

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
<u>Collector</u> <u>Major</u>	2	9,600	11,200	12,800	14,400	16,000
<u>Collector</u>	<u>2</u>	<u>7,100</u>	<u>8,200</u>	<u>9,400</u>	<u>10,600</u>	<u>11,800</u>

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 30 to 40 days~~3 months~~, an average of 1,285 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 2,000-2,200 round trips per day, or up to 4,000~~4,400~~ one-way trips per day. The most recent traffic counts for the Avila Beach area roadways that were used in the preparation of this analy-

sis were collected outside of the planned outage periods (e.g., May and July of 2002-2003), and therefore these traffic counts do not account for the planned outage-related traffic.

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 Severity¹ 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.

¹ 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
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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 ~~1,285~~ ~~1,100~~ more vehicles during maintenance power outages, which occur every 9 to 11 months for an average of ~~30 to 40 days~~ ~~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	Peak Hour	Peak Hour LOS, V/C	ADT	Peak Hour	Peak Hour LOS, V/C
Diablo Canyon Road (Access Road) ^a	1,800	180	A, 0.11	1,800 1,903	180 190	A, 0.11 0.12
Avila Beach Dr. e/o Diablo Canyon Road (Access Road)	5,622	616	A, 0.38	5,944	651	A, 0.40
Avila Beach Dr. w/o Diablo Canyon Road (Access Road)	3,373	355	A, 0.22	3,566	375	A, 0.23
Avila Beach Dr. w/o San Luis Bay Dr. peak ^b	11,986	1,172	C, 0.73	12,671	1,239	C, 0.77
Avila Beach Dr. w/o San Luis Bay Dr.	8,177	805	A, 0.50	8,645	851	A, 0.53
San Luis Bay Drive n/o Avila Beach Dr.	6,532	625	A, 0.39	6,906	661	A, 0.41
San Luis Bay Drive w/o Ontario Rd.	6,936	699	A, 0.43	7,333	739	A, 0.46
Shell Beach Road s/o Avila Beach Dr.	4,945	429	A, 0.27	5,228	454	A, 0.28
San Miguel s/o Avila Beach Dr.	1,512	178	A, 0.11	1,598	188	A, 0.12
Front St. e/o Avila Beach Dr.	5,781	709	A, 0.44	6,112	750	A, 0.46

Source: SLO County, 2004.

Notes: Peak hour LOS calculated based on the criteria developed specifically for Avila Beach area using Santa Barbara County thresholds or Highway Capacity Software.

V/C = the volume to capacity ratio for peak hour traffic, 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. Traffic on this private road is dependent only on DCPD activities and would not follow the normal population growth trends in the area.

^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	Daily LOS	Peak Hour	ADT	Daily LOS	Peak Hour
Santa Maria, Jct. Rte. 166 W., Main St.	58,000	C	6,500	59,644	D	6,684 6,500
Santa Maria, Donovan Rd.	55,000	C	6,500	58,211	C	6,879 6,500
Jct. Rte. 135 S., North Santa Maria	61,000	D	6,300	68,621	DE	7,087 6,300
Santa Barbara/SLO County	61,000	D	6,300	68,621	DE	7,087 6,300
Jct. Rte. 166 East	53,000	C	4,700	58,799	C	5,214 4,700
Tefft St.	53,000	C	4,900	58,014	C	5,364 4,900
Los Berros Rd.	53,000	C	6,200	54,654	C	6,394 6,200
Arroyo Grande, Bridge St.	48,000	B	5,800	44,219	B	5,343 5,800
Jct. Rte. 227 N., Grand Ave.	49,000	B	6,100	43,355	B	5,397 6,100
Arroyo Grande, Brisco Rd.	53,000	C	6,600	54,654	C	6,806 6,600
Pismo Beach, Oak Park Rd.	61,000	D	7,800	68,200	DE	8,721 7,800
Pismo Beach, Pismo Oaks	69,000	E	8,800	76,780	F	9,792 8,800
Pismo Beach, Villa Creek	56,000	C	8,600	58,877	C	9,042 8,600

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

Highway 101 Section	Existing Traffic			Future Traffic		
	ADT	Daily LOS	Peak Hour	ADT	Daily LOS	Peak Hour
Jct. Rte. 1 South	56,000	C	4,850	53,676	C	<u>4,6494,850</u>
North Shell Beach	65,000	D	8,200	69,820	E	<u>8,8088,200</u>
Avila Beach Drive	60,000	D	7,100	69,001	E	<u>8,1657,100</u>
San Luis Bay Dr.	72,000	E	8,700	76,071	F	<u>9,1928,700</u>
Higuera St.	72,000	E	8,300	78,913	F	<u>9,0978,300</u>
Los Osos Rd.	56,000	C	5,600	57,648	C	<u>5,7655,600</u>
Madonna Rd.	77,000	F	8,800	108,298	F	<u>12,3778,800</u>
Jct. Rte. 227 S.; Marsh St.	75,000	F	8,500	129,784	F	<u>14,7098,500</u>
Jct. Rte. 1 North, Osos St.	64,000	D	7,300	81,653	F	<u>9,3147,300</u>
California Blvd.	56,000	C	6,200	73,797	E	<u>8,1706,200</u>
Grand Ave.	42,000	B	4,700	47,318	B	<u>5,2954,700</u>
Buena Vista	49,000	B	5,400	58,754	C	<u>6,4755,400</u>
North City Limits	49,000	B	5,400	58,217	C	<u>6,4165,400</u>
Jct. Rte. 58 East, Santa Margarita Creek	39,000	B	4,200	40,080	B	<u>4,3164,200</u>

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 peak hour 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 change average daily LOS of roadways under Caltrans jurisdiction to below D, or contribute over 100 peak hour trips to a roadway with LOS E or F would require mitigation.
- Project activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units) with no reasonable alternative access.

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

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

- 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.

D.13.3.2 Replacement Steam Generator Transport

Impact T-1: RSG transport may damage roadway/parking infrastructure and would temporarily increase local traffic

Transport of the RSGs from Port San Luis to the DCPD would use approximately 1,500 feet of Avila Beach Drive and approximately 200 feet of Diablo Canyon Road (DCPD Access Road) to the DCPD Access Gate (see Figures B-1 or B-11). From the Access Gate the transport route would be located within the boundaries of the DCPD 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 DCPD personnel working at DCPD 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 DCPD. 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 ~~6876~~ 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 at the end of 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.

The Port San Luis parking lot would be used by the transporter to access Avila Beach Drive. Because parking lot pavement often is not designed to the same standards as roadway pavement, damage to the Port San Luis parking lot pavement is possible, but unlikely to occur. In order to address this potential impact PG&E proposes to use mats and other ground reinforcing methods to distribute weight, and steel plates may be used under the barge ramps to protect the underlying asphalt (see Section B.6). The impact is expected to be less than significant due to PG&E's efforts to protect the parking lot surface and because of the limited activities (eight transporter round-trips at maximum) and the transporter design that distributes the weight of the steam generators. However, a mitigation measure is suggested below in order to ensure that any unforeseen damage to pavement is repaired.

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).

Mitigation Measures for Impact T-1, RSG transport may damage roadway/parking infrastructure and would temporarily increase local traffic

T-1a Repair any damage to pavement from the transporter. The Applicant shall repair and bear any costs of repair of any significant damage to pavement (e.g., road or parking lots) that results from the transportation of the RSGs. The repairs shall bring the pavement to the pre-project or better condition.

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 DCP, 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 typically estimated as 10 percent of the average daily traffic). 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 project-related 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 phase of Replacement Steam Generator Staging and Preparation 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 add over 15 trips to this roadway~~increase the V/C ratio on this roadway by more than 0.1~~. Under the anticipated future conditions, Avila Beach Drive west of San Luis Bay Drive is expected to perform at LOS C during the peak hour. The addition of 142 peak hour trips to An increase of the V/C by more than 0.1 on a this roadway would worsen from LOS C to LOS D. Using the significance criteria in Table D.13-5, the addition of more than 15 trips to a roadway that would perform at LOS D with the project 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.

Several Highway 101 segments operate at below LOS D. Caltrans strives to operate its highway facilities between LOS C and D (Caltrans 2002). Because the project could potentially contribute over 100 peak hour trips to Highway 101, this impact would be considered significant.

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 and other local surface roads. 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~~October), 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 ~~October~~August) weekends between the hours of 10:00 a.m. and 5:00 p.m.

To achieve this, the Applicant shall not schedule project employee shift changes between 4:00 p.m. and 7:00 p.m. during May to October period, during weekdays. The Applicant shall not schedule project-related or outage-related employee shift changes between the hours of 10:00 a.m. and 5:00 p.m. during May to October period, during weekends.

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 6:00 a.m. and 8:00 a.m. and evening peak hours are between 4:00 p.m. and 5:30 p.m.

To achieve this, in addition to the shift change restrictions stated in Mitigation Measure T-2a, the Applicant shall schedule project employee shift changes outside of period between 6:00 a.m. and 8:00 a.m. during weekdays.

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 ^a	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 ^e	3,634	A, 0.24	391	0.01
Avila Beach Dr. w/o San Luis Bay Dr. peak ^b	11,986	C, 0.73	1,172	12,671	C, 0.77	1,239	4,100	16,771	F, 1.04	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	F, 0.79	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	E, 0.67	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	E, 0.72	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 ^d	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 ^e	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 ^e	6,795	A, 0.52	835	0.05

Table D.13-6. Future and Project Traffic Conditions in the Project Area during Staging and Preparation

<u>Road/Route</u>	<u>Future Traffic (2008)</u>			<u>Future with Project Traffic</u>					
	<u>ADT</u>	<u>Peak Hour</u>	<u>Peak Hour LOS, V/C</u>	<u>Project ADT</u>	<u>Project Peak Hour</u>	<u>ADT</u>	<u>Peak Hour</u>	<u>Peak Hour LOS, V/C</u>	<u>Increase in Peak Hour V/C</u>
<u>Diablo Canyon Road ^a</u>	<u>1,800</u>	<u>180</u>	<u>A, 0.11</u>	<u>1,420</u>	<u>142</u>	<u>3,220</u>	<u>322</u>	<u>A, 0.20</u>	<u>0.09</u>
<u>Avila Beach Dr e/o Diablo Canyon Dr ^c (Access Rd)</u>	<u>5,944</u>	<u>651</u>	<u>A, 0.40</u>	<u>1,420</u>	<u>142</u>	<u>7,364</u>	<u>793</u>	<u>A, 0.49</u>	<u>0.09</u>
<u>Avila Beach Dr w/o San Luis Bay Dr peak ^b</u>	<u>12,671</u>	<u>1,239</u>	<u>C, 0.77</u>	<u>1,420</u>	<u>142</u>	<u>14,091</u>	<u>1,381</u>	<u>D, 0.86</u>	<u>0.09</u>
<u>Avila Beach Dr w/o San Luis Bay Dr</u>	<u>8,645</u>	<u>851</u>	<u>A, 0.53</u>	<u>1,420</u>	<u>142</u>	<u>10,065</u>	<u>993</u>	<u>B, 0.61</u>	<u>0.09</u>
<u>San Luis Bay Drive n/o Avila Beach Dr</u>	<u>6,906</u>	<u>661</u>	<u>A, 0.41</u>	<u>1,420</u>	<u>142</u>	<u>8,326</u>	<u>803</u>	<u>A, 0.50</u>	<u>0.09</u>
<u>San Luis Bay Drive w/o Ontario Rd.</u>	<u>7,333</u>	<u>739</u>	<u>A, 0.46</u>	<u>1,420</u>	<u>142</u>	<u>8,753</u>	<u>881</u>	<u>A, 0.55</u>	<u>0.09</u>
<u>Shell Beach Road s/o Avila Beach Dr</u>	<u>5,228</u>	<u>454</u>	<u>A, 0.28</u>	<u>0</u>	<u>0</u>	<u>5,228</u>	<u>454</u>	<u>A, 0.28</u>	<u>0.00</u>
<u>San Miguel s/o Avila Beach Dr</u>	<u>1,598</u>	<u>188</u>	<u>A, 0.12</u>	<u>473</u>	<u>47</u>	<u>2,072</u>	<u>236</u>	<u>A, 0.15</u>	<u>0.03</u>
<u>Front St. e/o Avila Beach Dr</u>	<u>6,112</u>	<u>750</u>	<u>A, 0.46</u>	<u>237</u>	<u>24</u>	<u>6,348</u>	<u>773</u>	<u>A, 0.48</u>	<u>0.01</u>

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

Notes: [For existing traffic see Table D.13-3.](#) 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 DCPD permanent employees. [Traffic on this private road is dependent only on DCPD activities and would not follow the normal population growth trends in the area.](#)

^b Peak Season - during summer.

^c Additional trips on Avila Beach Drive west of Diablo Canyon Road would be Transporter-related trips [during the RSG Transport phase:](#) Transporter and support workers. [Avila Beach Drive is not impacted during Staging and Preparation phase and thus is not mentioned here.](#)

^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

[The worst case circulation scenario would occur if the original steam generator removal, transport and storage phase would occur during the peak tourist season, which occurs during the period from May through October.](#) 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 (~~1,2851,100~~ workers) and the permanent DCPD personnel (1,400 workers), for a total of ~~3,6353,450~~ workers, or ~~2,2352,050~~ additional workers over non-outage conditions.

[Within the peak tourist season, the peak traffic occurs during the summer months. Historically, the planned refueling outages did not occur during the summer \(the only one outage that occurred during the summer period was in August 1986; no scheduled outages have occurred during the summer period since](#)

then). Also, the project-related outage is longer than the normal planned outage (75-80 days vs. 30-40 days). Therefore, the typical summer time traffic in the Avila Beach area does not include the planned outage-related traffic.

The Applicant plans to conduct this phase of the Proposed Project outside of the peak tourist season. However, it is reasonable to assume that the Proposed Project schedule could change and the project-related outage could occur during the summer.

Offsite transport of the OSGs would not occur under the Proposed Project. Worst case traffic would occur during the 3-month 75- to 80-day outage period when project-related personnel for the Proposed Project would travel to DCPD in addition to the outage personnel, and if this project phase would overlap with the peak tourist season, a significant impact is expected (see Tables D.13-8 and D-13-9).

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 project-related trips would occur during the peak hour. The addition of 20595 round trips to the peak hour traffic on Avila Beach Drive would increase the V/C ratio on this roadway by more than 0.2-0.1 and would be considered significant (see Table D.13-68). Avoiding project-related travel during peak tourist season and peak hours would be required under Mitigation Measure T-2a. This measure and implementation of trip reduction measures identified below would avoid the potentially significant impact to Avila Beach Drive and other local roads and reduce the impact to local roads (Class II) to a less than significant level. 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 over 100320 to 410 peak hour trips to Highway 101 segments that are at LOS E or F (see Table D.13-9) 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) and the following mitigation measure.

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. The goal of this program shall be to achieve a 50 percent reduction of project-related vehicle trips during all steam generator replacement activities that overlap with outage periods or normal operation. With such 50 percent reduction, not more than 3,160 vehicles

would enter the plant during a 24-hour day. This limit represents vehicles from a normal workforce of 1,400 plus 1,285 outage workers with 475 project-related vehicles representing a two-person average vehicle occupancy for the 950 project-related workers. PG&E shall develop and maintain a daily count of vehicles entering the plant for verifying the success of this program. The program shall ~~that could~~ include but not be limited to the following activities:

- Provide appropriate offsite parking for the project-related employees and provide a shuttle service between the offsite parking and DCPP. Any parking arrangements shall be approved by the County of San Luis Obispo (and the landowner of the space(s) proposed to be used for parking if not owned by the County) prior to the project commencement. Any parking fees shall be borne by the Applicant.
- Provide a shuttle that would be available to all personnel that would enter DCPP during the project, and institute a set of incentive-based measures that would encourage use of the shuttle by all personnel (i.e., regular employees, outage personnel and project-related workers). 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 as specified in Mitigation Measure T-2a.
- Institute administrative measures, potentially through the use of contract terms, to prohibit project personnel from parking in local communities such as Avila Beach or Port San Luis.
- Develop a construction materials and machinery delivery and waste removal program that would avoid project-related and other DCPP service truck traffic on Avila Beach Drive and other local roadways during peak hours as specified in Mitigation Measure T-2a.
- Develop a public notification program that allows the public to be informed about the traffic reduction program, project schedule and potential traffic congestion.

The trip reduction program shall be coordinated with and approved by the County of San Luis Obispo and the Port San Luis Harbor District.

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	E, 0.94	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	E, 0.94	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	E, 0.93	8,060	0.01
Pismo Beach, Pismo Oaks	69,000	E, 0.93	8,800	76,780	F, 1.04	8,800	820	77,600	F, 1.05	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	E, 0.94	8,200	820	70,640	E, 0.95	8,469	0.01
Avila Beach Drive	60,000	D, 0.81	7,100	69,001	E, 0.93	7,100	3,280	72,281	E, 0.98	7,590	0.04
San Luis Bay Dr.	72,000	E, 0.97	8,700	76,071	F, 1.03	8,700	3,280	79,351	F, 1.07	9,226	0.04
Higuera St.	72,000	E, 0.97	8,300	78,913	F, 1.07	8,300	3,280	82,193	F, 1.11	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	F, 1.04	8,800	108,298	F, 1.46	8,800	3,280	111,578	F, 1.51	9,329	0.04
Jct. Rte. 227 S.; Marsh St.	75,000	F, 1.01	8,500	129,784	F, 1.75	8,500	3,280	133,064	F, 1.80	9,022	0.04
Jct. Rte. 1 North, Osos St.	64,000	D, 0.86	7,300	81,653	F, 1.10	7,300	3,280	84,933	F, 1.15	7,794	0.04
California Blvd.	56,000	C, 0.76	6,200	73,797	E, 1.00	6,200	3,280	77,077	F, 1.04	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

DCPP Steam Generator Replacement Project
D.13 TRAFFIC AND CIRCULATION

Table D.13-7. Future and Project Highway Conditions in the Project Area during Staging and Preparation

Highway 101 Section	Future Traffic (2008)			Project		Future with Project Traffic		
	ADT	Daily LOS	Peak Hour	ADT	Peak Hour	ADT	Daily LOS	Peak Hour
<u>Santa Maria, Jct. Rte. 166 W., Main St.</u>	<u>59,644</u>	<u>D</u>	<u>6,684</u>	<u>1,420</u>	<u>142</u>	<u>61,064</u>	<u>D</u>	<u>6,826</u>
<u>Santa Maria, Donovan Rd.</u>	<u>58,211</u>	<u>C</u>	<u>6,879</u>	<u>1,420</u>	<u>142</u>	<u>59,631</u>	<u>D</u>	<u>7,021</u>
<u>Jct. Rte. 135 S., North Santa Maria</u>	<u>68,621</u>	<u>E</u>	<u>7,087</u>	<u>1,420</u>	<u>142</u>	<u>70,041</u>	<u>E</u>	<u>7,229</u>
<u>Santa Barbara/SLO County</u>	<u>68,621</u>	<u>E</u>	<u>7,087</u>	<u>1,420</u>	<u>142</u>	<u>70,041</u>	<u>E</u>	<u>7,229</u>
<u>Jct. Rte. 166 East</u>	<u>58,799</u>	<u>C</u>	<u>5,214</u>	<u>1,420</u>	<u>142</u>	<u>60,219</u>	<u>D</u>	<u>5,356</u>
<u>Tefft St.</u>	<u>58,014</u>	<u>C</u>	<u>5,364</u>	<u>1,420</u>	<u>142</u>	<u>59,434</u>	<u>D</u>	<u>5,506</u>
<u>Los Berros Rd.</u>	<u>54,654</u>	<u>C</u>	<u>6,394</u>	<u>1,420</u>	<u>142</u>	<u>56,074</u>	<u>C</u>	<u>6,536</u>
<u>Arroyo Grande, Bridge St.</u>	<u>44,219</u>	<u>B</u>	<u>5,343</u>	<u>1,420</u>	<u>142</u>	<u>45,639</u>	<u>B</u>	<u>5,485</u>
<u>Jct Rte 227 N., Grand Ave.</u>	<u>43,355</u>	<u>B</u>	<u>5,397</u>	<u>1,420</u>	<u>142</u>	<u>44,775</u>	<u>B</u>	<u>5,539</u>
<u>Arroyo Grande, Brisco Rd.</u>	<u>54,654</u>	<u>C</u>	<u>6,806</u>	<u>1,420</u>	<u>142</u>	<u>56,074</u>	<u>C</u>	<u>6,948</u>
<u>Pismo Beach, Oak Park Rd.</u>	<u>68,200</u>	<u>E</u>	<u>8,721</u>	<u>1,420</u>	<u>142</u>	<u>69,620</u>	<u>E</u>	<u>8,863</u>
<u>Pismo Beach, Pismo Oaks</u>	<u>76,780</u>	<u>F</u>	<u>9,792</u>	<u>1,420</u>	<u>142</u>	<u>78,200</u>	<u>F</u>	<u>9,934</u>
<u>Pismo Beach, Villa Creek</u>	<u>58,877</u>	<u>C</u>	<u>9,042</u>	<u>1,420</u>	<u>142</u>	<u>60,297</u>	<u>D</u>	<u>9,184</u>
<u>Jct. Rte. 1 South</u>	<u>53,676</u>	<u>C</u>	<u>4,649</u>	<u>1,420</u>	<u>142</u>	<u>55,096</u>	<u>C</u>	<u>4,791</u>
<u>North Shell Beach</u>	<u>69,820</u>	<u>E</u>	<u>8,808</u>	<u>1,420</u>	<u>142</u>	<u>71,240</u>	<u>E</u>	<u>8,950</u>
<u>Avila Beach Drive</u>	<u>69,001</u>	<u>E</u>	<u>8,165</u>	<u>1,420</u>	<u>142</u>	<u>70,421</u>	<u>E</u>	<u>8,307</u>
<u>San Luis Bay Drive</u>	<u>76,071</u>	<u>F</u>	<u>9,192</u>	<u>1,420</u>	<u>142</u>	<u>77,491</u>	<u>F</u>	<u>9,334</u>
<u>Higuera St.</u>	<u>78,913</u>	<u>F</u>	<u>9,097</u>	<u>1,420</u>	<u>142</u>	<u>80,333</u>	<u>F</u>	<u>9,239</u>
<u>Los Osos Rd.</u>	<u>57,648</u>	<u>C</u>	<u>5,765</u>	<u>1,420</u>	<u>142</u>	<u>59,068</u>	<u>C</u>	<u>5,907</u>
<u>Madonna Rd.</u>	<u>108,298</u>	<u>F</u>	<u>12,377</u>	<u>1,420</u>	<u>142</u>	<u>109,718</u>	<u>F</u>	<u>12,519</u>
<u>Jct Rte 227 S; Marsh St.</u>	<u>129,784</u>	<u>F</u>	<u>14,709</u>	<u>1,420</u>	<u>142</u>	<u>131,204</u>	<u>F</u>	<u>14,851</u>
<u>Jct Rte 1 North, Osos St.</u>	<u>81,653</u>	<u>F</u>	<u>9,314</u>	<u>1,420</u>	<u>142</u>	<u>83,073</u>	<u>F</u>	<u>9,456</u>
<u>California Blvd.</u>	<u>73,797</u>	<u>E</u>	<u>8,170</u>	<u>1,420</u>	<u>142</u>	<u>75,217</u>	<u>F</u>	<u>8,312</u>
<u>Grand Ave.</u>	<u>47,318</u>	<u>B</u>	<u>5,295</u>	<u>1,420</u>	<u>142</u>	<u>48,738</u>	<u>B</u>	<u>5,437</u>
<u>Buena Vista</u>	<u>58,754</u>	<u>C</u>	<u>6,475</u>	<u>1,420</u>	<u>142</u>	<u>60,174</u>	<u>D</u>	<u>6,617</u>
<u>North City Limits</u>	<u>58,217</u>	<u>C</u>	<u>6,416</u>	<u>1,420</u>	<u>142</u>	<u>59,637</u>	<u>D</u>	<u>6,558</u>
<u>Jct. Rte. 58 East, Santa Margarita Creek</u>	<u>40,080</u>	<u>B</u>	<u>4,316</u>	<u>1,420</u>	<u>142</u>	<u>41,812</u>	<u>B</u>	<u>4,458</u>

Source: Caltrans, 2004.

Notes: For existing traffic see Table D.13-4. LOS calculated using Santa Barbara County thresholds or Highway Capacity Software.

ADT = Average Daily Traffic.

Table D.13-8. Future and Project Traffic Conditions in the Project Area during OSG Removal, Transport, and Storage

Road/Route	Future Traffic (2008)			Future Traffic with Outage Traffic			Future with Outage and Project Traffic			Increase in Peak Hour V/C		
	ADT	Peak Hr	Peak hour LOS, V/C	ADT	Peak Hr	Peak hour LOS, V/C	Project ADT	Project Peak Hour	ADT		Peak Hour	Peak Hr LOS, V/C
<u>Diablo Canyon Road ^a</u>	<u>1,800</u>	<u>180</u>	<u>A, 0.11</u>	<u>4,370</u>	<u>437</u>	<u>A, 0.27</u>	<u>1,900</u>	<u>190</u>	<u>6,270</u>	<u>627</u>	<u>A, 0.39</u>	<u>0.12</u>
<u>Avila Beach Dr. e/o Diablo Canyon Dr. (Access Road)</u>	<u>5,944</u>	<u>651</u>	<u>A, 0.40</u>	<u>8,514</u>	<u>908</u>	<u>A, 0.56</u>	<u>1,900</u>	<u>190</u>	<u>10,414</u>	<u>1,098</u>	<u>B, 0.68</u>	<u>0.12</u>
<u>Avila Beach Dr. w/o San Luis Bay Dr. peak ^b</u>	<u>12,671</u>	<u>1,239</u>	<u>C, 0.77</u>	<u>15,241</u>	<u>1,496</u>	<u>E, 0.93</u>	<u>1,900</u>	<u>190</u>	<u>17,141</u>	<u>1,686</u>	<u>F, 1.04</u>	<u>0.12</u>
<u>Avila Beach Dr. w/o San Luis Bay Dr.</u>	<u>8,645</u>	<u>851</u>	<u>A, 0.53</u>	<u>11,215</u>	<u>1,108</u>	<u>B, 0.69</u>	<u>1,900</u>	<u>190</u>	<u>13,115</u>	<u>1,298</u>	<u>C, 0.80</u>	<u>0.12</u>
<u>San Luis Bay Drive n/o Avila Beach Dr.</u>	<u>6,906</u>	<u>661</u>	<u>A, 0.41</u>	<u>9,476</u>	<u>918</u>	<u>A, 0.57</u>	<u>1,900</u>	<u>190</u>	<u>11,376</u>	<u>1,108</u>	<u>B, 0.69</u>	<u>0.12</u>
<u>San Luis Bay Drive w/o Ontario Rd.</u>	<u>7,333</u>	<u>739</u>	<u>A, 0.46</u>	<u>9,903</u>	<u>996</u>	<u>A, 0.62</u>	<u>1,900</u>	<u>190</u>	<u>11,803</u>	<u>1,186</u>	<u>C, 0.73</u>	<u>0.12</u>
<u>Shell Beach Road s/o Avila Beach Dr.</u>	<u>5,228</u>	<u>454</u>	<u>A, 0.28</u>	<u>5,228</u>	<u>454</u>	<u>A, 0.28</u>	<u>0</u>	<u>0</u>	<u>5,228</u>	<u>454</u>	<u>A, 0.28</u>	<u>0.00</u>
<u>San Miguel s/o Avila Beach Dr.</u>	<u>1,598</u>	<u>188</u>	<u>A, 0.12</u>	<u>1,598</u>	<u>188</u>	<u>A, 0.12</u>	<u>633</u>	<u>63</u>	<u>2,232</u>	<u>252</u>	<u>A, 0.16</u>	<u>0.04</u>
<u>Front St. e/o Avila Beach Dr.</u>	<u>6,112</u>	<u>750</u>	<u>A, 0.46</u>	<u>6,112</u>	<u>750</u>	<u>A, 0.46</u>	<u>317</u>	<u>32</u>	<u>6,428</u>	<u>781</u>	<u>A, 0.48</u>	<u>0.02</u>

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

Notes: For existing traffic see Table D.13-3. 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 DCPD permanent employees. Traffic on this private road is dependent only on DCPD activities and would not follow the normal population growth trends in the area.

b. Peak Season - during summer.

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

d. 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).

Table D.13-9. Future and Project Highway Conditions in the Project Area during OSG Removal, Transport, and Storage

Highway 101 Section	Future Traffic (2008)			Project		Future with Project Traffic		
	ADT	Daily LOS	Peak Hour	ADT	Peak Hour	ADT	Daily LOS	Peak Hour
<u>Santa Maria, Jct. Rte. 166 W., Main St.</u>	59,644	D	6,684	1,900	190	61,544	D	6,874
<u>Santa Maria, Donovan Rd.</u>	58,211	C	6,879	1,900	190	60,111	D	7,069
<u>Jct. Rte. 135 S., North Santa Maria</u>	68,621	E	7,087	1,900	190	70,521	E	7,277
<u>Santa Barbara/SLO County</u>	68,621	E	7,087	1,900	190	70,521	E	7,277
<u>Jct. Rte. 166 East</u>	58,799	C	5,214	1,900	190	60,699	D	5,404
<u>Tefft St.</u>	58,014	C	5,364	1,900	190	59,914	D	5,554
<u>Los Berros Rd.</u>	54,654	C	6,394	1,900	190	56,554	C	6,584
<u>Arroyo Grande, Bridge St.</u>	44,219	B	5,343	1,900	190	46,119	B	5,533
<u>Jct. Rte. 227 N., Grand Ave.</u>	43,355	B	5,397	1,900	190	45,255	B	5,587
<u>Arroyo Grande, Brisco Rd.</u>	54,654	C	6,806	1,900	190	56,554	C	6,996
<u>Pismo Beach, Oak Park Rd.</u>	68,200	E	8,721	1,900	190	70,100	E	8,911
<u>Pismo Beach, Pismo Oaks</u>	76,780	F	9,792	1,900	190	78,680	F	9,982
<u>Pismo Beach, Villa Creek</u>	58,877	C	9,042	1,900	190	60,777	D	9,232
<u>Jct. Rte. 1 South</u>	53,676	C	4,649	1,900	190	55,576	C	4,839
<u>North Shell Beach</u>	69,820	E	8,808	1,900	190	71,720	E	8,998
<u>Avila Beach Drive</u>	69,001	E	8,165	1,900	190	70,901	E	8,355
<u>San Luis Bay Dr.</u>	76,071	F	9,192	1,900	190	77,971	F	9,382
<u>Higuera St.</u>	78,913	F	9,097	1,900	190	80,813	F	9,287
<u>Los Osos Rd.</u>	57,648	C	5,765	1,900	190	59,548	D	5,955
<u>Madonna Rd.</u>	108,298	F	12,377	1,900	190	110,198	F	12,567
<u>Jct. Rte. 227 S.; Marsh St.</u>	129,784	F	14,709	1,900	190	131,684	F	14,899
<u>Jct. Rte. 1 North, Osos St.</u>	81,653	F	9,314	1,900	190	83,553	F	9,504
<u>California Blvd.</u>	73,797	E	8,170	1,900	190	75,697	F	8,360
<u>Grand Ave.</u>	47,318	B	5,295	1,900	190	49,218	B	5,485
<u>Buena Vista</u>	58,754	C	6,475	1,900	190	60,654	D	6,665
<u>North City Limits</u>	58,217	C	6,416	1,900	190	60,117	D	6,606
<u>Jct. Rte. 58 East, Santa Margarita Creek</u>	40,080	B	4,316	1,900	190	41,980	B	4,506

Source: Caltrans, 2004.

Notes: For existing traffic see Table D.13-4. LOS calculated using Santa Barbara County thresholds or Highway Capacity Software.

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, ~~1,285~~ ~~1,100~~ outage personnel and 900 to 950 project-related employees would access the site, causing a total of ~~2,232,050~~ additional personnel over normal operations, or ~~4,100~~ ~~4,470~~ additional one-way trips per day, which would be 950 round-trips or 1,900 additional one-way trips over operation during a planned outage. Therefore, circulation impacts would be the same as for Impact T-3. With implementation of Mitigation Measures T-3a, ~~and T-2a3b~~, ~~and 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 ~~1,285~~ ~~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 round-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 shutdown 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.13-8-10 shows the mitigation monitoring, compliance, and reporting program for Traffic and Circulation.

Table D.13-810. Mitigation Monitoring Program – Traffic and Circulation

IMPACT T-1	RSG transport may damage roadway/parking infrastructure and would temporarily increase local traffic (Class III)
MITIGATION MEASURE	T-1a: Repair any damage to pavement from the transporter. The Applicant shall repair and bear any costs of repair of any significant damage to pavement (e.g., road or parking lots) that results from the transportation of the RSGs. The repairs shall bring the pavement to the pre-project or better condition.
Location	Implementation of the measure would affect Avila Beach Drive, Diablo Canyon Road, and any paved roads or parking lots within the Port San Luis. Monitoring and photo documentation shall be done at the Port's parking lot and along the transporter route.
Monitoring / Reporting Action	Conduct site visits to assess the road and parking lot conditions before and after the transport, use photo documentation to assess the pre- and post-project pavement conditions. To ensure compliance, conduct a site visit after the repairs (if any) are reported as completed.
Effectiveness Criteria	If the damaged pavement (if any) appears as good or better after the repairs (if any) are completed, the measure is effective.
Responsible Agency	CPUC shall assign a qualified environmental monitor, that is also approved by the Harbor District to review the monitoring reports and establish and implement an enforcement action if the measure is not effective.
Timing	Review before commencing RSG transportation, conduct site visits during Project implementation.
IMPACT T-2	Staging and preparation would temporarily increase local traffic (Class II)
MITIGATION MEASURE	T-2a: Avoid travel during peak season on Avila Beach Drive and other local surface roads. 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 October), 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 October) weekends between the hours of 10:00 a.m. and 5:00 p.m. To achieve this, the Applicant shall not schedule project employee shift changes between 4:00 p.m. and 7:00 p.m. during May to October period, during weekdays. The Applicant shall not schedule project-related or outage-related employee shift changes between the hours of 10:00 a.m. and 5:00 p.m. during May to October period, during weekends.
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/ shift change orders by CPUC. Conduct site visits during the project implementation to ensure compliance.
Effectiveness Criteria	If the Applicant demonstrates approved observable shift schedule 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 RSG staging and preparation, conduct site visits during project implementation.
MITIGATION MEASURE	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 6:00 a.m. and 8:00 a.m. and evening peak hours are between 4:00 p.m. and 5:30 p.m.

Table D.13-810. Mitigation Monitoring Program – Traffic and Circulation

	<u>To achieve this, in addition to the shift change restrictions stated in Mitigation Measure T-2a, the Applicant shall schedule project employee shift changes outside of period between 6:00 a.m. and 8:00 a.m. during weekdays.</u>
Location	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.
Monitoring / Reporting Action	Review and approval of the alternative project schedule by CPUC. Site visits during the project implementation to ensure compliance.
Effectiveness Criteria	If <u>the Applicant demonstrates approved observable shift schedule fewer than ten project-related vehicles pass through the Access Gate during any peak hour</u> , 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 RSG staging and preparation, conduct site visits during project implementation.
IMPACT T-3	Steam generator replacement activities would temporarily increase local traffic (Class II)
MITIGATION MEASURE	<p>T-3a: Develop a trip reduction program. The Applicant shall develop a trip reduction program for the Proposed Project. <u>The goal of this program shall be to achieve a 50 percent reduction of project-related vehicle trips during all steam generator replacement activities that overlap with outage periods or normal operation. With such 50 percent reduction, not more than 3,160 vehicles would enter the plant during a 24-hour day. This limit represents vehicles from a normal workforce of 1,400 plus 1,285 outage workers with 475 project-related vehicles representing a two-person average vehicle occupancy for the 950 project-related workers. PG&E shall develop and maintain a daily count of vehicles entering the plant for verifying the success of this program. The program shall that could include but not be limited to the following activities:</u></p> <ul style="list-style-type: none"> • Provide <u>appropriate</u> offsite parking for the project-related employees and provide a shuttle service between the offsite parking and DCPD. <u>Any parking arrangements shall be approved by the County of San Luis Obispo (and the landowner of the space(s) proposed to be used for parking if not owned by the County) prior to the project commencement. Any parking fees shall be borne by the Applicant.</u> • <u>Provide a shuttle that would be available to all personnel that would enter DCPD during the project, and institute a set of incentive-based measures that would encourage use of the shuttle by all personnel (i.e., regular employees, outage personnel and project-related workers). Provide a shuttle for the outage personnel, and institute a set of measures that would encourage use of the shuttle by the outage personnel.</u> • Develop a work schedule that would prevent employees traveling on Avila Beach Drive and other local roadways during peak hours <u>as specified in Mitigation Measure T-2a.</u> • <u>Institute administrative measures, potentially through the use of contract terms, to prohibit the project personnel from parking in the local communities such as Avila Beach or Port of San Luis.</u> • Develop a construction materials <u>and machinery</u> 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 <u>as specified in Mitigation Measure T-2a.</u> • <u>Develop a public notification program that allows the public to be informed about the traffic reduction program, project schedule and potential traffic congestion.</u> <p><u>The trip reduction program shall be coordinated with and approved by the County of San Luis Obispo and the Port San Luis Harbor District.</u></p>
Location	Monitoring visits shall be done to the alternative offsite parking sites. <u>Review the DCPD documentation directing work and shift change schedules.</u>
Monitoring / Reporting Action	Review and approval of the trip reduction <u>and traffic control</u> program by CPUC. Site visits to ensure implementation.
Effectiveness Criteria	If <u>the total daily number of vehicles entering the plant is no more than 3,160</u> 50 percent of the project-related employees use the provided shuttle on the regular basis , the measure is effective.

Table D.13-810. Mitigation Monitoring Program – Traffic and Circulation

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, <u>coordination with County of San Luis Obispo and the Port San Luis Harbor District.</u>
Timing	<u>Review and approve the trip reduction program before the project commencement.</u> During the OSGs removal, transportation, and storage.
MITIGATION MEASURE	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 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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