

## D.13 Traffic and Circulation

This section addresses how traffic caused by the Proposed Project would directly or indirectly affect traffic and circulation on the roadways in the vicinity of DCPP. Section D.13.1 identifies the roadway segments most likely to be affected, the behavior of existing traffic in the area, and how the existing performance of the roads is currently classified. Section D.13.2 describes the regulations that govern large loads on the roadways and how work may be conducted within the traveled lanes. Sections D.13.3 through D.13.5 describe how the Proposed Project and alternatives would impact local on-road traffic. Transportation of radioactive materials and logistics of activities affecting marine vessels in Port San Luis are described previously in Section D.12, System and Transportation Safety.

### D.13.1 Environmental Setting for the Proposed Project

#### D.13.1.1 Roadway and Intersection Classification

Circulation conditions are often described in terms of levels of service (LOS). LOS is a means of describing the existing amount of traffic on a roadway versus the design capacity of the roadway. The design capacity of a roadway is defined as the maximum rate of vehicle travel (e.g., vehicles per hour) that can reasonably be expected along a section of roadway. Capacity is dependent on a number of variables including road classification and number of lanes, road condition, terrain, and weather and driver characteristics. LOS is generally a function of the ratio of traffic volume (V) to the capacity (C) of the roadway or intersection. The LOS rating uses qualitative measures that characterize operational conditions within a traffic stream and their perception by motorists. These measures include freedom of movement, speed and travel time, traffic interruptions, types of vehicle, comfort, and convenience.

Trucks and other large or heavy vehicles (e.g., wider than normal vehicles, slower moving tractors) impact LOS by occupying more roadway space and by having reduced operating qualities as compared to passenger cars. Because heavy vehicles accelerate more slowly than passenger cars, gaps form in traffic flows that affect the efficiency of the roadway. Also, intersections present a number of variables that can influence LOS, including curb parking, transit buses, turn lanes, signal spacing, pedestrians, and signal timing.

The Highway Capacity Manual (HCM) (TRB, 1994) is widely used in traffic studies for predicting LOS for a range of roadways and intersections. The HCM established LOS classifications depending on roadway volume to capacity (V/C) ratios for different types of roadways and for intersections; these are given in Table D.13-1. The LOS of a roadway is described using a scale ranging from A to F, with A indicating excellent traffic flow quality and F indicating stop-and-go traffic. Level E is normally associated with the maximum design capacity that a roadway or intersection can accommodate. LOS A, B, and C are generally considered satisfactory. LOS D is considered tolerable in urban areas during peak hours due to the high cost of improving roadways to LOS C.

For divided highways, the LOS classifications are based on the vehicle density, which is a measure that quantifies the proximity of vehicles to each other within the traffic stream and indicates the degree of maneuverability within the traffic stream (TRB, 1994).

**Table D.13-1. LOS vs. Volume to Capacity Ratios for Different Types of Roadways**

LOS	Traffic Conditions	V/C			
		Multi-Lane Freeways*	2-Lane Highways**	Arterials	Intersections
A	Free-flow conditions with unimpeded maneuverability. Stopped delay at signalized intersections is minimal.	0.30	0.15-0.26	0.00-0.60	<0.60
B	In the range of stable flow, but the presence of other users in the traffic streams begins to be noticeable.	0.50	0.27-0.42	0.61-0.70	0.60-0.69
C	In the range of stable flow, but marks the beginning of the flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream.	0.71	0.43-0.63	0.71-0.80	0.70-0.79
D	High-density but stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences poor level of comfort.	0.89	0.64-0.99	0.81-0.90	0.80-0.89
E	Near capacity. Operations with significant delays and low average speeds.	1.00	1.00 and over	0.91-1.00	0.90-0.99
F	Forced or breakdown flow. Operations with extremely low speeds, high delay.	--	--	>1.00	1.00 and over

Sources: TRB, 1994 and Caltrans, 2002.

\* V/C for 65 mph vehicle speed.

\*\* V/C for level terrain, when passing is allowed.

As discussed above, LOS is determined not only by traffic volumes but also by a number of roadway conditions and intersection details. Determining a roadway’s potential to present a traffic flow problem is a time-consuming process; therefore, a screening approach is often utilized. The screening approach involves comparing the roadway class with a traffic volume level for each LOS. The screening levels are developed by making generic assumptions for the data input in the HCM calculations. The screening approach, however, is used for roadways and not for intersections.

Table D.13-2 shows the screening traffic volume levels for determination of LOS for roadways in the area. This table has been adopted by Santa Barbara County for screening of traffic impacts. San Luis Obispo County does not have a screening approach similar to Santa Barbara County. However, past EIRs for San Luis Obispo County, including those for the Avila Beach (ADL, 1997), Guadalupe Oil Field Remediation (ADL, 1998) projects, and Diablo Canyon Independent Spent Fuel Storage Installation projects (MRS, 2003), have successfully used a screening approach to determine LOS. The roadway capacities listed in the table are “rule of thumb” figures. Some factors that affect these capacities are intersections (numbers and configuration), degrees of access control, roadway grades, design geometries (horizontal and vertical alignment standards), sight distance, level of truck and bus traffic, and level of pedestrian and bicycle traffic.

**Table D.13-2. LOS Screening Classifications and Roadway Daily Volumes**

Roadway Class	Number of Lanes	LOS Classes				
		A	B	C	D	E
Freeway	4	29,600	49,600	59,200	66,600	74,000
Arterial	4	23,900	27,900	31,900	35,900	39,900
Arterial	2	12,000	14,000	16,000	18,000	20,000
Collector	2	9,600	11,200	12,800	14,400	16,000

Source: Avila Beach EIR (ADL, 1997).

LOS values are often developed by county engineering and public works departments to address impacts of development projects on future roadway requirements. These analyses are normally conducted as part of a community plan, such as the County of San Luis Obispo Annual Resource Summary Report (SLO County, 2003). The analyses generally utilize the detailed approach given in the HCM and include both roadways and intersections. When these types of detailed analysis are available for roadways within the study area, the LOS classifications from the more-detailed approach is used over the screening LOS level approach.

Special studies have been conducted on Avila Beach Drive, which has special LOS criteria that were adopted in 1994. The special criteria were a result of a Wilbur Smith Associates study which showed liberal capacity values using car following techniques (WSA, 1992). Avila Beach Drive operates with high peaks of traffic due to weekend and summer peak season tourist and beach enthusiasts. Therefore, special LOS criteria have been developed which represent a compromise analysis of off-season and in-season loading. These criteria are:

- Week-long volume taken the second week in May;
- Count location taken west of San Luis Bay Drive;
- An average peak hour load is determined from an average value of Monday thru Friday 3:00 p.m. to 6:00 p.m. volumes.

Capacity for Avila Beach Drive is based on two-way flow criteria as follows (peak hour volumes):

- LOS A < 985 vehicles per hour (vph);
- LOS B < 1130 vph;
- LOS C < 1280 vph;
- LOS D < 1440 vph;
- LOS E < 1615 vph.

Avila Beach Drive can be assumed to have the capacity of a two-lane collector roadway, because the hourly capacity values are roughly 10 percent of daily values for a typical two-lane collector roadway (as in Table D.13-2). Traffic volumes during peak and non-peak months and times of the year (specifically summer periods) are considered because previous studies indicate that traffic in Avila Beach could be 50 to 100 percent higher on summer weekends (WSA, 1992 and TPG, 2001).

### D.13.1.2 Existing Conditions

The existing circulation system within the DCPP site consists of a single private two-lane paved road (Diablo Canyon Road, also know as the DCPP Access Road) that begins at Avila Beach Drive (approximately 7 miles southeast of DCPP) (see Figure B-1). The DCPP Access Gate prevents public traffic from entering the site and using the road. Immediately after leaving the Access Gate, the DCPP Access Road follows the topography northwest of Point San Luis. After circumventing Point San Luis, the primary road proceeds northwest, parallel to the coastline until it reaches the DCPP site.

The DCPP Access Road accommodates the existing 1,400 DCPP permanent employees that use approximately 900 vehicles (the San Luis Obispo County Transportation Management Association [TMA] provides vanpools for DCPP employees). During planned DCPP outage periods, which last an average of 3 months, up to 1,100 outage support personnel also use the DCPP Access Road to travel to DCPP. Planned outages occur every 18 to 21 months for each of the two DCPP reactors, thus an outage occurs every 9 to 11 months. During this period, DCPP Access Road experiences up to 2,000 round trips per day, or up to 4,000 one-way trips per day.

A primary road remains paved north of DCPP for a short distance and then becomes an unpaved road. There are several other unpaved roads on the PG&E property. These unpaved roads, however, do not provide primary access for DCPP employees and are not used to any noticeable degree. An unpaved road extends to the northerly boundary of the DCPP property that is shared with Montaña De Oro State Park. There is a secured gate across this road at the northern boundary.

Regional access to DCPP from U.S. Highway 101 is via the Avila Beach area, which is served by a relatively sparse network of two-lane rural roadways. Only two routes connect to Highway 101 interchanges: Avila Beach Drive and San Luis Bay Drive. These two routes, west of the freeway, join into a single roadway leading to Avila Beach and Port San Luis. Other roadways in the study area are generally classified as collectors or minor roadways.

The area roadways are shown in Figure D.13-1. Project area existing and future traffic conditions are summarized in Table D.13-3.

**Avila Beach Drive.** Avila Beach Drive is a winding, 4.5-mile, two-lane roadway from Highway 101 to its terminus at Port San Luis. East of Cave Landing Road, Avila Beach Drive maintains minimal shoulders as the roadway width is constrained on the south by steep rocky slopes and on the north by the parallel San Luis Obispo Creek. A short section of Avila Beach Drive is widened to accommodate a left turn bay for eastbound vehicles turning north on San Luis Bay Drive. Additional left turn bays exist on the segment of Avila Beach Drive at Cave Landing Road and Ontario Road. West of Cave Landing Road, Avila Beach Drive maintains left-turn pockets at all intersecting collector roadways and generally accommodates summer peak parking demands along both shoulders.

Avila Beach Drive is listed as a collector roadway in San Luis Obispo County's General Plan (San Luis Bay – Coastal Area Plan, 1997) and as an arterial road in San Luis Obispo County's Avila Circulation Study (TPG, 2001). For the purposes of this EIR, Avila Beach Drive is considered a collector roadway because its curves and lack of passing lanes give it a lower capacity than that of a typical arterial road. In addition, the LOS peak hour volumes established by San Luis Obispo County are indicative of a two-lane collector roadway.

The 2003 San Luis Obispo County Annual Resource Summary Report (SLO County, 2003) indicates that Avila Beach Drive has no current recommended Level of Severity<sup>1</sup> classification; however, this roadway is listed as a road with increasing traffic volumes, which may lead to a future Level of Severity recommendation from the County.

**San Luis Bay Drive.** San Luis Bay Drive begins just east of Highway 101 and terminates with a stop-sign controlled intersection at Avila Beach Drive, approximately 2.8 miles east of the DCPP security gate. The intersection with Avila Beach Drive is approximately 1.4 miles southwest of the interchange with Highway 101. San Luis Bay Drive is listed as a collector roadway by the San Luis Obispo County General Plan. San Luis Bay Drive is a two-lane roadway, and is generally used by trips originating or terminating north of Avila Beach, primarily in San Luis Obispo. Shoulders along San Luis Bay Drive are not wide enough to allow for parking.

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<sup>1</sup> San Luis Obispo County has the following road classifications. Level of Severity I: When traffic projections indicate that roadway level of service "D" will occur within five years. Level of Severity II: When traffic projections indicate that roadway level of service "D" will occur within two years. Level of Severity III: When calculation of existing traffic flows indicates a roadway level of service "D."

Figure D.13-1. Project Area Roadway System  
[CLICK HERE TO VIEW](#)

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**Other Collector Roadways.** Collector roadways in the study area include Front Street, San Luis Street, San Miguel Street, Cave Landing Road, See Canyon Road, and Monte Road. Front, San Luis, and San Miguel Streets are located in central Avila Beach. Front Street is located between the beach on the south and commercial shops on the north, beginning at Avila Beach Drive and proceeding to the east. San Luis Street and San Miguel Street provide access from Avila Beach Drive to the commercial and parking facilities in Avila Beach.

### D.13.1.3 Existing Roadway Performance

Existing traffic circulation and roadway operating conditions for the Proposed Project area were compiled for the roadways and intersections along the transportation routes in the vicinity of the Proposed Project. Average daily traffic (ADT) and peak hour traffic flow measurements were used to classify the road segments according to the LOS shown in Table D.13-2 or as produced from area documents as discussed above. Information was obtained for Highway 101 from the California Department of Transportation (Caltrans) and for major roads and arterial roads from the San Luis Obispo County Public Works and Engineering Departments. For areas where peak hour traffic data was not available, it was assumed to be 10 percent of ADT. Table D.13-3 lists the segments of each route that could be affected by the project, along with the corresponding traffic volumes, LOS classification, and volume-to-capacity ratios. The Applicant estimates existing daily plant traffic at 900 vehicles per day (vpd) with 1,100 more vehicles during maintenance power outages, which occur every 9 to 11 months for an average of 3 months.

Some local roads in the vicinity of Avila Beach and several stretches of Highway 101 (see Tables D.13-3 and D.13-4) that could be affected by the Proposed Project currently show poor LOS levels. These existing conditions include:

- Stretches of Highway 101: LOS D or E
- Avila Beach Drive: LOS C or D (during summer peak periods)
- Los Osos Valley Road near Diablo Canyon's alternate evacuation route: LOS D.

The sections of Highway 101 with the heaviest traffic include the junctions with Highway 135 (LOS D), south Pismo Beach (LOS D or E), Shell Beach and Avila Beach Drive (LOS D), San Luis Bay Drive, Higuera Street, and Los Osos Valley Road (LOS E). The worst traffic in the area is experienced on Highway 101 in San Luis Obispo at the Madonna Road/Route 227 Junction and at the Marsh Street exit (LOS E to F) (Caltrans, 2003).

### D.13.1.4 Seasonal, Weekly, and Hourly Variations

Avila Beach experiences significant variations in traffic depending on the time of the year and weekend or non-weekend period. Avila Beach Drive and San Luis Bay Drive experience heavy weekend traffic during summer months, when traffic is approximately 20 percent greater than non-summer weekends and 50 percent greater than summer weekdays (SLO County Traffic Volume Report; TPG, 2001). San Luis Obispo County bases LOS calculations on non-summer weekday traffic volumes (the month of May peak levels). The existing traffic volume for Avila Beach Drive near San Luis Bay Drive, according to County calculations (3-hour average during weekdays in the month of May), is about 8,200 vpd, or LOS A (SLO County, 2003).

The Avila Beach Drive segment west of San Luis Bay Drive and east of San Luis Street carries the largest traffic volumes in the area, typically ranging from approximately 12,000 vpd during summer weekends to 8,100 vpd on non-summer weekdays (see Table D.13-3). During summer weekdays, traffic

volumes are fairly balanced between San Luis Bay Drive and Avila Beach Drive, with approximately 6,700 to 7,000 vpd utilizing each roadway; during the peak weekends, however, about 60 percent of traffic utilizes Avila Beach Drive and 40 percent uses San Luis Bay Drive (DKS Associates, 1990). Historical data indicates that peak hour traffic can range up to about 1,400 trips, or LOS D during summer weekends, and down to below 170 hourly trips during winter weekdays (SLO County, 2004). All historical LOS ratings that are worse than LOS A occur between May and August, during the evening peak hour period, or during the weekend.

Distinct inbound (westbound) and outbound (eastbound) peaks are prevalent on San Luis Bay Drive and Avila Beach Drive over a summer weekend: the inbound peak typically occurs between 11:00 a.m. and 1:00 p.m. while the outbound peaks are between 2:00 p.m. and 4:00 p.m. (TPG, 2001 and DKS Associates, 1990). Overall in the Avila Beach area, two-way volumes peak between 1:00 p.m. and 3:00 p.m. on weekends, when approximately 11 percent of the total 24-hour traffic utilizes the roadways (DKS Associates, 1990). Avila Beach Drive traffic counts conducted for a non-summer week in May exhibit two different peaks. The non-summer a.m. peak hour occurred at 6 a.m., while the p.m. peak hour was evident at 6 p.m. These hours correspond to the traffic peaks for Diablo Canyon Road (DCPP Access Road), which are between 5 a.m. and 7 a.m. in the morning, and between 4:00 p.m. and 6:00 p.m. in the afternoon (Unocal, 1998). San Luis Bay Drive exhibited a similar non-summer weekday trend except the p.m. peak occurred earlier in the day, between 3:00 p.m. and 4:00 p.m.

#### D.13.1.5 Future Conditions

The anticipated future conditions of the roadways are shown in Table D.13-3 and described here because the Proposed Project would not take place immediately upon approval and steam generator replacement activity would not begin to peak until 2008.

Annual population growth in California is about 1.8 percent (based on the years 1990–2000), which is comparable to San Luis Obispo’s 1.4 percent growth rate between 1990 and 2000 (U.S. Census, 2000). Avila Beach and Avila Valley experienced an annual growth of 2.4 percent between 1980 and 2000. Traffic growth numbers in the Avila Beach area are mostly dependent on the increase in tourist visits, and not directly on the population growth in the area itself. An increase in the number of tourist visits to the Avila Beach area would most likely depend on the population growth in San Luis Obispo County.

San Luis Obispo County traffic counts for the Avila Beach area during the last five to seven years are considered anomalous due to the restricted beach access and reduced number of visitors during the Avila Beach Remediation Project, and therefore these numbers were not used. The San Luis Obispo County traffic models estimated annual growth rates between 1.2 and 1.6 percent based on information from the Caltrans Route Concept Report (Caltrans, 2001). Therefore, for prediction of future traffic conditions, a 1.4 percent annual traffic growth was used for the local Avila Beach roads.

The Caltrans Route Concept Report for the relevant sections of Highway 101 between the Santa Barbara County Line and the South San Luis Obispo Urban Area (Caltrans sub-segment 4), indicates that Highway 101 is currently operating at LOS C and D for non-peak and peak periods, respectively, and is anticipated to be operating at LOS F by the year 2020. The San Luis Obispo County traffic model estimates also predict the future traffic and population growth, which is done for the Caltrans planning documents (Caltrans, 2001). The Route Concept Report, however, does not examine highway segments in terms of interchanges.



**Table D.13-3. Existing and Future Traffic Conditions in the Project Area**

Road/Route	Existing Traffic			Future Traffic		
	ADT	LOS, V/C	Peak Hr	ADT	LOS, V/C	Peak Hr
Diablo Canyon Road (Access Road) <sup>a</sup>	1,800	A, 0.11	180	1,903	A, 0.12	190
Avila Beach Dr. e/o Diablo Canyon Road (Access Road)	5,622	A, 0.38	616	5,944	A, 0.40	651
Avila Beach Dr. w/o Diablo Canyon Road (Access Road)	3,373	A, 0.22	355	3,566	A, 0.23	375
Avila Beach Dr. w/o San Luis Bay Dr. peak <sup>b</sup>	11,986	C, 0.73	1,172	12,671	C, 0.77	1,239
Avila Beach Dr. w/o San Luis Bay Dr.	8,177	A, 0.50	805	8,645	A, 0.53	851
San Luis Bay Drive n/o Avila Beach Dr.	6,532	A, 0.39	625	6,906	A, 0.41	661
San Luis Bay Drive w/o Ontario Rd.	6,936	A, 0.43	699	7,333	A, 0.46	739
Shell Beach Road s/o Avila Beach Dr.	4,945	A, 0.27	429	5,228	A, 0.28	454
San Miguel s/o Avila Beach Dr.	1,512	A, 0.11	178	1,598	A, 0.12	188
Front St. e/o Avila Beach Dr.	5,781	A, 0.44	709	6,112	A, 0.46	750

Source: SLO County, 2004.

Notes: LOS calculated using Santa Barbara County thresholds or Highway Capacity Software.

V/C = the volume to capacity ratio, capacity is based on roadway class with LOS of E; ADT = Average Daily Traffic.

e/o = "east of"; w/o = "west of"; n/o = "north of"; s/o = "south of"

a. Diablo Canyon Road ADT is comprised with 900 vehicles carrying 1,400 DCPD permanent employees.

b. Traffic data for peak season - during summer.

Highway 101 traffic data from Caltrans is available for the past seven years for each segment between interchanges (exits). This data was used to make a more detailed estimate of the annual traffic growth rates over the last seven years. These annual growth rates were used to extrapolate the existing traffic counts and estimate future traffic conditions in the area for the next three to four years. It was assumed that traffic volumes on Highway 101 in the area would grow at the same rate as they have been growing for the last seven years. Future traffic conditions on Highway 101 are shown in Table D.13-4.

Table D.13-4. Existing and Future Traffic Conditions on Highway 101 in the Project Vicinity

Highway 101 Section	Existing Traffic			Future Traffic		
	ADT	LOS, V/C	Peak Hr	ADT	LOS, V/C	Peak Hr
Santa Maria, Jct. Rte. 166 W., Main St.	58,000	C, 0.78	6,500	59,644	D, 0.81	6,500
Santa Maria, Donovan Rd.	55,000	C, 0.74	6,500	58,211	C, 0.79	6,500
Jct. Rte. 135 S., North Santa Maria	61,000	D, 0.82	6,300	68,621	D, 0.93	6,300
Santa Barbara/SLO County	61,000	D, 0.82	6,300	68,621	D, 0.93	6,300
Jct. Rte. 166 East	53,000	C, 0.72	4,700	58,799	C, 0.79	4,700
Tefft St.	53,000	C, 0.72	4,900	58,014	C, 0.78	4,900
Los Berros Rd.	53,000	C, 0.72	6,200	54,654	C, 0.74	6,200
Arroyo Grande, Bridge St.	48,000	B, 0.65	5,800	44,219	B, 0.60	5,800
Jct. Rte. 227 N., Grand Ave.	49,000	B, 0.66	6,100	43,355	B, 0.59	6,100
Arroyo Grande, Brisco Rd.	53,000	C, 0.72	6,600	54,654	C, 0.74	6,600
Pismo Beach, Oak Park Rd.	61,000	D, 0.82	7,800	68,200	D, 0.92	7,800
Pismo Beach, Pismo Oaks	69,000	<b>E, 0.93</b>	8,800	76,780	<b>F, 1.04</b>	8,800
Pismo Beach, Villa Creek	56,000	C, 0.76	8,600	58,877	C, 0.80	8,600
Jct. Rte. 1 South	56,000	C, 0.76	4,850	53,676	C, 0.73	4,850
North Shell Beach	65,000	D, 0.88	8,200	69,820	<b>E, 0.94</b>	8,200
Avila Beach Drive	60,000	D, 0.81	7,100	69,001	<b>E, 0.93</b>	7,100
San Luis Bay Dr.	72,000	<b>E, 0.97</b>	8,700	76,071	<b>F, 1.03</b>	8,700
Higuera St.	72,000	<b>E, 0.97</b>	8,300	78,913	<b>F, 1.07</b>	8,300
Los Osos Rd.	56,000	C, 0.76	5,600	57,648	C, 0.78	5,600
Madonna Rd.	77,000	<b>F, 1.04</b>	8,800	108,298	<b>F, 1.46</b>	8,800
Jct. Rte. 227 S.; Marsh St.	75,000	<b>F, 1.01</b>	8,500	129,784	<b>F, 1.75</b>	8,500
Jct. Rte. 1 North, Osos St.	64,000	D, 0.86	7,300	81,653	<b>F, 1.10</b>	7,300
California Blvd.	56,000	C, 0.76	6,200	73,797	<b>E, 1.00</b>	6,200
Grand Ave.	42,000	B, 0.57	4,700	47,318	B, 0.64	4,700
Buena Vista	49,000	B, 0.66	5,400	58,754	C, 0.79	5,400
North City Limits	49,000	B, 0.66	5,400	58,217	C, 0.79	5,400
Jct. Rte. 58 East, Santa Margarita Creek	39,000	B, 0.53	4,200	40,080	B, 0.54	4,200

Source: Caltrans, 2003.

Notes: LOS calculated using Santa Barbara County thresholds or Highway Capacity Software.

V/C = the volume to capacity ratio, capacity is based on roadway class with LOS of E; ADT = Average Daily Traffic.

### D.13.1.6 Proposed Roadway Projects

According to the San Luis Obispo County Department of Public Works and Transportation there is only one roadway project planned in Avila Beach for the foreseeable future. The project would entail replacement of San Luis Bay Drive bridge with a bridge wide enough to accommodate a left turn lane; widening of Avila Beach Drive to accommodate a right turn lane and a left turn lane onto San Luis Bay Drive; widening of shoulders to two to four feet; incorporation of the Bob Jones Bike Trail beneath the bridge; and installation of a traffic signal at the intersection of San Luis Bay Drive and Avila Beach Drive (Gaglione, 2004). This project is tentatively planned to be finished in 2006 or the beginning of 2007, and therefore, would not interfere with the Proposed Project.

According to Caltrans (Caltrans, 2004), there are several projects involving Highway 101 in the project vicinity that are being constructed currently. However, there are no major highway projects that are planned to be constructed beyond 2007 in San Luis Obispo County.

## D.13.2 Applicable Regulations, Plans, and Standards

Transportation system requirements relevant to the Proposed Project are derived from policies and plans of San Luis Obispo County and Caltrans. Proposed Project activities could temporarily affect access, traffic flow, and parking on public streets within unincorporated San Luis Obispo County and the Port San Luis Harbor District. The Applicant and/or the construction contractor would need to obtain encroachment permits or similar legal agreements from these agencies before commencing project activities. Such permits are needed where project activities could require the use of the public right-of-way. For the Proposed Project or any of the alternatives, these closure or encroachment permits would likely be issued by San Luis Obispo County, the Port San Luis Harbor District, or Caltrans.

### Federal and State Standards

Caltrans maintains the State highway system, including Highway 101, which provides the main vehicle access to the area. Maximum load limits for trucks and safety requirements for oversized vehicles are generally regulated by Caltrans for operation on highways. Should the Proposed Project need to encroach upon traveled lanes of a State highway (i.e., Highway 101), Caltrans would be responsible for issuing permits to allow such activities.

### Local Ordinances and Policies

San Luis Obispo County regulates vehicle weight and speed limits, safety, parking and other traffic issues through Official Traffic Regulation Codes (2004). In addition, San Luis Obispo County outlines policies and standards in the Circulation Element of the San Luis Obispo County General Plan. The standards provide guidance in defining whether the Proposed Project would be consistent with established roadway capacity levels and roadway LOS. Project consistency with roadway standards is based on the number of ADTs contributed by the project, the potential for exceeding acceptable design capacities, and the estimated future volumes for roadways in the project area. The County established LOS C as the accepted level of service for roads in the Avila Beach area (SLO County, 1995). CEQA thresholds for transportation impacts have not been specified by the County, however, the County has approved numerous environmental documents using the criteria detailed in the section below.

## D.13.3 Environmental Impacts and Mitigation Measures for the Proposed Project

### D.13.3.1 Definition and Use of Significance Criteria

The criteria below are based on a review of the CEQA Guidelines checklist, CEQA documents prepared in San Luis Obispo County, and input from relevant government agencies.

Transportation/circulation impacts caused by the Proposed Project would be considered significant if:

- Project traffic would increase the V/C ratio of a roadway by more than the value provided in Table D.13-5 or add at least 5, 10, or 15 trips to a roadway performing at LOS F, E or D, respectively.
- Project activities would reduce the number of travel lanes during peak traffic periods for roadways with peak hour LOS D or worse, resulting in a disruption of traffic flow and/or traffic congestion.
- Project activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units) with no reasonable alternative access.
- Project activities would increase demand for and/or reduce the supply of parking spaces with no provisions for accommodating the resulting parking deficiencies.
- Project activities would increase roadway wear in the project vicinity as a result of heavy truck or construction equipment movements or trenching operations, resulting in noticeable deterioration of pavement or roadway surfaces.

Table D.13-5. Significance Criteria for Traffic and Circulation

Peak Hour LOS (with project)	Increase in V/C is Greater Than	Trips Added
A	0.20	-
B	0.15	-
C	0.10	-
D	-	15
E	-	10
F	-	5

### D.13.3.2 Replacement Steam Generator Transport

#### Impact T-1: RSG transport would temporarily increase local traffic

Transport of the RSGs from Port San Luis to the DCPP would use approximately 1,500 feet of Avila Beach Drive and approximately 200 feet of Diablo Canyon Road (DCPP Access Road) to the DCPP Access Gate (see Figures B-1 or B-11). From the Access Gate the transport route would be located within the boundaries of the DCPP property, off-limits to the general public. Four round trips would be required to transport RSGs for Unit 2 in 2007, with four additional round trips to transport the RSGs for Unit 1 in 2008. The transporter trips and additional project support trips along a 1,500-foot portion of Avila Beach Drive, at night if necessary (as per the Applicant), are not expected to cause significant impacts because the 1,500-foot section of Avila Beach Drive experiences low traffic volumes even during peak summer periods.

The number of additional personnel that would be required during RSG offloading at the Port San Luis and transport was estimated at 30 workers, which would be in addition to the 1,400 DCPP personnel working at DCPP during non-outage periods. It is assumed that during the RSG offloading at Port San Luis, these transport workers would make two-round-trips per day to Port San Luis (60 daily one-way trips) or to DCPP. The peak day scenario on Avila Beach Drive west of Diablo Canyon Road would occur when all 30 workers travel to Port San Luis in addition to the RSG transporter trips, for a total of 68 one-way trips. It is assumed that any support equipment to handle the RSGs at Port San Luis would be delivered to Port San Luis before the RSGs arrive and would not contribute to the peak traffic.

Transport would occur during non-outage periods and during the non-peak tourist season, September through November (see Project Description), when the local roads are at LOS A and are anticipated to remain at this LOS in the future (see Table D.13-3).

The ground transporters used to move the RSGs from Port San Luis to the RSG storage facility would be platform trailers specifically designed to move heavy loads. These trailers have multiple wheels to allow the weight of the load to be spread out over a large area thereby decreasing the impact to the road and

underlying utilities. Additionally, the weight of the RSG would be controlled through hydraulic distribution and leveling equipment on the trailer. Thus, no road damage is anticipated.

Since road damage from transport is not anticipated, and the addition of 30–34 round-trips (60–68 one-way trips) to local roads during a non-peak season, and during a non-outage period is well below normal outage period traffic, Impact T-1 would be considered adverse but less than significant (Class III).

### D.13.3.3 Replacement Steam Generator Staging and Preparation

#### Impact T-2: Staging and preparation would temporarily increase local traffic

Approximately 100 to 700 workers would be needed during the RSG staging and preparation periods that occur prior to the actual outage. In addition to the project-related personnel accessing the DCPP, there would be additional trucks delivering materials to construct necessary temporary staging facilities. The Applicant did not provide information on the number of trucks needed to deliver materials. It was estimated that 10 trucks per day (for a total of 20 daily one-way trips) would be needed to deliver the materials. Therefore, additional worst case traffic is estimated to be 710 round trips per day (1,420 one-way daily trips or 142 peak hour trips). Staging and preparation is expected to occur before the outage period, therefore there would be no outage-related traffic during this phase. Although the highest numbers of workers are not currently anticipated to be needed during peak tourism season, the possibility of unanticipated changes in the project schedule is considered here.

Tables D.13-6 and D.13-7 show how the project would affect future traffic on the local roads and Highway 101. The addition of 142 trips to the peak hour traffic on Avila Beach Drive would increase the V/C ratio on this roadway by more than 0.1. Under anticipated future conditions, Avila Beach Drive west of San Luis Bay Drive is expected to perform at LOS C during the peak hour. An increase of the V/C by more than 0.1 on a LOS C roadway would be considered potentially significant. This impact occurs because Avila Beach Drive and San Luis Bay Drive provide the only local access to Highway 101. Scheduling project worker trips to avoid peak times, as in Mitigation Measures T-2a and T-2b, would reduce this impact less than significant levels (Class II).

#### ***Mitigation Measures for Impact T-2, Staging and Preparation would temporarily increase local traffic.***

- T-2a Avoid travel during peak season on Avila Beach Drive.** The Applicant shall develop an alternative project schedule that would restrict project-related personnel from travel on Avila Beach Drive during peak season (e.g., May to August), evening peak hours of between 4:00 p.m. and 6:00 p.m. In addition, all project-related traffic shall be restricted from travel on Avila Beach Drive during peak season (e.g., May to August) weekends between the hours of 10:00 a.m. and 5:00 p.m.
- T-2b Avoid travel during peak time on Highway 101.** The Applicant shall develop an alternative project schedule that would restrict the project-related personnel from travel on Highway 101 during peak hours of operation. Typically, morning peak hours are between 6 a.m. and 8 a.m. and evening peak hours are between 4:00 p.m. and 5:30 p.m.

Table D.13-6. Existing, Future, and Worst Case Project Traffic Conditions in the Project Area

Road/Route (Class)	Existing			Future Traffic			Project ADT	Future with Project Traffic			Increase in V/C
	ADT	LOS, V/C	Peak Hr	ADT	LOS, V/C	Peak Hr		ADT	LOS, V/C	Peak Hr	
Diablo Canyon Road <sup>a</sup>	1,800	A, 0.11	180	1,903	A, 0.12	190	4,100	6,003	A, 0.37	605	0.26
Avila Beach Dr. e/o Diablo Canyon Dr. (Access Road)	5,622	A, 0.38	616	5,944	A, 0.40	651	4,100	10,044	D, 0.67	1,076	0.26
Avila Beach Dr. w/o Diablo Canyon Dr. (Access Road)	3,373	A, 0.22	355	3,566	A, 0.23	375	68 <sup>c</sup>	3,634	A, 0.24	391	0.01
Avila Beach Dr. w/o San Luis Bay Dr. peak <sup>b</sup>	11,986	C, 0.73	1,172	12,671	C, 0.77	1,239	4,100	16,771	<b>F, 1.04</b>	1,677	0.27
Avila Beach Dr. w/o San Luis Bay Dr.	8,177	A, 0.50	805	8,645	A, 0.53	851	4,100	12,745	<b>F, 0.79</b>	1,280	0.27
San Luis Bay Drive n/o Avila Beach Dr.	6,532	A, 0.39	625	6,906	A, 0.41	661	4,100	11,006	<b>E, 0.67</b>	1,086	0.26
San Luis Bay Drive w/o Ontario Rd.	6,936	A, 0.43	699	7,333	A, 0.46	739	4,100	11,433	<b>E, 0.72</b>	1,166	0.26
Shell Beach Road s/o Avila Beach Dr.	4,945	A, 0.27	429	5,228	A, 0.28	454	0 <sup>d</sup>	5,228	A, 0.29	464	0.01
San Miguel s/o Avila Beach Dr.	1,512	A, 0.11	178	1,598	A, 0.12	188	1,367 <sup>e</sup>	2,965	A, 0.20	329	0.09
Front St. e/o Avila Beach Dr.	5,781	A, 0.44	709	6,112	A, 0.46	750	683 <sup>e</sup>	6,795	A, 0.52	835	0.05

Source: San Luis Obispo County Traffic Volumes, which includes data from 1993-2003.

Notes: LOS calculated using Santa Barbara County thresholds or Highway Capacity Software.

V/C = the volume to capacity ratio, capacity is based on roadway class with LOS of E; ADT = Average Daily Traffic.

e/o = "east of"; w/o = "west of"; n/o = "north of"; s/o = "south of"

a. Diablo Canyon Road ADT is comprised of 900 vehicles carrying 1,400 DCPP permanent employees.

b. Peak Season - during summer.

c. Additional trips on Avila Beach Drive west of Diablo Canyon Road would be Transporter-related trips: Transporter and support workers.

d. Shell Beach Road is assumed to not be used by the project traffic

e. San Miguel Road and Front Street are assumed to experience only a portion of the project trips (e.g., lunch trips, trips to convenience store during the day).

### D.13.3.4 Original Steam Generator Removal, Transport, and Storage

#### Impact T-3: Steam generator replacement activities would temporarily increase local traffic

During this phase, the Proposed Project circulation impacts would be from commuter vehicles of the personnel assisting in the removal and transport of the OSGs to the proposed onsite storage facility (900 to 950 workers, see Figure B-15), in addition to the outage personnel (1,100 workers) and the permanent DCPD personnel (1,400 workers), for a total of 3,450 workers, or 2,050 additional workers over non-outage conditions. Offsite transport of the OSGs would not occur under the Proposed Project. Worst case traffic would occur during the 3-month outage period when personnel for the Proposed Project would travel to DCPD in addition to the outage personnel. The Applicant has stated that it would incorporate alternate work hours for the workers during the outage period to accommodate the short-term increase in worker traffic, but did not provide details on scheduling.

For this analysis, it was assumed that unless additional mitigation is implemented, 10 percent of the additional trips would occur during the peak hour. The addition of 205 round trips to the peak hour traffic on Avila Beach Drive would increase the V/C ratio on this roadway by more than 0.2 (see Table D.13-6). Under anticipated future conditions, Avila Beach Drive west of San Luis Bay Drive is expected to perform at LOS C during the peak hour. An increase of the V/C by more than 0.2 on a roadway at LOS A [e.g., Diablo Canyon Road (Access Road), Avila Beach Drive east of Diablo Canyon Drive (Access Road)], would be considered a potentially significant impact (Class II), and implementation of Mitigation Measures T-3a and T-3b would be necessary to reduce this impact to a less than significant level.

Other roads in the area are expected to be at LOS B or worse during the peak travel time without the Proposed Project. An increase of the V/C by more than 0.2 on these roads would be considered a potentially significant impact (Class II) that would warrant additional mitigation. Implementation of Mitigation Measures T-3a and T-3b would reduce this impact to a less than significant level.

Additionally, several segments of Highway 101 are expected to operate at LOS E or worse without the Proposed Project (see Table D.13-7). It was assumed that 20 percent of the project-related traffic comes to the project site from the south on Highway 101, and 80 percent comes from the north (e.g., San Luis Obispo). The addition of 320 to 410 peak hour trips to Highway 101 segments that are at LOS E or F would be considered a potentially significant impact (Class II) that could be mitigated to less than significant level through implementation of Mitigation Measure T-2b (identified above).

#### ***Mitigation Measures for Impact T-3, Steam generator replacement activities would temporarily increase local traffic***

**T-3a Develop a trip reduction program.** The Applicant shall develop a trip reduction program for the Proposed Project that will include but not be limited to the following activities:

- Provide offsite parking for the project-related employees and provide a shuttle service between the offsite parking and DCPD.
- Provide a shuttle for the outage personnel, and institute a set of measures that would encourage use of the shuttle by the outage personnel.
- Develop a work schedule that would prevent employees from traveling on Avila Beach Drive and other local roadways during peak hours.
- Develop a construction material delivery and waste removal program that would avoid project-related and other DCPD service truck traffic on Avila Beach Drive and other local roadways during peak hours.

Table D.13-7. Existing, Future, and Worst Case Project Traffic Conditions on Highway 101 in the Project Vicinity

Highway 101 Section	Existing			Future Traffic			Project ADT*	Future with Project Traffic			Increase in V/C
	ADT	LOS, V/C	Peak Hr	ADT	LOS, V/C	Peak Hr		ADT	LOS, V/C	Peak Hr	
Santa Maria, Jct. Rte. 166 W., Main St.	58,000	C, 0.78	6,500	59,644	D, 0.81	6,500	820	60,464	D, 0.82	6,730	0.01
Santa Maria, Donovan Rd.	55,000	C, 0.74	6,500	58,211	C, 0.79	6,500	820	59,031	C, 0.80	6,730	0.01
Jct. Rte. 135 S., North Santa Maria	61,000	D, 0.82	6,300	68,621	D, 0.93	6,300	820	69,441	<b>E, 0.94</b>	6,526	0.01
Santa Barbara/SLO County	61,000	D, 0.82	6,300	68,621	D, 0.93	6,300	820	69,441	<b>E, 0.94</b>	6,526	0.01
Jct. Rte. 166 East	53,000	C, 0.72	4,700	58,799	C, 0.79	4,700	820	59,619	D, 0.81	4,889	0.01
Tefft St.	53,000	C, 0.72	4,900	58,014	C, 0.78	4,900	820	58,834	C, 0.80	5,094	0.01
Los Berros Rd.	53,000	C, 0.72	6,200	54,654	C, 0.74	6,200	820	55,474	C, 0.75	6,423	0.01
Arroyo Grande, Bridge St.	48,000	B, 0.65	5,800	44,219	B, 0.60	5,800	820	45,039	B, 0.61	6,014	0.01
Jct. Rte. 227 N., Grand Ave.	49,000	B, 0.66	6,100	43,355	B, 0.59	6,100	820	44,175	B, 0.60	6,321	0.01
Arroyo Grande, Brisco Rd.	53,000	C, 0.72	6,600	54,654	C, 0.74	6,600	820	55,474	C, 0.75	6,832	0.01
Pismo Beach, Oak Park Rd.	61,000	D, 0.82	7,800	68,200	D, 0.92	7,800	820	69,020	<b>E, 0.93</b>	8,060	0.01
Pismo Beach, Pismo Oaks	69,000	<b>E, 0.93</b>	8,800	76,780	<b>F, 1.04</b>	8,800	820	77,600	<b>F, 1.05</b>	9,083	0.01
Pismo Beach, Villa Creek	56,000	C, 0.76	8,600	58,877	C, 0.80	8,600	820	59,697	D, 0.81	8,878	0.01
Jct. Rte. 1 South	56,000	C, 0.76	4,850	53,676	C, 0.73	4,850	820	54,496	C, 0.74	5,043	0.01
North Shell Beach	65,000	D, 0.88	8,200	69,820	<b>E, 0.94</b>	8,200	820	70,640	<b>E, 0.95</b>	8,469	0.01
Avila Beach Drive	60,000	D, 0.81	7,100	69,001	<b>E, 0.93</b>	7,100	3,280	72,281	<b>E, 0.98</b>	7,590	0.04
San Luis Bay Dr.	72,000	<b>E, 0.97</b>	8,700	76,071	<b>F, 1.03</b>	8,700	3,280	79,351	<b>F, 1.07</b>	9,226	0.04
Higuera St.	72,000	<b>E, 0.97</b>	8,300	78,913	<b>F, 1.07</b>	8,300	3,280	82,193	<b>F, 1.11</b>	8,817	0.04
Los Osos Rd.	56,000	C, 0.76	5,600	57,648	C, 0.78	5,600	3,280	60,928	D, 0.82	6,056	0.04
Madonna Rd.	77,000	<b>F, 1.04</b>	8,800	108,298	<b>F, 1.46</b>	8,800	3,280	111,578	<b>F, 1.51</b>	9,329	0.04
Jct. Rte. 227 S.; Marsh St.	75,000	<b>F, 1.01</b>	8,500	129,784	<b>F, 1.75</b>	8,500	3,280	133,064	<b>F, 1.80</b>	9,022	0.04
Jct. Rte. 1 North, Osos St.	64,000	D, 0.86	7,300	81,653	<b>F, 1.10</b>	7,300	3,280	84,933	<b>F, 1.15</b>	7,794	0.04
California Blvd.	56,000	C, 0.76	6,200	73,797	<b>E, 1.00</b>	6,200	3,280	77,077	<b>F, 1.04</b>	6,669	0.04
Grand Ave.	42,000	B, 0.57	4,700	47,318	B, 0.64	4,700	3,280	50,598	C, 0.68	5,135	0.04
Buena Vista	49,000	B, 0.66	5,400	58,754	C, 0.79	5,400	3,280	62,034	D, 0.84	5,851	0.04
North City Limits	49,000	B, 0.66	5,400	58,217	C, 0.79	5,400	3,280	61,497	D, 0.83	5,851	0.04
Jct. Rte. 58 East, Santa Margarita Creek	39,000	B, 0.53	4,200	40,080	B, 0.54	4,200	3,280	43,360	B, 0.59	4,624	0.04

Source: Caltrans, 2004.

Notes: LOS calculated using Santa Barbara County thresholds or Highway Capacity Software.

V/C = the volume to capacity ratio, capacity is based on roadway class with LOS of E; ADT = Average Daily Traffic.



**T-3b Avoid travel during peak season on Avila Beach Drive and San Luis Bay Drive.** The Applicant shall develop an alternative project schedule that would restrict project-related personnel from travel on Avila Beach Drive and San Luis Bay Drive during peak season (e.g., May to August) evening peak hours of between 4:00 p.m. and 7:00 p.m. In addition, all project-related and outage traffic shall be restricted from travel on Avila Beach Drive and San Luis Bay Drive during peak season (e.g., May to August) weekends between the hours of 10:00 a.m. and 5:00 p.m.

### D.13.3.5 Replacement Steam Generator Installation

During RSG installation, the same worst-case number of personnel would travel to DCPP as during the OSG removal, transport and storage phase described under Impact T-3. This means that in addition to 1,400 permanent DCPP employees, 1,100 outage personnel and 900 to 950 project-related employees would access the site, causing a total of 2,050 additional personnel, or 4,100 additional one-way trips per day. Therefore, circulation impacts would be the same as for Impact T-3. With implementation of Mitigation Measures T-3a and T-3b, including T-2b, as described above, the adverse effects of the Proposed Project would be reduced to a less than significant level (Class II).

Should the Proposed Project be allowed to proceed as proposed, DCPP would continue to operate as it is in the existing conditions past the useful life of the OSGs and up to the end of the current operating licenses that expire in 2021 and 2025. This means that 900 daily round-trips due to normal operations, and additional 1,100 daily round-trips due to periodic outages would continue to occur. Because there would be no permanent increase in traffic with the Proposed Project, the return to service would not generate additional traffic.

## D.13.4 Environmental Impacts and Mitigation Measures for the Alternatives

### D.13.4.1 Replacement Steam Generator Offloading Alternative

There would be no new transportation impacts associated with offloading the RSGs at the DCPP Intake Cove. However, this alternative would be preferred over the Proposed Project because it would eliminate the potential less than significant impacts associated with transporting the steam generators along Avila Beach Drive to the DCPP Access Road.

### D.13.4.2 Temporary Staging Area Alternatives

The TSA alternatives involve different TSA locations within DCPP. Potential impacts associated with these alternatives would be identical to the Proposed Project. There would be no additional transportation impacts from any of the TSA alternatives.

### D.13.4.3 Original Steam Generator Storage Facility Location Alternatives

The OSG Storage Facility alternatives involve different OSG Storage Facility locations within DCPP. Potential impacts associated with these alternatives would be identical to the Proposed Project. There would be no additional transportation impacts from the OSG Storage Facility alternatives.

#### D.13.4.4 Original Steam Generator Offsite Disposal Alternative

This alternative would involve transportation of the OSGs to a disposal location outside of the DCPP. Transportation impacts would be similar to Impact T-1. Under this alternative, the OSGs would be loaded onto a transporter at DCPP, and a transporter would haul the OSGs to the Intake Cove or Port San Luis areas. At these locations, the OSGs would likely be loaded onto a barge and transported to a disposal location. The same number of additional personnel (30) would be needed to accomplish the transport activity. Transportation impacts to the local roads would be from addition of 30 round-trips per day (60 one-way trips per day). For the Port San Luis option, transportation along Avila Beach Drive and along Diablo Canyon Road would include 8 transporter trips between DCPP and Port San Luis. With regard to the Intake Cove, this option would eliminate the potential less than significant impacts associated with transporting the steam generators along Avila Beach Drive to the DCPP Access Road. Overall, the effect of this transport activity would be adverse but not significant (Class III).

#### D.13.5 Environmental Impacts of the No Project Alternative

Existing traffic in the vicinity of DCPP on the Access Road, Avila Beach Drive, San Luis Bay Drive, and other area roadways would be reduced under the No Project Alternative, and the roadways would experience an improved level of service due to the shut down of routine DCPP operations prior to the NRC license expiration dates. This would cause a beneficial impact to local roadway performance (Class IV).

The No Project Alternative would also involve construction of new generation and transmission facilities elsewhere. The exact location, technology or design is not known at this time. However, this alternative is likely to have significant circulation impacts. Construction of the new facilities would occur over several years, and would involve a large number of construction personnel that would likely affect the roads in the area where the new facilities would be sited. Transmission and generation system enhancement options would not have substantial circulation impacts because there would be little, if any, new construction, and long-term operation of replacement facilities would not normally lead to permanently large increases in vehicle trips. Impacts associated with the construction and operation of new generation facilities would likely be significant in the absence of mitigation, but could likely be mitigated to a less than significant level because of the short term duration of construction and limited size of operational workforces. Additional environmental review would be required with the siting and construction of new generation facilities.

## D.13.6 Mitigation Monitoring, Compliance, and Reporting Table

Table D.13-8 shows the mitigation monitoring, compliance, and reporting program for Traffic and Circulation.

**Table D.13-8. Mitigation Monitoring Program – Traffic and Circulation**

<b>IMPACT T-2</b>	<b>Staging and preparation would temporarily increase local traffic (Class II)</b>
<b>MITIGATION MEASURE</b>	<b>T-2a: Avoid travel during peak season on Avila Beach Drive.</b> The Applicant shall develop an alternative project schedule that would restrict the project-related personnel from travel on Avila Beach Drive during peak season (e.g., May to August), evening peak hours of between 4:00 p.m. and 7:00 p.m. In addition, all project-related traffic shall be restricted from travel on Avila Beach Drive during peak season (e.g., May to August) weekends between the hours of 10:00 a.m. and 5:00 p.m.
<b>Location</b>	Implementation of the measure would affect Avila Beach transportation system. Monitoring shall be done at the DCPD secured Access Gate on Diablo Canyon Road
<b>Monitoring / Reporting Action</b>	Review and approval of the alternative project schedule by CPUC. Conduct site visits during the project implementation to ensure compliance
<b>Effectiveness Criteria</b>	If fewer than ten project-related vehicles pass through the Access Gate during any peak hour, the measure is effective
<b>Responsible Agency</b>	CPUC shall assign a qualified environmental monitor, review the monitoring reports and establish and implement an enforcement action if the measures are not effective
<b>Timing</b>	Review the alternative schedule before commencing RSG staging and preparation, conduct site visits during project implementation
<b>MITIGATION MEASURE</b>	<b>T-2b: Avoid travel during peak time on Highway 101.</b> The Applicant shall develop an alternative project schedule that would restrict the project-related personnel from travel on Highway 101 during peak hours of operation. Typically, morning peak hours are between 6 a.m. and 8 a.m. and evening peak hours are between 4:00 p.m. and 5:30 p.m.
<b>Location</b>	Implementation of the measure would affect Highway 101 in Avila Beach vicinity. Monitoring shall be done at the DCPD Access Gate on Diablo Canyon Road
<b>Monitoring / Reporting Action</b>	Review and approval of the alternative project schedule by CPUC. Site visits during the project implementation to ensure compliance
<b>Effectiveness Criteria</b>	If fewer than ten project-related vehicles pass through the Access Gate during any peak hour, the measure is effective
<b>Responsible Agency</b>	CPUC shall assign a qualified environmental monitor, review the monitoring reports and establish and implement an enforcement action if the measures are not effective
<b>Timing</b>	Review the alternative schedule before commencing RSG staging and preparation, conduct site visits during project implementation
<b>IMPACT T-3</b>	<b>Steam generator replacement activities would temporarily increase local traffic (Class II)</b>
<b>MITIGATION MEASURE</b>	<b>T-3a: Develop a trip reduction program.</b> The Applicant shall develop a trip reduction program for the Proposed Project that could include but not be limited to the following activities: <ul style="list-style-type: none"> <li>• Provide offsite parking for the project-related employees and provide a shuttle service between the offsite parking and DCPD.</li> <li>• Provide a shuttle for the outage personnel, and institute a set of measures that would encourage use of the shuttle by the outage personnel.</li> <li>• Develop a work schedule that would prevent employees traveling on Avila Beach Drive and other local roadways during peak hours.</li> <li>• Develop a construction materials delivery and waste removal program that would avoid project-related and other DCPD service truck traffic on Avila Beach Drive and other local roadways during peak hours.</li> </ul>

Table D.13-8. Mitigation Monitoring Program – Traffic and Circulation

Location	Monitoring visits shall be done to the alternative offsite parking sites
Monitoring / Reporting Action	Review and approval of the trip reduction program by CPUC. Site visits to ensure implementation
Effectiveness Criteria	If 50 percent of the project-related employees use the provided shuttle on the regular basis, the measure is effective
Responsible Agency	CPUC shall assign a qualified environmental monitor, review the monitoring reports and establish and implement an enforcement action if the measures are not effective
Timing	During the OSGs removal, transportation and storage
<b>MITIGATION MEASURE</b>	<b>T-3b: Avoid travel during peak season on Avila Beach Drive and San Luis Bay Drive.</b> The Applicant shall develop an alternative project schedule that would restrict the project-related and outage personnel from travel on Avila Beach Drive and San Luis Bay Drive during peak season (e.g., May to August) evening peak hours of between 4:00 p.m. and 7:00 p.m. In addition, all project-related and outage traffic shall be restricted from travel on Avila Beach Drive and San Luis Bay Drive during peak season (e.g., May to August) weekends between the hours of 10:00 a.m. and 5:00 p.m.
Location	Implementation of the measure would affect Avila Beach transportation system. Monitoring shall be done at the DCPP secured Access Gate on Diablo Canyon Road
Monitoring / Reporting Action	Review and approval of the alternative project schedule. Site visits during the project implementation to ensure compliance
Effectiveness Criteria	If fewer than ten project-related vehicles pass through the Access Gate during any peak hour, the measure is effective
Responsible Agency	CPUC shall assign a qualified environmental monitor, review the monitoring reports and establish and implement an enforcement action if the measures are not effective
Timing	Review the alternative schedule before commencing OSG removal, conduct site visits during project implementation

## D.13.7 References

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