Section 4.15
Transportation and Traffic

Introduction

This section describes existing transportation conditions in the study area and evaluates potential transportation impacts associated with construction and operation of the proposed project.

The project will not conflict with adopted transportation policies. Although the project construction would temporarily increase traffic on local roadways, the increase in construction traffic is not expected to significantly affect the existing roadway operations. Therefore, all impacts will be less than significant, and no mitigation is required.

Methodology

Existing transportation and traffic conditions in the study area were identified by collecting the best available traffic data and other transportation system information. Traffic data and other transportation system information were obtained from site visits, maps, literature searches, and aerial photographs. Impacts on transportation and traffic were determined based on the project construction plan and anticipated operations procedures.

For the impact analysis, the two project segments were assumed to be constructed at the same time, to evaluate the maximum, worst-case traffic impact to the street network in the study area. Because the project is mostly in remote areas and the peak construction phase of the project is expected to be short term, no quantitative level of service analysis was performed. Traffic volumes from construction activities were estimated to address their short-term impacts to the local street system.

Affected Environment

Regulatory Setting

No federal plans or policies related to transportation or traffic apply to the project.

State of California

California Government Code 65300 requires each local government to include a Circulation Element as part of its general plan. The Circulation Element must address the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities, and must be correlated with the land use element of the plan (California Government Code 65300).

Based on Circulation Element requirements and professional practice, jurisdictions typically measure the quality of service provided by a roadway or intersection in terms of three parameters.

- Volume-to-capacity ratio (V/C): The number of vehicles that travel on a transportation facility divided by the vehicular capacity of that facility (the number of vehicles the facility was designed to convey).
- Delay: The additional travel time experienced by a vehicle or traveler because of inability to travel at optimal speed, and/or stops due to congestion or traffic control.
- Level of service (LOS): A scale used to determine the operating quality of a roadway segment or intersection based on V/C or average delay experienced by vehicles on the facility. The levels range from A to F, with LOS A representing free traffic flow and LOS F representing severe traffic congestion.

Each local jurisdiction establishes an LOS standard for the roadway facilities under its authority as part of its planning process. This defines the minimum acceptable roadway operating conditions and allows deficiencies to be identified. To the extent feasible, transportation planning policies generally aim to ensure that facilities and services will be able to provide the minimum LOS for all planned land uses. This process requires jurisdictions to balance the following key factors.

- Long-term land development policies and community development standards;
- Adopted LOS standards; and
- Financial policies and strategies, which determine available revenues and realistic levels of expenditure.

Any segment of roadway that operates at an LOS below the standard is considered a deficiency in the roadway system. Identified deficiencies often provide the basis for prioritizing improvement projects under capital improvement programs.

Local Regulations

Because the CPUC has exclusive jurisdiction over siting, design, and construction of the project, the project is not subject to local discretionary land use regulations. The following analysis of local regulations relating to transportation and traffic is provided for informational purposes and to assist with CEQA review.

San Benito County General Plan

The transportation policy in the San Benito County General Plan (San Benito County 1992) is listed below.

> ***Policy 4 – LOS C Policy:*** *A LOS of C shall be used for the acceptable minimum standard of operation for intersections and roadways.*

City of Hollister City General Plan

Transportation policies in the City of Hollister General Plan (City of Hollister 2005) are listed below.

> ***Policy C1.1:*** *Ensure, to the maximum extent feasible, that the designated arterial roadways system is planned to operate at LOS C or better during peak and off-peak hours as of the horizon year of the adopted General Plan.*

> ***Policy C4.1:*** *Discourage or prohibit the movement and parking of large trucks within residential neighborhoods.*

City of San Juan Bautista General Plan

Transportation policies in the City of San Juan Bautista General Plan (City of San Juan Bautista 1998a) are listed below.

> ***Policy T-2:*** *Maintain LOS C at all intersections and at all road segments except along Third Street/The Alameda between Muckelemi and SR 156, where LOS D shall be permitted during the weekend peak hour. Allow exceptions to this policy only where the City Council finds overriding circumstances which make it impractical or feasible to implement.*

Policy L-19: *Discourage truck through-traffic on San Juan Bautista City streets.*

Monterey County General Plan

Transportation policies in the Monterey County General Plan (Monterey County 2007) are listed below.

Policy C-1.1: *The acceptable level of service for County roads and intersections shall be LOS D, except as follows:*

a. Acceptable LOS for county roads in Community Areas may be reduced below LOS D through the Community Plan process.

b. County roads operating at LOS D or below at the time of adopting this General Plan shall not be allowed to be degraded further except in Community Areas where a lower LOS may be approved through the Community Plan process.

c. Area Plans and Land Use Plans may establish an acceptable LOS for county roads other than LOS D. The benefits which justify less than LOS D shall be identified in the Area Plan. Where an Area Plan does not establish a separate LOS, the standard LOS D shall apply.

LOS Comparison by Jurisdiction

Based on circulation elements and adopted regulations, each jurisdiction has identified a level of service. Jurisdictions within the study area utilize LOS methods presented in the *Highway Capacity Manual*. The signalized intersections and roadway V/C are evaluated using thresholds presented in the 1985 *Highway Capacity Manual* (TRB 1985). The delay thresholds defined to determine LOS are different in the 1985 version than the thresholds defined in the current 2000 *Highway Capacity Manual* (TRB 2000), but the LOS analysis methods in these two versions are similar. Table 4.15-1 shows the V/C values, average delay, and typical driving conditions for each LOS level as defined by Monterey County, and the Cities of Hollister and San Juan Bautista.

Table 4.15-1. Volume to Capacity (V/C) Ratio, Delay, and Traffic Flow Conditions for Level of Service (LOS) Designations

LOS	V/C Range	Average Delay (seconds per vehicle)	Traffic Flow Conditions
A	0 –0.6	0–5	Free-flow with no delay. Users are virtually unaffected by others in the traffic stream.
B	0.6–0.7	5–15	Stable traffic. Traffic flows smoothly with few delays.
C	0.7–0.8	15–25	Stable flow but the operation of individual users becomes affected by other vehicles.
D	0.8–0.9	25–40	Approaching unstable flow. Operation of individual users becomes significantly affected by other vehicles. Delay may be more than one cycle during peak hours.
E	0.9–1.0	40–60	Unstable flow with operating conditions at or near the capacity level. Long delays and vehicle queuing.
F	>1.0	>60	Forced or breakdown flow that causes reduced capacity. Stop and go traffic conditions. Excessive long delays and vehicle queuing.

Sources: Monterey County 2006, City of Hollister 2005, City of San Juan Bautista 1998b.

To monitor roadway operations, agencies adopt LOS standards that define the level of traffic operations that are acceptable within their jurisdiction. The transportation study area includes roadways under the jurisdictions of Monterey County, San Benito County, and Cities of Hollister and San Juan Bautista. The adopted LOS standards for each of these agencies are as follows:

- San Benito County: The LOS standard is LOS C for county roads and intersections during peak travel periods (San Benito County 1992)
- City of Hollister: The LOS standard is LOS C for city-controlled intersections and road segments (City of Hollister 2005).
- City of San Juan Bautista: The LOS standard is LOS C for city-controlled intersections and road segments during peak travel periods. In certain instances, a lower level of service may be acceptable when LOS C cannot practically be achieved. (City of San Juan Bautista 1998a.)
- Monterey County: The LOS standard is LOS D for county roads and intersections during peak travel periods. In certain instances, a lower level of service may be acceptable when LOS D cannot practically be achieved. (Monterey County 2007.)

Project Setting

Study Area

The transportation study area includes roadways that could be affected by the traffic generated by project construction (as noted below [see "Impacts and Mitigation Measures"], the project will not affect existing operations and maintenance traffic or transportation conditions). Therefore, highways and local streets that provide major access to project sites are included in the study area. Existing conditions are identified for vehicle operations, transit services, and non-motorized transportation on these roadways.

The proposed project includes two power line segments that are located in Monterey and San Benito Counties, near the Cities of Hollister and San Juan Bautista. Although the project sites are not located in these two cities, the roadways in Hollister and San Juan Bautista that could be affected by project-related traffic are included in the study area.

Roadway Network

Figure 4.15-1 shows the local roadways and highways that provide access to the project segments and staging areas. The study area is served by regional and local roadways, which are described in the following sections.

Regional Roadways

Regional access to the project construction sites is provided by SR 25, U.S. Highway 101 (US 101), SR 129, and SR 156. Figure 4.15-1 shows the regional access roadways in the study area. Table 4.15-2 lists the regional access highways and the 2007 average annual daily traffic (AADT) volumes of these highway segments in the vicinity of the project.

Table 4.15-2. Regional Access Highways and Average Annual Daily Traffic in the Project Study Area

Highway	Location	2007 Average Annual Daily Traffic
State Route (SR) 25	Between Sunnyslope Road and SR 156	18,000
U.S. Highway (US) 101	Between Boronda Road Interchange and SR 156 west junction	68,000
	Between San Miguel Canyon Road and SR 156 east junction	62,000
	Between SR 156 east junction and SR 129	51,000
SR 129	Between Rogge Lane and US 101	11,000
SR 156	Between US 101 and Union Road	25,000
	Between Union Road and SR 25	18,000
	Between SR 25 and Fairview Road	11,000

Source: Caltrans 2008.

Local Roadways

Table 4.15-3 summarizes the local roadways that provide access between regional highways and the project sites. Each roadway is designated with a functional classification that describes the mobility and access function that the roadway is intended to serve. Functional classifications are defined as follows:

- Arterials are major streets that primarily serve through traffic and provide access to abutting properties as a secondary function. Monterey County designates arterials as Major Road; and the City of Hollister designates arterials as Major Thoroughfare.
- Collectors connect local streets to arterials and provide for both access and traffic circulation within residential and non-residential areas. Monterey County designates collectors as Minor Road; the City of Hollister designates collectors as either Major Collector or Collector; and the City of San Juan Bautista has designated collectors as either Major Collector or Minor Collector.
- Local Streets primarily provide access to adjacent residential properties. They serve limited mobility functions and are designed to discourage through-traffic. All roadways not designated as Arterials or Collectors are designated as Local Streets.

Table 4.15-3. Local Roadways in the Project Study Area

Roadway	Jurisdiction	Functional Classification
Avenida del Piero	San Benito County	Local Street
Buena Vista Road	San Benito County	Collector
Rocks Road	San Benito County	Local Street
Wright Road	San Benito County	Collector
Salinas Road	San Benito County	Arterial
San Juan Highway	San Benito County	Arterial
San Juan Road	San Benito County	Arterial
San Justo Road	San Benito County	Collector
4th Street/San Juan Road	City of Hollister	Major Collector
1st Street	City of San Juan Bautista	Collector
3rd Street	City of San Juan Bautista	Collector
The Alameda	City of San Juan Bautista	Arterial
Monterey Street	City of San Juan Bautista	Collector
Crazy Horse Canyon Road	Monterey County	Major Road
San Juan Grande Road	Monterey County	Minor Road

Sources for road functional classification: Monterey County 2006, San Benito County 1998, City of Hollister 2005, City of San Juan Bautista 1998a.

Based on information provided in the applicable general plans, the peak hour LOS at McCray Street/SR 25, Nash Road/SR 25, 4th Street/SR 25, and Santa Ana Road/SR 25 intersections exceed the City of Hollister standard of LOS C (City of Hollister 2005). The general plans do not identify operational deficiencies on any other study area roadways in the City of San Juan Bautista or San Benito and Monterey Counties.

Non-Motorized Transportation

Bikeways in the study area are designated as bike paths, bike lanes, and bike routes. Bikeway classifications are defined as follows:

- Bike paths are paved facilities designated for bicycle use that are physically separated from roadways by spaces or physical barrier.
- Bike lanes are lanes on the outside edge of roadways reserved for the exclusive use of bicycles.
- Bike routes are roadways recommended for bicycle use and often connected to bike lanes and bike paths.

In Monterey County, Crazy Horse Canyon Road and San Juan Grande Road in the study area are identified as bike routes. In San Benito County, most of roadways are rural and narrow, with varying shoulder widths. Bicycles are allowed on all paved public roadways in the county, except freeways (highways with interchanges). These county roadways do not necessarily meet requirements to be designated as bike routes. (Council of San Benito County Governments 2002.)

Transit Service

The San Benito County Express provides both fixed route and demand response transit services on roadways within the study area in the City of Hollister. Burney Express provides transit service to the Burney intermountain area. No transit service is provided on roadways within the study area in Monterey County.

Rail Service

Within the study area, the Union Pacific Railroad runs through the City of Hollister adjacent to the eastern terminus of the Hollister Pole Segment and the Hollister Substation. Only freight railroad service is provided on the railroad in the study area.

Air Traffic

Five aviation facilities are located within the project vicinity. In San Benito County, the Hollister Municipal Airport is located 1.5 mile north of the Hollister Pole Segment; the Christensen Ranch Airport is located 4 miles east of the Hollister Pole Segment, and the Frazier Lake Airport is located 6 miles north of the Hollister Pole Segment. In Monterey County, the nearest aviation facilities are the Salinas Municipal Airport, approximately 8 miles south of the Hollister Tower Segment, and the Fritzsche Army Airfield, approximately 11 miles southwest of the Hollister Tower Segment.

Environmental Effects

This section describes the project-related impacts on transportation and traffic. It describes the methods used to determine the impacts of the project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate potentially significant impacts accompany each impact discussion.

Significance Criteria

Criteria for determining the significance of impacts related to transportation are based on Appendix G of the State CEQA Guidelines and professional judgment. The proposed project may result in a potentially significant impact on the environment if it would result in any of the conditions listed below:

- Cause an increase in traffic that is substantial in relation to the existing traffic volumes and capacity of the roadway system (e.g., result in a substantial increase in either the number of vehicle trips, the V/C ratio on roads, or congestion at intersections).
- Exceed, either individually or cumulatively, an LOS standard established by local jurisdictions for designated roadways or highways.
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- Substantially increase safety hazards due to incompatible uses (e.g., farm equipment or heavy trucks).
- Result in inadequate emergency access.
- Result in inadequate parking capacity.
- Conflict with alternative transportation modes.

The following traffic characteristics were examined to determine the level of significance of impacts that may be generated by the proposed project.

- **Traffic Volume and LOS.** Traffic increases are considered significant if they result in violation of the adopted LOS standard of the jurisdiction in which the roadway facility is located. As described earlier, LOS C is the standard for intersections and roadways in the San Benito County and Cities of Hollister and San Juan Bautista. LOS D is the standard for intersections and roadways in the Monterey County.
- **Safety.** Safety impacts are considered significant if design elements of the project, or project construction, would result in conditions that would increase the risk of accidents, either for vehicular or non-motorized traffic. Elements that could result in safety impacts include poor sight distance, sharp curves, or substantial differences in speed between construction-related and general-purpose traffic.
- **Emergency Access and Circulation.** Adequate emergency access routes must be maintained at all times during construction and after the project is completed. A significant impact would occur if the project fails to maintain emergency access and circulation at all times.
- **Parking.** A significant impact would occur if the project results in violation of the adopted parking policies of the counties or cities.
- **Air Travel.** A significant impact would occur if the project results in a hazard to air navigation or would create an unsafe condition for air navigation.

- **Alternative Transportation.** A significant impact would occur if the project results in conflicts with the transit system or non-motorized transportation.

Impacts and Mitigation Measures

Maintenance of the existing project facilities generally is performed as needed. The proposed project involves modification of existing power lines and an existing substation. New employees will not be required for operations and maintenance, and operations will not generate new traffic. Therefore, only construction-related traffic impacts were analyzed.

Construction of the project is expected to begin in 2010. Construction phases will include construction of staging areas and helicopter landing zones (approximately 1 week per area), the Hollister Tower Segment (approximately 13 months), the Hollister Pole Segment (approximately 12 months), and the Hollister Substation (approximately 1 month). The peak construction phases would occur during construction of the Hollister Pole Segment and Hollister Tower Segment. Each project segment is expected to require from approximately 12 to approximately 13 months to construct. For the purpose of this impact analysis, the two project segments were assumed to be constructed in the same time frame to evaluate the maximum, worst-case traffic impact to the street network in the study area.

Traffic generated during the construction phases will originate from importing concrete, delivery of materials and equipment delivery, and commuting construction workers. Excavated soil will be spread at the site; therefore, no dump truck traffic (hauling away soil) is expected from project construction. Truck traffic is expected for importing concrete and construction materials. Table 4.15-4 summarizes the estimated construction-generated traffic. Construction of the Hollister Pole Segment and Hollister Tower Segment is expected to generate 216 construction-related vehicles per day on roadways in the study area.

In addition to trucks, helicopters would be used to install poles and deliver workers and equipment to project sites that are difficult to access by vehicles. It is estimated that a maximum of four helicopters would be used during the peak construction phases.

Table 4.15-4. Estimated Construction-Generated Traffic of the Proposed Project

Construction Phase	Maximum Daily Concrete Truck Traffic (vehicle trips/day)	Maximum Daily Delivery Truck Traffic (vehicle trips/day)	Maximum Daily Worker Traffic (vehicle trips/day)	Total Maximum Daily Traffic (vehicle trips/day)
Hollister Tower Segment:				
Establish staging area	0	6	10	16
Road construction				
Tower installation	10	12	46	68
Transmission line reconductoring				
Hollister Pole Segment:				
Establish staging area	0	6	10	16
Road construction				
Tower installation	20	50	46	116
Transmission line reconductoring				
Hollister Substation	0	4	20	25

Increase in area traffic volumes from construction-generated traffic and potential degradation of LOS for local roadways – less-than-significant impact

As shown in Table 4.15-4, construction of the Hollister Pole Segment and Hollister Tower Segment will generate a maximum of 216 vehicles per day on regional highways and local roadways. This is considered a relatively low increase in daily traffic volume on highways, compared to the AADT listed in Table 4.15-2. Therefore, this construction-related traffic is not expected to significantly degrade the operation of regional highways.

Construction of the Hollister Tower Segment is expected to generate a maximum of 84 vehicle trips per day on local access roadways adjacent to a construction site. Construction of the Hollister Pole Segment is expected to generate a maximum of 132 vehicle trips per day on local access roadways adjacent to a construction site. Table 4.15-3 listed the local roadways that would be used to access the project segments. The local roadways used by construction traffic would vary, depending on the specific construction site on any given day. The increase in construction-related traffic could temporarily disturb traffic operation on these local roadways but is not expected to substantially degrade traffic operations.

To address the temporary construction impact, as described in Chapter 3, "Project Description," PG&E will implement its standard traffic control measures to minimize the effects of construction traffic. If required, encroachment permits

will be obtained from Caltrans and San Benito County for crossing jurisdictional roads, highways, and freeways. If required by Caltrans or San Benito County as part of the permit, PG&E will prepare a Traffic Control Plan according to the Caltrans *Highway Design Manual* requirements. Appropriate traffic control and safety measures will be implemented, as required by Caltrans and San Benito County and according to PG&E standard traffic safety practices. With implementation of these actions, impacts are expected to be less than significant, and no mitigation is required.

Potential change in area air traffic patterns due to the use of helicopters during construction – less-than-significant impact

Construction of the project will require using helicopters to install poles, towers, and deliver workers and equipment to project sites that are difficult to access with vehicles. Operation of the helicopters could affect existing air traffic patterns. However, as required by the FAA, PG&E will require the helicopter vendor to develop and implement a Helicopter Lift Plan (see APM HAZ-4 [Develop and implement a Helicopter Lift Plan]). This measure will ensure that impacts are less than significant, and no additional mitigation is required.

Potential increase in safety hazards due to construction-generated traffic – less-than-significant impact

The maneuvering of construction-related vehicles and equipment among the general-purpose traffic on local roads could cause safety hazards. To address these concerns, as described in Chapter 3, "Project Description," PG&E will implement its standard practice measures to minimize the effects of construction traffic. Appropriate traffic control and safety measures will be implemented, as required by Caltrans and San Benito County and according to PG&E standard traffic safety practices. As a result, impacts are expected to be less than significant, and no mitigation is required.

Potential interference with emergency access and circulation due to construction-generated traffic – less-than-significant impact

Emergency access to the project vicinity could be affected by project construction, and construction-related traffic could delay or obstruct the movement of emergency vehicles. Implementation of PG&E's standard traffic control measures and any conditions stipulated in necessary permits will ensure that emergency access will not be delayed or obstructed. In addition, construction probably will occur along a linear alignment that probably will progress daily, thus minimizing the potential for delays or obstructions at any one location. This impact is considered less than significant, and no mitigation is required.

Potential inadequate parking supply to meet parking demand for construction equipment and construction workers – no impact

A parking area for construction workers and trucks will be provided at staging areas adjacent to a work site or areas within the power line right-of-way; therefore, there will be no impact related to inadequate parking.

Potential conflict with alternative transportation modes due to temporary lane closures – less-than-significant impact

Although most of the project construction would take place within the project right-of-way, temporary lane closures would be needed in some areas where power lines would cross over existing roads, which could temporarily interfere with transit services and bicycle travel along these roads. However, the project would progress quickly and the lane closure is not expected take more than a few days at any given work site. In addition, as described in Chapter 3, "Project Description," PG&E will implement standard traffic control practices to minimize the effects of construction traffic. Additional traffic control and safety measures will be implemented, as required by Caltrans and San Benito County. Therefore, this impact is considered less than significant, and no mitigation is required.

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