

3.14 Traffic and Circulation

Both the Lompoc Wind Energy Facility (LWEF) and the 115-kV power line would be located directly south of the City of Lompoc. Both Project components would be accessed via San Miguelito Road, a county-maintained rural road. As shown on Figure 2-3, the power line component of the Project begins at the LWEF and then runs northeast to State Route 1 (SR-1) to a connection point with an existing Pacific Gas and Electric Company (PG&E) power line. East of Lompoc, SR-1 and SR-246 connect to United States (U.S.) Highway 101 approximately 20 miles east of the LWEF site. Figure 3.14-1 illustrates the regional location of the site in relation to existing transportation facilities.

3.14.1 Existing Conditions

3.14.1.1 Existing Roadway Network

The transportation system in the vicinity of the Project is composed of two regional highways (SR-1 and SR-246), one county maintained rural road (San Miguelito Road) and one freeway (U.S. Highway 101). These roadways would be used for access to the site during construction and operations. The following section discusses the characteristics of the highway network.

U.S. Highway 101

This serves as one of California's primary western arteries, linking San Francisco in the north and Los Angeles in the south. Access to and from U.S. Highway 101 in the vicinity of the Project site is via the SR-246 interchange and the SR-1 interchange for both northbound and southbound traffic. According to traffic counts conducted by the California Department of Transportation (Caltrans) in 2005, U.S. Highway 101 carries an average of 22,400 vehicles per day at the SR-246 interchange (Caltrans, 2005).

SR-1

SR-1, also known as Highway 1 and Cabrillo Highway, splits from U.S. Highway 101 south of Buellton and passes through the coastal cities of Lompoc, Guadalupe, and Grover City before joining U.S. Highway 101 again at Pismo Beach. In the City of Lompoc, SR-1 is Ocean Avenue (between 12th Street and H Street) and H Street (between Ocean Avenue and Purisima Road). According to traffic counts conducted by Caltrans in 2005, SR-1 carries an average of 7,900 vehicles per day north of Jalama Road (Caltrans, 2005). The posted speed varies depending on the location.

SR-246

This two-lane highway runs from Santa Ynez, at SR-154, to the Pacific coast. The portion of the route through Lompoc is called Ocean Avenue and is concurrent with SR-1 between H Street and 12th Street. According to the traffic counts conducted by Caltrans, SR-246 carries 6,200 vehicles per day at the western limits of the City of Lompoc. Traffic volumes are higher inside city limits; between D Street and C Street traffic volumes average 17,007 vehicles per day (Caltrans, 2005). The posted speed limit is 40 miles per hour (mph).

San Miguelito Road

This two-lane rural roadway is the only roadway between the Project site and the City of Lompoc. It serves residences near the City of Lompoc, the Celite mine, and Miguelito

County Park south of the mine. South of the park, the road narrows and serves only a small number of private ranches and the Sudden Peak tracking station. Average Daily Traffic (ADT) at the north end, near the Lompoc city limits, is 1,868 vehicles per day (Santa Barbara County Public Works, 2004). Traffic volumes decrease to the south. The posted speed limit is 40 mph.

3.14.1.2 Existing Traffic Conditions

Traffic and circulation conditions are often described in terms of level of service (LOS). Level of service is a qualitative indication of operating conditions as represented by congestion, delay, and volume to capacity (V/C) ratio. Volume to capacity ratio is a measure of traffic volumes as compared to the theoretical capacity of a roadway. The LOS assessment uses a letter grade to characterize the perception of traffic operations by drivers, ranging from LOS A (excellent conditions) to LOS F (extreme congestion). The relationship between LOS and V/C ratio is shown in Table 3.14-1.

The design capacity of a roadway is defined as the maximum rate of vehicles over time that can reasonably be expected along a particular section. Capacity is dependent on a number of variables, including roadway type, number of lanes, weather, and driver characteristics.

The assessment of existing traffic operations for the Project includes the existing ADT volumes, design capacity, and the V/C ratio of the roadways in the vicinity of the site. Table 3.14-2 includes a summary of the operational assessment of these roadways. Design and policy capacities were obtained from the County of Santa Barbara Comprehensive Plan's Circulation Element, which provides traffic capacity guidelines for the county's roadways. The reported V/C ratios are based on the more conservative of the two capacity values.

TABLE 3.14-1
LOS Values

V/C Ratio	LOS
0.60 or less	A
0.60 to 0.70	B
0.70 to 0.80	C
0.80 to 0.90	D
0.90 to 1.00	E
Greater than 1.00	F

LOS grades are based on the V/C ratio, using a standard planning-level assessment as shown in Table 3.14-2. The existing volume on the street network does not exceed the design or capacity. All roadways operate at LOS C or better, which is considered satisfactory.

3.14.1.3 Potential Constraints to Truck Traffic

Certain local roadways may have constraints that limit their potential to be used by large trucks. As an example, the minimum vertical clearance on SR-1 at the Gaviota Creek separation is 16.24 feet. In addition, the City of Lompoc has also identified a potential concern regarding vehicle weight at the Robinson Bridge on SR-246. San Miguelito Road has overhanging trees that may be lower than the vertical clearances of the trucks, and its horizontal curves south of Miguelito County Park have relatively small radii and lower design speeds.

TABLE 3.14-2
Existing Traffic Operations

Roadway	Designation	Existing Volume (ADT)	Design Capacity (ADT) ^a	Policy Capacity (ADT) ^b	Daily V/C Ratio	LOS
San Miguelito Road ^c	Two-lane Rural Roadway	1,868	16,000	10,000	0.19	A
Ocean Avenue (SR-246) ^c	Major Arterial	17,007	39,900	30,000	0.57	A
SR-246 ^d	Two-lane Expressway	6,200	29,700	11,000	0.56	A
SR-1 ^d	Two-lane Expressway	7,900	29,700	11,000	0.72	C
U.S. Highway 101 ^d	Four-lane Expressway	22,400	80,000 ^e	33,000	0.68	B

Notes:

^aProposed Amendment to the Circulation Element of the Comprehensive Plan, Final EIR, 91-EIR-6, August 27, 1991.

^bSanta Barbara County, 1991b (Comprehensive Plan, Circulation Element)

^cSanta Barbara County Public Works, 2004 (Traffic Counts)

^dCaltrans, 2005 (Traffic Counts)

^eEstimated capacity based on procedures in the *Highway Capacity Manual* (Transportation Research Board, 2000), assuming 2000 vehicles/hour/lane and a k-factor (peak hour percentage) of 10 percent.

LOS – level of service

3.14.1.4 Bicycle Facilities

Within the City of Lompoc limits, existing Class II bicycle paths are located on San Miguelito Road, Cypress Avenue, SR-246 and SR-1. According to the City of Lompoc Comprehensive Plan, Circulation Element, Class II routes provide a right-of-way within the paved area of a roadway, designated for the exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited. Cross-flows by pedestrians and motor vehicles are permitted on Class II bicycle paths.

3.14.2 Regulatory Framework

3.14.2.1 Federal Authorities and Administering Agencies

United States Department of Transportation and Caltrans are the administering agencies for the following:

- 49 CFR 350-399, and Appendixes A through G, Federal Motor Carrier Safety Regulations, address safety considerations for the transport of goods, materials, and substances over public highways.

3.14.2.2 State

Caltrans owns the right-of-way for U.S. Highway 101, SR-1, and SR-246, including the on- and off-ramps that provide access to the Project area. If any improvements to these roadways or any other work within the right-of-way is necessary for the Project, then an Encroachment Permit from Caltrans would be required.

Caltrans is the administrating agency for the following regulations:

- CVC Sections 34500, 34501, 34501.2, 34501.3, 34501.4, 34501.10, 34505.5-7, 34506, 34507.5, and 34510-11 regulate the safe operation of vehicles, including those used to transport hazardous materials.
- California Street and Highways Code (S&HC) Sections 660, 670, 1450, 1460 et seq. 1470, and 1480, regulates right-of-way encroachment and granting of permits for encroachments on state and county roads.
- S&HC, Sections 117 and 660-711, and CVC, Sections 35780 et seq., require permits to transport oversized loads on county roads. California S&HC Sections 117 and 660 to 711 require permits for any construction, maintenance, or repair involving encroachment on state highway rights-of-way. CVC Section 35780 requires approval for a permit to transport oversized or excessive loads over state highways.
- Caltrans weight and load limitations for state highways apply to all state and local roadways. The weight and load limitations are specified in the CVC Sections 35550 to 35559. The following provisions, from the CVC, apply to all roadways and are therefore applicable to this Project:

General Provisions:

- The gross weight imposed upon the highway by the wheels on any axle of a vehicle shall not exceed 20,000 pounds and the gross weight upon any one wheel, or wheels, supporting one end of an axle, and resting upon the roadway, shall not exceed 10,500 pounds.
- The maximum wheel load is the lesser of the following:
 - a. The load limit established by the tire manufacturer
 - b. A load of 620 pounds per lateral inch of tire width, as determined by the manufacturer's rated tire width

Vehicles with Trailers or Semitrailers:

- The gross weight imposed upon the highway by the wheels on any one axle of a vehicle shall not exceed 18,000 pounds and the gross weight upon any one wheel, or wheels, supporting one end of an axle and resting upon the roadway, shall not exceed 9,500 pounds, except that the gross weight imposed upon the highway by the wheels on any front steering axle of a motor vehicle shall not exceed 12,500 pounds.
- All construction in the public right-of-way must comply with the "Manual of Traffic Control Devices" (Caltrans and FHWA, 2003).

3.14.2.3 Local Authorities and Administrating Agencies

Santa Barbara County

State law requires that any development in Santa Barbara County should be consistent with the Santa Barbara County Comprehensive Plan. The Circulation Element of the Comprehensive Plan provides specific policies related to traffic and transportation

implications of proposed development. Refer to Section 3.10, Land Use, for an additional discussion on the policies.

If any frontage road improvements are required on public roads inside the County right-of-way, then an encroachment permit would be required from the County. A Traffic Management Plan (TMP) is required to lay out the requirements and provisions to be implemented in the process of achieving the most efficient and safe movement of vehicles on the public roads and highways around the site in conjunction with the efficient movement of vehicles onto and off the site, over the period of the construction.

Santa Barbara County Association of Governments

The Santa Barbara County Association of Governments (SBCAG) has been designated as the Congestion Management Agency for the county and is therefore responsible for administration of the Congestion Management Program (CMP). The CMP establishes a minimum level of service along roadways and intersections that are included in the CMP network, including all state highways. Construction vehicle trips are exempt from the evaluation of CMP LOS deficiencies. SBCAG has developed a set of traffic impact thresholds to assess the impacts of land use decisions made by local jurisdictions on regional transportation facilities located within the CMP roadway system.

City of Lompoc

The City of Lompoc Circulation Element establishes truck routes and load limitations for the City streets identified within the Project area. Truck weights on City streets are limited to 20,000 pounds per axle. Similarly, per Caltrans, no trucks over 6,000 pounds are permitted on Ocean Avenue in the City of Lompoc. The City of Lompoc would review the haul route and TMP and must permit heavy or oversized loads before they can legally travel on City streets. If any improvements to the roadways in the City right-of-way, or any other work within the right-of-way, are necessary for the Project, then an Encroachment Permit from the City of Lompoc would be required.

3.14.3 Project Impacts

3.14.3.1 Impact Assessment Methodology

Fewer than 10 trips per day are expected to be generated during the post-construction phase. Thus, the analysis of traffic impacts is limited to vehicle trips during the construction phases only.

Project Trip Generation

Although the Project may be constructed in up to three phases, this analysis uses a worst-case scenario and assumes that the entire Project would be constructed at one time. This assumption maximizes the number of construction workers required, resulting in the greatest impact on traffic. Multiple phases would extend the length of time of the impacts.

The peak construction crew would be composed of approximately 100 workers. Heavy equipment would be needed to clear the sites, build roads and wind turbine generator (WTG) pads, haul and lift materials, and pull power line. Once roads were opened and foundations built, cranes and trucks would move in to haul and lift the parts into position for assembly. A total of 13,000 worker and visitor trips are expected during the life of the Project, most of which would occur in private vehicles.

Table 3.14-3 provides a summary of the truck trips by activity (for example, WTG parts and pole placement) and month for the 6-month period in which most construction is expected to occur. Approximately 12,270 truck trips are anticipated during this period. In general, the trucks would travel to the Project site from Lompoc throughout the day and proceed to designated areas.

TABLE 3.14-3
Construction Truck Trips

Activity	Month						Total
	1	2	3	4	5	6	
WTG Parts			320	320	320	320	1,280
WTG Foundations	600	1,200	1,200	450			3,450
WTG Water	500	1,250	1,250				3,000
Access Roads	1,323	1,323					2,646
Pole Placement	203	203	203	203	202		1,014
Line Stringing			40	40	40	40	160
Meteorological Towers				60	60		120
Substation and O&M Facility				200	200	200	600
Total by Month	2,926	3,976	3,013	1,273	822	560	12,270
Total by Day (22 Days/Month)	119	181	137	58	37	25	93

Truck trips were converted to passenger-car equivalent trips using a passenger-car equivalent factor of 2.5. The *Highway Capacity Manual* uses a general factor of 1.5 for trucks. On large grades, higher truck equivalent factors are used, but generally do not exceed 3, except in mountainous areas. To account for larger trucks and some grades, a 2.5 factor was used as a conservative estimate. This would account for the fact that long trucks (for oversize and heavy loads) take up more physical space and generally operate at lower speeds than passenger vehicles. Using the 2.5 truck equivalent factor, the total number of passenger-car equivalent trips expected during the construction period is 43,700.

A maximum of 181 trucks trips per day would occur in the second month, which translates to 450 passenger-car equivalent trips per day. The addition of 100 workers, each making two-way trips, would result in 650 daily trips per day at the peak of construction. This value was used for the analysis.

Project Trip Distribution

Eighty percent of the employee/visitor trips and 100 percent of water truck trips are expected to be generated from within the City of Lompoc. Twenty percent of the employee/visitor trips and other construction-related truck trips, or 107 new trips, are expected to be generated from U.S. Highway 101 and travel to the Project site via SR-1 or SR-246. Trips are expected to be divided evenly between these state highways. Those going to or from the south would use SR-1, and those going to or from the north would use SR-246.

Access to the Project facilities, including individual WTGs, would be provided by existing and new roads throughout the Project area. Approximately 5.2 miles of new roads and 8.3 miles of upgrades to existing dirt roads would provide access to turbines on the site.

3.14.3.2 Thresholds of Significance

The County of Santa Barbara Environmental Thresholds and Guidelines Manual provides the criteria shown in Table 3.14-4) to assist in assessing the potential significance of Project-related impacts (County, 2006). A significant traffic impact would occur when:

- The addition of project traffic to an intersection would increase the V/C ratio by the value provided in Table 3.14-4, or add at least 5, 10, or 15 trips to an intersection at LOS F, E, or D, respectively. In other words, the definition of significant traffic volume increases varies with LOS. For intersections at LOS A, relatively high volumes of traffic can be added before an impact is defined. For intersections at LOS F, only five trips would result in an impact.
- Project access to a major road or arterial road would require a driveway that would create an unsafe situation or a new traffic signal or major revisions to an existing traffic signal.
- Project would add traffic to a roadway that has design features (for example, narrow width, road side ditches, sharp curves, poor sight distance, or inadequate pavement structure) or receive use that would be incompatible with substantial increases in traffic (for example, rural roads with use by farm equipment, livestock, horseback riding, or residential roads with heavy pedestrian or recreational use) that would become potential safety problems with the addition of project or cumulative traffic. Exceedance of the roadways designated Circulation Element Capacity may indicate the potential for the occurrence of the impacts listed in this section.
- Project traffic would utilize a substantial portion of an intersection(s) capacity where the intersection is currently operating at acceptable LOS (A through C) but with cumulative traffic would degrade to or approach LOS D (V/C 0.81) or lower. Substantial is defined as a minimum change of 0.03 for intersections that would operate from 0.80 to 0.85; and a change of 0.02 for intersections that would operate from 0.86 to 0.90; and 0.01 for intersections operating at anything lower. In other words, there is a sliding scale that defines a significant volume of new traffic, depending on the LOS. If the thresholds are exceeded, construction of improvements or project modifications to reduce the levels of significance to insignificance is required.

TABLE 3.14-4
County of Santa Barbara Thresholds

Level of Service (Including Project)	Increase in V/C Ratio Greater Than
A	0.20
B	0.15
C	0.10
	Or the Addition of:
D	15 trips
E	10 trips
F	5 trips

3.14.3.3 Project Impacts

Impact No.	Impact Description	Phase	Impact Classification
TC-1	Project-related construction traffic would temporarily affect traffic levels and LOS on Project area roadways.	Construction	Class III

Impact TC-1: LOS and V/C Ratio. Temporary traffic impacts were assessed by adding the anticipated Project-related construction traffic to the existing traffic on selected highway segments. Level of service and V/C ratios were then compared for without and with-Project conditions. Table 3.14-5 provides a summary of the results of this comparison.

Service levels of roadways potentially affected by Project traffic would change little, if at all, from those experienced under existing conditions. Additionally, changes in V/C ratios would fall below County significance thresholds. Potential short-term impacts associated with traffic levels and LOS values for potentially affected highways would be adverse, but less than significant (*Class III*).

TABLE 3.14-5
Existing plus Project Traffic Operations

Roadway	Designation	Existing + Project (ADT)	Design Capacity (ADT) ^a	Policy Capacity (ADT) ^b	Daily V/C Ratio (wo/w Project)	LOS (wo/w Project)
San Miguelito Road	Two-lane Rural Roadway ^c	2,518	16,000	10,000	0.19/0.25	A/A
Ocean Avenue	Major Arterial ^c	17,657	39,900	30,000	0.57/0.59	A/A
SR-246	Two-lane Expressway ^d	6,253	29,700	11,000	0.56/0.57	A/A
SR-1	Two-lane Expressway ^d	7,954	29,700	11,000	0.72/0.72	C/C
U.S. 101	Four-lane Expressway ^d	22,507	80,000 ^e	33,000	0.68/0.68	B/B

Notes:

^aProposed Amendment to the Circulation Element of the Comprehensive Plan, Final EIR, 91-EIR-6, Aug 27, 1991.

^bSanta Barbara County, 1991b (Comprehensive Plan, Circulation Element)

^cSanta Barbara County Public Works, 2004 (Traffic Counts)

^dCaltrans, 2005 (Traffic Counts)

^eEstimated capacity based on procedures in the *Highway Capacity Manual* (Transportation Research Board, 2000), assuming 2000 vehicles/hour/lane and a k-factor (peak hour percentage) of 10 percent

wo – without

w – with

Impact No.	Impact Description	Phase	Impact Classification
TC-2	Long, heavy trucks used to deliver equipment during construction could present safety concerns, and physical modifications to the roadway or nearby trees and power lines may be required.	Construction	Class II

Impact TC-2: Roadway Safety. Long, heavy trucks would be used to deliver equipment to the Project site during construction, although the specific types of trucks that would be used is not known at this time. The Applicant conducted an analysis of San Miguelito Road in November 2006 to determine if the road would be passable by large trucks and concluded that it would be if steerable trailers were used. This cannot be established with certainty, however, until the specific type of transport vehicles has been determined. Turbine parts may be up to 165 feet long and 18 feet in diameter, and the effective length and width of trucks needed for these parts would be substantial. Some road widening, tree trimming, and tree removal may be required along San Miguelito Road, as may temporary raising of overhead power lines in order to allow trucks to pass. Even so, it is possible that trucks may not be able to turn at some intersections without special maneuvers, they may drive slowly, and they may extend outside of their designated lane or roadway at times, putting other vehicles at risk. Moreover, the length and width of these vehicles could impede emergency traffic and pose a hazard to bicyclists. Potential short-term impacts associated with these safety issues would be significant, but mitigable (*Class II*).

Entrances to the ranch properties off of San Miguelito Road would have to be widened to allow access by construction equipment, but this would not pose a safety hazard.

Trucks delivering limited amounts of hazardous materials to the Project site would be used during both construction and operation. This impact is discussed in Section 3.13, Risk of Accidents, Hazardous Materials, and Safety. Workers parking on open fields (especially during the summer) could ignite dry grass. This impact is discussed in Section 3.8, Fire Hazards and Emergency Services.

Impact No.	Impact Description	Phase	Impact Classification
TC-3	Heavy-haul trucks would be required to transport large and heavy equipment subject to weight, height, and load limitations.	Construction	Class III

Impact TC-3: Truck Delivery Routes—Weight and Load Limitations. Heavy-haul trucks would be required to transport large and heavy equipment. The specific heavy-haul delivery route is not known at this time. The route to be used by trucks between the Project site and U.S. Highway 101 most likely would include the following roadways, which have height, weight, and width restrictions:

- San Miguelito Road
- I Street
- Cypress Avenue
- Ocean Avenue
- SR-246
- SR-1

A heavy-haul contractor would be engaged to operate these trucks and to identify the delivery routes and required approvals. Before beginning construction, the contractor would develop an approach and specific plan for the delivery truck routes. As part of that plan, an evaluation of the weight and load limitations, intersection turning requirements and overhead obstructions would be conducted. The final plan would require approval by

City of Lompoc, County, and State of California authorities before the heavy-haul deliveries began. The heavy-haul contractor would be required to comply with all applicable requirements, and weight, height, and load limitations would not be exceeded. Impacts would be adverse, but less than significant (*Class III*).

Impact No.	Impact Description	Phase	Impact Classification
TC-4	During peak construction, several oversized trucks per day could slow traffic and necessitate temporary blockages of intersections.	Construction	Class III

Impact TC-4: Road Blockages/Traffic Delays. Several oversized trucks per day could be needed during peak construction. The use of these trucks could require temporary blockages of intersections in the City of Lompoc, but traffic could be routed around these intersections. Construction trips also could cause temporary traffic delays on San Miguelito Road; while these delays would pose an inconvenience, they would not result in safety impacts to the general public. (Impacts to emergency vehicles are addressed under Impact TC-2). Impacts associated with road blockages and traffic delays would be adverse, but less than significant (*Class III*).

Impact No.	Impact Description	Phase	Impact Classification
TC-5	Trucks carrying heavy equipment could damage existing streets.	Construction	Class II
	Project vehicles could track dust and soil onto public roads.	Construction and Operations	Class III

Impact TC-5: Damage to Roadways. Trucks carrying heavy equipment to the Project site could damage existing streets. Truck loads may weigh as much as 180,000 pounds. In particular, wide trucks may cause damage along the sides of roads without paved shoulders and could cause culverts to collapse. Damage could be exacerbated by erosion caused by precipitation, eventually causing safety impacts to vehicular traffic and bicyclists. This potential short-term impact would be significant, but mitigable (*Class II*).

Project vehicles could track dust, soils, and other materials from the Project site onto the public roads. An erosion control plan would be required, however, that would include measures to stabilize construction entrances and exits to prevent sediment from being tracked onto adjacent roadways and to ensure the prompt removal of any sediment or other materials that are tracked off site (Section 3.15.3.4). Impacts would be adverse, but less than significant (*Class III*).

3.14.3.4 Consistency with Congestion Management Program Thresholds

SBCAG has developed a set of traffic impact thresholds to assess the impacts of land use decisions made by local jurisdictions on regional transportation facilities located within the Congestion Management Plan (CMP) roadway system. These guidelines are used to determine the significance of Project-generated traffic impacts on the regional CMP system. Significant impacts would occur on:

- Any roadway or intersection operating at LOS A or B with a decrease of two levels of service resulting from the addition of Project-generated traffic
- Any roadway or intersection operating at LOS C with Project-generated traffic that results in LOS D or worse
- Intersections within the CMP system with existing congestion, when Project generated trips exceed the values in the Table 3.14-6
- Freeway or highway segments with existing congestion when the Project generated trips exceed the values in Table 3.14-7

As noted, Project operation would result in only about 10 trips per day, which would not affect LOS. During construction, none of the Project area roadways would be worse than LOS C, even accounting for Project construction traffic; therefore, the Project would be consistent with the CMP.

TABLE 3.14-6
Intersection Thresholds

Intersection Level of Service	Peak Hour Trips
LOS D	20
LOS E	10
LOS F	10

TABLE 3.14-7
Highway Segment Thresholds

Level of Service	Peak Hour Trips
LOS D	100
LOS E	50
LOS F	50

3.14.4 Applicant-proposed Mitigation Measures

The following Applicant-proposed mitigation measures are considered part of the project description. The measures have been refined to reflect the County Standard Conditions of Approval and Mitigation Measures (Santa Barbara County, 2005), including adding plan requirements, timing, and monitoring actions that would be required. Mitigation Measure A-TC-1 was expanded to include Project-specific traffic management plan actions to address the transport of heavy and large loads, construction traffic safety, and construction worker parking.

Mitigation Measure A-TC-1: Traffic Management Plan (TMP). The Applicant shall prepare a TMP for submittal to the County of Santa Barbara, City of Lompoc, and Caltrans. The purpose of the TMP is to address potential hazards associated with Project truck traffic. The plan will require measures such as informational signs, flagmen when equipment may result in blockages of throughways, and traffic control to implement any necessary changes in temporary lane configuration.

Specific provisions could include:

- Location and use of flag persons and pilot cars during the delivery of large loads
- Requirements to limit the hours for transporting heavy loads to minimize traffic impacts
- Limit the number of heavy loads per day, or to specific days

- Provide for advance notification of residents, emergency providers, and hospitals when roads may be partially or completely closed
- Develop protocols for passage of emergency vehicles and regular traffic when heavy vehicles are traveling at slow speeds
- Ensure adequate parking for workers, construction vehicles, and trucks
- Encourage measures for using carpooling, shuttle buses, cycling, or motorcycling to travel to the construction site.
- Transportation Demand Management (TDM), including agreements, employee information, reporting, and traffic count monitoring

Plan Requirements: All requirements shall be shown on grading and building plans prior to zoning clearance for the first and all subsequent Project phases.

Timing: Conditions shall be enforced throughout all construction phases.

MONITORING: County staff will ensure that measures are included in the TMP. The County shall monitor implementation of the plan and ensure compliance (*Addresses Impacts TC-1, TC-2, and TC-3*).

Mitigation Measure A-TC-2: Traffic Mitigation Fees. The Applicant shall pay the appropriate traffic mitigation fees to the County of Santa Barbara.

Requirements: The fees shall be paid.

Timing: Proof of payment for the traffic mitigation fees shall be provided to the County prior to the approval of the zoning clearance for the first and all subsequent Project phases.

MONITORING: County staff will ensure that payment is received (*Addresses Impacts TC-1 through TC-5*).

3.14.5 Additional Mitigation Measures

In addition to the Applicant-proposed mitigation measures, the following additional mitigation measures will be implemented to provide adequate protections to roadways.

Mitigation Measure TC-1: Roadway Repairs. The Applicant shall enter into an agreement with affected jurisdictions to ensure that any damage to roadways attributable to Project traffic is mitigated through repair or reconstruction to original conditions. Roads will be photographed or videotaped prior to construction to ensure that final repairs are sufficient to return the road to pre-construction conditions. The Applicant shall also comply with the requirements of the hauling permits from affected jurisdictions prior to the construction of the Project.

Plan Requirements: All requirements shall be included in the TMP. The applicant shall pay for any repairs needed during the construction phase to maintain the roads in acceptable condition, as determined by the TMP. At the conclusion of each major construction phase, all affected roads shall be restored to pre-construction conditions in consultation with the affected jurisdictions. In addition, prior to the start of the rainy season, the roadways impacted by construction activities and heavy load delivery shall be surveyed to ensure that

any roadway damage will not be subject to further damage from erosion caused by precipitation. If roadways are determined to need repair, interim repairs shall be proposed for review and approval by the affected jurisdictions and implemented in an approved timeframe to avoid further roadway damage.

Timing: The TMP shall be approved prior to the zoning clearance for the first and all subsequent Project phases. Conditions shall be enforced throughout all construction phases.

MONITORING: County staff will ensure that road damage is adequately documented and required repairs are completed (*Addresses Impact TC-4*).

Mitigation Measure TC-2: Oversize Loads. Oversize loads require the implementation of special traffic control measures and require permits from affected jurisdictions. Since loads will be delivered to the site using state, city, and County roads, permits shall be required from Caltrans, the City of Lompoc, and the County of Santa Barbara. The Applicant shall obtain permits from the County of Santa Barbara to trim or remove trees, or both, on San Miguelito Road for the safe movement of oversized trucks. Longer trucks may have to be restricted to specific routes if turning radii are not sufficient on current truck routes.

The Applicant employed a licensed surveyor in November 2006 to evaluate San Miguelito Road, to determine if the road would be passable by large trucks; the surveyor concluded that road widening, grading, or tree removal would not be required if steerable trailers were used. However, this cannot be established with certainty until the specific characteristics of the transport vehicles have been determined. Therefore, before final zoning clearance, further survey of the roadway constraints shall be required. Specifically, the applicant shall employ a qualified, County-approved engineer to conduct a pre-construction survey to assess the ability to transport the required large loads along southern San Miguelito Road without grading of embankments or damage to trees or other vegetation (apart from minor trimming of overhead branches). The survey shall be based on the actual load dimensions and vehicles to be used in transporting the largest turbine parts and other Project parts and materials. If the survey indicates that grading, tree removal, or other vegetation damage may occur, all potentially affected areas shall be included in the Project grading and drainage plan, erosion control plan, and site restoration plan. County oak tree replacement requirements and any other applicable permit conditions relating to biological, cultural, geological, and water resources shall apply.

Plan Requirements: All requirements shall be included in the TMP. Applicant shall file copies of all oversize load/heavy haul permits with the County prior to the first delivery. Applicant shall provide the County with the large load transportation survey, including all information on load sizes, for review and approval.

Timing: Conditions shall be enforced throughout all construction phases. TMP and large load transportation survey shall be approved prior to the issuance of the zoning clearance for the first phase of construction and for subsequent Project phases.

MONITORING: County staff will verify that all required permits are obtained. County staff will review the large load survey and verify that the all applicable plans, conditions, and requirements are applied if damage may occur to the embankments, trees, or vegetation (*Addresses Impact TC-3*).

3.14.6 Residual Impacts

With the implementation of the identified mitigation measures, residual impacts to traffic and circulation would be less than significant.