roadways. No new structures would be installed within roads, and no modifications to public roads would

occur. Construction would be short term and temporary, but could result in a noticeable increase in deterioration of roadway surfaces. As under the proposed ECO Substation Project, impacts would be adverse. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II) with implementation of Mitigation Measure TRA-2.

Impact TRA-8: While this alternative's site for the ECO Substation would be approximately 700 feet to the east, similar to the proposed ECO Substation Project, aviation impacts would be adverse. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II) with implementation of Mitigation Measure TRA-3.

D.9.4.2 ECO Partial Underground Proposed 138 kV Transmission Route Alternative

This alternative would not affect the impact conclusions resulting from implementation of the proposed Tule Wind and ESJ Gen-Tie projects as discussed in Section D.9.3.3.

Environmental Setting/Affected Environment

With the exception of underground placement of the proposed 138 kV transmission line between MP 9 and the rebuilt Boulevard Substation, components of this alternative would be the same as those identified for the proposed ECO Substation Project, as presented in Section B of this EIR/EIS. Under this alternative, from MP 9 to the rebuilt Boulevard Substation, the proposed 138 kV transmission line would be installed underground (instead of on overhead transmission poles) along the same route as the proposed ECO Substation Project; therefore, the setting would be the same as described in Sections D.9.1 and D.9.1.2.

Environmental Impacts/Environmental Effects

Direct and Indirect (Note: cumulative effects are addressed in Section F of this EIR/EIS)

Impact TRA-1: When compared with the proposed ECO Substation Project, a greater amount of grading would be required to develop the project site, since the proposed 138 kV transmission line between MP 9 and the rebuilt Boulevard Substation would be placed underground. A greater number of trucks would be required, and the same construction routes would be used. Since impacts under the ECO Substation Project would be considered substantial and require mitigation, impacts under this alternative would also be adverse. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II) with implementation of Mitigation Measure TRA-1.

Impact TRA-2: When compared with the proposed ECO Substation Project, the same construction routes would be used, and a greater number of trucks would be required. Therefore,

as under the proposed ECO Substation Project, construction activities could restrict the movements of emergency vehicles, and impacts would be adverse. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II) with implementation of Mitigation Measure TRA-1.

Impact TRA-3: When compared with the proposed ECO Substation Project, the same construction routes would be used, and a greater construction trip generation would occur. As under the proposed ECO Substation Project, increases in vehicle trips associated with construction worker commutes or equipment transportation associated with this alternative could result in unstable flow or fluctuations in traffic volumes, and could result in an unacceptable reduction in performance of the circulation system. Therefore, impacts would be adverse. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II) with implementation of Mitigation Measure TRA-1.

Impact TRA-4: When compared with the proposed ECO Substation Project, the same construction routes would be used, and the same encroachment and traffic permits would be required from Caltrans and the County. Therefore, as under the proposed ECO Substation Project, impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-5: As analyzed in Section D.9.3.3, with incorporation of Mitigation Measure TRA-1, the proposed ECO Substation Project will not conflict with planned transportation projects in the area. Overall, the project would not substantially disrupt bus or rail transit service, or pedestrian and bicycle movements, and impacts would be less than significant with mitigation (Class II). Given the similarity of this alternative to the proposed ECO Substation Project, no feature of this alternative would result in a different level of impacts; therefore, impacts would be adverse. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II) with implementation of Mitigation Measure TRA-1.

Impact TRA-6: As under the proposed ECO Substation Project, parking impacts resulting from construction of the substation would be less than significant (Class III) because all parking would occur on site or along designated access roads, and there would be adequate parking spaces for construction vehicles. Identified impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-7: Construction activity for this alternative, similar to the proposed ECO Substation Project, would not necessitate any modification to existing public roadways. No new structures would be installed within roads, and no modifications to public roads would occur. Construction would be short term and temporary, but it could result in the deterioration of roadway surfaces used for the construction zone. Identified impacts would be adverse. Under

CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II) with implementation of Mitigation Measure TRA-2.

Impact TRA-8: Similar to the proposed ECO Substation Project, this alternative could adversely affect aviation activities, but since a major portion of the overhead alignment would be underground, impacts would be reduced and no mitigation would be required (Class III). This alternative would not propose a land use that conflicts with the applicable ALUCP. Identified impacts would not be adverse and, under CEQA, would be less than significant (Class III).

D.9.4.3 ECO Highway 80 138 kV Transmission Route Alternative

This alternative would not affect the impact conclusions resulting from implementation of the proposed Tule Wind and ESJ Gen-Tie projects as discussed in Section D.9.3.3.

Environmental Setting/Affected Environment

From the intersection of the SWPL transmission line and Old Highway 80 (approximately 1.5 miles northwest of Jacumba), this alternative would expand and use an existing utility ROW and overbuild an existing distribution line for approximately 4.8 miles along Old Highway 80 to the rebuilt Boulevard Substation. A description of the Old Highway 80 setting is provided in Section D.9.1.

Environmental Impacts/Environmental Effects

Direct and Indirect (Note: cumulative effects are addressed in Section F of this EIR/EIS)

Impact TRA-1: When compared with the proposed ECO Substation Project, a similar amount of grading would be required to develop the project site, and a similar number of trucks would be required. Similar construction routes would be used, except that Old Highway 80 would also be used. Impacts identified under the ECO Substation Project would be adverse; therefore, Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-2: When compared with the proposed ECO Substation Project, similar construction routes would be used. Therefore, as under the ECO Substation Project, construction activities could restrict the movements of emergency vehicles. Identified impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-3: When compared with the ECO Substation Project, similar construction routes would be used (although Old Highway 80 would also be used), and the trip generation for construction vehicles would be similar. As under the ECO Substation Project, increases in vehicle trips associated with construction worker commutes or equipment transportation associated with this alternative could result in unstable flow or fluctuations in traffic volumes and in an unacceptable reduction in performance of the circulation system. Identified impacts would therefore be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-4: When compared with the proposed ECO Substation Project, similar construction routes would be used, similar construction trip generation would occur, and the same encroachment and traffic permits would be required from Caltrans and the County. Therefore, as under the proposed ECO Substation Project, impacts would be less than significant (Class III).

Impact TRA-5: As analyzed in Section D.9.3.3, with incorporation of Mitigation Measure TRA-1, the proposed ECO Substation Project will not conflict with planned transportation projects in the area. The ECO Substation Project may result in temporary impacts to the existing bike route along Old Highway 80 during the construction and decommissioning phases of the project. However, impacts would be minimal and temporary. Overall, the project would not substantially disrupt bus or rail transit service, or pedestrian and bicycle movements, and impacts would be less than significant with mitigation (Class II). Given the similarity of this alternative to the ECO Substation Project, no feature of this alternative would result in a different level of impacts; therefore, impacts would be adverse; under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-6: As under the proposed ECO Substation Project, parking impacts resulting from construction of the substation would be less than significant (Class III) because all parking would occur on site or along designated access roads, and there would be adequate parking spaces for construction vehicles. Identified impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-7: Construction activity for this alternative, similar to the proposed ECO Substation Project, would not necessitate any modification to existing public roadways. No new structures would be installed within roads, and no modifications to public roads would occur. Construction would be short term and temporary, but it could result in the deterioration of roadway surfaces used for the construction zone. Identified impacts would be adverse; therefore, Mitigation Measure TRA-2 has been provided to mitigate this impact. Under CEQA,

impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-8: When compared with the proposed ECO Substation Project, this alternative would be partly co-located along Old Highway 80, which currently has an existing transmission line along this stretch. This alternative would overbuild the transmission line and increase the height of this potential aviation hazard. As such, Mitigation Measure TRA-3 will still be required to reduce impacts to less than significant (Class II), although impacts would be reduced when compared with the proposed ECO Substation Project. This alternative would not propose a land use that conflicts with the applicable ALUCP and would be located in the same safety and noise compatibility zones as the proposed ECO Substation Project; as such, identified impacts would not be adverse and, under CEQA, would be less than significant (Class III).

D.9.4.4 ECO Highway 80 Underground 138 kV Transmission Route Alternative

This alternative would not affect the impact conclusions resulting from implementation of the proposed Tule Wind and ESJ Gen-Tie projects as discussed in Section D.9.3.3.

Environmental Setting/Affected Environment

From the intersection of the SWPL transmission line and Old Highway 80, this alternative would place the 138 kV transmission line underground adjacent to Old Highway 80 (expanding and using an existing utility ROW) and would follow the roadway north and west to the rebuilt Boulevard Substation.

Environmental Impacts/Environmental Effects

Direct and Indirect (Note: cumulative effects are addressed in Section F of this EIR/EIS)

Impact TRA-1: When compared with the proposed ECO Substation Project, a greater amount of grading would be required to place a portion of the 138 kV transmission line underground, and a greater number of trucks would be required. Similar construction routes would be used, and a greater potential for lane closure would result due to the increase in grading. Impacts identified under the ECO Substation Project would be considered substantial and require mitigation; therefore, impacts resulting under this alternative would also be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-2: When compared with the proposed ECO Substation Project, similar construction routes would be used, although Old Highway 80 would also be used, and a greater number of trucks would be required for the undergrounding component. Therefore, as under the ECO Substation Project, construction activities could restrict the movements of emergency

vehicles, and impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-3: When compared with the proposed ECO Substation Project, similar construction routes would be used (although Old Highway 80 would also be used), and a greater number of construction vehicles would be used. As under the ECO Substation Project, increases in vehicle trips associated with construction worker commutes or equipment transportation associated with this alternative could result in unstable flow or fluctuations in traffic volumes, and could result in an unacceptable reduction in performance of the circulation system. Identified impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-4: When compared with the proposed ECO Substation Project, similar construction routes would be used, similar construction trip generation would occur, and the same encroachment and traffic permits would be required from Caltrans and the County. Therefore, as under the proposed ECO Substation Project, impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-5: As analyzed in Section D.9.3.3, with incorporation of Mitigation Measure TRA-1, the proposed ECO Substation Project will not conflict with planned transportation projects in the area. The ECO Substation Project may result in temporary impacts to the existing bike route along Old Highway 80 during the construction and decommissioning phases of the project. However, impacts would be minimal and temporary. Overall, the project would not substantially disrupt bus or rail transit service, or pedestrian and bicycle movements, and impacts would be less than significant with mitigation (Class II). Given the similarity of this alternative to the ECO Substation Project, no feature of this alternative would result in a different level of impact; therefore, impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-6: As under the proposed ECO Substation Project, parking impacts resulting from construction of the substation would be less than significant (Class III) because all parking would occur on site or along designated access roads, and there would be adequate parking spaces for construction vehicles. Identified impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-7: Construction activity for this alternative, similar to the proposed ECO Substation Project, would be short term and temporary, but it could result in the deterioration of

roadway surfaces used for the construction zone. Identified impacts would be adverse. Mitigation Measure TRA-2 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-8: Similar to the proposed ECO Substation Project, this alternative could adversely affect aviation activities, but since a major portion of the overhead alignment would be underground, impacts would be reduced, and no mitigation would be required. Identified impacts would not be adverse and, under CEQA, would be less than significant (Class III). This alternative would not propose a land use that conflicts with the applicable ALUCP.

D.9.5 Tule Wind Project Alternatives

Table D.9-6, Transportation and Traffic Impacts Identified for Tule Wind Project Alternatives, summarizes the impacts that have been identified for the Tule Wind Project alternatives.

Table D.9-6
Transportation and Traffic Impacts Identified for
Tule Wind Project Alternatives

Impact No.	Description	Classification
Tule Wind Alternative 1, Gen-Tie Route 2 with Collector Substation/O&M Facility on Rough Acres Ranch		
Tule-TRA-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
Tule-TRA-2	Construction activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units), and there are no reasonable alternative access routes available.	Class II
Tule-TRA-3	Construction activities would result in unstable flow, or fluctuations in volumes of traffic that temporarily restrict flow; or in an unacceptable reduction in performance of the circulation system, as defined by an applicable plan (including a congestion management program), ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.	Class II
Tule-TRA-4	The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Class III
Tule-TRA-5	Construction would substantially disrupt bus or rail transit service, and there would be no suitable alternative routes or stops; or would impede pedestrian movements or bike trails, and there are no suitable alternative pedestrian/bicycle access routes or accommodation through construction zones; or would conflict with planned transportation projects in the project area.	Class II
Tule-TRA-6	Construction or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies.	Class III
Tule-TRA-7	A noticeable increase in deterioration of roadway surfaces used for the construction zone would occur as a result of heavy truck or construction equipment movements.	Class II
Tule-TRA-8	A project structure, crane, or wires would be positioned such that it/they could adversely affect aviation activities, or a proposed land use would conflict with the applicable Airport Land Use Compatibility Plan.	Class II

East County Substation/Tule Wind/Energia Sierra Juarez Gen-Tie Projects
D.9 TRANSPORTATION AND TRAFFIC

Table D.9-6 (Continued)

Impact No.	Description	Classification
Tule Wind Alternative 2, Gen-Tie Route 2 Underground with Collector Substation/O&M Facility on Rough Acres Ranch		
Tule-TRA-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
Tule-TRA-2	Construction activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units), and there are no reasonable alternative access routes available.	Class II
Tule-TRA-3	Construction activities would result in unstable flow, or fluctuations in volumes of traffic that temporarily restrict flow; or in an unacceptable reduction in performance of the circulation system, as defined by an applicable plan (including a congestion management program), ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.	Class II
Tule-TRA-4	The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Class III
Tule-TRA-5	Construction would substantially disrupt bus or rail transit service, and there would be no suitable alternative routes or stops; or would impede pedestrian movements or bike trails, and there are no suitable alternative pedestrian/bicycle access routes or accommodation through construction zones; or would conflict with planned transportation projects in the project area.	Class II
Tule-TRA-6	Construction or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies.	Class III
Tule-TRA-7	A noticeable increase in deterioration of roadway surfaces used for the construction zone would occur as a result of heavy truck or construction equipment movements.	Class II
Tule-TRA-8	A project structure, crane, or wires would be positioned such that it/they could adversely affect aviation activities, or a proposed land use would conflict with the applicable Airport Land Use Compatibility Plan.	Class II
Tule Wind Alternative 3, Gen-Tie Route 3 with Collector Substation/O&M Facility on Rough Acres Ranch		
Tule-TRA-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
Tule-TRA-2	Construction activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units), and there are no reasonable alternative access routes available.	Class II
Tule-TRA-3	Construction activities would result in unstable flow, or fluctuations in volumes of traffic that temporarily restrict flow; or in an unacceptable reduction in performance of the circulation system, as defined by an applicable plan (including a congestion management program), ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.	Class II
Tule-TRA-4	The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Class III
Tule-TRA-5	Construction would substantially disrupt bus or rail transit service, and there would be no suitable alternative routes or stops; or would impede pedestrian movements or bike trails, and there are no suitable alternative pedestrian/bicycle access routes or accommodation through construction zones; or would conflict with planned transportation projects in the project area.	Class II

Table D.9-6 (Continued)

Impact No.	Description	Classification
Tule-TRA-6	Construction or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies.	Class III
Tule-TRA-7	A noticeable increase in deterioration of roadway surfaces used for the construction zone would occur as a result of heavy truck or construction equipment movements.	Class II
Tule-TRA-8	A project structure, crane, or wires would be positioned such that it/they could adversely affect aviation activities, or a proposed land use would conflict with the applicable Airport Land Use Compatibility Plan.	Class II
Tule Wind Alternative 4, Gen-Tie Route 3 Underground with Collector Substation/O&M Facility on Rough Acres Ranch.		
Tule-TRA-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
Tule-TRA-2	Construction activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units), and there are no reasonable alternative access routes available.	Class II
Tule-TRA-3	Construction activities would result in unstable flow, or fluctuations in volumes of traffic that temporarily restrict flow; or in an unacceptable reduction in performance of the circulation system, as defined by an applicable plan (including a congestion management program), ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.	Class II
Tule-TRA-4	The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Class III
Tule-TRA-5	Construction would substantially disrupt bus or rail transit service, and there would be no suitable alternative routes or stops; or would impede pedestrian movements or bike trails, and there are no suitable alternative pedestrian/bicycle access routes or accommodation through construction zones; or would conflict with planned transportation projects in the project area.	Class II
Tule-TRA-6	Construction or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies.	Class III
Tule-TRA-7	A noticeable increase in deterioration of roadway surfaces used for the construction zone would occur as a result of heavy truck or construction equipment movements.	Class II
Tule-TRA-8	A project structure, crane, or wires would be positioned such that it/they could adversely affect aviation activities, or a proposed land use would conflict with the applicable Airport Land Use Compatibility Plan.	Class II
Tule Wind Alternative 5, Reduction in Turbines		
Tule-TRA-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
Tule-TRA-2	Construction activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units), and there are no reasonable alternative access routes available.	Class II
Tule-TRA-3	Construction activities would result in unstable flow, or fluctuations in volumes of traffic that temporarily restrict flow; or in an unacceptable reduction in performance of the circulation system, as defined by an applicable plan (including a congestion management program), ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.	Class II

Table D.9-6 (Continued)

Impact No.	Description	Classification
Tule-TRA-4	The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Class III
Tule-TRA-5	Construction would substantially disrupt bus or rail transit service, and there would be no suitable alternative routes or stops; or would impede pedestrian movements or bike trails, and there are no suitable alternative pedestrian/bicycle access routes or accommodation through construction zones; or would conflict with planned transportation projects in the project area.	Class II
Tule-TRA-6	Construction or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies.	Class III
Tule-TRA-7	A noticeable increase in deterioration of roadway surfaces used for the construction zone would occur as a result of heavy truck or construction equipment movements.	Class II
Tule-TRA-8	A project structure, crane, or wires would be positioned such that it/they could adversely affect aviation activities, or a proposed land use would conflict with the applicable Airport Land Use Compatibility Plan.	Class II

D.9.5.1 Tule Wind Alternative 1, Gen-Tie Route 2 with Collector Substation/O&M Facility on Rough Acres Ranch

This alternative would not affect the impact conclusions resulting from implementation of the proposed ECO Substation and ESJ Gen-Tie projects as discussed in Section D.9.3.3.

Environmental Setting/Affected Environment

Under this alternative, the proposed Tule Wind Project’s collector substation and O&M facility would be relocated from BLM-administered land in the McCain National Cooperative Land and Wildlife Management Area to County of San Diego–jurisdictional land on Rough Acres Ranch. Proposed turbines would be located in the same area as identified in the proposed Tule Wind Project. Upon exiting the alternate collector substation site, the alternate 138 kV transmission line would generally follow the same route as the proposed Tule Wind Project 138 kV transmission line to the rebuilt Boulevard Substation. Similar construction routes would be used, although different routes would be used to access the Rough Acres Ranch section of the project.

Environmental Impacts/Environmental Effects

Direct and Indirect (Note: cumulative effects are addressed in Section F of this EIR/EIS)

Impact TRA-1: When compared with the proposed Tule Wind Project, a similar amount of grading would be required to develop the project site, and a similar number of trucks would be required. Similar construction routes would be used, although different routes would be used to access the Rough Acres Ranch section of the project. Impacts identified under the Tule Wind Project would be considered substantial and require mitigation, and impacts would be similar

under this alternative. Identified impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-2: When compared with the proposed Tule Wind Project, similar construction routes would be used, although different routes would be used to access the Rough Acres Ranch section of the project. As under the Tule Wind Project, construction activities would cause temporary road and lane closures that would temporarily disrupt traffic flow and could be considered substantial; therefore, impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-3: When compared with the proposed Tule Wind Project, similar construction routes would be used, and the trip generation for construction vehicles would be similar. The alternative is not anticipated to increase traffic to a point that would cause an increase in the traffic load and street system capacity. As under the proposed Tule Wind Project, without mitigation, this alternative is anticipated to create a substantial increase in traffic. Identified impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-4: When compared with the proposed Tule Wind Project, similar construction routes would be used, similar construction trip generation would occur, and the same encroachment and traffic permits would be required from Caltrans and the County. Therefore, as under the proposed Tule Wind Project, impacts due to increased hazards would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-5: As analyzed in Section D.9.3.3, the proposed Tule Wind Project may result in temporary impacts to the existing bike route along Old Highway 80 during the construction and decommissioning phases of the project. However, impacts would be minimal and temporary. The traffic control plan identified in Mitigation Measure TRA-1 will provide safety measures and directional guidance to deter bicyclists to a safer route along the highway during this phase. No feature of this alternative would result in a different level of impacts; therefore, impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-6: As under the proposed Tule Wind Project, parking impacts resulting from construction of the project would be less than significant (Class III) because all parking would occur on site or along designated access roads, and there would be adequate parking spaces for

construction vehicles. Parking would be made available on Rough Acres Ranch for construction of the O&M and substation facilities. Identified impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-7: As under the proposed Tule Wind Project, during construction, unexpected damage to roadways by construction vehicles and equipment (overhead line trucks, crew trucks, concrete trucks, etc.) along the site could occur from vehicles entering and leaving roadways and construction of the project. Therefore, impacts would be adverse. Mitigation Measure TRA-2 has been provided to mitigate this impact and will ensure that the roads and damaged roadways will be repaired and properly restored to the original condition and/or improved conditions. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-8: Similar to the proposed Tule Wind Project, turbines and transmission lines proposed under this alternative would present a substantial obstacle to be avoided and would require attention from pilots. Implementation of Mitigation Measure TRA-3 will ensure that pilots and Border Patrol staff will be notified of the project location and components, and pilots will be alerted to significant dangers that will exist as a result of development of the project. Therefore, impacts would be adverse. Mitigation Measure TRA-3 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II). No conflict with the Jacumba ALUCP would result (No Impact).

D.9.5.2 Tule Wind Alternative 2, Gen-Tie Route 2 Underground with Collector Substation/O&M Facility on Rough Acres Ranch

This alternative would not affect the impact conclusions resulting from implementation of the proposed ECO Substation and ESJ Gen-Tie projects as discussed in Section D.9.3.3.

Environmental Setting/Affected Environment

Section D.9.5.1 describes the existing setting associated with relocation of the collector substation and O&M facility to Rough Acres Ranch and the subsequent shortened 138 kV transmission line route and extended collector cable system. Because this alternative would only place the alternate 138 kV transmission line underground, the existing setting would be the same as described in Section D.9.5.1.

Environmental Impacts/Environmental Effects

Direct and Indirect (Note: cumulative effects are addressed in Section F of this EIR/EIS)

Impact TRA-1: When compared with the proposed Tule Wind Project, a greater amount of grading would be required to develop the project site, and a greater number of trucks would be required. Similar construction routes would be used, although different routes would be used to access the Rough Acres Ranch section of the project. Impacts identified under the proposed Tule Wind Project would be considered substantial and adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-2: When compared with the proposed Tule Wind Project, similar construction routes would be used, although different routes would be used to access the Rough Acres Ranch section of the project, and a greater number of trucks would be required to implement the underground placement of the gen-tie. Similar to the Tule Wind Project, construction activities would cause temporary road and lane closures that would temporarily disrupt traffic flow and could be considered substantial; therefore, impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-3: When compared with the proposed Tule Wind Project, similar construction routes would be used, and the trip generation for construction vehicles would be greater. The alternative is not anticipated to increase traffic to a point that would cause an increase in the traffic load and street system capacity. As under the proposed Tule Wind Project, without mitigation, this alternative is anticipated to create a substantial increase in traffic. Therefore, impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-4: When compared with the proposed Tule Wind Project, although the trip generation for construction vehicles would be greater, similar construction routes would be used and the same encroachment and traffic permits would be required from Caltrans and the County. Therefore, identified impacts due to increased hazards would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-5: As analyzed in Section D.9.3.3, the proposed Tule Wind Project may result in temporary impacts to the existing bike route along Old Highway 80 during the construction and decommissioning phases of the project. However, impacts would be minimal and temporary. The traffic control plan identified in Mitigation Measure TRA-1 will provide safety measures and directional guidance to deter bicyclists to a safer route along the highway during this phase. No

feature of this alternative would result in a different level of impacts; therefore, impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-6: As under the proposed Tule Wind Project, parking impacts resulting from construction of the project would be less than significant (Class III) because all parking would occur on site or along designated access roads, and there would be adequate parking spaces for construction vehicles. Parking would be made available on Rough Acres Ranch for construction of the O&M and substation facilities. Identified impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-7: As under the proposed Tule Wind Project, during construction, unexpected damage to roadways by construction vehicles and equipment (overhead line trucks, crew trucks, concrete trucks, etc.) along the site could occur from vehicles entering and leaving roadways and construction of the project. This would be an adverse impact. Mitigation Measure TRA-2 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-8: Similar to the proposed Tule Wind Project, turbines and transmission lines proposed under this alternative would present a substantial obstacle to be avoided and would require attention from pilots. However, with the proposed underground placement of a component of this alternative, impacts would be reduced when compared with the proposed Tule Wind Project. Identified impacts would be adverse; therefore, Mitigation Measure TRA-3 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II). Implementation of Mitigation Measure TRA-3 will ensure that pilots and Border Patrol staff would be notified of the project location and components, and pilots would be alerted to significant dangers that would exist as a result of development of the project. No conflict with the Jacumba ALUCP would result (No Impact).

D.9.5.3 Tule Wind Alternative 3, Gen-Tie Route 3 with Collector Substation/O&M Facility on Rough Acres Ranch

This alternative would not affect the impact conclusions resulting from implementation of the proposed ECO Substation and ESJ Gen-Tie projects as discussed in Section D.9.3.3.

Environmental Setting/Affected Environment

Under this alternative, the Tule Wind Project's collector substation and O&M facility would be relocated from BLM-administered land in the McCain National Cooperative Land and Wildlife

Management Area to County of San Diego—jurisdictional land on Rough Acres Ranch. Proposed turbines would be located in the same area as identified in the proposed Tule Wind Project. Upon exiting the alternate collector substation site, the alternate 138 kV transmission line would travel north for approximately 0.15 mile before travelling in a western direction to Ribbonwood Road. At Ribbonwood Road, the alternate transmission line would turn south, primarily adjacent to Ribbonwood Road, and would cross I-8 before entering the community of Boulevard. At the Ribbonwood Road/Old Highway 80 intersection, the alternate transmission line would turn east and follow Old Highway 80 to the rebuilt Boulevard Substation. Similar construction routes would be used, although different routes would be used to access the Rough Acres Ranch section of the project.

Environmental Impacts/Environmental Effects

Direct and Indirect (Note: cumulative effects are addressed in Section F of this EIR/EIS)

Impact TRA-1: When compared with the proposed Tule Wind Project, a similar amount of grading would be required to develop the project site, and a similar number of trucks would be required. Similar construction routes would be used for the northern segments of the project, and different routes would be used to access Rough Acres Ranch and the alternative transmission line Route 3 sections of the project. Identified impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-2: When compared with the proposed Tule Wind Project, similar construction routes would be used, although different routes would be used to access the Rough Acres Ranch and the alternative transmission line Route 3 sections of the project. Therefore, as with the Tule Wind Project, construction activities would cause temporary road and lane closures that would temporarily disrupt traffic flow and that could be considered adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-3: When compared with the proposed Tule Wind Project, similar construction routes would be used, and the trip generation for construction vehicles would be similar. The alternative is not anticipated to increase traffic to a point that would cause an increase in the traffic load and street system capacity. As under the proposed Tule Wind Project, identified impacts would be adverse; therefore, Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-4: When compared with the proposed Tule Wind Project, similar construction routes would be used, similar construction trip generation would occur, and the same

encroachment and traffic permits would be required from Caltrans and the County. Hence, as under the Tule Wind Project, impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-5: As analyzed in Section D.9.3.3, the proposed Tule Wind Project may result in temporary impacts to the existing bike route along Old Highway 80 during the construction and decommissioning phases of the project. However, impacts would be minimal and temporary. The traffic control plan identified in Mitigation Measure TRA-1 will provide safety measures and directional guidance to deter bicyclists to a safer route along the highway during this phase. No feature of this alternative would result in a different level of impacts; therefore, identified impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-6: As under the proposed Tule Wind Project, parking impacts resulting from construction of the project would be less than significant (Class III) because all parking would occur on site or along designated access roads, and there would be adequate parking spaces for construction vehicles. Parking would be made available on Rough Acres Ranch for construction of the O&M and substation facilities. Identified impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-7: As under the proposed Tule Wind Project, during construction, unexpected damage to roadways by construction vehicles and equipment (e.g., overhead line trucks, crew trucks, concrete trucks) along the site could occur from vehicles entering and leaving roadways and construction of the project. Identified impacts would be adverse. Mitigation Measure TRA-2 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-8: Similar to the proposed Tule Wind Project, turbines and transmission lines proposed under this alternative would present a substantial obstacle to be avoided and would require attention from pilots. Identified impacts would be adverse. Mitigation Measure TRA-3 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II). Implementation of Mitigation Measure TRA-3 will ensure that pilots and Border Patrol staff would be notified of the project location and components, and pilots will be alerted to significant dangers that will exist as a result of development of the project. No conflict with the Jacumba ALUCP would result (No Impact).

D.9.5.4 Tule Wind Alternative 4, Gen-Tie Route 3 Underground with Collector Substation/O&M Facility on Rough Acres Ranch

This alternative would not affect the impact conclusions resulting from implementation of the proposed ECO Substation and ESJ Gen-Tie projects as discussed in Section D.9.3.3.

Environmental Setting/Affected Environment

Section D.9.5.3 describes the existing setting associated with the Tule Wind Alternative Gen-Tie Route 3 with collector substation/O&M facility of Rough Acres Ranch. Because this alternative would only place the 138 kV transmission line underground, the existing setting would be the same as described in Section D.9.5.3.

Environmental Impacts/Environmental Effects

Direct and Indirect (Note: cumulative effects are addressed in Section F of this EIR/EIS)

Impact TRA-1: When compared with the proposed Tule Wind Project, a greater amount of grading would be required to develop the project site, and a greater number of trucks would be required. Similar construction routes would be used, although different routes would be used to access Rough Acres Ranch and the alternative transmission line Route 3 sections of the project. Identified impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-2: When compared with the proposed Tule Wind Project, similar construction routes would be used, although different routes would be used to access the Rough Acres Ranch and alternative transmission line Route 3 sections of the project. As under the Tule Wind Project, construction activities would cause temporary road and lane closures that would temporarily disrupt traffic flow and could be considered substantial. Identified impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-3: When compared with the proposed Tule Wind Project, similar construction routes would be used, and the trip generation for construction vehicles would be greater due to the proposed undergrounding component. As under the proposed Tule Wind Project, identified impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-4: When compared with the proposed Tule Wind Project, although trip generation for construction vehicles would be greater, similar construction routes would be used and the same encroachment and traffic permits would be required from Caltrans and the County. Therefore, as under the proposed Tule Wind Project, impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-5: As analyzed in Section D.9.3.3, the proposed Tule Wind Project may result in temporary impacts to the existing bike route along Old Highway 80 during the construction and decommissioning phases of the project. However, impacts would be minimal and temporary. The traffic control plan identified in Mitigation Measure TRA-1 will provide safety measures and directional guidance to deter bicyclists to a safer route along the highway during this phase. Due to location of the transmission line along Ribbinwood Road and Old Highway 80, this alternative would result in slightly greater impacts. Identified impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-6: As under the proposed Tule Wind Project, parking impacts resulting from construction of the project would be less than significant (Class III) because all parking would occur on site or along designated access roads, and there would be adequate parking spaces for construction vehicles. Parking would be made available on Rough Acres Ranch for construction of the O&M and substation facilities. Identified impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-7: As under the proposed Tule Wind Project, during construction, unexpected damage to roadways by construction vehicles and equipment (overhead line trucks, crew trucks, concrete trucks, etc.) along the site could occur from vehicles entering and leaving roadways and construction of the project. Identified impacts would be adverse. Mitigation Measure TRA-2 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-8: Similar to the proposed Tule Wind Project, turbines and transmission lines proposed under this alternative would present a substantial obstacle to be avoided and would require attention from pilots. However, with the proposed undergrounding of a component of this alternative, impacts would be reduced when compared with the proposed Tule Wind Project. Identified impacts would be adverse. Mitigation Measure TRA-3 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II). Implementation of Mitigation Measure TRA-3 will ensure that pilots and Border Patrol staff will be notified of the project location and components,

and pilots will be alerted to significant dangers that will exist as a result of development of the project. No conflict with the Jacumba ALUCP would result (No Impact).

D.9.5.5 Tule Wind Alternative 5, Reduction in Turbines

This alternative would not affect the impact conclusions resulting from implementation of the proposed ECO Substation and ESJ Gen-Tie projects as discussed in Section D.9.3.3.

Environmental Setting/Affected Environment

Under this alternative, the setting would be the same as described in Section B of this EIR/EIS, with the exception that this alternative would remove 62 of the proposed 134 turbines (11 turbines on County jurisdictional land abutting the BLM In-Ko-Pah Mountains ACEC and 51 turbines adjacent to wilderness areas on the western side of the project site). Therefore, with the exception of the removed turbines, the environmental setting for this alternative would be similar to that identified for the proposed Tule Wind Project in Sections D.9.1 and D.9.1.3.

Environmental Impacts/Environmental Effects

Direct and Indirect (Note: cumulative effects are addressed in Section F of this EIR/EIS)

Impact TRA-1: When compared with the proposed Tule Wind Project, a lesser amount of grading would be required to develop the project site, and fewer trucks would be required because fewer turbines would be erected. Similar construction routes would be used. Impacts identified under the proposed Tule Wind Project would be considered substantial and require mitigation, and impacts would be similar under this alternative. Identified impacts would be adverse; therefore, Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-2: When compared with the proposed Tule Wind Project, similar construction routes would be used. This alternative would have a corresponding reduction in construction trucks needed since fewer turbines are proposed. Nonetheless, as under the proposed Tule Wind Project, construction activities would cause temporary road and lane closures that would temporarily disrupt traffic flow and could be considered substantial. Identified impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-3: When compared with the proposed Tule Wind Project, similar construction routes would be used, and the trip generation for construction vehicles would be slightly less due to the reduction in turbines. Nonetheless, as under the proposed Tule Wind Project, identified

impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-4: Although reduced construction trip generation would occur when compared with the proposed Tule Wind Project, similar construction routes would be used and the same encroachment and traffic permits would be required from Caltrans and the County. Therefore, as under the proposed Tule Wind Project, impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-5: As analyzed in Section D.9.3.3, the Tule Wind Project may result in temporary impacts to the existing bike routes during the construction and decommissioning phases of the project. However, impacts would be minimal and temporary. The traffic control plan identified in Mitigation Measure TRA-1 will provide safety measures and directional guidance to deter bicyclists to a safer route along the highway during this phase. A similar level of impacts would result; impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-6: As under the proposed Tule Wind Project, parking impacts resulting from construction of the project would be less than significant (Class III) because all parking would occur on site or along designated access roads, and there would be adequate parking spaces for construction vehicles. Identified impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-7: As under the proposed Tule Wind Project, during construction, unexpected damage to roadways by construction vehicles and equipment (overhead line trucks, crew trucks, concrete trucks, etc.) along the site could occur from vehicles entering and leaving roadways and construction of the project. Identified impacts would be adverse. Mitigation Measure TRA-2 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-8: Similar to the proposed Tule Wind Project, turbines and transmission lines proposed under this alternative would present a substantial obstacle to be avoided and would require attention from pilots. However, with the reduction in turbines proposed under this alternative, impacts would be reduced when compared with the proposed Tule Wind Project. Identified impacts would be adverse. Mitigation Measure TRA-3 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II). Implementation of Mitigation Measure TRA-3 will ensure that pilots and Border Patrol staff will be notified of the project location and components,

and pilots will be alerted to significant dangers that will exist as a result of development of the project. No conflict with the Jacumba ALUCP would result (No Impact).

D.9.6 ESJ Gen-Tie Project Alternatives

Table D.9-7 summarizes the impacts that have been identified for the ESJ Gen-Tie Project alternatives.

Table D.9-7
Transportation and Traffic Impacts Identified for
ESJ Gen-Tie Project Alternatives

Impact No.	Description	Classification
ESJ 230 kV Gen-Tie Underground Alternative		
ESJ-TRA-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
ESJ-TRA-2	Construction activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units), and there are no reasonable alternative access routes available.	Class III
ESJ-TRA-3	Construction activities would result in unstable flow, or fluctuations in volumes of traffic that temporarily restrict flow; or in an unacceptable reduction in performance of the circulation system, as defined by an applicable plan (including a congestion management program), ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.	Class III
ESJ-TRA-4	The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Class III
ESJ-TRA-5	Construction would substantially disrupt bus or rail transit service, and there would be no suitable alternative routes or stops; or would impede pedestrian movements or bike trails, and there are no suitable alternative pedestrian/bicycle access routes or accommodation through construction zones; or would conflict with planned transportation projects in the project area.	Class III
ESJ-TRA-6	Construction or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies.	No Impact
ESJ-TRA-7	A noticeable increase in deterioration of roadway surfaces used for the construction zone would occur as a result of heavy truck or construction equipment movements.	Class III
ESJ-TRA-8	A project structure, crane, or wires would be positioned such that it/they could adversely affect aviation activities, or a proposed land use would conflict with the applicable Airport Land Use Compatibility Plan.	No Impact
ESJ Gen-Tie Overhead Alternative Alignment		
ESJ-TRA-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
ESJ-TRA-2	Construction activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units), and there are no reasonable alternative access routes available.	Class III

Table D.9-7 (Continued)

Impact No.	Description	Classification
ESJ-TRA-3	Construction activities would result in unstable flow, or fluctuations in volumes of traffic that temporarily restrict flow; or in an unacceptable reduction in performance of the circulation system, as defined by an applicable plan (including a congestion management program), ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.	Class III
ESJ-TRA-4	The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Class III
ESJ-TRA-5	Construction would substantially disrupt bus or rail transit service, and there would be no suitable alternative routes or stops; or would impede pedestrian movements or bike trails, and there are no suitable alternative pedestrian/bicycle access routes or accommodation through construction zones; or would conflict with planned transportation projects in the project area.	Class III
ESJ-TRA-6	Construction or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies.	No Impact
ESJ-TRA-7	A noticeable increase in deterioration of roadway surfaces used for the construction zone would occur as a result of heavy truck or construction equipment movements.	Class III
ESJ-TRA-8	A project structure, crane, or wires would be positioned such that it/they could adversely affect aviation activities, or a proposed land use would conflict with the applicable Airport Land Use Compatibility Plan.	Class II
ESJ Gen-Tie Underground Alternative Alignment		
ESJ-TRA-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
ESJ-TRA-2	Construction activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units), and there are no reasonable alternative access routes available.	Class III
ESJ-TRA-3	Construction activities would result in unstable flow, or fluctuations in volumes of traffic that temporarily restrict flow; or in an unacceptable reduction in performance of the circulation system, as defined by an applicable plan (including a congestion management program), ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.	Class III
ESJ-TRA-4	The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Class III
ESJ-TRA-5	Construction would substantially disrupt bus or rail transit service, and there would be no suitable alternative routes or stops; or would impede pedestrian movements or bike trails, and there are no suitable alternative pedestrian/bicycle access routes or accommodation through construction zones; or would conflict with planned transportation projects in the project area.	Class III
ESJ-TRA-6	Construction or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies.	No Impact
ESJ-TRA-7	A noticeable increase in deterioration of roadway surfaces used for the construction zone would occur as a result of heavy truck or construction equipment movements.	Class III
ESJ-TRA-8	A project structure, crane, or wires would be positioned such that it/they could adversely affect aviation activities, or a proposed land use would conflict with the applicable Airport Land Use Compatibility Plan.	No Impact

D.9.6.1 ESJ 230 kV Gen-Tie Underground Alternative

This alternative would not affect the impact conclusions resulting from implementation of the proposed ECO Substation and Tule Wind projects as discussed in Section D.9.3.3.

Environmental Setting/Affected Environment

Section D.9.1.4 describes the existing setting associated with the proposed ESJ Gen-Tie Project. Because this alternative would construct the 230 kV gen-tie underground, the existing setting would be the same as that described in Sections D.9.1 and D.9.1.4.

Environmental Impacts/Environmental Effects

Direct and Indirect (Note: cumulative effects are addressed in Section F of this EIR/EIS)

Impact TRA-1: When compared with the proposed ESJ Gen-Tie Project, a greater amount of grading would be required under this alternative to develop the project site since undergrounding is proposed, and a greater number of trucks would be required. Similar construction routes would be used. Construction of this alternative would cause temporary road and lane closures that would temporarily disrupt traffic flow and that could be considered adverse and substantial. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-2: When compared with the proposed ESJ Gen-Tie Project, similar construction routes would be used, although a greater number of trucks would be required to implement the undergrounding of the gen-tie. The proposed ESJ Gen-Tie Project would not result in inadequate emergency access. The project is not served by a dead-end road that exceeds the maximum cumulative length permitted by the Consolidated Fire Code for the 17 fire protection districts in San Diego County. Construction activities would not restrict the movements of emergency vehicles, and as under the proposed ESJ Gen-Tie Project, identified impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-3: When compared with the proposed ESJ Gen-Tie Project, similar construction routes would be used, and the trip generation for construction vehicles would be greater. As with the proposed ESJ Gen-Tie Project, this alternative is not anticipated to create a substantial increase in traffic that would result in unstable flow or an unacceptable reduction in performance of the circulation system. Therefore, impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-4: When compared with the proposed ESJ Gen-Tie Project, similar construction routes would be used, a slightly higher construction trip generation would occur, and the same

encroachment and traffic permits would be required from Caltrans and the County. Hence, as under the proposed ESJ Gen-Tie Project, impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-5: The proposed ESJ Gen-Tie Project would not conflict with planned transportation projects in the area. The project would not substantially disrupt bus or rail transit service, or pedestrian and bicycle movements, and impacts would be less than significant (Class III). This alternative would not generate sufficient travel demand to increase demand for transit, pedestrian, or bicycle facilities. No feature of this alternative would result in a different level of impacts; therefore, impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-6: As under the proposed ESJ Gen-Tie Project, parking impacts resulting from construction of this alternative would be less than significant (Class III) because no on- or off-site parking is required or proposed. The Zoning Ordinance, Section 6766 (County of San Diego 1978), does not require a provision for on-site parking spaces for this type of project. This alternative would be consistent with the ordinance for total parking requirements; therefore, the proposed alternative will not result in insufficient parking capacity (No Impact).

Impact TRA-7: A greater amount of construction traffic would occur under this alternative when compared with the proposed ESJ Gen-Tie Project. Operations and maintenance activities would result in negligible increase in ADT. All road improvements would be constructed according to the County of San Diego Public and Private Road Standards. Accordingly, impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-8: Similar to the proposed ESJ Gen-Tie Project, this alternative is located outside of the Jacumba Airport ALUCP's noise and safety zones (San Diego Airport Land Use Commission 2006). Also, with the undergrounding proposed under this alternative, no impacts would result, which would be a reduction in impacts when compared with the proposed ESJ Gen-Tie Project (No Impact).

D.9.6.2 ESJ Gen-Tie Overhead Alternative Alignment

This alternative would not affect the impact conclusions resulting from implementation of the proposed Tule Wind Project as discussed in Section D.9.3.3. This alternative assumes the implementation of the ECO Substation Alternative Site and that the transportation and traffic impacts identified in Section D.9.4.1 (ECO Substation Alternative Site) would occur.

Environmental Setting/Affected Environment

This alternative would be similar to the proposed ESJ Gen-Tie project (the 500 kV or 230 kV gen-tie options), analyzed in Section D.9.3.3, but will be shifted 700 feet to the east to connect with the ECO Substation Alternative Site. As such, the environmental setting would be similar to that described in Section D.9.1.

Environmental Impacts/Environmental Effects

Direct and Indirect (Note: cumulative effects are addressed in Section F of this EIR/EIS)

Impact TRA-1: When compared with the proposed ESJ Gen-Tie Project, similar construction routes would be used, and a similar number of trucks would be required. Construction of this alternative would cause temporary road and lane closures that would temporarily disrupt traffic flow and could be considered adverse and substantial. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-2: When compared with the proposed ESJ Gen-Tie Project, similar construction routes would be used, and a similar number of trucks would be required to implement the alternative overhead alignment. As such, this alternative would not result in inadequate emergency access. The alternative site is not served by a dead-end road that exceeds the maximum cumulative length permitted by the Consolidated Fire Code for the 17 fire protection districts in San Diego County. Construction activities would not restrict the movements of emergency vehicles, and as under the proposed ESJ Gen-Tie Project, impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-3: When compared with the proposed ESJ Gen-Tie Project, similar construction routes would be used, and the trip generation for construction vehicles would be similar. As with the proposed ESJ Gen-Tie Project, this alternative is not anticipated to create a substantial increase in traffic that would result in unstable flow or an unacceptable reduction in performance of the circulation system. Therefore, impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-4: When compared with the proposed ESJ Gen-Tie Project, similar construction routes would be used, similar construction trip generation would occur, and the same encroachment and traffic permits would be required from Caltrans and the County. Hence, as under the ESJ Gen-Tie Project, impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-5: The proposed ESJ Gen-Tie Project would not conflict with planned transportation projects in the area. The project would not substantially disrupt bus or rail transit

service, or pedestrian and bicycle movements, and impacts would be less than significant (Class III). This alternative would not generate sufficient travel demand to increase demand for transit, pedestrian, or bicycle facilities. No feature of this alternative would result in a different level of impacts; therefore, impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-6: As under the proposed ESJ Gen-Tie Project, parking impacts resulting from construction of this alternative would be less than significant (Class III) because no on- or off-site parking is required or proposed. The Zoning Ordinance, Section 6766 (County of San Diego 1978), does not require a provision for on-site parking spaces for this type of project. This alternative would be consistent with the ordinance for total parking requirements; therefore, this alternative will not result in insufficient parking capacity (No Impact).

Impact TRA-7: As with the proposed ESJ Gen-Tie Project, a similar amount of construction traffic would occur under this alternative. Operation and maintenance activities would result in a negligible increase in ADT. All road improvements would be constructed according to the County of San Diego Public and Private Road Standards. Identified impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-8: Similar to the proposed ESJ Gen-Tie Project, this alternative is located outside of the Jacumba Airport ALUCP's noise and safety zones (San Diego Airport Land Use Commission 2006). Towers and transmission lines would present a substantial obstacle to be avoided and would require attention from pilots. Identified impacts would be adverse; therefore, Mitigation Measure TRA-3 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II). Implementation of Mitigation Measure TRA-3 will ensure that pilots and Border Patrol staff will be notified of the project location and components, and pilots will be alerted to significant dangers that would exist as a result of development of the project.

D.9.6.3 ESJ Gen-Tie Underground Alternative Alignment

This alternative would not affect the impact conclusions resulting from implementation of the proposed Tule Wind Project as discussed in Section D.9.3.3. This alternative assumes the implementation of the ECO Substation Alternative Site and that the transportation and traffic impacts identified in Section D.9.4.1 (ECO Substation Alternative Site) would occur.

Environmental Setting/Affected Environment

This alternative would result in the underground placement of the 230 kV Gen-Tie Transmission Line to connect with the ECO Substation Alternative Site. As such, the environmental setting would be similar as that described in Section D.9.1.

Environmental Impacts/Environmental Effects

Direct and Indirect (Note: cumulative effects are addressed in Section F of this EIR/EIS)

Impact TRA-1: When compared with the proposed ESJ Gen-Tie Project, a greater amount of grading would be required under this alternative to develop the project site since undergrounding is proposed, and a greater number of trucks would be required. Similar construction routes would be used. Construction of this alternative would cause temporary road and lane closures that would temporarily disrupt traffic flow and could be considered substantial. Identified impacts would be adverse. Mitigation Measure TRA-1 has been provided to mitigate this impact. Under CEQA, impacts would be significant but can be mitigated to a level that is considered less than significant (Class II).

Impact TRA-2: When compared with the proposed ESJ Gen-Tie Project, similar construction routes would be used, although a greater number of trucks would be required to implement the undergrounding. The proposed ESJ Gen-Tie Project would not result in inadequate emergency access. The project is not served by a dead-end road that exceeds the maximum cumulative length permitted by the Consolidated Fire Code for the 17 fire protection districts in San Diego County. Construction activities would not restrict the movements of emergency vehicles, and as under the proposed ESJ Gen-Tie Project, impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-3: When compared with the proposed ESJ Gen-Tie Project, similar construction routes would be used, and the trip generation for construction vehicles would be greater. However, this alternative is not anticipated to create a substantial increase in traffic that would result in unstable flow or an unacceptable reduction in performance of the circulation system. Therefore, impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-4: When compared with the proposed ESJ Gen-Tie Project, similar construction routes would be used, a slightly higher construction trip generation would occur, and the same encroachment and traffic permits would be required from Caltrans and the County. Hence, as under the proposed ESJ Gen-Tie Project, impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-5: The proposed ESJ Gen-Tie Project would not conflict with planned transportation projects in the area. The project would not substantially disrupt bus or rail transit service, or pedestrian and bicycle movements, and impacts would be less than significant (Class III). This alternative would not generate sufficient travel demand to increase demand for transit, pedestrian, or bicycle facilities. No feature of this alternative would result in a different level of

impacts; therefore, impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-6: As under the proposed ESJ Gen-Tie Project, parking impacts resulting from construction of this alternative would be less than significant (Class III) because no on- or off-site parking is required or proposed. The Zoning Ordinance, Section 6766 (County of San Diego 1978), does not require a provision for on-site parking spaces for this type of project. This alternative would be consistent with the ordinance for total parking requirements; therefore, the alternative will not result in insufficient parking capacity (No Impact).

Impact TRA-7: A greater amount of construction traffic would occur under this alternative when compared with the proposed ESJ Gen-Tie Project. Operation and maintenance activities would result in negligible increase in ADT. All road improvements would be constructed according to the County of San Diego Public and Private Road Standards. Identified impacts would not be adverse and, under CEQA, would be less than significant (Class III).

Impact TRA-8: Similar to the proposed ESJ Gen-Tie Project, this alternative is located outside of the Jacumba Airport ALUCP's noise and safety zones (San Diego Airport Land Use Commission 2006). Also, with the undergrounding proposed under this alternative, no impacts would result; this would be a reduction in impacts when compared with the proposed ESJ Gen-Tie Project (No Impact).

D.9.7 No Project/No Action Alternatives

D.9.7.1 No Project Alternative 1—No ECO Substation, Tule Wind, or ESJ Gen-Tie Projects

Environmental Impacts/Environmental Effects

Impacts TRA-1 through TRA-8: Under the No Project Alternative 1, the ECO Substation, Tule Wind, and ESJ Gen-Tie projects would not be built, and the existing conditions would remain at these sites.

Transportation and traffic impacts resulting from the Proposed PROJECT would not occur.

D.9.7.2 No Project Alternative 2—No ECO Substation Project

Environmental Impacts/Environmental Effects

Impacts TRA-1 through TRA-8: Under the No Project Alternative 2, the proposed ECO Substation Project would not be constructed by SDG&E, and the existing energy grid and local environment would remain. The Tule Wind and ESJ Gen-Tie projects would be constructed and

required to interconnect with either an existing substation or a new substation that would be constructed. It is assumed that SDG&E would seek to construct a new substation to interconnect planned renewable energy generation in the area.

Under the No Project Alternative 2, none of the construction impacts identified for the proposed ECO Substation Project would occur (refer to Section D.9.3.3 for discussion of impacts associated with the ECO Substation Project). The Tule Wind and ESJ Gen-Tie projects would, however, be constructed and would be forced to interconnect with an existing substation or with a new substation. Impacts from expanded substations or a new substation could be greater due to multiple impact locations and longer gen-tie lines, which translate into a higher number of construction truck trips. The location of the ECO Substation Project was selected, in part, to facilitate the interconnection hub concept; it is located near already-planned wind generation projects (CAISO Generation Interconnection Queue) and close to a region with favorable wind potential, as determined by the Department of Energy Wind Program and the National Renewable Energy Laboratory. Impacts associated with the Tule Wind and ESJ Gen-Tie projects would be expected to be similar to those described in Section D.9.3.3 but could vary depending on the point of interconnection and the resulting gen-tie route and length of the projects.

D.9.7.3 No Project Alternative 3—No Tule Wind Project

Environmental Impacts/Environmental Effects

Impacts TRA-1 through TRA-8: Under the No Project Alternative 3, the Tule Wind Project would not be built, and the existing conditions on the project site would remain as under existing conditions. The environmental settings for the ECO Substation and ESJ Gen-Tie projects were previously identified in Sections D.9.1.2 and D.9.1.4, respectively.

Under the No Project Alternative 3, the number of construction trucks required would be less when compared with the proposed Tule Wind Project. Despite a reduction in the number of construction trucks, temporary construction impacts resulting from the ECO Substation and ESJ Gen-Tie projects would still be considered adverse if Mitigation Measure TRA-1 is not implemented. With implementation of mitigation measures proposed for the ECO Substation and ESJ Gen-Tie projects, under CEQA, impacts would be considered less than significant.

D.9.7.4 No Project Alternative 4—No ESJ Gen-Tie Project

Environmental Impacts/Environmental Effects

Impacts TRA-1 through TRA-8: Under the No Project Alternative 4, the ESJ Gen-Tie Project would not be built, and the existing conditions on the ESJ Gen-Tie project site would remain as

under existing conditions. If the ESJ Gen-Tie Project were not built, renewable energy generated in Mexico would not be delivered to the proposed ECO Substation and the U.S. market.

Under the No Project Alternative 4, Sempra could be forced to add new gen-tie facilities elsewhere to deliver renewable energy to the U.S. market. The ESJ Wind Phase I Project in Mexico would still be built under No Project Alternative 4 conditions, and the impacts associated with an alternative gen-tie would be expected to be similar to those described in Section D.9.3.3 but could vary, depending on length of gen-tie line and the location pursued.

D.9.8 Mitigation Monitoring, Compliance, and Reporting

Table D.9-8 presents the mitigation monitoring, compliance, and reporting program for transportation and traffic for the ECO Substation, Tule Wind, and ESJ Gen-Tie projects. Section D.9.9 provides residual effects.

The proposed Campo, Manzanita, and Jordan wind energy projects would require preparation of a mitigation monitoring, compliance, and reporting program following project-specific environmental review and evaluation under all applicable environmental regulations once sufficient project-level information has been developed.

Table D.9-8
Mitigation Monitoring Compliance and Reporting–ECO Substation, Tule Wind, and ESJ Gen-Tie Projects–Transportation and Traffic

ECO Substation Project	
Mitigation Measure	<p>TRA-1. Prepare and implement a Traffic Control Plan. At minimum, the plan will include the following:</p> <ul style="list-style-type: none"> • SDG&E shall encourage carpooling to the construction site to reduce personal vehicle traffic in the project area to the greatest extent possible. • SDG&E will consider the specific object sizes, weights, origin, destination, and unique handling requirements, and evaluate alternative transportation approaches. • Measures such as informational signs and flaggers shall be implemented when equipment may result in blocked roadways, and traffic cones or similar shall be implemented to identify any necessary changes in temporary lane configuration. • Flaggers and directional guidance for bicyclists along Old Highway 80 shall be used. • All Caltrans' standards for utility encroachments shall be met. • The plan shall be prepared in accordance with Caltrans' Manual on Uniform Traffic Control Devices and the Work Area Traffic Control Handbook (WATCH) Manual. • Clearances or overhead crossings shall conform to regulations of the CPUC and BLM, and the number of crossings shall be minimized. • New installations under an existing roadbed shall be made by the boring-and-jacking method. No trenching under the traveled way will occur. • For freeways and expressways, the placement of longitudinal encroachments is prohibited within controlled-access rights-of-way (ROWS).

Table D.9-8 (Continued)

	<ul style="list-style-type: none"> • Utilities shall not be located in median areas. • Transverse crossings shall be normal (90°) to the highway alignment where practical. If impractical, skews of up to 30° from normal may be allowed. • Supports for overhead lines crossing freeways shall be located outside the controlled-access ROW and not on cut-or-fill slopes, and shall not impair sight distances. All installations shall be placed as close to the ROW line as possible. Aboveground utilities shall be outside of the clear recovery zone (20 feet from edge-of-travel way for conventional highways and 30 feet for freeways and expressways). Allowance shall be made for future widening of the highways. • New installations shall not impair sight distances. • SDG&E shall coordinate in advance with the applicants for the other two connected actions. This effort shall include coordinating the timing of construction of the various projects to reduce potential conflicts. • SDG&E shall coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles. The County will then notify respective police, fire, ambulance, and paramedic services. SDG&E shall notify counties and cities of the proposed locations, nature, timing, and duration of any construction activities, and advise of any access restrictions that could impact their effectiveness. <p>SDG&E shall provide a draft copy of the Traffic Control Plan to the agencies listed for comment a minimum of 90 days prior to the start of any construction activities. The comments will be provided back to SDG&E, and plan revisions will address each comment to the satisfaction of the commenting agency. The final plan will be submitted to the CPUC and BLM with input from commenting agencies and provided to SDG&E for implementation during all construction activities.</p>
Location	At construction zones along proposed ECO Substation Project and utility corridors
Monitoring/Reporting Action	CPUC, BLM, San Diego County, and Caltrans (if required) will review Traffic Control Plan. The CPUC and BLM will ensure its implementation. For coordination with emergency service providers, document coordination with providers, including provision of construction schedule shall be provided at the time of submittal of the Traffic Control Plan.
Effectiveness Criteria	Approval and implementation of the plan. For coordination with emergency service providers: evidence of coordination.
Responsible Agency	CPUC/BLM
Timing	Plan in effect throughout construction.
Mitigation Measure	TRA-2. Repair roadways damaged by construction activities. If damage to roads occurs, SDG&E shall coordinate repairs with the affected public agencies to ensure that any impacts to area roads are adequately repaired at SDG&E's cost. Roads disturbed by construction activities or construction vehicles shall be properly restored to ensure long-term protection of road surfaces. Care shall be taken to prevent damage to roadside drainage structures. Roadside drainage structures and road drainage features (e.g., rolling dips) shall be protected by regrading and reconstructing roads to drain properly. Said measures shall be incorporated into an access agreement/easement with the applicable governing agency prior to construction.
Location	All roads used to access construction sites
Monitoring/Reporting Action	Review documentation to ensure that SDG&E obtained permits for construction within each road ROW prior to construction. Verify that each affected roadway has been satisfactorily restored and/or reconstructed within 30 days of the end of the construction.
Effectiveness Criteria	Restoration/maintenance of roads to preconstruction conditions as determined by the affected public agency
Responsible Agency	CPUC/BLM
Timing	After construction is completed on each affected roadway

Table D.9-8 (Continued)

Mitigation Measure	TRA-3. Consult with and inform U.S. Customs and Border Protection and FAA. SDG&E shall consult with U.S. Customs and Border Patrol and FAA to determine where Border Patrol aircraft operate in the County. Prior to construction, SDG&E shall provide written notification to all Border Patrol aircraft working in the County, and to the CPUC and BLM, stating when and where the new transmission lines and towers will be erected, and shall install markers as requested by the Border Patrol or FAA. SDG&E shall also provide all Border Patrol aircraft, the Border Patrol, FAA, and CPUC and BLM with aerial photos or topographic maps clearly showing the new lines and towers in relation to the U.S.–Mexico border within San Diego County.
Location	Within the area of Border Patrol aircraft operations and the project site
Monitoring/Reporting Action	Evidence of notification and submittal of aerial photos and/or topographic maps to U.S. Customs and Border Patrol and FAA
Effectiveness Criteria	Evidence of notification and sharing of information about the location of the new lines and towers.
Responsible Agency	CPUC, BLM, and FAA
Timing	Evidence of notification shall be provided to the CPUC and BLM after final engineering and prior to construction
Tule Wind Project	
Mitigation Measure	TRA-1. Prepare and implement a Traffic Control Plan. At minimum, the plan will include the following: <ul style="list-style-type: none"> • Pacific Wind Development shall encourage carpooling to the construction site to reduce personal vehicle traffic in the project area to the greatest extent possible. • Pacific Wind Development will consider the specific object sizes, weights, origin, destination, and unique handling requirements, and evaluate alternative transportation approaches. • Measures such as informational signs and flaggers shall be implemented when equipment may result in blocked roadways, and traffic cones or similar shall be implemented to identify any necessary changes in temporary lane configuration. • Flaggers and directional guidance for bicyclists along Old Highway 80 shall be used. • All Caltrans' standards for utility encroachments shall be met. • The plan shall be prepared in accordance with Caltrans' Manual on Uniform Traffic Control Devices and the Work Area Traffic Control Handbook (WATCH) Manual. • Clearances or overhead crossings shall conform to regulations of San Diego County, BLM, CSLC, BIA, and/or the Ewiiapaayp Band of Kumeyaay Indians depending on the jurisdiction where the construction activities are being completed and the number of crossings shall be minimized. • New installations under an existing roadbed shall be made by the boring-and-jacking method. No trenching under the traveled way will occur. • For freeways and expressways, the placement of longitudinal encroachments is prohibited within controlled-access ROWs. • Utilities shall not be located in median areas. • Transverse crossings shall be normal (90°) to the highway alignment where practical. If impractical, skews of up to 30° from normal may be allowed. • Supports for overhead lines crossing freeways shall be located outside the controlled-access ROW and not on cut-or-fill slopes, and shall not impair sight distances. All installations shall be placed as close to the ROW line as possible. Aboveground utilities shall be outside the clear recovery zone (20 feet from edge-of-travel way for conventional highways and 30 feet for freeways and expressways). Allowance shall be made for future widening of the highways. • New installations shall not impair sight distances. • Pacific Wind Development shall coordinate in advance with the applicants for the other two connected actions. This effort shall include coordinating the timing of construction of the various projects to reduce potential conflicts.

Table D.9-8 (Continued)

	<ul style="list-style-type: none"> Pacific Wind Development shall coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles. The County will then notify respective police, fire, ambulance, and paramedic services. Pacific Wind Development shall notify counties and cities of the proposed locations, nature, timing, and duration of any construction activities, and advise of any access restrictions that could impact their effectiveness. <p>Pacific Wind Development shall provide a draft copy of the Traffic Control Plan to the agencies listed for comment a minimum of 90 days prior to the start of any construction activities. The comments will be provided back to the Pacific Wind Development, and plan revisions will address each comment to the satisfaction of the commenting agency. The final plan will be submitted to BLM, San Diego County, CSLC, BIA, and/or the Ewiiapaayp Band of Kumeyaay Indians depending on the jurisdiction where the construction activities are being completed with input from commenting agencies and provided to Pacific Wind Development for implementation during all construction activities.</p>
Location	At construction zones along the proposed Tule Wind Project access roads
Monitoring/Reporting Action	BLM, CSLC, BIA, and/or the Ewiiapaayp Band of Kumeyaay Indians, and Caltrans (if required), depending on the jurisdiction where the construction activities are being completed, will review Traffic Control Plan. BLM, San Diego County, CSLC, BIA, and/or the Ewiiapaayp Band of Kumeyaay Indians depending on the jurisdiction where the construction activities are being completed, will ensure its implementation. For coordination with emergency service providers, document coordination with providers, including provision of construction schedule shall be provided at the time of submittal of the Traffic Control Plan.
Effectiveness Criteria	Approval and implementation of the plan/quarterly updates to agencies. For coordination with emergency service providers, evidence of coordination.
Responsible Agency	BLM/San Diego County/CSLC/BIA/Ewiiapaayp Band of Kumeyaay Indians
Timing	Plan in effect throughout construction.
Mitigation Measure	TRA-2. Repair roadways damaged by construction activities. If damage to roads occurs, Pacific Wind Development shall coordinate repairs with the affected public agencies to ensure that any impacts to area roads are adequately repaired at Pacific Wind Development's cost. Roads disturbed by construction activities or construction vehicles shall be properly restored to ensure long-term protection of road surfaces. Care shall be taken to prevent damage to roadside drainage structures. Roadside drainage structures and road drainage features (e.g., rolling dips) shall be protected by regrading and reconstructing roads to drain properly. Said measures shall be incorporated into an access agreement/easement with the applicable governing agency prior to construction.
Location	All roads used to access construction sites
Monitoring/Reporting Action	Review documentation to ensure that Pacific Wind Development obtained permits for construction within each road ROW prior to construction. Verify that each affected roadway has been satisfactorily restored and/or reconstructed within 30 days of the end of the construction.
Effectiveness Criteria	Restoration/maintenance of roads to preconstruction conditions as determined by the affected public agency
Responsible Agency	BLM/San Diego County/CSLC/BIA/Ewiiapaayp Band of Kumeyaay Indians
Timing	After construction is completed on each affected roadway

Table D.9-8 (Continued)

Mitigation Measure	TRA-3. Consult with and inform U.S. Customs and Border Protection and FAA. Pacific Wind Development shall consult with U.S. Customs and Border Patrol and FAA to determine where Border Patrol aircraft operate in the County. Prior to construction, Pacific Wind Development shall provide written notification to all Border Patrol aircraft working in the County, stating when and where the new transmission lines and towers will be erected, and shall install markers as requested by the Border Patrol or FAA. Pacific Wind Development shall also provide all Border Patrol aircraft, FAA, and Border Patrol with aerial photos or topographic maps clearly showing the new lines and towers in relation to the U.S.–Mexico border within San Diego County.
Location	Within the area of Border Patrol aircraft operations and the project site
Monitoring/Reporting Action	Evidence of notification and submittal of aerial photos and/or topographic maps to U.S. Customs and Border Patrol and FAA
Effectiveness Criteria	Evidence of notification and sharing of information about the location of the new lines and towers
Responsible Agency	BLM/San Diego County/CSLC/BIA/Ewiiapaayp Band of Kumeyaay Indians/FAA
Timing	Evidence of notification shall be provided to the BLM/ San Diego County/CSLC/BIA/Ewiiapaayp Band of Kumeyaay Indians, depending on the jurisdiction where the construction activities are to occur, after final engineering and prior to construction
ESJ Gen-Tie Project	
Mitigation Measure	TRA-1. Prepare and implement a Traffic Control Plan. At minimum, the plan will include: <ul style="list-style-type: none"> • Energia Sierra Juarez shall encourage carpooling to the construction site to reduce personal vehicle traffic in the project area to the greatest extent possible. • Energia Sierra Juarez will consider specific object sizes, weights, origin, destination, and unique handling requirements and evaluate alternative transportation approaches. • Measures such as informational signs and flaggers shall be implemented when equipment may result in blocked roadways, and traffic cones or similar shall be implemented to identify any necessary changes in temporary lane configuration. • Flaggers and directional guidance for bicyclists along Old Highway 80 shall be used. • All Caltrans' standards for utility encroachments shall be met. • The plan shall be prepared in accordance with Caltrans Manual on Uniform Traffic Control Devices and the Work Area Traffic Control Handbook (WATCH) Manual. • Clearances or overhead crossings shall conform to regulations of the County of San Diego, and the number of crossings shall be minimized. • New installations under an existing roadbed shall be made by the boring-and-jacking method. No trenching under the traveled way will occur. • For freeways and expressways, the placement of longitudinal encroachments is prohibited within controlled-access rights-of-way (ROWs). • Utilities shall not be located in median areas. • Transverse crossings should be normal (90°) to the highway alignment where practical. If impractical, skews of up to 30° from normal may be allowed. • Supports for overhead lines crossing freeways shall be located outside the controlled-access ROW and not on cut-or-fill slopes and shall not impair sight distances. All installations shall be placed as close to the ROW line as possible. Aboveground utilities shall be outside of the clear recovery zone (20 feet from edge-of-travel way for conventional highways and 30 feet for freeways and expressways). Allowance shall be made for future widening of the highways. • New installations shall not impair sight distances. • Energia Sierra Juarez shall coordinate in advance with the applicants for the other two connected actions. This effort shall include coordinating the timing of construction of the various projects to reduce potential conflicts.

Table D.9-8 (Continued)

	<ul style="list-style-type: none"> • Energia Sierra Juarez shall coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles. The County and cities will then notify respective police, fire, ambulance, and paramedic services. Energia Sierra Juarez shall notify counties and cities of the proposed locations, nature, timing, and duration of any construction activities, and advise of any access restrictions that could impact their effectiveness. <p>Energia Sierra Juarez shall provide a draft copy of the Traffic Control Plan to the agencies listed for comment a minimum of 90 days prior to the start of any construction activities. The comments will be provided back to Energia Sierra Juarez, and plan revisions will address each comment to the satisfaction of the commenting agency. The final plan will be approved by the County with input from commenting agencies and provided to Energia Sierra Juarez for implementation during all construction activities.</p>
Location	At construction zones along proposed ESJ Gen-Tie Project access roads
Monitoring/Reporting Action	San Diego County will review Traffic Control Plan and ensure its implementation. For coordination with emergency service providers: document coordination with providers, including provision of construction schedule.
Effectiveness Criteria	Approval and implementation of the plan/quarterly updates to agencies. For coordination with emergency service providers: evidence of coordination shall be provided at the time of submittal of the Traffic Control Plan.
Responsible Agency	San Diego County
Timing	Plan in effect throughout construction.
Mitigation Measure	TRA-3. Consult with and inform U.S. Customs and Border Protection and FAA. Energia Sierra Juarez shall consult with U.S. Customs and Border Patrol and FAA to determine where Border Patrol aircraft operate in the County. Prior to construction, Energia Sierra Juarez shall provide written notification to all Border Patrol aircraft working in the County, stating when and where the new transmission lines and towers will be erected, and shall install markers as requested by the Border Patrol or FAA. Energia Sierra Juarez shall also provide all Border Patrol aircraft, FAA, and Border Patrol with aerial photos or topographic maps clearly showing the new lines and towers in relation to the U.S.–Mexico border within San Diego County.
Location	Within the area of Border Patrol aircraft operations and the project site
Monitoring/Reporting Action	Evidence of notification and submittal of aerial photos and/or topographic maps to U.S. Customs and Border Patrol and FAA
Effectiveness Criteria	Evidence of notification and sharing of information about the location of the new lines and towers
Responsible Agency	San Diego County, FAA
Timing	Evidence of notification shall be provided to the County of San Diego after final engineering and prior to construction

D.9.9 Residual Effects

With implementation of the mitigation measures identified in Section D.9.8, all significant impacts under CEQA would be mitigated to a level that is considered less than significant; therefore, no residual impacts would occur for the Proposed PROJECT or alternatives.

D.9.10 References

- 14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- 14 CFR 77. Federal Aviation Regulations: Objects Affecting Navigable Airspace.
- Banister, Judy. 2009. Personal communication (telephone conversation) between J. Banister (MTS ROW Engineer) and J. Saunders (Dudek). June 12, 2009.
- BLM (Bureau of Land Management). 2008. *Eastern San Diego County Resource Management Plan and Record of Decision*. El Centro Field Office. October 2008.
- California Vehicle Code. 1983. Division 15, Chapter 5, Article 1, Section 35551 (Computation of Allowable Gross Weight). Adopted January 1, 1983.
- Caltrans (California Department of Transportation). 2009a. *Construction Manual*, as amended. Published 2001, last updated August 2009.
- Caltrans. 2009b. *Advertised and tentative upcoming projects-Office Engineer* webpage. Accessed online July 10, 2009, at: <http://www.dot.ca.gov/hq/esc/oe/gmap.php>
- Caltrans. 2010. Traffic and Vehicle Data Systems Unit. Accessed online April 1, 2010, at: <http://traffic-counts.dot.ca.gov/2008all.htm>
- City of San Diego. 2002. *Plan Report: Bicycle Master Plan*. Prepared by Alta Planning in association with KTU+A. Pp. 4-33 and 4-37. May 2002.
- County of San Diego. 1978. San Diego County Zoning Ordinance, as amended. Adopted October 18, 1978.
- County of San Diego. 1994. *County of San Diego General Plan Part III: Circulation Element*. Adopted December 5, 1967; amended July 27, 1994.
- County of San Diego. 1995. *County of San Diego General Plan Part XX: Mountain Empire Subregional Plan*. Adopted January 3, 1979; amended January 11, 1995.
- County of San Diego. 2005. *County of San Diego General Plan Part XII: Public Facility Element*. Adopted March 13, 1991; amended January 12, 2005.
- County of San Diego. 2008. *Five Year Capital Improvement Plan FY 2008–09 thru 2012–13*. County of San Diego, Department of Public Works.

- County of San Diego. 2009. *Jacumba Airport webpage-Department of Public Works*. Accessed July 10, 2009, at: <http://www.sdcountry.ca.gov/dpw/airports/jacumba.html>
- County of San Diego. 2010a. *San Diego County Draft General Plan Update: A Plan for Growth, Conservation, and Sustainability*. Updated April 2, 2010.
- County of San Diego. 2010b. *Guidelines for Determining Significance and Report Format and Content Requirements, Transportation and Traffic*. Land Use and Environment Group, Department of Planning and Land Use, Department of Public Works. Second revision June 30, 2009; first modification February 19, 2010.
- CPUC (California Public Utilities Commission). 1948. General Order 26-D. Regulations Governing Clearances on Railroads and Street Railroads with Reference to Side and Overhead Structures, Parallel Tracks, Crossings of Public Roads, Highways and Streets. Effective February 1, 1948. As amended. Accessed online at: http://162.15.7.24/PUBLISHED/GENERAL_ORDER/59571.htm
- CPUC. 2009. General Order No. 95. Rules for Overhead Electric Line Construction. August 2009. Accessed online at: <http://162.15.7.24/PUBLISHED/Graphics/112890.PDF>
- CPUC and BLM. 2008. *Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement the Sunrise Powerlink Project*. SCH No. 2006091071; DOI Control No. DES-07-58. Prepared by Aspen Environmental Group for CPUC and BLM. Agoura Hills, California: Aspen Environmental Group. July 2008.
- ENTRIX. 2009. GIS data for Transportation Facilities in the Project Area (ESJ U.S. component).
- ENTRIX. 2010. GIS data for Transportation Facilities in the Project Area (ESJ Wind Project component).
- HDR Engineering. 2010. GIS data for Transportation Facilities in the Project Area.
- Iberdrola Renewables, Inc. 2010. *Applicant's Environmental Document: Tule Wind Project San Diego County, California*. San Diego, CA: Prepared by HDR Engineering, Inc. September 2010.
- LLG (Linscott, Law, and Greenspan Engineers). 2010. Full Traffic Impact Study for the Tule Wind Project (MUP 09-019). March 26, 2010.
- MTS (Metropolitan Transit System). 2007. *Route 888 Fact Sheet*. Accessed online July 10, 2009, at: <http://www.sdmts.com/mtscr/Route.aspx?r=888>

- pilotoutlook.com. 2009a. Rancho Vallecito Airport information. Accessed online December 28, 2009, at: <http://www.pilotoutlook.com/airport/california/46ca>
- pilotoutlook.com. 2009b. Agua Caliente Springs Airport information. Accessed online December 28, 2009, at: <http://www.pilotoutlook.com/airport/california/154>
- San Diego Airport Land Use Commission. 2006. *Jacumba Airport Land Use Compatibility Plan*. SCH No. 2005031007. Adopted December 2006.
- SANDAG (San Diego Association of Governments). 2007. *San Diego and Arizona Eastern Railway (SD&AE) Fact Sheet*. June 2007.
- SANDAG. 2010. Demographic and Other Data (Transportation Data): Average Daily Traffic Volumes for the Unincorporated Area. Accessed online April 1, 2010, at: http://www.sandag.org/resources/demographics_and_other_data/transportation/adtv/index.asp
- SanGIS. 2010. GIS data for Transportation Facilities in the Project Area.
- SDG&E (San Diego Gas and Electric). 2009. *Proponent's Environmental Assessment for the East County 500/230/138 kV Substation Project*. August 2009.
- USFS (U.S. Forest Service). 2010. GIS data for Transportation Facilities in the Project Area.