3.16 Transportation/Traffic

Table 3.16-1 Transportation/Traffic Checklist

Would the project:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a.	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				
b.	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				
C.	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?				
d.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
e.	Result in inadequate emergency access?				
f.	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				

3.16.1 **Setting**

The project route would extend just over 40 miles and pass through Butte, Yuba, and Sutter counties including the City of Oroville. The project area is defined as the land within a 500-foot corridor of the two proposed transmission line segments. The applicant currently owns rights-of-way (ROWs) and easements along the entire project route. Additional overhang easements may be needed in some locations due to recent development on adjacent properties in the Marysville and Palermo areas. No major work at the substations will be done as a part of this project.

The transportation facilities in the project area include California State Routes and local access roads; railroads and waterways; bus, pedestrian and bicycle routes; and public and private airports. The project would not cross any federal roads.

State and Local Routes

The project area would be in proximity to the following three state routes. The California Department of Transportation (Caltrans) is the agency responsible for funding and maintaining state routes and highways within the State.

State Route (**SR 20**) serves commuter, commercial, agricultural, and recreational travel in Yuba County and as a regional east/west connection. It extends from west of Marysville through the Yuba County foothills and into Nevada County.

State Route (**SR 65**) serves both local and regional travel within Yuba County. It begins at Interstate 80 in South Placer County and extends to the north through downtown Wheatland, terminating at SR 70. SR 65 is a two-lane conventional highway from Wheatland to South Beale Road and a four-lane freeway north of South Beale Road to SR 70.

State Route (**SR 70**) serves both local and regional travel within Yuba County. It begins at SR 99 in Sutter County and extends to the north through Yuba County and into Butte County. It is a two- to four-lane conventional highway from Sutter/Yuba County Line to McGowan Parkway, where it becomes a four-lane freeway that extends into Marysville.

Project-area access road efficiencies were evaluated according to local circulation element guidelines that assign a Level of Service (LOS) rating based on factors such as speed, travel time, ability to maneuver, traffic interruptions, and safety. The majority of local access roadways in Butte, Yuba, and Sutter counties and the City of Oroville that would be used during construction are operating at an acceptable LOS C or better (Butte County 1984; City of Oroville 1995; Sutter County 1996; Yuba County 1996) with the exception of Simpson Lane in Yuba County, which operates at LOS D during p.m. peak-hour traffic volumes (Yuba County 2007).

Waterways and Railroads

The project route would cross several waterways (Figure 3.9-1). The project route would also parallel and cross Southern Pacific Railroad and Union Pacific Railroad lines. Crossing structures would be installed at all major roads, railroads, and other utility crossings along the project route to prevent injury or damage from the inadvertent falling of a conductor.

Southern Pacific Railroad lines extend through Sutter County east of Highway 70 from Sacramento County to Yuba City, and north of Yuba City to Butte County. The rail lines are available for the transport of agricultural goods and other materials. Rail passenger service is only available from Oroville by way of the Amtrak Coast Starlight. Union Pacific Railroad owns and operates two freight railroads for commodity transport in Yuba County.

Airports

There are several existing airport facilities in the project area. In Butte County, the Oroville Municipal Airport is located approximately 4.5 miles northwest from the project alignment in Palermo (Butte County). In Sutter County, the Sutter County Airport is located approximately 3 miles from the project route. In Yuba County, the Yuba County Airport is located approximately 0.75 miles west of the project route in the Town of Olivehurst, and the Beale Air Force Base is located approximately 3.5 miles from project route in the Town of Linda (Yuba County 1996). Siller Bros Inc. Aviation, a private airstrip, is located within 2 miles of the project route.

Alternate Modes of Transportation

There is a range of alternate modes of transportation within the project area. In addition to rail and air travel, there are local transit services for disabled and elderly residents; public and private buses; and infrastructure for pedestrians and bicycles.

The Butte County Association of Governments (BCAG) is the designated organization responsible for the preparation of all federal- and state-required transportation planning and programming documents for Butte County and the City of Oroville (BCAG 2004). The Sacramento Area Council of Governments (SACOG) is the Transportation Planning Agency designated by the Director of the Department of Transportation for the Sacramento Region, providing regional transportation planning and funding for Sutter County and Yuba County (SACOG 2009). At the local level, transportation planning is the responsibility of the three counties (Butte, Yuba, and Sutter) and the City of Oroville.

Regulatory Setting

Caltrans and Western Pacific / Union Pacific Railroad

The applicant would be required to obtain encroachment permits from Western Pacific / Union Pacific Railroad and Caltrans for railway and road crossings.

Sacramento Area Council of Governments

SACOG, which is an association of governments in the six-county Sacramento Region responsible for transportation planning and funding, has established a Congestion Management Program (CMP) for Yuba and Sutter counties as part of its Metropolitan Transportation Improvement Plan (SACOG 2009). The CMP is a countywide program designed to keep traffic congestion within an acceptable standard. The CMP must include traffic flow standards, standards for public transit service, a program to analyze the traffic impacts of land use decisions, a "trip reduction/travel demand" element to reduce vehicular use, and a 7-year capital improvement program.

Butte County

Chapter 14, Motor Vehicles and Traffic, of the Butte County Municipal Code addresses a range of traffic and transportation issues, including travel demand management and trip reduction, but does not include system performance measures. The Butte County General Plan, Transportation Element (Butte County 1984) addresses transportation planning in the County, and includes performance standards for the transportation circulation system. It also addresses congestion management.

Yuba County

Title IX, Vehicle and Traffic Codes, of the Yuba County Ordinance Code addresses a range of traffic and transportation issues, including travel demand management and trip reduction, but does not include system performance measures. The Yuba County General Plan, Transportation Element (Yuba County 1996) addresses transportation planning in the county, and includes performance standards for the transportation circulation system. Congestion is addressed in the SACOG CMP for Yuba and Sutter counties.

Sutter County

Chapters 1100 to 1160, Traffic, of the Sutter County Municipal Code address a range of traffic and transportation issues, including travel demand management and trip reduction, but does not include system performance measures. The Sutter County General Plan, Transportation Element (Sutter County 1996) addresses transportation planning in the county, and includes performance standards for the transportation circulation system. Congestion is addressed in the SACOG CMP for Yuba and Sutter counties.

City of Oroville

The City of Oroville County General Plan, Transportation Element (City of Oroville 1995) addresses transportation planning and includes performance standards for the transportation circulation system.

Applicant Proposed Measures

The applicant has incorporated the following applicant proposed measures (APMs) into the project to minimize or avoid impacts on transportation and traffic. See Chapter 1.0 for a full description of each APM that the applicant has incorporated into the project to avoid or minimize impacts on all resource areas.

APM AIR-4: Implement standard mitigation measures

APM HAZ-4: Develop and implement a helicopter lift plan

APM HAZ-5: Prepare a health and safety plan

APM HAZ-6: Develop and implement a fire risk management plan

APM TRAN-1: Restriction of Simpson Lane during p.m. peak Hours

3.16.2 Environmental Impacts and Mitigation Measures

Project construction is anticipated to take 12 to 18 months and would require an excavation crew, a light-duty helicopter crew, a heavy-duty helicopter crew, a pole crew, line crew, substation crew, and environmental monitor. Equipment that may be used includes a line truck, water truck, four-wheel-drive pickups, 70-ton crane, helicopter, auger, bulldozer, hand tools, rope truck for reconductoring, and a truck-mounted rope puller and conductor tensioner. Details about the project construction schedule, number of workers, and construction-related truck trips are provided in Table 3.16-2.

Table 3.16-2 Construction Phases, Workers, Truck Trips, Schedule, and Activities

	Total Days of	Maximum Number of	Maximum Daily Delivery	Total Daily Delivery Trucks
Project Phase	Construction 1	Workers	Trucks	for the Project
Construction of Staging areas/helicopter landing zones and new temporary roads	120	30	5	50
Existing Tower removal and Tower Site Recovery ²	120	30	5	500
Pole Site Excavation, concrete base construction and new pole installation ³	300	50	10	1,400 4
Transmission Line Installation	200	30	5	500
Staging areas/helicopter landing zones recovery	100	20	5	20

Source: PG&E 2009

Notes:

¹ Off-road construction equipment is assumed to operate 12 hours per day.

Includes the helicopter operation of two Bell 214 and two Hughes 500, which are assumed to operate 4 hours per day for a total of 100 hours for each helicopter.

Includes the helicopter operation of one Bell 214 and two Hughes 500. One Bell 214 is assumed to operate 4 hours per day for a total of 100 hours and two Hughes 500 are assumed to operate 8 hours per day for a total of 200 hours for each helicopter.

⁴ Includes concrete trucks for pole foundation construction.

a. Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

LESS THAN SIGNIFICANT WITH MITIGATION. The project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. Although the general plans for Sutter, Butte and Yuba counties and the City of Oroville all include performance measures for traffic and transportation, the project would not cause a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections that would conflict with the effectiveness of the circulation system. Construction is anticipated to occur over a 12- to 18-month period, and there would be a temporary increase in truck traffic on regional and local roadways in the project area.

During construction of the transmission line modifications and telecommunication improvements, periodic single-lane closures may be required, which could temporarily impact traffic conditions along the project route. The traffic management procedures required under the encroachment permits that the applicant would be required to obtain, however, would ensure adequate traffic flow. The traffic management procedures would require the use of sufficient signage to alert drivers of construction zones, notification of emergency responders prior to construction, community outreach, and traffic control around schools (APM AIR-4). To ensure that advance notification to nearby airports, railroads, and schools would take place, the following mitigation measure is required:

MM TRAN-1: Construction Notification. PG&E will provide advance notice to nearby airports, railroads, and schools in the project vicinity regarding construction activities.

During operation and maintenance, the reconstructed transmission lines would be monitored and the applicant's personnel would only visit the project area for repairs on an as-needed basis. Such visits would require substantially fewer trips than during construction and would result in a less than significant impact on the effectiveness of the circulation system. Therefore, with the implementation of MM TRAN-1, impacts under this criterion would be less than significant.

b. Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

LESS THAN SIGNIFICANT. Construction of the project is not anticipated to exceed a level of service standard established by the county congestion management agencies for the project. Due to the short-term and linear nature of project, construction activities are not anticipated to impact traffic levels. Construction crews and vehicles (Table 3.16-2) would use existing paved or graveled roads along most of the transmission line corridor to access tower/pole sites; these include existing paved roads and farm roads, in addition to existing maintenance access to the existing transmission lines. Where necessary, existing access roads would be widened to a maximum of 16 feet, and new, temporary, access roads will be constructed. The traffic management plan required by the encroachment permits would include provisions for signage and noticing to inform the public about work before any disruptions occur, the use of flagmen and/or escort vehicles to control and direct traffic flow, and scheduling roadway work during periods of minimum traffic flow (APM AIR-4).

Access would be primarily by existing major roadways suitable for truck traffic. The roadways within Butte County, the City of Oroville, and Sutter County that would be used for construction are identified above as having an LOS are operating at LOS C or better and currently meet the adopted operating standards. In Yuba County, the roads currently operate at acceptable levels during the p.m. peak hour with the exception of a portion of Simpson Lane, which operates at LOS D during p.m. peak-hour traffic volumes. To reduce impacts to Simpson Lane, the applicant would implement APM TRAN-1.

During operation and maintenance, the reconstructed transmission lines would be monitored and the applicant's personnel would only need to visit the project area for necessary repairs on an as-needed basis. Therefore, the project would not exceed a level of service standard, and impacts would be less than significant under this criterion.

c. Would the project 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?

LESS THAN SIGNIFICANT. During construction, helicopters would be used to transport materials and work crews to locations where overland access is not possible or difficult due to topography and vegetation, and otherwise as warranted by construction needs. Temporary helicopter landing areas would be established to pick up and drop off crew and materials, as well as to stage and refuel. Although operation of the helicopters would result in a temporary change in air traffic patterns, the applicant would require the contract helicopter vendors to develop and implement a helicopter lift plan (APM HAZ-4) as required by the FAA to mitigate safety risks. The FAA also requires notice about construction or alteration projects that exceed a height restriction of 200 feet above ground level per Federal Aviation Regulations (FAR) Part 77 (Yuba 1994).

Since the existing steel towers range in height from 75 to 95 feet and the replacement structures would range in height from 80 to 120 feet, the project would not constitute a new obstruction to navigable air space under FAR Part 77. Therefore, with implementation of APM HAZ-4, the project would not result in a change in air traffic patterns that would result in substantial safety risks, and impacts would be less than significant under this criterion.

d. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

LESS THAN SIGNIFICANT WITH MITIGATION. The project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). During construction, towers would be removed and replaced, and transmission lines would be pulled across roadways, waterways, and railroad tracks. The maneuvering of construction-related vehicles and equipment among the general-purpose traffic on local roads could cause safety hazards.

To minimize potential hazards, traffic management procedures would be prepared and submitted for approval by Caltrans and/or local authorities pursuant to the encroachment permit(s). Construction or installation work requiring the crossing of a local street, highway, or rail line would incorporate the use of guard poles, netting, or similar means to protect moving traffic and structures from the activity. In addition, the only construction activities that would occur at night would be those required to raise towers. The majority of construction staging activities, including onsite and offsite vehicle movement, would occur during the day, and nighttime construction would only occur from June 1st to October 1st (Chapter 1, Background Information).

The traffic management plan required by the encroachment permits would include provisions for signage and noticing to inform the public about work before any disruptions occur, the use of flagmen and/or

escort vehicles to control and direct traffic flow, and scheduling roadway work during periods of minimum traffic flow (APM AIR-4). Any specific transportation needs (e.g., temporary road closures) would be identified in the plan and coordinated with the appropriate jurisdictions (encroachment permit requirements). Damage to local streets would be repaired and streets restored to their pre-project condition during and at the completion of construction of the project pursuant to the encroachment permits. In addition, the applicant will provide advance notice to nearby airports, railroads, and schools in the project vicinity regarding construction activities (MM TRAN-1).

The existing access roads have several "wet" crossings (cobble base) that may be impassible for larger/heavier construction vehicles; therefore, portable bridges that would span top of bank to top of bank are proposed. Vehicular traffic and heavy equipment would be scheduled for the dry/low flow season. If bridging is not possible, construction would utilize sky crane helicopters to transport materials to job sites. During construction, helicopters would be used to remove existing towers, install new poles, and to deliver materials and workers to locations where overland access is difficult. The helicopter vendor would prepare a helicopter lift plan for approval by the FAA prior to helicopter operations (APM HAZ-4).

Operation of the project would not substantially increase hazards due to a design feature or incompatible uses because operation of the project would not involve, create, or increase hazards at applicable transportation-related facilities. Therefore, construction and operation of the project would result in a less than significant impact with implementation of MM TRAN-1.

e. Would the project result in inadequate emergency access?

LESS THAN SIGNIFICANT. The project would not permanently change the existing circulation system and emergency access routes. However, construction activities may result in temporary open trenches and traffic lane closures for large equipment and/or vehicles that could potentially delay or obstruct emergency access for the fire or police departments. As required by the encroachment permits, traffic management procedures will protect workers as well as moving traffic, structures, and local streets during construction activities.

Under the encroachment permit, damage to roadways will be repaired, and streets will be restored to their pre-project condition during and at the completion of construction of the project. This will reduce potential impacts to emergency response along roadways in the project area. If road closures are required, the applicant would coordinate with local agencies to maintain emergency access routes or services pursuant to the encroachment permit (APM AIR-4). The applicant would also prepare a Health and Safety Plan (APM HAZ-5) and develop and Implement a Fire Risk Management Plan (APM HAZ-6). Therefore, impacts would be less than significant under this criterion.

f. Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

LESS THAN SIGNIFICANT. The project would not conflict with adopted policies, plans, or programs regarding public transit, bicycles, or pedestrian facilities or otherwise decrease the performance of such facilities. The majority of project construction would take place within the existing project right-of-way. During construction and maintenance of the project, temporary lane closures may be required in some areas where power lines would cross roads; however, this would not permanently impact traffic flow including all affected modes of transportation and access. Therefore, construction and operation of the project would result in a less than significant impact under this criterion.

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