3.8 Hazards and Hazardous Materials

Table 3.8-1 Hazards and Hazardous Materials Checklist

Would the project:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
а.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			\boxtimes	
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
C.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				
f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
h.	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				

This section addresses the environmental setting and impacts related to the construction and operation of the project involving the issues of environmental hazards and hazardous materials. Hazards include the risks associated with potential explosions, fires, or release of hazardous substances in the event of an accident or natural disaster, which may cause or contribute to an increase in mortality or serious illness, or pose substantial harm to human health or the environment. Hazardous materials are classified as those that include solids, liquids, or gaseous materials that, because of their quantity, concentration, or physical, chemical, or infectious characteristics, could pose a threat to human health or the environment.

Reconstruction work on the project could result in the exposure of the public and workers to potential health and safety hazards such as chemical substances and fuel-powered equipment, helicopters for transporting structures and personnel, high-voltage electrical equipment (potential fire hazard and EMF source), seismic hazard, and the potential finding of contaminated soils or groundwater during excavations.

Hazardous materials such as fuel, oil, and lubricants would likely be used during project construction. In addition, subsurface construction would involve excavation in areas with contaminated soil or groundwater, as well as the generation of debris. If encountered, contaminated soil or groundwater may qualify as hazardous waste, requiring regulated handling and disposal.

3.8.1 Setting

The project route traverses predominantly agricultural portions of Butte, Sutter, and Yuba counties but also includes mixed land uses, such as residential, commercial, and industrial. Land uses along the project route that have the potential to create safety hazards and/or may contain hazardous materials are predominantly agricultural with some residential and industrial uses. Much of the project route parallels the Western Pacific Railroad alignment and/or area levees.

The project route traverses portions of Butte County designated as agricultural, agricultural residential, industrial, and commercial (Butte County 2009). In Sutter County, the project route crosses or is adjacent to agricultural properties where agricultural pesticides and herbicides are likely used (PG&E 2009).

Within Yuba County, the project route crosses or is adjacent to properties designated by the Yuba County General Plan as Valley Agricultural, Single Family Residential, Multiple Family Residential, Public, Industrial, and Community Commercial. Agricultural pesticides and herbicides are likely in use or have been used in agricultural and newer residential areas. Facilities in Yuba County located within 1 mile of the project right-of-way (ROW) and associated with hazardous materials include the Yuba County Airport, agricultural lands, and residential and commercial areas (PG&E 2009 and DigitalGlobe 2009).

Hazardous Materials Sites near the Project ROW

A review of environmental databases was conducted to identify those sites known to be associated with releases of hazardous materials or wastes along the project route (EDR 2008, DTSC 2009, and SWRBC 2009). This research covered a 1-mile radius centered on the project route. A summary of the sites listed within 0.5 miles of the project ROW centerline is provided in Table 3.8-2. The following federal and state databases listed below were reviewed (EDR 2008):

- Federal: National Priority List (NPL), Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS), CERCLIS No Further Remedial Action Planned (CERCLIS-NFRAP), Resource Conservation and Recovery Act Information System (RCRIS, CORRACTS and Non-CORRACTS TSD facilities, RCRA Generator List and RCRA-NonGen), Facility Index System (FINDS), US Brownfields, Emergency Response Notification System (ERNS), and others.
- State of California: HIST Cal-Sites, Bond Expenditure Plan, Cortese List, California SWRCY (list of recycling facilities), California SWF/LF (Landfill facilities), California LUST (leaks of hazardous substances from underground storage tanks), Facility Inventory Database (CA FID UST), Spills, Leaks, Investigations and Cleanups (SLIC), Underground Storage Tank (UST) List and HIST UST (historical UST sites), Aboveground Storage Tank (AST), SWEEPS UST (underground storage tank listing), Voluntary Cleanup Properties (VCP), RESPONSE (confirmed release sites), HAZNET (hazardous waste disposal sites), EMI (toxics and criteria pollutant emissions data), ENVIROSTOR (known or suspected contamination sites), and others.
- "Orphan" listings: The research included the "unmappable" (also referred as "orphan") listing, cross-referencing available address information and facility names.

	Proximity to		
	contorlino		
Site/Location	(miles)	Data Sourco	Hazard Type/Finding
Vuba Suttor Disposal Inc / VSDI			Class III landfill for non bazardous
Greenwaste Composting	0 - 0.25	W/MUDS/SW/AT CA	waste
3001 North Levee Rd Marvsville CA		WDS	waste.
Easthar Divar Vatorinary Haspital	0 0 25		Disposal of photochomicals and
5975 Woodland Dr, Marysville, CA	0 - 0.25		photoprocessing waste.
E-Z Serve	0.25	LUST, Cortese	Release of gasoline that impacted
1822 North Beale Rd, Marysville, CA			groundwater. Open – Site
			Assessment Status. This site is
Toyooo Station #120	0.25	LUCT Cortage Matifu	Delease of acceling that impacted
1847 Olivorburst Pd. Olivorburst CA	0.25		aroundwator
4007 Olivernuist Ru, Olivernuist, CA Mathows Brothors	0.25		No roloasos woro roportod in the
950 Ramirez Rd, Marysville, CA	0.25	SWEEDS LIST	FDR database report
Eastside Market and Gas	0.25	HIST LIST SWEEPS	No releases were reported in the
7422 Lincoln Boulevard, Palermo, CA	0.20	UST	FDR database report.
Rancho Cenedella Inc	0.25	AST, HIST UST, CA FID	One 5,000-gallon AST and unleaded
7681 Jack Slough Road, Marysville, CA		UST, SWEEPS UST	gasoline UST. No releases were
			reported in the EDR database
			report.
East Nicolaus Market 1968 East Nicolaus Ave, Nicolaus, CA	0.25	LUST	Release of gasoline in 1997. Drinking water was affected.
Brown's Elementary School	0.25	HAZNET, LUST,	The case has been closed by the
1248 Pacific Ave, Rio Oso, CA		Cortese	local regulatory agency.
Circle A	Greater than	LUST	Release of gasoline discovered in
1215 22 nd Street East, Marysville, CA	0.25		2003. Groundwater has been
			impacted. A clean-up and
			abatement order was issued in
	0.05 0.5		2006.
Oliverhurst Recycling Center	0.25 – 0.5	SWRCY	No data indicative of leaks or
4833 Olivernurst Ave, Olivernurst, CA			releases from this facility has been
Denne and Denne		LUCT Ordere Netter	
Danna and Danna 1001 Foother Diver Plud Manusville, CA	0.25 – 0.5		A gasoline release was reported in
Siorra Viou Momorial	0.25 0.5	UU LUST Cortoso	The case has been closed by the
	0.20 - 0.0		
Gee Property	0.25 - 0.5	LUST Cortese	Δ gasoline release was reported in
4880 Oliverhurst Rd Oliverhurst CA	0.20 0.0		1988. The release impacted the soil
			only.
AGV Corner Market	0.25 – 0.5	LUST, Cortese	A release of gasoline was reported
4881 Oliverhurst Rd, Oliverhurst, CA			in 1999.
Sierra Superstop #8	0.25 – 0.5	LUST, Cortese	Controlled migration of the plume
5057 Oliverhurst Ave, Oliverhurst, CA			from this site.

Table 3.8-2	Hazardous Materials	Sites Identified	Along the	Project Route
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	Proximity to the ROW		
	centerline		
Site/Location	(miles)	Data Source	Hazard Type/Finding
Tom's Sierra Co. #76 5073 Oliverhurst Ave, Oliverhurst, CA	0.25 – 0.5	HAZNET, LUST SWEEPS UST	Disposal of tank bottom waste, and unspecified oil-containing waste. Monitoring studies concluded that if concentrations remain low and continue to decline, a recommendation for site closure will be made.
Coffee Express 5202 Lindhurst Ave, Marysville, CA	0.25 – 0.5	LUST, Cortese	Gasoline release discovered in 1990 and was determined to impact the soil only. The LUST case has been closed by the local regulatory agency.

Table 3.8-2 Hazardous Materials Sites Identified Along the Project Route

Source: EDR 2008, DTSC 2009, DigitalGlobe 2009, SWRCB 2009.

Twelve sites listed in the Cortese List (potentially having soil and/or groundwater impacts to the environment) were identified within a 1-mile radius from the project ROW centerline. Three additional underground storage tanks sites (LUST sites) were also identified along the project route. In addition, the proposed transmission line modifications would pass through agricultural lands; therefore, there is also the possibility that herbicides or other agrochemicals would be present in the soil.

The orphan listing review also identified a potentially contaminated site within a 1-mile radius of the project ROW centerline (EDR 2008):

• PG&E Manufactured Gas Plant SV-CG-MRY-2 (ENVIROSTOR). The site is located in downtown Marysville, a residential and commercial area. According to the California Department of Toxic Substances and Chemicals (DTSC), the site was the location of a former gasification plant. Residues and waste from the manufacturer's gas process were stored and disposed onsite. In addition, petroleum leaked from onsite storage tanks. Potential contaminants of concern at this facility include total petroleum hydrocarbons (TPH) as diesel (TPHd), as gasoline (TPHg), and as motor oil; and polynuclear aromatic compounds (PAHS).

Airports

A segment of the project route is located approximately 1 mile east of the Yuba County Airport, near the town of Olivehurst, in Yuba County, California. According to the Yuba County Airport Comprehensive Land Use Plan (SACOG 1994), the project route is located within the overflight zone of this airport.

Fire Safety

The project route passes through a number of areas that are classified by the California Department of Forestry and Fire Protection (Cal Fire) as moderate to high fire hazard severity zones (PG&E 2009b and Cal Fire 2009). The northern portion of the project route passes through moderate and high fire hazard severity zones from the northern end, south to near the Butte/Yuba County border. Much of this area is located in the hills east of Oroville. Most of the remainder of the area through which the project alignment passes is unzoned in Yuba and Sutter counties. Cal Fire has determined that Sutter County has no Very High Fire Hazard Severity Zones. The alignment passes through areas of moderate fire hazard severity in the vicinity of Marysville, where the alignment crosses Highway 20 and north and south of the community of Olivehurst (Cal Fire 2009).

Applicant Proposed Measures

The applicant has incorporated the following applicant proposed measures (APMs) into the project to minimize or avoid impacts on hazards and hazardous materials. 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 HAZ-1: Implement a spill prevention plan

APM HAZ-2: Conduct construction soil sampling and testing if soil contamination is suspected

APM HAZ-3: Conduct groundwater sampling and testing if suspected contaminated groundwater is encountered during construction

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 HYDRO-1: Prepare and implement a storm water pollution prevention plan (SWPPP)

3.8.2 Environmental Impacts and Mitigation Measures

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

LESS THAN SIGNIFICANT. During project construction, hazardous materials such as liquid concrete, vehicle fuels, oils, and other vehicle maintenance fluids would be used and stored in construction staging areas. Operation and maintenance of the project would involve annual ground inspections and the periodic and routine transport, use, and disposal of minor amounts of hazardous materials, primarily fuel, and lubricating oils. Minor spills or releases of these hazardous materials could occur due to improper handling, storage, and/or maintenance, leading to potential soil or groundwater contamination.

Waste generation from the project includes the removed towers and conductor, remnant construction and equipment maintenance materials, and crates used to ship materials. After construction, all hazardous materials would be removed from the site. According to the applicant, steel from removed towers and conductor would be salvaged and recycled as appropriate at a local salvage facility. The removed material that cannot be salvaged, recycled, or reused would be disposed in a local landfill facility (PG&E 2009b).

In order to reduce the potential for spills and leaks of hazardous materials and reduce the severity of the impact in the event of an inadvertent spill, the applicant has proposed to include a Spill Prevention Plan in APM HAZ-1, which is related to the SWPPP to be developed as part of APM HYDRO-1. In addition, the applicant also proposes to have a minimum of 50 feet of setback from streams, creeks, or other water bodies to avoid potential impacts to the riparian habitats from construction and staging areas.

With implementation of the above actions, impacts associated with spills of hazardous materials during construction or operation of the project would be less than significant.

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

LESS THAN SIGNIFICANT. Implementation of the proposed actions required under APM HAZ-1 for spill prevention and hazardous substance control, as well as the requirements of the Storm Water Pollution Prevention Plan discussed in APM HYDRO-1, would reduce impacts under this criterion to less than significant levels.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

LESS THAN SIGNIFICANT. The project would not emit hazardous emissions or handle acutely hazardous materials substances or waste within 0.25 miles of an existing or proposed school as defined in Section 21151.8 of the CEQA Statute. The statute specifies that any project involving the construction or alteration of a facility within 0.25 miles of a school that might reasonably be anticipated to emit hazardous air emissions, or handle an extremely hazardous substance—or a mixture containing extremely hazardous substances—in a quantity equal to or greater than the state threshold may pose a health or safety hazard to persons who would attend or would be employed at the school.

Section 25532 of the Health and Safety Code defines extremely hazardous substances as those listed in Appendix A of 40 CFR Part 355, The List of Extremely Hazardous Substances and Their Threshold Planning Quantities. Fuels, lubricant oils, and other project construction related materials are not included in this list. During the proposed transmission line reconstruction and operations, only vehicle fuels, liquid concrete, oils and related maintenance lubricants would be handled, stored, and transported. Therefore, this criterion is not applicable to construction and operation of the project.

"Hazardous emissions" means emissions that are classified as a toxic air contaminant by the California Air Resources Board or by the air pollution control board in the regional area. Diesel-fueled engines are likely to emit contaminants during construction. Potential impacts to all receptors of these emissions are discussed in Section 3.3, Air Quality.

Potential risk of accidental spills of hazardous materials during project construction are discussed in Section 3.8.2(a) of the applicant's PEA; however, the implementation of actions proposed in the Spill Prevention Plan (APM HAZ-1) and the provisions of the SWPPP to be prepared by the applicant prior construction would reduce impacts under this criterion to less than significant levels.

d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

LESS THAN SIGNIFICANT WITH MITIGATION. The provisions in Government Code Section 65962.5 are commonly referred to as the "Cortese List." Twelve Cortese sites and three additional underground storage tank sites were identified within a 1-mile radius from the project ROW centerline (Table 3.8-2). In addition, agricultural pesticides and herbicides are likely in use or have been used in agricultural and newer residential areas.

The project would involve surface and subsurface construction activities including the removal and replacement of 240 transmission towers, the construction of temporary roads, and minor setting changes in the Palermo and East Nicolaus substations. The installation of hybrid poles—proposed for use at the majority of locations along the project route—would be augured to a maximum diameter of 7.5 feet and a

depth of approximately 20 feet. According to the applicant, these activities would involve the excavation and handling of approximately 17,640 cubic yards of soil.

Due to the fact that most of the listed contaminated sites located within a 1-mile radius of the project ROW had affected soil groundwater with hydrocarbons, and other chemicals of concern are likely in use in the area, unexpected soil or groundwater contamination would be encountered during the proposed surface and subsurface construction activities.

As part of APM HAZ-1, the applicant proposes to implement an Environmental Training and Monitoring Program, which would include a detailed sampling protocol in the event of encountering unexpected contamination along the project route or in minor replacements that would be required in substations. In addition to APM HAZ-1, the applicant proposes to implement APM HAZ-2 and APM HAZ-3 as part of the project design.

In addition to the APMs, Mitigation Measure (MM) HAZ-1 (Contaminated Soil and Groundwater Contingency Plan) would reduce potential impacts associated with hazards to the public or the environment through exposure to contaminated sites. Implementation of APM HAZ-1, APM HAZ-2, APM HAZ-3, and MM HAZ-1 would reduce impacts to less than significant levels under this criterion.

MM HAZ-1: Contaminated Soil and Groundwater Contingency Plan. The applicant shall integrate the proposed sampling protocols described in APM HAZ-2 and APM HAZ-3 into a project construction-specific contingency plan to address potential for unearthing or exposing buried hazardous materials or contamination or shallow contaminated groundwater during construction activities. The plan shall detail the preventive actions that the applicant or its contractor would take to prevent the migration of contaminated soils or other materials offsite and the remedial action that would be undertaken. Site-specific plans should be developed for the areas where there is a high probability of encountering shallow contaminated soil or groundwater within 20 feet of the ground surface and the depth of construction.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

NO IMPACT. The Yuba County Airport is located approximately 1 mile east of a portion of the project route (Towers 205 to 213). According to the Yuba County Airport Comprehensive Land Use Plan and its Land Use Compatibility Guidelines for Safety (SACOG 1994), the project ROW is located within the overflight zone of the airport; however, there are no restrictions to project activities within this area (SACOG 1994).

Height standards for defining obstructions to air navigation are established by the Federal Aviation Administration (FAA) and are defined in Federal Aviation Regulation (FAR) Part 77, Objects Affecting Navigable Airspace. In order to make a determination whether a project constitutes a hazard to air navigation, FAR Part 77 requires that notice be given to the FAA if any kind of proposed construction or alteration is (1) more than 200 feet in height above the ground level at its site, or (2) of a greater height than an imaginary surface extending outward and upward at a slope of 100 to 1 for a horizontal distance of 20,000 feet from all edges of the runway surface if the runway is more than 3,200 feet in length.

The Yuba County Airport has two major runways (Yuba County Airport 2009): Runway 14/32 (6,006 x 150 feet, paved, lighted) and Runway 05/23 (3,261 x 150 feet, paved). The distance between the closest portion of the project route (Tower 207) and this airport is approximately 5,600 feet from the end of

Runway 05/23 (DigitalGlobe 2009). Per FAR 77.11, the FAA would require notification for proposed structures exceeding 159 feet in height at this distance.

Given that the hybrid poles proposed to be installed along this portion of the alignment, and the cranes to be used during conductor replacement would not exceed a maximum height of 120 feet, no obstruction to the navigable airspace in the overflight zone of the Yuba County Airport is anticipated, and FAA notification would not be required. Therefore, the project would have no impact under this criterion.

f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

LESS THAN SIGNIFICANT. The Siller Bros Inc. Aviation, a private airstrip, is located within 2 miles of the project route. However, due to the distance from the project to the airport, the infrequent flights, and lighter aircraft, the project would not expose people residing or working along the project route to a safety hazard.

Structures and materials to be removed and used during construction would be transported in and out of the construction areas by both high-duty and light-duty helicopters. Helicopters would also be used to transport construction workers to some pole sites located in remote areas, or when restrictions on vehicular use and heavy equipment use are noted. According to the applicant, it is estimated that a total of 2904 minimum trips would be required for all the structure and line pulling work required by the project (PG&E 2009b). Additional information provided by the applicant indicates that helicopter contractors will handle all required FAA notifications and flight plans, alert local airports when they will be in the airport's designated airspace, and notify local law enforcement when flying in urban areas.

In order to comply with requirements of the FAA, and reduce the risk of the operation of helicopters to structures and/or persons, the applicant will implement APM HAZ-4, a helicopter life plan. With the implementation of APM HAZ-4, impacts would be less than significant under this criterion.

g. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

LESS THAN SIGNIFICANT. 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. According to the applicant, occasionally, it may be necessary to temporarily close one lane of traffic, requiring the implementation of traffic control and safety measures (PG&E 2009a).

State Highways 65 and 70 are the primary evacuation routes for the communities of Linda, Olivehurst, and Plumas Lake (Yuba County 2006). State Highways 70, 162, and 99 are also primary evacuation routes for the City of Oroville (City of Oroville 2008).

As part of standard operating procedures, the applicant proposes to implement a Health and Safety Plan (APM HAZ-5), which includes coordination with local agencies in the event that road closures might impede emergency access routes or services (PG&E 2009a).

The implementation of the action described in APM HAZ-5 along with a project-specific traffic control plan required by Caltrans and local Counties would reduce impacts on emergency access routes or services to less than significant levels.

h. Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

LESS THAN SIGNIFICANT. The primary risk for potential fire hazards for transmission line construction and operation would be a break in the line, which could result in a fire. Additional potential risks would involve the use of vehicles and equipment, which could generate heat or sparks and ignite dry vegetation, thus causing a fire. The project route would pass through areas considered moderate to high for wildfire hazards. The northern portion would pass through moderate and high fire hazard severity zones from the northern end, south to near the Butte/Yuba County border. Therefore, fire prevention actions should be taken in order to reduce the wildland fire risk, especially in those areas of moderate and high severity zones. The implementation of APM-HAZ 6, fire risk management plan, would reduce impacts under this criterion to less than significant levels.

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