

1 3.3.6 Geology and Soils

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
(a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:				
(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(iv) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (ICBO 1994), creating substantial risks to life and property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

1 **Environmental Setting**

2 Baseline geologic information was collected from published geologic and seismic  
 3 literature covering the proposed Project and the surrounding area. Regional and site-  
 4 specific information was obtained from the United States Geological Survey (USGS),  
 5 United States Department of Agriculture (USDA), and California Department of  
 6 Conservation (California Geological Survey) maps and other publications as referenced.

7 **Regional Setting**

8 Regional Geology

9 The proposed Project area is located on a relatively flat alluvial plain within the Central  
 10 Valley, within the Great Valley geomorphic province. Physiographically, the Central  
 11 Valley lies within the California Trough physiographic section, which is part of the larger  
 12 Pacific Border province, which in turn is part of the Pacific Mountain System (USGS  
 13 2008; Benke and Cushing 2005). The Great Valley is an alluvial plain about 50 miles  
 14 wide and 400 miles long in the central part of California. The Great Valley is a trough  
 15 (California Trough) in which sediments have been deposited almost continuously since  
 16 the Jurassic Period. Its northern part is the Sacramento Valley, drained by the  
 17 Sacramento River, and its southern part is the San Joaquin Valley, drained by the San  
 18 Joaquin River (California Geological Survey 2002).

19 Located in the central part of the southern end of the Sacramento Valley, the proposed  
 20 Project is situated on an alluvial plain composed of a deep sequence of sediments  
 21 derived from erosion of the Coast Ranges to the west and Sierra Nevada Mountains to

1 the east, within the confines of a structural trough. The thickness of the alluvial deposits  
2 in the vicinity of the proposed Project area is approximately 8,000 feet (Hackel 1966,  
3 Figure 1); however, a minimum of 60,000 feet of Mesozoic sediments, consisting of  
4 siltstone, claystone, and sandstone of predominantly marine origin, were laid down in  
5 the area west of the present margin of the Sacramento Valley (Hackel 1966, 217),  
6 southwest of the proposed Project area. The uppermost part of the alluvial plain is  
7 composed of Holocene-age natural levee and channel deposits and basin deposits and  
8 Pleistocene-age Modesto Formation and Riverbank Formation sediments, all alluvial in  
9 origin. These alluvial deposits are underlain by undifferentiated early Tertiary-age  
10 marine deposits that overlie upper Cretaceous-age deposits of the Great Valley  
11 Sequence. The sedimentary sequence rests on a basement complex composed of  
12 metamorphosed Paleozoic (at least 245 million years old) and Mesozoic (at least 66  
13 million years old) sediments, volcanics, and granites extending west from the Sierra  
14 Nevada Mountains.

## 15 **Local Geology**

### 16 Topography

17 The Project area is located on nearly level to very gently sloping stream channels,  
18 levees, terraces, overflow basins, and areas of floodplain, with fluvial erosion and  
19 deposition acting as the main geomorphic processes. Ground surface elevations  
20 average 60 feet above mean sea level (amsl) over most of the relatively flat, generally  
21 south-draining alluvial plain of the Project area, ranging between about 65 feet in the  
22 north and east, and 55 feet south of the confluence of the Feather and Yuba rivers.

### 23 Surface and Near-Subsurface Materials

24 The Project area is located in both suburban and rural settings, with a substantial  
25 amount of unpaved land surface. The western portion of the Project area is  
26 characterized by agricultural land to the north of Pease Road and a combination of rural  
27 residential, new suburban residential, and agricultural uses south of Pease Road.  
28 Within the central portion of the alignment, a mixture of rural residential and agricultural  
29 uses in the Laurellen Road area is interrupted by natural habitat associated with Jack  
30 Slough and the Feather River. The eastern portion of the alignment, which rings the  
31 eastern edge of the city of Marysville, is characterized by urban, agricultural, and flood  
32 control land uses.

1 Soils

2 Native soil types in the Project area have been mapped by the USDA and are shown in  
3 Table 3.3.6-1, Soil Types and Occurrence Along the Project Alignment.

4 **Table 3.3.6-1. Soil Types and Occurrence Along the Project Alignment**

Soil Type No.	Type Designation
<b>West of Feather River to Pease Substation</b>	
121	Columbia Fine Sandy Loam
124	Conejo Loam
126	Conejo–Tisdale Complex
132	Gridley Clay Loam
145	Nueva Loam
<b>Between Feather River and East Marysville Substation</b>	
139	Columbia Fine Sandy Loam
182	Kilaga Clay Loam
185	Kimbal Loam
203	Perkins Loam
216	San Joaquin Loam
<b>East Marysville Substation to Marysville Substation</b>	
138	Columbia Fine Sandy Loam
217	San Joaquin Urban Land Complex

5 Source: USDA 2008.

6 In their undisturbed native state, the San Joaquin soils have a relatively high clay  
7 content, often occurring as layers of hardpan (indurated and/or cemented subsoils)  
8 within a few feet of ground surface. Consequently, surface and near-surface San  
9 Joaquin soils may be expected to have a high shrink–swell potential that can swell  
10 (expand) when wetted and shrink (contract) as they dry. Such soil properties can  
11 threaten the stability of structures without adequately engineered foundations.  
12 Typically, clayey soils do not absorb water readily and generate moderately high to high  
13 rates of runoff, depending on the slope; the hazard of erosion varies from slight, where  
14 gently sloping, to high in steeper areas. However, the clayey surface texture of these  
15 soils renders them relatively non-susceptible to wind erosion and limits their  
16 susceptibility to water erosion. The Project area is a source of topsoil throughout the  
17 proposed alignment from Pease Substation eastward to the East Marysville Substation.  
18 From the East Marysville Substation to the Marysville Substation, the Project area may  
19 not be considered a source of topsoil, because areas where undisturbed native soils are

1 exposed are minimal due to the Project's location atop and/or adjacent to levees and/or  
2 along State Route 20/city of Marysville streets.

### 3 **Faults and Seismicity**

#### 4 Seismic Conditions

5 The Project area is located along the eastern margin of the circum-Pacific earthquake  
6 zone, which is a result of the processes of plate tectonics and is the most seismically  
7 active area in the United States. A major feature of the circum-Pacific earthquake zone  
8 associated with this region of California is the San Andreas Fault System, which defines  
9 the boundary between the North American Plate to the east (on which the proposed  
10 Project is located) and the Pacific Plate to the west. The San Andreas Fault System is  
11 generally expressed as a 40-mile-wide elongated zone of fracturing and rock  
12 deformation that creates the general northwest- to southeast-trending valleys and ridges  
13 in the Coast Ranges as well as the overall physiographic nature of the California Central  
14 Valley. Another consequence of its proximity is the earthquake activity that is common  
15 throughout California.

16 A review of available published geologic and seismic hazards maps indicates that there  
17 are no known active faults identified in or adjacent to the proposed Project area  
18 (Saucedo and Wagner 1975; California Geological Survey 2007). In addition, there has  
19 been no documented movement on faults mapped in either Yuba County or Sutter  
20 County during the past 150 years. However, the region has experienced numerous  
21 instances of ground shaking originating from faults in the San Andreas Fault System to  
22 the southwest, the Foothills Fault System to the east, and the Central Valley Cleveland  
23 Hill fault to the north (ruptured in 1975).

24 The closest known potentially active fault mapped by the California Geological Survey is  
25 the Cleveland Hill Fault located about 23 miles north, with the closest branches of the  
26 seismically active San Andreas Fault System (Historic activity; i.e., within the last 200  
27 years) 35 miles to the southwest. The main trace of the San Andreas Fault System is  
28 approximately 90 miles to the southwest. Other active faults within 100 miles of the  
29 proposed Project area are listed in Table 3.3.6-2.

1 **Table 3.3.6-2. Active Faults within 100 Miles of the Proposed Project Area**

Fault Name	Distance from Fault to Project Area (Miles)	Characteristic Earthquake (moment magnitude (Mw))
<b>West Valley Faults</b>		
Dunnigan Hills	30	6.6 <sup>1</sup>
Midland–Sweitzer	40	Pre-Quaternary: No longer considered active <sup>2</sup>
<b>Central Valley Faults</b>		
Cleveland Hill	23	5.7 <sup>2</sup>
Bear Mountain	40	6.0
New Melones	40	6.0
Stockton	87	5.0 <sup>3</sup>
<b>San Andreas Fault System</b>		
Vaca–Kirby Hill	35	6.1 <sup>1</sup>
Green Valley	68	6.2
Antioch	79	Pre-Quaternary: No longer considered active <sup>4</sup>
Healdsburg/Rogers Creek	78	7.1
Greenville	80	6.6
Concord	88	6.2
Calaveras	90	7.5
San Andreas	90	7.9
Hayward	95	6.9–7.1

2 Sources:

3 <sup>1</sup>Wesnouski 1986, Table A.1.4 <sup>2</sup>California Geological Survey 2007.5 <sup>3</sup>AGS 2005, Table 2.6 <sup>4</sup>California Geological Survey 1991, 1, 18, 19.

7 The probable seismic shaking expected (10 percent probability of being exceeded in 50  
8 years) is anticipated to produce peak ground accelerations between 10 and 20 percent  
9 of the acceleration of gravity (g), 0.1 g and 0.2 g, respectively. The peak ground  
10 acceleration value for alluvium in the Project area is 0.17 g (California Geological  
11 Survey 2003). Earthquake intensities generally associated with this amount of ground  
12 shaking are typically between VI and VII on the Modified Mercalli Intensity Scale (MMI).  
13 An expected characteristic earthquake on the entire San Andreas Fault System is  
14 moment magnitude (Mw) 7.9 and is probably the largest earthquake that would be felt in  
15 the proposed Project area. However, given the distance between the San Andreas  
16 Fault and the Project area, the felt intensity would be expected to be between MMI IV  
17 and V (light to moderate shaking). A felt intensity between MMI VII and VIII would be  
18 caused by a characteristic earthquake on the Dunnigan Hills Fault of Mw 6.6 because it

1 is closer to the Project area than the San Andreas Fault and is capable of producing a  
2 larger earthquake than the closer Cleveland Hill Fault.

### 3 **Regulatory Setting**

#### 4 Federal

5 There are no federal regulations that pertain to geologic hazards relevant to this Project.

#### 6 State

7 The Alquist-Priolo Earthquake Fault Zoning Act of 1972 (California Public Resources  
8 Code, Sections 2621–2630) (formerly the Special Studies Zoning Act) regulates  
9 development and construction of buildings intended for human occupancy to avoid the  
10 hazard of surface fault rupture. While the Alquist-Priolo Act does not specifically  
11 regulate overhead transmission lines, it does help define areas where fault rupture is  
12 most likely to occur. The Alquist-Priolo Act groups faults into categories of active,  
13 potentially active, and inactive. Historic and Holocene-age faults are considered active,  
14 Late Quaternary and Quaternary-age faults are considered potentially active, and pre-  
15 Quaternary-age faults are considered inactive. These classifications are qualified by  
16 the conditions that a fault must be shown to be “sufficiently active” and “well defined” by  
17 detailed site-specific geologic explorations in order to determine whether building  
18 setbacks should be established.

19 The California Seismic Hazards Mapping Act of 1990 (Hazards Mapping Act) (California  
20 Public Resources Code, Sections 2690–2699.6) is designed to protect the public from  
21 the effects of strong ground shaking, liquefaction, landslides, other ground failures, or  
22 other hazards caused by earthquakes. The Hazards Mapping Act requires site-specific  
23 geotechnical investigations to identify the hazard and the formulation of mitigation  
24 measures before the permitting of most developments designed for human occupancy.  
25 Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards in  
26 California, constitutes the guidelines for evaluating seismic hazards other than surface  
27 fault rupture and for recommending mitigation measures as required by California Public  
28 Resources Code section 2695(a). Because the Project area has yet to be mapped, the  
29 provisions related to the Hazards Mapping Act would not apply.

30 State regulations pertaining to the management of erosion/sedimentation as they relate  
31 to water quality are described in Section 3.3.8, Hydrology and Water Quality, of this  
32 MND. The primary purpose of these regulations and standards is to protect surface

1 waters from the effects of land development. Among other measures included in such  
2 regulations and standards are the requirements to reduce the potential for  
3 sedimentation caused by erosion.

4 The California Building Code (CBC) (Title 24, California Code of Regulations (CCR)  
5 Part 1) is based on the 1997 Uniform Building Code (UBC) (ICBO 1997), with the  
6 addition of more extensive structural seismic provisions. The State of California  
7 provides minimum standards for structural design and site development for projects  
8 containing buildings for human occupancy through the CBC. The CBC, although based  
9 on the UBC (which is used widely throughout the United States, when adopted on a  
10 state-by-state or district-by-district basis), has been adapted to California conditions with  
11 numerous more detailed and/or more stringent regulations.

12 Implementation of the requirements contained in Chapter 16 of the CBC reduces  
13 impacts associated with exposure of people and structures to seismic hazards, and  
14 ensures structures meet specific minimum seismic safety and structural design  
15 standards. Chapter 33 specifies the requirements to be fulfilled for site work,  
16 demolition, and construction, including the protection of adjacent properties from  
17 damage caused by such work. The CBC requires a site-specific geotechnical study to  
18 address seismic issues and identifies seismic factors that must be considered in  
19 structural design. Chapter 33 requires all development intended for human occupancy  
20 to adhere to regulations pertaining to grading activities, including drainage and erosion  
21 control, and treatment of expansive soils.

## 22 Local

23 The safety elements of General Plans for the cities and counties along the Project  
24 alignment contain policies for avoidance of geologic hazards and/or protection of unique  
25 geologic resources.

## 26 **Impact Analysis and Mitigation**

### 27 Impact Discussion

28 **(a) Impact GEO-1: Potential to expose people or structures to potential**  
29 **substantial adverse effects, including the risk of loss, injury, or death involving:**

30 **(i) Rupture of a known earthquake fault, as delineated on the most recent**  
31 **Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for**

1        **the area or based on other substantial evidence of a known fault. Refer to**  
2        **Division of Mines and Geology Special Publication 42.**

3        **Project activities will not expose people or structures to potential substantial**  
4        **adverse effects due to rupture of a known earthquake fault (No Impact).**

5        The Project does not lie within any mapped Alquist-Priolo Earthquake Fault Zone, and  
6        no Alquist-Priolo Earthquake Fault Zone is mapped in either Yuba or Sutter counties.  
7        The Cleveland Hill fault, the closest Alquist-Priolo Earthquake Fault Zone mapped fault,  
8        passes approximately 23 miles to the north of the proposed Project area.  
9        Consequently, none of the known or suspected faults appear to cross the proposed  
10       Project area. Therefore, the Project activities will not expose people or structures to  
11       potential substantial adverse effects due to rupture of a known earthquake fault, and is  
12       considered to have no impact.

13       **(a) Impact GEO-2: Potential to expose people or structures to potential**  
14       **substantial adverse effects, including the risk of loss, injury, or death involving:**

15              **(ii) Strong seismic ground shaking.**

16       **With mitigation, the Project would not result in significant impacts due to seismic**  
17       **ground shaking (Less than Significant with Mitigation, Class II).**

18       The type and magnitude of seismic hazards affecting the site are dependent on the  
19       distance to causative faults, the intensity, and the magnitude of the seismic event. The  
20       expected peak ground acceleration for a 10 percent probability of exceedance in 50  
21       years is approximately 0.17 g. The resulting vibration from seismic ground shaking  
22       could have the potential to cause ground failures such as liquefaction or settlement in  
23       loose alluvium and/or poorly compacted fill only if such materials were present.  
24       Implementation of Mitigation Measure GEO-2 would ensure that impacts from ground  
25       shaking would be less than significant (Class II).

26       Mitigation Measure for Impact GEO-2:

27       **MM GEO-2. Geotechnical Investigations.** At least 90 days prior to the start of  
28       construction of the Project, the applicant shall conduct a site-specific  
29       geotechnical investigation to evaluate seismic hazards, including but not  
30       limited to peak ground accelerations, liquefaction, and expansive soils for  
31       the design of Project components. Recommendations contained therein

1 shall be implemented through Project design and construction. The final  
2 geotechnical report certified by a California registered geotechnical  
3 engineer and final Project engineering design and drawings certified by a  
4 California registered civil/structural engineer shall be submitted to the  
5 California State Lands Commission for review and approval.

6 Rationale for Mitigation

7 This mitigation measure will provide for adequate design to ensure that new  
8 transmission poles could withstand peak ground accelerations; therefore, impacts would  
9 be reduced to less than significant (Class II).

10 **(a) Impact GEO-3: Potential to expose people or structures to potential**  
11 **substantial adverse effects, including the risk of loss, injury, or death involving:**

12 **(iii) Seismic-related ground failure, including liquefaction.**

13 **With mitigation, the Project would not result in significant impacts due to**  
14 **seismic-related ground failure, including liquefaction (Less than Significant with**  
15 **Mitigation, Class II).**

16 Liquefaction is the phenomenon whereby saturated soils develop high pore-water  
17 pressures during seismic shaking and lose their strength characteristics. This  
18 phenomenon generally occurs in areas of high seismicity, where groundwater is shallow  
19 and loose granular soils or hydraulic fill soils are present. The Project area is less  
20 affected by seismic events than other portions of the State of California. Nevertheless,  
21 some property damage has occurred in the past as a result of major seismic events  
22 occurring in adjacent areas, especially the San Francisco Bay area and, to a lesser  
23 extent, the foothills of the Sierra Nevada. The nearest known active faults to the  
24 proposed Project area that have been mapped by the California Division of Mines and  
25 Geology are the Cleveland Hill and Dunnigan Hills faults, located approximately 23  
26 miles to the north and 30 miles to the southwest, respectively. The Cleveland Hill Fault  
27 experienced a rupture of 5.7 on the Richter Scale in 1975, whereas the Dunnigan Hills  
28 Fault has been inactive for the past 150 years. However, the region has undergone  
29 numerous instances of ground shaking caused by other major faults in the region. As a  
30 general rule, poorly consolidated, water-saturated fine sands and silts located within 50  
31 feet of the surface are typically considered to be the most susceptible to liquefaction.

1 Implementation of Mitigation Measure GEO-2 would ensure that impacts from  
2 liquefaction would be less than significant (Class II).

3 **(a) Impact GEO-4: Potential to expose people or structures to potential**  
4 **substantial adverse effects, including the risk of loss, injury, or death involving:**

5 **(iv) Landslides.**

6 **With mitigation, Project activities would not result in conditions conducive to**  
7 **landslides (Less than Significant with Mitigation, Class II).**

8 The Project is located across generally level or gently sloping topography and  
9 construction activities are not expected to create any over-steepening conditions.  
10 Impacts associated with the unlikely occurrence of a landslide would be mitigated to a  
11 level that is less than significant with implementation of Mitigation Measure GEO-2  
12 (Class II).

13 **(b) Impact GEO-5: Potential to Result in Substantial Soil Erosion or the Loss of**  
14 **Topsoil.**

15 **Project activities would not result in substantial soil erosion or the loss of topsoil**  
16 **(Less than Significant, Class III).**

17 The affected areas will be limited to access roads and boreholes across level  
18 agricultural and rural lands or adjacent to rural and suburban residential land use. The  
19 general clayey surface texture of many of the mapped soils in the Project area renders  
20 them relatively non-susceptible to wind erosion and limits their susceptibility to water  
21 erosion. Therefore, Project activities would not result in substantial soil erosion or the  
22 loss of topsoil, and the impact would be considered less than significant (Class III).

23 **(c) Impact GEO-6: Potential to Result in On- or Off-Site Landslide, Lateral**  
24 **Spreading, Subsidence, Liquefaction, or Collapse.**

25 **With mitigation, Project activities would not adversely result in on- or off-site**  
26 **landslide, lateral spreading, subsidence, liquefaction, or collapse (Less than**  
27 **Significant with Mitigation, Class II).**

28 The affected areas will be limited to access roads and boreholes across level  
29 agricultural and rural lands or adjacent to rural and suburban residential land uses.  
30 Therefore, Project activities would not adversely result in on- or off-site landslide, lateral

1 spreading, subsidence, liquefaction, or collapse; however, these unlikely events would  
2 be mitigated to a level that is less than significant with implementation of Mitigation  
3 Measure GEO-2 (Class II). It should be noted that a thorough discussion of potential  
4 levee collapse issues is included in Section 3.3.8, Hydrology and Water Quality, Impact  
5 HYD-9.

6 **(d) Impact GEO-7: Potential to Expose People and/or Structures to Expansive**  
7 **Soils, Creating Substantial Risks to Life or Property.**

8 **With mitigation, the proposed Project is not expected to be adversely affected by**  
9 **these surface materials (Less than Significant with Mitigation, Class II).**

10 Identified soil types in the Project area may have the potential for expansive soil  
11 characteristics as defined in Table 18-1-B of the Uniform Building Code (ICBO 1994).  
12 However, the proposed Project is not expected to be adversely affected by these  
13 surface materials because of the depth of the proposed pole foundations. The wooden  
14 poles would be sunk approximately 10 feet below the ground's surface and the tubular  
15 steel pole foundations would extend approximately 25 feet below the ground's surface.  
16 Surface movement, including expansive soils, tends to affect structures that are located  
17 within the first few feet of soil material. If the structure's anchor extends below this initial  
18 soil area, any surface soil movement would not adversely affect these structures.  
19 Therefore, because of the depth of the subsurface pole structures, impacts related to  
20 expansive soils are considered less than significant. However, in the unlikely event that  
21 people and/or structures are exposed to expansive soils as a result of the proposed  
22 Project, implementation of Mitigation Measure GEO-2 would reduce this impact to a  
23 less-than-significant level (Class II).

24 **(e) Impact GEO-8: Potential to Expose People and/or Structures to Soils**  
25 **Incapable of Adequately Supporting the Use of Septic Tanks or Alternative**  
26 **Wastewater Disposal Systems Where Sewers are not Available for the Disposal of**  
27 **Wastewater.**

28 **The Project will not require the use of septic tanks or alternative wastewater**  
29 **disposal systems (No Impact).**

30 The Project will not require the use of septic tanks or alternative wastewater disposal  
31 systems; therefore, it is considered to have no impact.

## 1 3.3.7 Hazards and Hazardous Materials

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
(a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) For a project within the vicinity of a private airstrip, would the	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**1 Environmental Setting**

2 Golden State Environmental conducted an environmental hazards database search on  
 3 November 23, 2008, to determine the presence of any known hazards in the Project  
 4 area. This search revealed a number of incidents throughout the Marysville and Yuba  
 5 City areas, including businesses that generate hazardous wastes and use hazardous  
 6 chemicals. There have also been a number of releases of hazardous substances,  
 7 although many were minor and all appear to have been adequately addressed. These  
 8 include instances of power poles with transformers being knocked down accidentally or  
 9 as a result of storm activity with the release of polychlorinated biphenyl (PCB). There  
 10 were also transformers that were damaged by poor handling.

11 The database search also recognized the Marysville Substation (also site of the Pacific  
 12 Gas and Electric (PG&E) Service Center) as being a large quantity generator,  
 13 generating waste halogenated and nonhalogenated solvents; spent antifreeze;  
 14 batteries, battery parts, casing, and cores; asbestos solids and debris; empty metal  
 15 drums and containers; aerosol containers; flammable organic liquids and petroleum  
 16 distillates; waste insulating oil and lube oil; spent oil filters and absorbents; oil water  
 17 emulsions from sumps; organic paints, ink, and lacquer; PCB electrical equipment and  
 18 PCB-containing insulating oil; and PCB-containing insulating oil contaminated solids.

1 There were also incidents of releases at the substation facility that were adequately  
2 addressed.

3 The database search did not list specific hazardous materials/resources for the East  
4 Marysville Substation or the PG&E operations in the Pease Substation and immediately  
5 surrounding area.

#### 6 Schools

7 The Project is in the vicinity of several local schools. Anna McKenney Intermediate  
8 School, located at 1904 Houston Street in the city of Marysville, is located  
9 approximately 0.25 mile from the existing/proposed transmission line. Albert Powell  
10 High School, located at 1875 Clark Avenue in Yuba City, is approximately 0.60 mile  
11 from the existing/proposed transmission line.

#### 12 Airports

13 The Yuba County Airport is located 3.0 miles south of the Marysville Substation and the  
14 Sutter County Airport is located approximately 1.5 miles southwest of the Marysville  
15 Substation. Beale Air Force Base is approximately 8.0 miles east of Marysville and  
16 supports military transportation and training activities. The Pease Substation is located  
17 approximately 6.0 miles northeast of the Vanderford Ranch Company Airport, which is a  
18 private airstrip.

### 19 **Regulatory Setting**

#### 20 Federal

21 The United States Environmental Protection Agency (U.S. EPA) is tasked with  
22 implementing several laws related to environmental protection from hazardous materials  
23 and substances. These laws include the Clean Air Act, Clean Water Act, Safe Drinking  
24 Water Act, Toxic Substances Control Act, Resource Conservation and Recovery Act,  
25 Comprehensive Environmental Response, Compensation and Liability Act and the  
26 Environmental Planning and Community Right-to-Know Act (EPCRA).

#### 27 State

28 The California Environmental Protection Agency (California EPA) is also tasked with  
29 implementing these federal laws and has done so through the actions of the California  
30 Air Resources Board (CARB), Department of Toxic Substances Control (DTSC),

1 Integrated Waste Management Board (IWMB), Office of Environmental Health Hazard  
2 Assessment (OEHHA) and State Water Resources Control Board (SWRQCB).

3 Local

4 County health departments and fire departments are tasked with enforcement of local  
5 hazardous material handling, storage, and transportation regulations.

6 **Impact Analysis and Mitigation**

7 Impact Discussion

8 **(a) Impact HAZ-1: Routine transport, Use, or Disposal of Hazardous Materials.**

9 **The Project would result in minimal routine use, transport, or disposal of**  
10 **hazardous materials; therefore, a less-than-significant impact would occur (Less**  
11 **than Significant, Class III).**

12 A limited amount of hazardous or potentially hazardous materials may be generated  
13 during the construction phase of the Project. Hazardous wastes, if present, would be  
14 removed from the right-of-way, transported under uniform waste manifest by a licensed  
15 transporter, and disposed of at a licensed treatment, storage, or disposal facility.  
16 Although the Project does not call for the specific routine transport or disposal of  
17 hazardous materials, use of potentially hazardous materials associated with the routine  
18 operation and maintenance of the construction equipment necessary for the Project is  
19 expected. Equipment that may be associated with the use of potentially hazardous  
20 materials may include backhoes, graders, air compressors, man lifts, generators, drill  
21 rigs, truck-mounted augers, flatbed trucks, boom trucks, rigging and mechanic trucks,  
22 small to medium-sized cranes, concrete trucks, and crew trucks, all requiring the use of  
23 PCB-based fuels and lubricants. However, such equipment is designed to properly use  
24 and store these fuels and lubricants as part of their normal operations, and any impact  
25 to the environment would only occur through accidental release or improper storage.  
26 Therefore, the Project would not create a significant hazard to the public or the  
27 environment through the routine transport, use, or disposal of hazardous materials and  
28 the impact would be considered less than significant (Class III).

1 **(b) Impact HAZ-2: Upset and Accident Conditions Involving the Release of**  
2 **Hazardous Materials into the Environment.**

3 **Project construction could potentially include a risk of releasing existing**  
4 **hazardous substances and exposing people to potential health hazards; however,**  
5 **this impact would be reduced to less than significant with appropriate mitigation**  
6 **(Less than Significant with Mitigation, Class II).**

7 The construction equipment used in support of the Project would require periodic  
8 refueling and lubricating. Large equipment (e.g., backhoes and graders) are typically  
9 fueled and maintained at the construction site as they are not designed for use on public  
10 roadways. Such maintenance uses a service vehicle that mobilizes to the location of  
11 the equipment. It is during the transfer of fuel that the potential for an accidental release  
12 is most likely. Such spills are typically minor and localized to the immediate area of the  
13 fueling (or maintenance). Implementation of Mitigation Measures HAZ-2a through HAZ-  
14 2c would mitigate impacts due to potential hazardous substance spills during  
15 construction to result in a less-than-significant impact (Class II).

16 Replacement of the transmission line would include demolition and removal of the  
17 existing 60 kV transmission line and its removal from the existing right-of-way area.  
18 Hazardous substances associated with these existing on-site facilities may exist.  
19 Materials associated with construction activities requiring disposal include asphalt,  
20 transmission poles, and equipment. All transmission poles and equipment that are  
21 removed from the Project alignment would be taken to the Marysville Substation and  
22 either hauled off site for recycling at a licensed recycling facility or stored on site for  
23 future use. Hazardous wastes would be removed from the right-of-way and disposed of  
24 at a licensed disposal facility. Therefore, there is the possibility that Project construction  
25 could include a risk of releasing existing hazardous substances and exposing people to  
26 potential health hazards. Implementation of Mitigation Measures HAZ-2a through 2c  
27 would reduce this impact to less than significant (Class II).

28 Mitigation Measures for Impact HAZ-2:

29 **MM HAZ-2a. Proper Handling and Disposal of Hazardous Wastes.** Handling of  
30 potentially hazardous materials shall be under the direction of a licensed  
31 professional with the necessary experience and knowledge to oversee the  
32 proper identification, characterization, handling, and disposal or recycling  
33 of the materials generated as a result of the Project. As wastes are

1 generated, they will be placed, at the direction of the licensed professional  
2 (licensed per Occupational Safety and Health Administration (OSHA)  
3 hazardous materials handling protocols) in designated areas that offer  
4 secure, secondary containment and/or protection from stormwater runoff.  
5 Other forms of containment may include placing waste on plastic sheeting  
6 (and/or covering with same) or in steel bins or other suitable containers  
7 pending profiling and disposal or recycling.

8 **MM HAZ-2b. Storage of Hazardous Materials Away from Sensitive Receptors.** The  
9 temporary storage and handling of potentially hazardous materials will be  
10 in areas away from sensitive receptors, such as schools or residential  
11 areas. These areas will be secured with chain-link fencing or similar  
12 barrier with controlled access to restrict casual contact from non-Project  
13 personnel. Prior to working on the Project, all personnel that may come  
14 into contact with potentially hazardous materials will have the appropriate  
15 health and safety training commensurate with the anticipated level of  
16 exposure.

17 **MM HAZ-2c. Hazardous Material Transportation Route Planning.** Transportation  
18 routes will be selected to the extent possible to minimize exposure to  
19 sensitive receptors. Handling of potentially hazardous materials may be  
20 temporarily suspended during periods of adverse weather conditions,  
21 particularly where such activities could pose an unacceptable risk to  
22 sensitive receptors in the opinion of the Occupational Safety and Health  
23 Administration (OSHA)-licensed professional. Measures will also be taken  
24 to minimize or eliminate fugitive dust emissions associated with the  
25 handling of the potentially hazardous materials. This can be  
26 accomplished with the application of water mist spray and/or covering with  
27 tarps or plastic sheeting during temporary storage and transportation to  
28 the receiving waste/recycling facility.

29 Rationale for Mitigation

30 These mitigation measures would protect the environment and nearby sensitive  
31 receptors from potentially hazardous material exposure. Impacts would be reduced to  
32 less than significant (Class II).

1 **(c) Impact HAZ-3: Hazardous Emissions Release within One-Quarter Mile of a**  
2 **School.**

3 **The location of Project construction activities within close proximity to schools**  
4 **(0.25 mile from the proposed transmission line) could potentially result in a**  
5 **significant impact; however, this impact would be reduced to less than significant**  
6 **with proposed mitigation (Less than Significant with Mitigation, Class II).**

7 Anna McKenney Intermediate School in Marysville is located approximately 0.25 mile  
8 and Albert Powell High School in Yuba City is located 0.60 mile from the proposed  
9 transmission line. As described in Section 3.3.3, Air Quality, the proposed Project  
10 would not emit hazardous emissions or toxic air emissions during operation. Potentially  
11 hazardous emissions during construction due to construction equipment exhaust and  
12 dust would be reduced to less than significant through implementation of Mitigation  
13 Measures HAZ-2a through HAZ-2c; therefore, hazardous air emissions near schools  
14 would be less than significant after mitigation (Class II).

15 The Project would require the handling of potentially hazardous materials during  
16 construction, specifically old transmission materials and oils, lubricants, etc. associated  
17 with construction equipment. Further, mechanical construction equipment would be  
18 used throughout construction to drill holes, remove existing poles, remove the old and  
19 install the new transmission line, etc. Location of such construction activities within  
20 close proximity to schools would result in a potentially significant impact (Class II).  
21 However, incorporation of Mitigation Measures HAZ-2a through HAZ-2c would reduce  
22 this impact to a less-than-significant level.

23 **(d) Impact HAZ-4: Potential Hazards Associated with an Area that is Included on a**  
24 **Hazardous Materials List Compiled Pursuant to Government Code Section 65962.5.**

25 **The Project is located in an area where existing documented hazards and past**  
26 **spills/incidents have all been either closed or handled in accordance with federal,**  
27 **state, and local environmental health and safety laws (Less than Significant, Class III).**

28 The Project site is located on a site (Marysville Substation) that is included on a list of  
29 hazardous materials sites compiled pursuant to Government Code section 65962.5.  
30 However, all existing documented hazards at the substation and any past spills or  
31 incidents were all either closed or handled in accordance with federal, state, and local  
32 environmental health and safety laws. Therefore, as there are no outstanding

1 documented hazards, a less-than-significant impact would occur and mitigation is not  
2 required (Class III).

3 **(e) Impact HAZ-5: Potential Hazards Associated with Proximity to an Airport or**  
4 **Location within an Airport Land Use Plan.**

5 **The Project site is not located within proximity to an airport land use plan but**  
6 **may result in introduction of aviation hazards (Less than Significant with**  
7 **Mitigation, Class II).**

8 The Project site is not located within an airport land use plan. However, it is located  
9 approximately 1.5 miles from the Sutter County Airport, which is a public facility. The  
10 Project does not involve introduction of hazardous materials or substances, nor would it  
11 involve new populations or housing that could be affected by low-flying aircraft.  
12 However, the Project would result in the introduction of new tubular steel poles, which  
13 may be as high as 105 feet. These new poles may result in a hazard to low-flying  
14 aircraft. Although the introduction of new tubular steel poles would not trigger the  
15 Federal Aviation Administration's (FAA's) notification requirement for new structures  
16 because they do not exceed 200 feet in height, the following mitigation measures, in  
17 addition to Mitigation Measure AGR-3b, would ensure that potential hazards to aviation  
18 uses would be less than significant (Class II).

19 Mitigation Measures for Impact HAZ-5:

20 **MM HAZ-5a. Notification of Construction Activity.** At least 30 days before cranes,  
21 helicopters, and stringing operations are employed along the alignment,  
22 the applicant shall notify Yuba County and Sutter County Airports, Beale  
23 Air Force Base, and the Vanderford Ranch Company Airport of proposed  
24 construction activity. This notification will include details of the Project  
25 area, types of aerial and/or crane/lift construction equipment anticipated,  
26 and approximate length of construction.

27 **MM HAZ-5b. Notification of New Transmission Line Dimensions.** As soon as the  
28 new line is constructed, the applicant shall notify the Yuba County and  
29 Sutter County Airports, Beale Air Force Base, and the Vanderford Ranch  
30 Company Airport of the new transmission line dimensions. This  
31 notification shall include a map showing the location and heights of the  
32 transmission line and pole structures.

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1 Rationale for Mitigation

2 These measures would provide local airport/airstrip operators with advanced notice of  
3 construction activity and the ultimate transmission line dimensions and will therefore  
4 avoid potential conflicts with low-flying aircraft. Impacts would be reduced to less than  
5 significant (Class II).

6 **(f) Impact HAZ-6: Potential Hazards Associated with Location in Proximity to a**  
7 **Private Airstrip.**

8 **The Project would not result in a safety hazard for people residing or working in**  
9 **the Project area due to hazards associated with proximity to a private airstrip, but**  
10 **may result in aviation hazards (Less than Significant with Mitigation, Class II).**

11 The Project is located approximately six miles from the Vanderford Ranch Company  
12 Airport, which is a private airstrip. The Project does not involve the introduction of  
13 hazardous materials or substances, nor would it involve new populations or housing that  
14 could be affected by low-flying aircraft. However, the introduction of the new tubular  
15 steel poles, which may be up to 105 feet in height, may pose a safety hazard to low-  
16 flying aircraft being used for agricultural pesticide application. Mitigation Measure AGR-  
17 3b has been included to reduce this potential impact to aerial agricultural operators to  
18 less than significant. Mitigation Measures HAZ-5a and HAZ-5b would further reduce  
19 potential impacts to low-flying aircraft, therefore reducing this impact to a less-than-  
20 significant level (Class II).

21 **(g) Impact HAZ-7: Potential Conflict with an Adopted Emergency Response Plan.**

22 **The Project would not conflict with an adopted emergency response plan with**  
23 **implementation of appropriate mitigation (Less than Significant with Mitigation,**  
24 **Class II).**

25 None of the fire and police stations and emergency medical service providers located  
26 throughout the service area is located immediately adjacent to the existing/proposed  
27 transmission line. Therefore, no fire protection, police protection, and/or emergency  
28 service providers would be directly affected by construction activities such that  
29 implementation of emergency response plans would be adversely affected.

30 All streets would remain open to emergency vehicles during the construction period.  
31 The only indirect impact would result from construction vehicles using roadways to

1 access construction sites. Because the number of vehicles using roadways to access  
2 pole construction sites would represent a minimal contribution to average daily traffic,  
3 these vehicles would not impair traffic flow. Therefore, the Project would not block any  
4 of the designated emergency roads, and consequently, would not interfere with an  
5 adopted emergency response plan or emergency evacuation plan.

6 During the Project's estimated 10 to 12 month construction period, some of the public  
7 and levee roadways may need to be temporarily closed to allow transmission line  
8 stringing. As identified in Section 3.3.15, Transportation/Traffic, a traffic control and  
9 detour plan would be prepared in coordination with the local jurisdictions as part of the  
10 Project implementation plan. Implementation of Mitigation Measure TRA-4b (from  
11 Section 3.3.15, Transportation and Traffic) would ensure that short-term construction-  
12 related traffic and activities would not significantly impact traffic congestion. Therefore,  
13 this impact would be considered less than significant with implementation of Mitigation  
14 Measure TRA-4b (Class II).

15 **(h) IMPACT HAZ-8: Potential Wildland Fire Risk.**

16 **The Project would not result in a significant probability of starting or spreading**  
17 **wildfire and/or being exposed to the destructive forces of wildfire (Less than**  
18 **Significant, Class III).**

19 The Project will not expose people or structures to a significant risk of loss, injury, or  
20 death involving wildland fires. The transmission line would traverse a variety of urban,  
21 rural, and agricultural land uses. The alignment would also cross wildlands associated  
22 with the Feather River and Jack Slough. However, in the case of both natural habitat  
23 areas, the presence of riverine/riparian systems and a continual supply of water both in  
24 the waterway and in the adjoining wetland would help reduce flammability should an  
25 accident occur both during construction or once the reconstructed transmission line is  
26 operational. The type of wildlands present in the vicinity of the Project may actually help  
27 reduce the potential of the Project to either start or be affected by a wildland fire.  
28 Further, the remaining undeveloped areas traversed by the Project consist of  
29 agricultural fields, and levee structures. The heavy presence of irrigated crops,  
30 irrigation ditches, and water sources results in a generally low likelihood of fire  
31 compared to undeveloped forest or other upland areas where wildfires typically start  
32 and spread. Therefore, the Project would result in a less-than-significant probability of  
33 starting or spreading wildfire and/or being exposed to the destructive forces of wildfire.  
34 The impact would be considered less than significant (Class III).

1 3.3.8 Hydrology and Water Quality

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
(a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Substantially deplete groundwater supplies or interfere substantially with ground water recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the flow rate or amount (volume) of surface runoff in a manner, which would result in flooding on or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(e) Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(f) Otherwise substantially degrade water quality (marine, surface, groundwater or wetland waters)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(h) Place within 100-year flood hazard area structures, which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(i) Expose people or structures to a significant risk of loss injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 1 Environmental Setting

2 The proposed Project area is located in the northern portion of California's Central  
3 Valley, also known as the Sacramento Valley. Project components are located in the  
4 Sacramento River Basin, within western Yuba County and would extend into eastern  
5 Sutter County. The Sacramento Valley is bound on the east by the Middle Cascade  
6 Mountains and the Sierra Nevada range and on the west by the Coast Ranges. Two  
7 local rivers, the Feather and Yuba, flow into the Sacramento River. The Sacramento  
8 River drains into the northern portion of the Central Valley, eventually flowing into San  
9 Francisco Bay.

## 1 **Surface Water**

### 2 Regional Hydrologic Setting

3 The proposed Project lies within the Sacramento River Basin. The existing  
4 transmission line alignment crosses irrigation ditches, drainage canals, and two  
5 perennial water bodies (Jack Slough and the Feather River). The Feather River is a  
6 principal tributary of the Sacramento River and rises primarily from three separate forks  
7 in the Sierra Nevada Mountains. Jack Slough is a narrow channel located north of  
8 Marysville in western Yuba County and eventually flows into the Feather River. The  
9 Feather River flows into the Sacramento River, which eventually meets the San Joaquin  
10 River to form the Sacramento–San Joaquin River Delta (the Delta) prior to emptying into  
11 the Pacific Ocean via the San Francisco Bay.

12 A segment of the Middle Fork of the Feather River, located in Plumas National Forest, is  
13 listed in the National Wild and Scenic Rivers System and is recognized as a state-  
14 designated scenic river (Interagency Wild and Scenic Rivers Coordinating Council  
15 2007). However, the portion of the Feather River within the Project area is not listed in  
16 the National Wild and Scenic Rivers System nor is it recognized as a state-designated  
17 scenic river (National Wild and Scenic Rivers System 2007).

### 18 Flooding

19 Much of the Project area is within the historic floodplain of the Yuba and Feather rivers  
20 and their tributaries, such as Jack Slough. Major floods are documented as inundating  
21 extensive portions of the Marysville/Yuba City area in 1852, 1861, 1866, and 1875.  
22 There were 10 major floods of the Yuba River over the last 100 years (Yuba County  
23 Grand Jury 2006–2007). As the Sacramento Valley was settled and agriculture became  
24 an increasingly important industry, an intricate system of levees was constructed to  
25 protect cities such as Marysville and Yuba City from floodwaters while reclaiming fertile  
26 land for farming.

27 The city of Marysville is protected from floodwaters by the Marysville Ring Levee (City of  
28 Marysville 1985). The eastern portion of the existing transmission line alignment  
29 parallels the eastern and northern components of the Marysville Ring Levee, and in  
30 some cases, existing poles are located atop the levee. As depicted on Figure 2-3,  
31 Proposed Alignment (West), and Figure 2-4, Proposed Alignment (East), the

1 existing/proposed transmission line runs perpendicular to the levee to the west of Jack  
2 Slough and both levees that contain the Feather River.

3 The condition and flood protection height of the levees varies within the Project area,  
4 with some locations considered weak due to porous, soft embankment material and the  
5 existence of very porous buried river channel deposits in contact with the base of the  
6 levee embankments. Localized levee failures and extensive flood inundation have  
7 occurred after the major levee system was constructed. These levee failures occurred  
8 in 1955, 1986, and 1997. The principal failure mechanism has been levee  
9 underseepage and piping from associated sand boils, and to a lesser degree water-side  
10 erosion. In addition to the height and integrity of the embankments, the success or  
11 failure of the local Marysville/Yuba City levee system depends to a large degree on the  
12 operation of the major upstream flood control dams and reservoirs, such as Oroville  
13 Dam. The coordinated operation of the dams determines both the peak flood stage  
14 height and its duration at Marysville. Due to historic flooding and levee failure issues  
15 coupled with the lack of certified 100-year flood protection within the Project area, a  
16 coordinated levee improvement effort among the U.S. Army Corps of Engineers  
17 (ACOE), the California Department of Water Resources (DWR), and the local levee  
18 districts is currently underway (SACOG 2007).

### 19 Surface Water Quality

20 As outlined in the October 2007 Water Quality Control Plan (Basin Plan) for the Central  
21 Valley region, water quality problems generally reflect the intensity of activities of key  
22 discharge sources and the volume, quantity, and uses of the receiving waters. Historic  
23 and ongoing point and nonpoint source discharges impact surface waters throughout  
24 the Sacramento Valley area. Much of the Delta, including tributary rivers such as the  
25 Feather and Yuba, are impaired by agricultural discharge, mines, urban runoff, and  
26 industrial pollution (CVRWQCB 2007).

### 27 **Groundwater**

28 The proposed Project traverses the South Yuba Sub-basin and the Sutter Sub-basin of  
29 the Sacramento Valley Groundwater Basin. The South Yuba Sub-basin and the Sutter  
30 Sub-basin aquifer systems are composed of continental deposits of Quarternary  
31 (recent) to Late Tertiary (Miocene) age (DWR 2003). The base of the South Yuba Sub-  
32 basin aquifer system overlies the pre-Tertiary metamorphosed igneous and sedimentary  
33 rocks of the Sierra Nevada block (DWR 2003). The South Yuba Sub-basin and Sutter

1 Sub-basin are drained by the Feather River (DWR 2003). The Feather River flows  
2 southward into the Delta, which discharges into the San Francisco Bay.

3 Groundwater levels are similar for the two relevant sub-basins. Groundwater levels in  
4 the South Yuba Sub-basin are rising and remain approximately 10 feet above mean sea  
5 level (amsl) as a result of increased surface water irrigation supplies and reduced  
6 groundwater pumping. Within the Sutter Sub-basin, groundwater levels tend to be  
7 within 10 feet of the ground's surface (DWR 2003).

#### 8 Aquifers

9 The proposed Project area is within the Central Valley aquifer system. The Central  
10 Valley aquifer system is divided into three subregions from north to south on the basis  
11 of surface water basins: Sacramento Valley, Sacramento–San Joaquin Delta, and San  
12 Joaquin Valley. The proposed Project is within the Sacramento Valley subregion  
13 (Planert and Williams1995).

#### 14 Groundwater Quality

15 The following information relating to groundwater quality was obtained from DWR  
16 Groundwater Bulletin 118 Update (2003).

#### 17 *South Yuba Sub-Basin*

18 The generally good water quality characteristics are apparent in the overall salinity of  
19 groundwater in this sub-basin. In general, total dissolved solids (TDS) concentrations in  
20 the study area are below 500 milligrams per liter (mg/l) throughout the entire basin.  
21 TDS levels below 500 mg/l render water usable for all types of agriculture, while levels  
22 between 500 and 1,250 mg/l require some restrictions depending on the intended  
23 agricultural use. DWR maintains data for 27 water quality wells in the South Yuba Sub-  
24 basin. Data collected from these wells indicate a TDS range of 141 to 686 mg/l and a  
25 median TDS concentration of 224 mg/l. The primary water chemistry in the area  
26 indicates calcium magnesium bicarbonate or magnesium calcium bicarbonate  
27 groundwater.

#### 28 *Sutter Sub-Basin*

29 DWR maintains data for 38 water quality wells in the Sutter Sub-basin. Data collected  
30 from these wells indicate a TDS range of 133 to 1,660 mg/l. The primary groundwater

1 chemistry in the sub-basin is calcium, magnesium, sodium, chloride, sulfate, and  
2 bicarbonate, which may occur in any combination. Groundwater containing calcium  
3 magnesium bicarbonate or magnesium calcium bicarbonate can be found in portions of  
4 the sub-basin. Recent groundwater quality data collected indicates some wells drilled to  
5 various depths contain chemical elements and compounds in amounts that exceed  
6 drinking water quality safety and aesthetic standards.

7 Groundwater resources in some portions of the county have naturally occurring levels of  
8 minerals, such as arsenic, which presents some concerns. Because of agricultural,  
9 feedlot, and dairy impacts, groundwater quality is expected to gradually deteriorate  
10 unless measures are taken to decrease the amounts of contaminants that are applied to  
11 the ground (DWR 2003).

## 12 **Regulatory Setting**

### 13 Federal

#### 14 *Federal Emergency Management Agency*

15 The Federal Emergency Management Agency (FEMA) is responsible for determining  
16 flood elevations based on ACOE studies and for distributing Flood Insurance Rate  
17 Maps, which are used in the National Flood Insurance Program (NFIP). NFIP  
18 represents an agreement between FEMA and a community to adopt and enforce  
19 floodplain management ordinances, particularly with respect to new construction. To  
20 encourage communities to join NFIP, FEMA created the Community Rating System  
21 (CRS), which offers communities discounts on flood insurance premium rates. To  
22 participate in NFIP, a community must apply to FEMA, adopt a resolution of intent  
23 stating its desire and commitment to participate in NFIP, and adopt and submit  
24 floodplain management requirements that meet or exceed the minimum floodplain  
25 management regulations of NFIP (FEMA 2008).

#### 26 *Safe Drinking Water Act*

27 Originally passed by Congress in 1974, the Safe Drinking Water Act authorizes the  
28 United States Environmental Protection Agency (U.S. EPA) to set national health-based  
29 standards for drinking water to protect public health (U.S. EPA 2004). The original act  
30 focused primarily on treatment as a means to protect drinking water quality but  
31 subsequent amendments in 1986 and 1996 have included source protection, operator  
32 training, and public information as important methods of ensuring a safe public water

1 supply (U.S. EPA 2004). The Safe Drinking Water Act applies to every public water  
2 system in the United States and the responsibility for ensuring safe public water  
3 supplies is divided among the U.S. EPA, states, tribes, water districts, and the public  
4 (U.S. EPA 2004).

#### 5 *Federal Clean Water Act*

6 Increasing public awareness and concern for controlling water pollution led to  
7 enactment of the Federal Water Pollution Control Act Amendments of 1972. As  
8 amended in 1977, this law became commonly known as the Clean Water Act. The  
9 Clean Water Act established basic guidelines for regulating discharges of pollutants into  
10 the waters of the United States. The Clean Water Act requires that states adopt water  
11 quality standards to protect public health, enhance the quality of water resources, and  
12 ensure implementation of the act.

13 Section 401 of the Clean Water Act requires an applicant for a federal permit, such as  
14 for the construction or operation of a facility that may result in the discharge of a  
15 pollutant into navigable waters, to obtain certification of those activities from the state in  
16 which the discharge originates. This process is known as Water Quality Certification.  
17 For projects in Yuba and Sutter counties, the Central Valley Regional Water Quality  
18 Control Board (CVRWQCB), Region 5 issues Section 401 permits.

19 Section 402 of the Clean Water Act authorizes the National Pollution Discharge  
20 Elimination System (NPDES) permit program. This permit program was established to  
21 control water pollution by regulating point sources that discharge pollutants into waters  
22 of the United States. In the State of California, the EPA has authorized the State Water  
23 Resources Control Board (SWRCB) permitting authority to implement the NPDES  
24 program. In general, the SWRCB issues two baseline general permits, one for  
25 industrial discharges and one for construction activities. The Phase II Rule that became  
26 final on December 8, 1999, expanded the existing NPDES program to address  
27 stormwater dischargers from construction sites that disturb land equal to or greater than  
28 one acre.

#### 29 State

#### 30 *Central Valley Flood Protection Board*

31 The CVFPB controls flooding along the Sacramento and San Joaquin rivers and their  
32 tributaries, including the Feather River and Yuba River, in cooperation with the U.S.

1 Army Corps of Engineers (ACOE). This board serves to provide a single entity that  
2 establishes, plans, constructs, operates, and issues permits for encroachment across  
3 the entire regional flood control system (State of California 2008b).

4 *State Water Resources Control Board*

5 The SWRCB is responsible for issuing general stormwater permits for construction, in  
6 accordance with the NPDES program. Small linear overhead projects disturbing at  
7 least one acre but less than five acres of land (including staging areas) must be covered  
8 by the Statewide General Permit for Storm Water Discharges Associated with  
9 Construction Activity from Small Linear Underground/Overhead Projects (Small LUP  
10 General Permit) and must prepare a Tier I Small Land Use Plan Stormwater Pollution  
11 Prevention Plan (SWPPP). Linear projects disturbing more than five acres must be  
12 covered by the Construction General Permit (General Permit) and must prepare a  
13 SWPPP that specifies best management practices (BMPs) to prevent pollutants from  
14 contacting stormwater and procedures to control erosion and sedimentation (SWRCB  
15 2007).

16 *Regional Water Quality Control Board*

17 The Project area, located in Yuba County and Sutter County, falls within the jurisdiction  
18 of the Region 5 CVRWQCB. Each RWQCB is responsible for water quality control  
19 planning within their region, often in the form of a basin plan. The Project is located  
20 within the Sacramento–San Joaquin River Basin Plan area. The RWQCB is also  
21 responsible for implementing the provisions of the General Stormwater Permit for  
22 construction. This includes reviewing SWPPPs and monitoring reports, conducting  
23 compliance inspections, and taking enforcement actions. In addition, the RWQCB is  
24 responsible for issuing Section 401 water quality certifications and wastewater permits  
25 for construction dewatering discharge to surface waters.

26 The water quality in the Central Valley area is managed by the CVRWQCB. The  
27 CVRWQCB's management and policy decisions are linked to the Basin Plan for this  
28 region. The water quality standards in the Basin Plan are defined by the water quality  
29 goals designating the uses of water. Additionally, the CVRWQCB adopted the Strategic  
30 Workplan for Activities in the San Francisco Bay/Sacramento–San Joaquin Delta  
31 Estuary (Strategic Workplan) in July 2008. Strategic Workplan activities are divided into  
32 nine elements, including a Water Quality and Contaminants Control Element that

1 addresses total maximum daily load (TMDL) pollutants. This element also includes a  
2 working drinking water policy for the Central Valley (SWRCB et al. 2008).

3 The CVRWQCB has designated beneficial uses for the waters of the Delta and has  
4 identified the water quality standards for compliance with the Clean Water Act, section  
5 303(c) (CVRWQCB 2007). The beneficial uses of surface waters in the Project area  
6 include municipal and domestic water supply; industrial service and process supply;  
7 agricultural irrigation; groundwater recharge; navigation; contact and non-contact  
8 recreation; commercial and sport fishing; migration of aquatic organisms; spawning  
9 reproduction and early development for aquatic organisms; wildlife habitat; and habitat  
10 for species identified as rare, threatened, and endangered. The SWRCB determined  
11 that the quality of these waters does not fully support all of the beneficial uses assigned  
12 to the water bodies in the Project area. Water quality impacts in the Central Valley area  
13 are primarily a result of pollutants from local agricultural, industrial, and municipal  
14 sources (CVRWQCB 2007).

15 Local

16 *City of Marysville*

17 Title 20 of the Marysville Municipal Code regulates floodplain management within the  
18 city and Section 20.12 provides construction standards in areas of special flood  
19 hazards. Section 20.12.080 (1) prohibits encroachments, including new construction or  
20 substantial improvements or other development, unless certification by a registered  
21 professional engineer or architect is provided demonstrating that encroachments shall  
22 not result in any increase in flood levels during the occurrence of the base flood  
23 discharge (City of Marysville 2008a).

24 The City of Marysville Stormwater Management Plan is being initiated by the city of  
25 Marysville and Yuba County to fulfill NPDES Phase II requirements for Small Municipal  
26 Separate Stormwater Systems. The City of Marysville Storm Water Management Plan  
27 includes BMPs, measurable goals, and timetables for the implementation of the Six  
28 Minimum Control Measures required by the U.S. EPA and the SWRCB.

29 This program is intended to include all of the city of Marysville's storm drain system.  
30 This includes all public man-made facilities within city limits that are owned, operated,  
31 maintained, or controlled by the city of Marysville by which stormwater may be  
32 conveyed to natural basins, detention basins, constructed wetland, artificial channels,

1 curbs, gutters, ditches, sumps, pumping stations, storm drain inlets and storm drains  
2 (City of Marysville 2008b).

3 *Yuba County.*

4 Title VII, Chapter 7.50 (Stormwater Quality) of the Yuba County Zoning Ordinance is  
5 intended to ensure that the county is compliant with federal and state laws concerning  
6 discharge of pollutants to water bodies (Yuba County 2008a). Further, this ordinance  
7 code ensures the requirement to enhance and protect the quality of waters of the state  
8 in Yuba County by reducing pollutants in stormwater discharges to the maximum extent  
9 practicable and controlling non-stormwater discharges to the storm drain.

10 *Sutter County*

11 The Public Works Department, Water Resources Division is responsible for a number of  
12 programs, including various drainage zones of benefit, stormwater quality, and  
13 floodplain administration for NFIP. Additionally, the Water Resources Division is  
14 initiating work to prepare a Groundwater Management Plan in accordance with the  
15 California Water Code. The overall goal of the Groundwater Management Plan is to  
16 ensure that the quantity and quality of groundwater in Sutter County is sustained. This  
17 will be accomplished through development and implementation of Basin Management  
18 Objectives that will be an important element of the Groundwater Management Plan.

19 *Yuba City*

20 The Environmental Conservation Element of the Yuba City General Plan contains the  
21 following policies relevant to the proposed Project (Yuba City 2004):

22 • Policy 8.5-I-2: Comply with the Central Valley Regional Water Quality Control  
23 Board's regulations and standards to maintain and improve the quality of both  
24 surface water and groundwater resources.

25 • Policy 8.5-I-3: Continue to control stormwater pollution and protect the quality of  
26 the City's waterways, by preventing oil and sediment from entering the river.

27 • Policy 8.5-I-4: Encourage State and regional agencies to monitor groundwater  
28 supplies and take steps to prevent overuse, depletion, and toxicity.

29 • Policy 8.5-I-5: Continue to regularly monitor water quality to maintain high levels  
30 of water quality for human consumption and ecosystem health.

- 1 • Policy 8.5-I-6: Protect waterways by prohibiting the dumping of debris and refuse  
2 in and near waterways and storm drains.

### 3 **Impact Analysis and Mitigation**

#### 4 Impact Discussion

#### 5 **(a) Impact HYD-1: Violation of Water Quality Standards or Waste Discharge** 6 **Requirements.**

7 **With implementation of best management practices and the proposed mitigation,**  
8 **Project activities would not violate water quality standards or waste discharge**  
9 **requirements (Less than Significant with Mitigation, Class II).**

10 Transmission pole removal and replacement activities would require excavation and  
11 grading around transmission pole installation areas, which could result in pollutant  
12 runoff, sediment runoff to nearby waterways, and accelerated soil erosion. Similarly,  
13 wind erosion and increased sedimentation resulting from mud tracked onto roadways  
14 could occur. Sedimentation is considered a pollutant and can have adverse impacts to  
15 water quality resulting from increases in turbidity, nutrient loads, and aquatic habitat  
16 degradation. Additionally, accidental spills or release of potentially hazardous materials  
17 commonly used during construction could enter and pollute surface waters and/or  
18 groundwater. Hazardous materials anticipated to be used during construction include  
19 diesel fuel, gasoline, motor oil, hydraulic fluid, antifreeze, transmission fluid, lubricating  
20 grease, cement, paints, and solvents.

21 The primary receiving waters for runoff from proposed construction activities include  
22 Jack Slough; Feather River; Yuba River, and the Sacramento Valley Groundwater  
23 Basin, including the South Yuba Sub-basin and Sutter Sub-basin. Construction-related  
24 activities could result in the violation of water quality standards or waste discharge  
25 requirements, which would be considered a significant impact. However,  
26 implementation of the following mitigation measure would reduce potentially significant  
27 impacts to less than significant (Class II).

#### 28 Mitigation Measure for Impact HYD-1:

29 **MM HYD-1. Best Management Practices.** The Project applicant shall implement best  
30 management practices to ensure that water quality standards and waste

1 discharge requirements are followed. The following conditions are  
2 required:

3 (a) A construction Stormwater Pollution Prevention Plan shall be  
4 prepared and reviewed/approved by the Regional Water Quality  
5 Control Board prior to commencement of work. The Stormwater  
6 Pollution Prevention Plan must be in compliance with the National  
7 Pollution Discharge Elimination System for both surface and  
8 groundwater. A copy of the approved Stormwater Pollution  
9 Prevention Plan shall be reviewed by all construction personnel prior  
10 to work on the Project. A copy of the Stormwater Pollution  
11 Prevention Plan shall be available on site at all times.

12 (b) A detailed description of best management practices will be provided  
13 in the Stormwater Pollution Prevention Plan, along with a map  
14 showing construction areas, staging areas, and best management  
15 practice locations. At a minimum, the following best management  
16 practices shall be included:

- 17 ○ Protective barrier(s);
- 18 ○ Scheduling;
- 19 ○ Spill kits; and
- 20 ○ Dewatering.

21 (c) Prior to commencement of construction, the applicant shall provide  
22 the California State Lands Commission a copy of the dewatering plan  
23 and the associated National Pollution Discharge Elimination System  
24 permit, which will outline provisions that will be undertaken to protect  
25 surface waters.

26 Rationale for Mitigation

27 This mitigation measure will result in the implementation of best management practices,  
28 as defined, that will ensure compliance with water quality standards and waste  
29 discharge requirements. Impacts would be reduced to less than significant (Class II).

1 **(b) Impact HYD-2: Potential to Deplete Groundwater Supplies.**

2 **Project activities would not contribute to long-term depletion of groundwater**  
3 **supplies or interfere substantially with groundwater recharge (Less than**  
4 **Significant, Class III).**

5 Because the groundwater level may be near the surface throughout the Project  
6 alignment, foundation boring and installation of poles may result in contact with  
7 groundwater. If construction dewatering with discharge to surface waters is necessary,  
8 an additional CVRWQCB permit will be applicable. Dewatering discharge will be  
9 monitored and treated as required to mitigate impacts to surface waters. Because  
10 installation activities are temporary, drawdown of the groundwater table or depletion of  
11 groundwater supplies would not occur. Therefore, impacts would be considered less  
12 than significant (Class III).

13 **(c) Impact HYD-3: Potential to Alter the Existing Drainage Pattern of the Site or**  
14 **Area.**

15 **Project activities would not significantly alter the existing drainage pattern of the**  
16 **Project site or area in a manner that would result in substantial erosion or**  
17 **siltation on or off site (Less than Significant, Class III).**

18 The Project would not impact any existing stream crossings as all access will be  
19 obtained through existing improved or unimproved roadways. Any work areas in close  
20 proximity to waterways (including Jack Slough, the Feather River, or unnamed  
21 agricultural canals) will be set back so that construction activity will not result in  
22 inadvertent soil discharge into the drainage. Finally, no poles will be located within the  
23 drainage. For these reasons, impacts would be considered less than significant  
24 (Class III).

25 **(d) Impact HYD-4: Potential to Substantially Increase the Flow Rate or Amount**  
26 **(Volume) of Surface Runoff.**

27 **Project activities would not substantially increase the flow rate or amount of**  
28 **surface runoff in a manner that would result in flooding on or off site (Less than**  
29 **Significant, Class III).**

30 Construction could result in additional temporary runoff as porous soil surfaces may  
31 become more compacted when repeatedly traversed by heavy equipment. However,

1 because of the small amount of work areas coupled with the temporary nature of the  
2 construction work, any increase in runoff would be minimal. Further, once constructed,  
3 the difference in the amount of permanent impervious surface between the existing and  
4 proposed transmission line would be negligible, and therefore, any increase in runoff  
5 would be minimal and would not result in flooding on or off site. Impacts would be  
6 considered less than significant (Class III).

7 **(e) Impact HYD-5: Potential to Contribute Runoff Water that Would Exceed the**  
8 **Capacity of Existing or Planned Stormwater Drainage Systems.**

9 **The Project would not create or contribute runoff water that would exceed the**  
10 **capacity of existing or planned stormwater drainage systems, and would not**  
11 **contribute substantial additional sources of polluted runoff (No Impact).**

12 The difference in the amount of permanent impervious surface between the existing and  
13 proposed transmission line would be negligible. Therefore, the Project would not  
14 contribute additional runoff that would exceed an existing storm drain system in the city  
15 of Marysville or alter natural drainage patterns in the unincorporated Yuba and Sutter  
16 county areas. Therefore, no impact would occur.

17 **(f) Impact HYD-6: Substantially Degrade Water Quality.**

18 **The Project could potentially result in degradation of water quality but would be**  
19 **reduced to a level below significance with implementation of MM HYD-1 (Less**  
20 **than Significant with Mitigation, Class II).**

21 See discussion of impacts and mitigation in HYD-1. The implementation of Mitigation  
22 Measure HYD-1 would reduce impacts associated with degradation of water quality  
23 (Class II).

24 Rationale for Mitigation

25 Implementation of Mitigation Measure HYD-1 would reduce water quality impacts to less  
26 than significant (Class II).

1 **(g) Impact HYD-7: Place Housing Within a 100-Year Flood Hazard Area.**

2 **The Project would not place housing within a 100-year flood hazard area (No**  
3 **Impact).**

4 The proposed Project does not include a residential component and thus would not  
5 place housing within a 100-year flood hazard area. Therefore, no impact would occur.

6 **(h) Impact HYD-8: Structures within a 100-Year Flood Hazard Area.**

7 **The Project would not significantly impede or redirect flood flows by placing**  
8 **structures within a 100-year flood hazard area (Less than Significant, Class III).**

9 The proposed Project would place approximately 25 transmission poles within a  
10 nominal 100-year flood hazard area. It should be noted that a formal 100-year flood  
11 hazard area has not yet been defined (SACOG 2007). These poles would be located in  
12 two groups, with the western group of 10 poles between the Feather River levee system  
13 and the eastern group of 15 poles located within Jack Slough between the West Jack  
14 Slough levee and the northeast portion of the Marysville Ring Levee. The physical  
15 presence of the structure(s) within the 100-year flood hazard area would not change the  
16 direction or magnitude of the floodwaters. However, the presence of the structure(s)  
17 within the 100-year floodway may cause localized scouring at the base of the pole if  
18 flood velocities and duration reached critical levels. This potential localized scouring at  
19 the base of the poles would not result in significant redirection of flood flows that could  
20 potentially harm downstream property (i.e., agricultural resources, structures, public  
21 infrastructure). Therefore, this impact would be considered less than significant  
22 (Class II).

23 **(i) Impact HYD-9: Potential to Expose People or Structures to a Significant Risk of**  
24 **Loss, Injury, or Death Involving Flooding.**

25 **Project activities would not expose people or structures to a risk of loss, injury,**  
26 **or death involving flooding, as a result of the failure of a levee or dam with**  
27 **implementation of the proposed mitigation (Less than Significant with Mitigation,**  
28 **Class II).**

29 The proposed Project would place approximately 51 transmission poles on levee  
30 structures. As seen on Figure 2-3, Proposed Alignment (West), and Figure 2-4,  
31 Proposed Alignment (East), approximately 49 poles would be located on the levee

1 along the eastern edge of the city of Marysville and two poles would be located on the  
2 unnamed levee immediately west of Jack Slough. If pole construction/replacement  
3 does not change the physical characteristics of the levee, then there is no increase in  
4 flood risk to downstream resources (i.e., agricultural resources, structures, public  
5 infrastructure).

6 However, due to the anticipated subterranean depth of poles approximately 25 feet  
7 below ground surface, there is a potential for both the deep tubular steel pole foundation  
8 and new wood pole foundation excavations to weaken the soil surrounding the pole  
9 foundation if drilling difficulties, such as belling and/or sloughing, are encountered. This  
10 is more likely to be a hazard if the embankment and/or sub-grade soils are granular or  
11 low density and are subject to caving when drilled. If levee embankment soils, or  
12 especially soils at the outside toe of the embankment, are significantly loosened by  
13 drilling, a potential weak area with increased risk of subsurface leakage and sand boil  
14 piping could be created. If weakened soil is allowed to remain, it could create a weak  
15 point in the levee structure, which could result in a possible levee failure, which would  
16 be considered a significant impact. Implementation of the following mitigation measure  
17 would reduce potentially significant impacts to less than significant (Class II).

18 Mitigation Measures for Impact HYD-9:

19 **MM HYD-9a. Levee Drilling Techniques.** Pursuant to U.S. Army Corps of Engineers  
20 Manual 1110-2-1913 (Design and Construction of Levees) and U.S. Army  
21 Corps of Engineers Regulation No. 1110-1-1807 (Procedures for Drilling  
22 in Earth Embankments), the following levee drilling best management  
23 practices shall be implemented:

- 24 • Careful observation by the geologist/engineer as foundation  
25 borehold drilling progresses, with particular attention paid to  
26 indications of caving and/or belling of the excavation.
- 27 • Use of casing to stabilize the boring if caving occurs.
- 28 • Conduct confirmatory cone penetration test soundings adjacent to  
29 the completed tubular steel pole foundation, if significant borehold  
30 caving occurred during drilling.
- 31 • If confirmatory cone penetration test soundings adjacent to tubular  
32 steel pole foundations find anomalously low subsurface density,

1                   soils should be densified around foundation caisson with  
2                   compaction grouting.

3 **MM HYD-9b. Subsurface Testing and Remediation.** Within one month of installation  
4                   of any new tubular steel pole within a levee structure, the applicant shall  
5                   perform subsurface testing (such as cone testing) to verify that the soils  
6                   disturbed during drilling/excavation are at least as dense as the  
7                   surrounding undisturbed levee-structure soils. If the soil surrounding the  
8                   pole has been disturbed by pole installation and is softer than surrounding  
9                   soils, remedial work must be conducted to return the soil to a condition  
10                  that is at least as structurally sound as the preconstruction condition.  
11                  Remedial work may include procedures such as compaction grouting or  
12                  vibro-compaction. The applicant shall submit a summary report outlining  
13                  all subsequent testing of subject poles and any subsequent remedial  
14                  action to the Central Valley Flood Control Protection Board for approval.

15 Rationale for Mitigation

16 These mitigation measures would prevent potential levee stability issues during  
17 construction. Further, these mitigation measures would require subsurface testing to  
18 verify that the density of soils disturbed during Project activities is sufficient to support  
19 the levee. If it is determined that soils on the levee have been compromised, remedial  
20 action will be taken to return the soil to preconstruction conditions. Impacts would be  
21 reduced to less than significant (Class II).

22 **(j) Impact HYD-10: Inundation by Seiche, Tsunami, or Mudflow.**

23 **With implementation of the proposed mitigation measure (MM HYD-9), the risk of**  
24 **inundation by a seiche, tsunami, or mudflow as a result of the Project would be**  
25 **reduced to less than significant (Less than Significant with Mitigation, Class II).**

26 Within California's Central Valley, seiche and mudflow are hazardous conditions that  
27 could occur as a result of an earthquake and river levee failure. Levees specific to the  
28 Project area are associated with the Feather River, Jack Slough, and the Yuba River.  
29 Because these rivers, and potential hazardous seiche and/or mudflow conditions that  
30 could occur during seismic or flooding events would be contained within the levee  
31 system, damage to property, structures, and public infrastructure resources would not  
32 occur. However, if levees were weakened or damaged as a result of the Project,

1 damage to downstream resources (i.e., structures, agricultural resources, public  
2 infrastructure) may occur and would be considered a significant impact. Implementation  
3 of Mitigation Measures HYD-9a and HYD-9b would reduce potentially significant  
4 impacts to less than significant (Class II).

5 Rationale for Mitigation

6 As discussed under Impact HYD-9, the potential for the levee to be damaged or  
7 weakened as a result of the Project, resulting in potential hazardous conditions such as  
8 a seiche or mudflow, would be reduced to a level that is less than significant through  
9 implementation of Mitigation Measures HYD-9a and HYD-9b (Class II).

1 **3.3.9 Land Use and Planning**

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
(a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2 **Environmental Setting**

3 Regional Setting

4 Pacific Gas and Electric (PG&E) is proposing to reconstruct an existing 8.3-mile 60 kV  
 5 transmission line located between the Pease and Marysville substations in the Yuba  
 6 City and Marysville area. The proposed Project is located in both Yuba and Sutter  
 7 counties, in the Sacramento Valley area of Central California. Figure 2-1, Regional  
 8 Map, provides the regional context of the proposed Project. The two counties are  
 9 located within the northern subregion of the Central Valley, also known as the  
 10 Sacramento Valley. Agriculture is the predominant land use within the northern  
 11 Sacramento Valley and specifically within Yuba and Sutter counties. It is estimated that  
 12 approximately 55 percent of the land within Yuba County and 88 percent of the land  
 13 within Sutter County is used for agricultural production or associated activities  
 14 (Department of Conservation 2007a; Department of Conservation 2007b).

1 Local Setting

2 The existing alignment consists of a single-circuit wood pole line and is generally  
3 located along Pease Road, Laurellen Road, and State Route 20/Levee Road and  
4 traverses several agricultural operations, the Feather River, and Jack Slough. The  
5 western portion of the Project area is characterized by agricultural land to the north of  
6 Pease Road and a combination of rural residential, new suburban residential and  
7 agricultural uses south of Pease Road. Within the central portion of the alignment, a  
8 mixture of rural residential and agricultural uses in the Laurellen Road area is  
9 interrupted by natural habitat associated with Jack Slough and the Feather River. The  
10 eastern portion of the alignment, which rings the eastern edge of the city of Marysville,  
11 can be characterized by urban, agricultural, and flood control land uses. Figure 2-2,  
12 Project Overview Map, provides an overview of the Project area.

13 **Regulatory Setting**

14 Federal

15 There are no federal regulations related to land use relevant to the Project.

16 State

17 *California State Lands Commission.* The California State Lands Commission (CSLC)  
18 has authority over the state's public trust lands. In carrying out its management  
19 responsibilities, the CSLC commonly leases trust lands to private and public entities for  
20 uses consistent with the doctrine. The CSLC requires a right-of-way lease for  
21 roadways, power lines, pipelines, or outfall lines when they cross property administered  
22 by the CSLC (section 2002 (3) of Article 2, Leasing or Other use of Public Lands).

23 *Central Valley Flood Protection Board.* The Central Valley Flood Protection Board  
24 controls flooding along the Sacramento and San Joaquin rivers and their tributaries,  
25 including the Feather River and Yuba River, in cooperation with the U.S. Army Corps of  
26 Engineers (ACOE). This board serves to provide a single entity that establishes, plans,  
27 constructs, operates, and issues permits for encroachment across the entire regional  
28 flood control system (State of California 2008b).

1 Local

2 *City of Marysville*

3 *City of Marysville General Plan.* Land uses along the proposed alignment route within  
4 the city of Marysville include industrial, open space, and residential. It should be noted  
5 that agricultural lands north of the Marysville city limits, but within Marysville's primary  
6 sphere of influence, are designated by the city of Marysville as Planned Development  
7 Area to facilitate future residential, commercial, and industrial development.

8 The Land Use Element of the Marysville General Plan does not contain any land use  
9 policies relevant to the proposed Project (City of Marysville 1985).

10 *City of Marysville Municipal Code.* The Project would traverse or be located adjacent to  
11 lands zoned as industrial, open space, residential, and planned development within the  
12 city (City of Marysville 2007).

13 *Yuba County*

14 *Yuba County General Plan.* According to the Yuba County General Plan Land Use  
15 Map, Project components would traverse or be located adjacent to lands designated as  
16 Valley Agriculture (Yuba County 2004).

17 The Land Use Element of the Yuba County General Plan contains the following goal  
18 and policies relevant to the proposed Project:

- 19 • Goal 2 (Agricultural Lands): Retain the most productive agricultural lands in  
20 agricultural use, and clearly define areas suitable for urbanization and other  
21 forms of nonagricultural development.
- 22 • Policy 33: Non-agricultural development projects shall be directed to marginal  
23 agricultural lands.
- 24 • Policy 41: All lands located outside Community Boundaries and located north of  
25 State Highway 20 on the valley floor shall be designated Valley Agriculture on the  
26 Land Use Diagram and zoned for agriculture, unless the site is already  
27 committed to rural residential or other non-agricultural use.

- 1       • Goal 5: Assure that land uses located in proximity to one another are compatible,  
2       and that the appearance of development is pleasing and compatible with its  
3       surroundings (Yuba County 1996).

4   *Yuba County Zoning Ordinance.* The Yuba County Zoning Map designates lands  
5   traversed by the proposed Project as a Agriculture Exclusive-Minimum 40-acre parcel  
6   (AE-40) (Yuba County 2004).

7   Title XII, Chapter 12.20.040 (14) of the Yuba County Zoning Ordinance states that  
8   public utility buildings, public services, and utility uses are permitted on AE-40 lands  
9   with a conditional use permit. Transmission and distribution lines are allowed within  
10   these areas without a use permit (Yuba County 2008a).

11   *Sutter County*

12   *Sutter County General Plan.* The Sutter County General Plan Land Use Map  
13   designates lands traversed by the proposed Project as Open Space and Agriculture  
14   (minimum 20-acre parcels) (Sutter County 2008a). According to the General Plan, the  
15   Open Space designation permits agriculture and public utility facilities and is intended to  
16   protect important open space land within Sutter County. The Agriculture designation is  
17   placed on lands suitable for crop production, orchards, grazing, and pasture land.

18   The Land Use Element of the Sutter County General Plan contains the following policies  
19   relevant to the proposed Project (Sutter County 1996):

- 20       • Policy 1.A-1: Land use planning within the Yuba City and Live Oak spheres of  
21       influence will be conducted by each respective city. Plans which affect  
22       unincorporated lands shall be prepared in cooperation with Sutter County and  
23       shall be subject to County approval. Sutter County shall work with Yuba City to  
24       establish a formal agreement for planning the unincorporated land within the  
25       sphere of influence within a reasonable time frame as determined by the Board  
26       of Supervisors.

- 27       • Policy 1.A-2: The County will review all development proposals within the  
28       spheres of influence for the cities of Yuba City and Live Oak for consistency with  
29       the design and development standards of each respective jurisdiction.

- 1 • Policy 1.F-1: The County shall require that new development adjacent to  
2 agricultural areas be designed to minimize conflicts with adjacent agricultural  
3 uses.
  
- 4 • Policy 1.F-4: The County shall protect agricultural operations from conflicts with  
5 non-agricultural uses by requiring buffers between proposed non-agricultural  
6 uses and adjacent agricultural operations.

7 *Sutter County Zoning Code.* The Zoning Map of Sutter County designates lands  
8 traversed by the Project as a Special Flood Plain Combing District (FP) and as General  
9 Agriculture (AG). As stated in Division 800 of the Sutter County Zoning Code,  
10 aboveground utilities are permitted within all zoning districts with a use permit (Sutter  
11 County 2008d). Replacement of existing transmission or distribution lines with new,  
12 reconstructed facilities within the existing utility right-of-way does not require a use  
13 permit (Vergis, pers. comm. 2009). The map also acknowledges the location of the  
14 Yuba City sphere of influence.

#### 15 *Yuba City*

16 *Yuba City General Plan.* It should be noted that the Project would not traverse land  
17 located within Yuba City; however, the Project would be located within the city's sphere  
18 of influence. The Yuba City General Plan designates lands adjacent to the proposed  
19 alignment as residential, commercial, and business. It should be noted that the  
20 proposed alignment would be located within PG&E's existing right-of-way, which  
21 consists of the current Pease–Marysville 60 kV transmission line.

#### 22 *Local Levee Protection Districts*

23 Similar to the Central Valley Flood Protection Board, the Project would also traverse  
24 flood protection structures managed and regulated by the Marysville Levee Commission  
25 and Reclamation District 10. Potential land use impacts to these structures would entail  
26 compliance with local levee district rules and regulations.

#### 27 *Yuba and Sutter Counties Habitat Conservation Plan*

28 Yuba and Sutter counties are currently working with local stakeholders to prepare a bi-  
29 county Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP)  
30 in an effort to establish a local mechanism for protecting natural and undeveloped  
31 habitat within the Yuba River Valley and Feather River Valley. The Yuba-Sutter

1 NCCP/HCP originally began as a planning and conservation document to address  
2 proposed highway improvements along State Route 70 and State Route 99, but now  
3 includes a larger coverage area within the Feather and Yuba River watersheds.  
4 Through the application of conservation strategies, preserve designs, and various  
5 protection measures to preserve identified sensitive biological habitats and special-  
6 status species, the plan will provide regulatory authority for planned urban growth and  
7 public infrastructure projects while conserving important biological resources within the  
8 planning area (Sutter County 2006). The HCP is currently being prepared; completion  
9 is not anticipated for at least two years (Hartman, pers. comm. 2008).

## 10 **Impact Analysis and Mitigation**

### 11 Impact Discussion

#### 12 **(a) Impact LUP-1: Potential to Physically Divide an Established Community.**

13 **The Project would not substantially change the visual or physical environment**  
14 **along the alignment route and would not physically divide the established**  
15 **community (No Impact).**

16 The proposed Project would reconfigure the existing Pease–Marysville 8.3-mile single-  
17 circuit 60 kV transmission line to a double-circuit wood and tubular steel pole line within  
18 the existing PG&E right-of-way. Upon completion of construction, the visual and  
19 physical environment along the alignment route would be similar to that which currently  
20 exists. Because the existing 60 kV transmission line is an established use in the area,  
21 the proposed reconfiguration to a double-circuit wood pole line would not result in a  
22 physical separation of an established community. Therefore, no impact would result  
23 from implementation of the proposed Project.

#### 24 **(b) Impact LUP-2: Conformance with Land Use Plans, Policies, and Regulations.**

25 **The Project would not change existing land uses within the alignment and**  
26 **therefore would conform with applicable land use plans, policies, and regulations**  
27 **(No Impact).**

28 The proposed Project would reconfigure the existing Pease–Marysville 8.3-mile 60 kV  
29 transmission line to a double-circuit wood and tubular steel pole line within the existing  
30 PG&E right-of-way. Upon completion of construction, the existing surrounding  
31 agricultural, residential, commercial, industrial, and public utility land uses would remain

1 unchanged. Reconstruction of existing public utility lines are allowable uses within the  
2 underlying planned land uses and zoning designations along the Project alignment.  
3 Therefore, no impact would occur due to conflict with local land use plans and/or  
4 designations.

5 The proposed alignment route would cross lands managed by the rules and regulations  
6 of the Central Valley Flood Protection Board, Marysville Levee Commission, and  
7 Reclamation District 10. The applicant would be required to obtain an encroachment  
8 permit from each entity prior to construction within/atop levee facilities, which will ensure  
9 compliance with the rules and regulations of the Central Valley Flood Protection Board,  
10 Marysville Levee Commission, and Reclamation District 10.

11 The applicant is required to obtain a new general lease right-of-way use for operation of  
12 the reconstructed/expanded transmission line across the Feather River from the CSLC.  
13 Obtaining this lease would ensure compliance with regulations governing placement of  
14 utilities on lands managed by the CSLC.

15 **(c) Impact LUP-3: Potential to Conflict with Habitat Conservation or Natural**  
16 **Community Conservation Plans.**

17 **Project activities would not substantially conflict with habitat conservation and/or**  
18 **natural community conservation plans (Less than Significant, Class III).**

19 The Project would traverse areas being contemplated for conservation under the Yuba-  
20 Sutter NCCP/HCP effort. However, since the transmission lines and poles are  
21 established uses in the Project area, proposed Project activities are not expected to  
22 interfere with the long-term objectives of species protection and natural habitat  
23 conservation that will be a component of this plan. Further, because the plan has not  
24 yet been approved, the proposed Project will not conflict with the goals of an adopted  
25 HCP/NCCP. Therefore, impacts would be less than significant (Class III).

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1 **3.3.10 Mineral Resources**

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
(a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 **Environmental Setting**

3 Yuba County

4 In Yuba County, mineral resources include precious metals (gold, platinum,  
 5 molybdenite), copper, zinc, fuller's earth, sand, gravel, and crushed stone (Yuba County  
 6 1996). Most of Yuba County lies within the Sierra Nevada gold belt districts, and Yuba  
 7 County seeks to carefully manage these unique resources to meet current and future  
 8 needs of the county.

9 Sutter County

10 According to the Sutter County General Plan, based on data provided by the California  
 11 Division of Mines and Geology, Sutter County does not contain any significant or  
 12 substantial deposits of mineral resources (Sutter County 1996).

13 **Regulatory Setting**

14 Federal

15 There are no federal regulations related to mineral resources relevant to the proposed  
 16 Project.

1 State

2 As mandated by the Surface Mining Reclamation Act of 1975, the California State  
3 Minerals and Geology Board classifies California mineral resources using the Mineral  
4 Resource Zone (MRZ) system. These zones have been established based on the  
5 presence or absence of significant sand and gravel deposits and crushed rock source  
6 areas (i.e., products used in the production of cement). The classification system  
7 emphasizes Portland cement concrete-grade aggregate, which is subject to a series of  
8 specifications to ensure the manufacture of strong, durable concrete. The following  
9 guidelines are presented in the mineral land classification for the region:

- 10 • MRZ-2 – Areas where adequate information indicates that significant mineral  
11 deposits are present or where it is judged that there is a high likelihood for their  
12 presence.
- 13 • MRZ-3 – Areas containing mineral deposits, the significance of which cannot be  
14 evaluated from available data.
- 15 • MRZ-4 – Areas where available information is inadequate for assignment to any  
16 other MRZ zone.

17 Local

18 *City of Marysville*

19 Sand and gravel deposits are located in and adjacent to the Yuba River (City of  
20 Marysville 1985). The General Plan does not identify any goals or policies specifically  
21 related to mineral deposits.

22 *Yuba County*

23 The Project site is located within a Valley Agriculture land use designation and not  
24 within an Extractive Industrial designation. Yuba County's General Plan notes that  
25 access to mineral resources present in the county should be maintained, particularly the  
26 Yuba Goldfields and the Western World Mining Company Copper-Zinc Deposit near  
27 Smartville (Yuba County 1996).

1 *Sutter County*

2 The Sutter County General Plan contains a Conservation/Open Space—Natural  
3 Resource Element that addresses gas and mineral resources. Sutter County’s General  
4 Plan policies relate mostly to ensuring that any new natural gas or mineral extraction  
5 projects are conducted in an environmentally sensitive manner. The General Plan has  
6 no policies or goals related to mineral resources relevant to the proposed Project (Sutter  
7 County 1996).

8 **Impact Analysis and Mitigation**9 Impact Discussion10 **(a) Impact MR-1: Potential Impacts to Valuable Mineral Resources.**

11 **The Project would not impact a known mineral resource of value to the region**  
12 **and residents of the state (Less than Significant, Class III).**

13 The proposed Project alignment would be located on lands with the following MRZ  
14 designations: MRZ-2, MRZ-3, and MRZ-4 (Yuba County 1996). *Special Report 132*  
15 classifies areas of the Yuba City–Marysville production-consumption region with regard  
16 to Portland cement concrete-grade aggregate (California Division of Mines and Geology  
17 1988). The Yuba Goldfields area is classified as MRZ-2 where substantial Portland  
18 cement concrete-grade aggregate deposits are present. The area extends from  
19 Marysville to Smartville along the Yuba River. These MRZ-2 deposits consist of four  
20 types: (1) natural stream channel and floodplain alluvium, (2) hydraulic wash deposits  
21 from upstream monitor workings, (3) dredge tailings, and (4) stream channel alluvium in  
22 the present channel of the Yuba River. The Western World Mining Company Copper-  
23 Zinc Deposit near Smartville is also classified as MRZ-2 where massive sulfide Copper-  
24 Zinc deposits are present. However, these areas are approximately eight miles to the  
25 east of the proposed Project site.

26 While the site has been categorized as containing MRZ-2, MRZ-3, and MRZ-4  
27 resources, mining activities do not occur in the immediate vicinity. With implementation  
28 of the proposed Project, these resources would not be eliminated from potential future  
29 mineral resources extraction. Further, because the Project consists of reconfiguring the  
30 existing transmission line, the Project would not represent introduction of a new land  
31 use within the Project area that may conflict with potential future mineral extraction  
32 activities. As a result, the availability of mineral resources in this area would not be

1 significantly impacted. Therefore, the proposed Project would not result in the loss of  
2 availability of a known mineral resource that would be of value to the region and the  
3 residents of the state. Impacts would be less than significant (Class III).

4 **(b) Impact MR-2: Conflicts with Mineral Resource Recovery Site Designations**  
5 **on a Local General Plan, Specific Plan, or Land Use Plan.**

6 **The Project would not result in the loss of a locally important mineral resource**  
7 **recovery site delineated on any of the applicable plans (No Impact).**

8 The proposed Project would not affect local policies or goals contained in applicable  
9 general plans. No impact related to the loss of availability of a locally important mineral  
10 resource recovery site delineated on a local general plan, specific plan, or other land  
11 use plan would result from the proposed Project.

## 1 3.3.11 Noise

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project result in:</i>				
(a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(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 expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

1 **Environmental Setting**

2 General Characteristics of Community Noise

3 To describe environmental noise and to assess Project impacts on areas that are  
 4 sensitive to community noise, a measurement scale that simulates human perception is  
 5 customarily used. The basic terminology and concepts of noise are described below.  
 6 Technical terms are defined in Table 3.3.11-1, Definitions.

7 **Table 3.3.11-1. Definitions**

Term	Definitions
<b>Ambient Noise Level</b>	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
<b>A-Weighted Sound Level, dBA</b>	The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
<b>Community Noise Equivalent Level (CNEL)</b>	The average equivalent A-weighted sound level during a 24-hour day. CNEL is calculated by adding 5 dB to sound levels in the evening (7 p.m. to 10 p.m.) and adding 10 dB to sound levels in the night (10 p.m. to 7 a.m.).
<b>Decibel, dB</b>	A unit for measuring sound pressure level and is equal to 10 times the logarithm to the base 10 of the ratio of the measured sound pressure squared to a reference pressure, which is 20 micropascals.
<b>Equivalent Noise Level, Leq</b>	The sound level corresponding to a steady state sound level containing the same total energy as a time varying signal over a given sample period. Leq is designed to average all of the loud and quiet sound levels occurring over a time period.

8 Sound (noise) levels are measured in decibels (dB). Table 3.3.11-2, Typical Sound  
 9 Levels Measured in the Environment and Industry, depicts common sound levels for  
 10 various noise sources. Community noise levels are measured in terms of A-weighted  
 11 sound level. The A-weighted scale of frequency sensitivity accounts for the sensitivity  
 12 of the human ear, which is less sensitive to low frequencies, and correlates well with  
 13 human perceptions of the annoying aspects of noise. The A-weighted decibel scale  
 14 (dBA) is cited in most noise criteria.

1 **Table 3.3.11-2. Typical Sound Levels Measured in the Environment and Industry**

Noise Source	A-Weighted Sound Level in Decibels	Noise Environment	Subjective Impression
Civil Defense Siren (100 ft.)	130		
	120		Threshold of pain
	110	Rock Music Concert	
Pile Driver (50 ft.)	100		Very loud
Motorcycle (25 ft.)	90	Boiler Room	
Diesel Truck (50 ft.)		Printing Press Plant	
Garbage Disposal (3 ft.)	80		Moderately loud
Vacuum Cleaner (3 ft.)	70		
Normal Conversation (3 ft.)			
	60		
		Department Store	
Light Traffic (100 ft.)	50	Private Office Business	
Bird Calls (distant)	40		Quiet
Soft Whisper	30	Quiet Bedroom	
	20	Recording Studio	
	10		Just Audible
	0		Threshold of hearing

2 People are generally more sensitive and annoyed by noise during the evening and  
3 nighttime. Thus, another noise descriptor used in community noise assessments,  
4 termed the Community Noise Equivalent Level (CNEL), was introduced. The CNEL  
5 scale represents a time-weighted 24-hour average noise level based on the A-weighted  
6 sound level. CNEL accounts for the increased noise sensitivity during the evening  
7 (7:00 p.m. to 10:00 p.m.) and nighttime hours (10:00 p.m. to 7:00 a.m.) by adding 5  
8 and 10 dB, respectively, to the average sound levels occurring during these hours.  
9 Another noise descriptor, termed the Day-Night Average Sound Level ( $L_{dn}$ ), is also  
10 used. The  $L_{dn}$  is similar to CNEL except there is no penalty to the noise level occurring  
11 during the evening hours.

12 Human activities cause community noise levels to be widely variable over time. For  
13 simplicity, sound levels are usually best represented by an average sound level over a  
14 given time period. The average sound level is generally described using the equivalent  
15 sound level ( $L_{eq}$ ), which is a single value (in dBA) for any desired time duration. The  
16  $L_{eq}$  includes all of the time-varying sound energy in the measurement period, usually

1 one hour. The noise level that is exceeded 50 percent of the time ( $L_{50}$ ) is a level that is  
2 normally less than the  $Leq$ , except for especially steady noise levels, in which case it  
3 may be similar to or slightly greater than the  $Leq$ .

4 Community noise levels are usually closely related to the intensity of nearby human  
5 activity. Noise levels are generally considered low when ambient levels are below  
6 45 dBA, moderate (45 to 60 dBA), and high (above 60 dBA). In wilderness areas, the  
7  $L_{dn}$  noise levels can be below 35 dBA. In small towns or wooded and lightly used  
8 residential areas, the  $L_{dn}$  is more likely to be around 50 or 60 dBA. Levels around  
9 75 dBA are more common in busy urban areas, and levels up to 85 dBA occur near  
10 major freeways and airports. Although people often accept the higher levels associated  
11 with very noisy urban residential and residential-commercial zones, they nevertheless  
12 are considered to be adverse to public health.

### 13 **Existing Conditions**

14 The Project is located within the city of Marysville, Yuba County, and Sutter County.  
15 The Project area within the city of Marysville is primarily characterized by industrial  
16 uses. In both Yuba and Sutter counties, land uses adjacent to the proposed alignment  
17 are characterized by agricultural (rice) fields, orchards, and single-family residences.  
18 As such, different levels of noise are present along the Project alignment ranging from  
19 quiet in uninhabited areas to higher noise levels near the eastern terminus at the  
20 Marysville Substation.

21 Sensitive noise receptors are facilities or areas (e.g., residential areas, hospitals,  
22 schools, etc.) where excessive noise may convey annoyance. Noise-sensitive  
23 receptors located in the vicinity of the Project include suburban areas in east Marysville,  
24 as well as rural residential areas north of Marysville and Yuba City. Schools, religious  
25 facilities, and parks are also present within 0.25 mile of the Project alignment.

### 26 **Regulatory Setting**

#### 27 Federal

28 There are no federal noise regulations that pertain to the proposed Project.

#### 29 State

30 There are no state noise regulations that pertain to the proposed Project.

1 Local

2 The proposed Project would be located within the city of Marysville, Yuba County, and  
3 Sutter County. In addition, a portion of the alignment route along Pease Road is within  
4 Yuba City's sphere of influence. Applicable local noise policies and ordinances are  
5 described below:

6 *City of Marysville General Plan*

7 Section E of the City of Marysville General Plan includes goals and policies for noise  
8 (City of Marysville 1984):

- 9     • Policy 6 indicates that any new source of noise projected at or above 70 dB at 50  
10       feet would be examined for compatibility with existing or projected planned  
11       neighboring land uses prior to the granting of a rezoning or building permit.

12 *City of Marysville Municipal Code*

13 The City of Marysville Municipal Code does not contain specific noise standards or a  
14 noise ordinance.

15 *Yuba County General Plan*

16 Acceptable noise levels at various land uses are identified in the Noise Element of the  
17 Yuba County General Plan. The acceptable noise level limit for residential development  
18 adjacent to transportation noise sources is 65 dB L<sub>dn</sub> (Yuba County 1994). Additional  
19 acceptable noise level limits are also identified within the Noise Element for various land  
20 uses exposed to stationary noise sources.

21 *Yuba County Zoning Code*

22 Section 8.20.310 of the Yuba County Zoning Code indicates that it is unlawful to  
23 operate equipment or perform any construction work within a radius of 500 feet of a  
24 residential zone between the hours of 10:00 p.m. and 7:00 a.m. in such a manner that  
25 a reasonable person of normal sensitivity residing in the area is caused discomfort or  
26 annoyance, unless a permit has been obtained to allow emergency repairs on systems  
27 and/or facilities (Yuba County 2008a).

1 *Sutter County General Plan*

2 Acceptable noise levels at various land uses are identified in the noise section of the  
3 Sutter County General Plan. These acceptable noise levels are summarized below:

- 4 • 60 dB L<sub>dn</sub> or less for residential, schools, libraries, churches, hospitals, office  
5 buildings, and commercial uses;
- 6 • 70 dB L<sub>dn</sub> or less for industrial, manufacturing, and agriculture (Sutter County  
7 1996).

8 *Sutter County Zoning Code*

9 The Sutter County Zoning Code does not include any noise regulations that pertain to  
10 the proposed Project (Sutter County 2008).

11 *Yuba City General Plan*

12 Acceptable noise levels at various land uses are identified in the Noise and Safety  
13 section of the Yuba City General Plan. These acceptable noise levels are summarized  
14 below:

- 15 • 60 dB L<sub>dn</sub> or less for low density residential;
- 16 • 65 dB L<sub>dn</sub> or less for multifamily residential;
- 17 • 70 dB L<sub>dn</sub> or less for schools, libraries, churches, hospitals, office buildings, and  
18 commercial uses; and
- 19 • 75 dB L<sub>dn</sub> or less for industrial and agricultural uses (Yuba City 2004).

20 *Yuba City Municipal Code*

21 Section 4.17.10 of the Yuba City Municipal Code identifies any construction, demolition,  
22 excavation, erection, alteration, or repair activity as a public nuisance in violation of  
23 sections 4.17.22 and 4.17.30 of the code if it occurs before 6:00 a.m. or after 9:00 p.m.  
24 daily except Sunday and state or federal holidays when the prohibited time shall be  
25 before 8:00 a.m. and after 9:00 p.m. In the interest of public health and safety, the  
26 chief building official may issue a permit for exemption (Yuba City web site accessed  
27 November 17, 2008)

## 1 Impact Analysis and Mitigation

### 2 Impact Discussion

3 **(a) Impact NOI-1: Generation of noise that conflicts with established standards in**  
 4 **local general plan or noise ordinance or applicable standards of other agencies.**

5 **Construction activities within the Project right-of-way and staging areas would**  
 6 **create both intermittent and continuous noises. Noise levels would diminish over**  
 7 **additional distance and could be reduced further by intervening structures and**  
 8 **appropriate mitigation (Less than Significant with Mitigation, Class II).**

9 Construction would also cause noise off site, primarily from commuting workers and  
 10 from trucks needed to bring materials to the work areas. Workers would likely meet at  
 11 various staging areas and then travel to the construction site in crews. Haul trucks  
 12 would make trips to bring poles, conductor line, and other materials to the construction  
 13 sites and remove excavated material and waste. Typical noise levels at 50 feet for the  
 14 types of construction equipment that would be used are listed in Table 3.3.11-3, Typical  
 15 Noise Levels of Construction Equipment.

16 **Table 3.3.11-3. Typical Noise Levels of Construction Equipment**

Equipment Type	Range of Noise Level (dBA at 50 ft.)
Front Loaders	72–84
Backhoes	72–93
Tractors, Dozers	76–96
Scrapers, Graders	80–93
Trucks	82–94
Concrete mixers/millers	75–88
Concrete pumps/spreaders	81–83
Cranes (movable)	75–86
Pumps	69–71
Generators	71–82
Compressors	74–86
Drill Rigs	70–85
Helicopters (in flight, at 150 ft.)	80–95
Jack Hammers/Rock drills	81–98

Source: EPA 1971.

1 Construction noise could substantially, but temporarily, increase ambient noise levels in  
2 the vicinity of the overhead line work, including tower locations and access routes.  
3 While noise levels will vary for different construction tasks, the greatest noise levels  
4 during the various phases of construction would generally involve concrete trucks, drills  
5 and helicopters. Further, installation of the steel towers would entail mechanical  
6 equipment. The distances from the steel towers would range from approximately 70  
7 feet at nearby residences along the Laurellen Road area to 2,000 feet (0.38 mile) from  
8 nearby residences in the Pease Road area.

9 Depending on the persistence of construction activity and its proximity to the numerous  
10 residential and other sensitive receptors in the Project area and along haul routes,  
11 construction noise could exceed the standards of the local jurisdictions. Drilling activity  
12 can be a continuous noise source and could last for several days depending on the soil  
13 conditions and other factors. Therefore, if the applicant is anticipating the use of a drill  
14 rig within 200 feet of any noise sensitive receptor for more than three days, a significant  
15 impact would occur. Mitigation Measures NOI-1a through NOI-1e are provided to  
16 reduce this impact.

17 Further, nighttime work may be required, which would expose residences to  
18 construction noise during periods of particular sensitivity. Residences located along the  
19 eastern and northern edges of the city of Marysville, along Laurellen Road, and along  
20 Pease Road could potentially be exposed to day and nighttime noise. The city of  
21 Marysville and Sutter County Municipal Codes do not specify nighttime noise limits.  
22 The Yuba City Noise Ordinance prohibits construction activity between 9:00 p.m. and  
23 6:00 a.m. Monday through Saturday and between 9:00 p.m. and 8:00 a.m. on  
24 Sundays. The Yuba County Noise Ordinance prohibits construction activity between  
25 10:00 p.m. and 7:00 a.m. unless construction is related to emergency activities to  
26 protect the health, safety, and public welfare.

27 The applicant proposes to work during nighttime hours in an effort to avoid disruption to  
28 the local power supply, which becomes particularly taxed when daytime temperatures  
29 exceed 90 degrees. If the proposed construction activities occur during the more noise-  
30 sensitive nighttime hours, this could violate local noise ordinances and/or may result in  
31 a noticeable temporary increase in ambient noise levels and cause annoyance or sleep  
32 disruption to occupants of residences located the closest to construction areas.  
33 Construction at night is a significant impact; therefore, mitigation is required.

1 Mitigation Measures for Impact NOI-1

2 **MM NOI-1a. Noise Barriers.** The applicant will need to provide temporary noise  
3 barriers to shield the drill rig from the adjacent homes if drilling would  
4 occur for more than three days within 200 feet of the homes. This barrier  
5 shall be a minimum of 12 feet in height and placed so that it completely  
6 blocks the line of sight between the noise sensitive receptor and drill rig.

7 **MM NOI-1b. Daytime Construction.** Pacific Gas and Electric shall conduct  
8 construction activities during daytime hours, Monday through Friday.  
9 Exceptions shall apply only where nighttime and weekend construction  
10 activities are necessary due to daytime temperature limits.

11 **MM NOI-1c. Nighttime Construction Restrictions.** The applicant must phase their  
12 construction schedule to ensure that any nighttime work is not located  
13 within 2,000 feet (0.38 mile) of residences unless the nighttime activity  
14 does not entail the use of mechanical equipment or noise from mechanical  
15 equipment is reduced to 40 dBA at the property line of any occupied  
16 noise-sensitive land use.

17 **MM NOI-1d. Advanced Notice of Construction.** Pacific Gas and Electric or its  
18 construction contractor shall provide advance notice, between two and  
19 four weeks prior to construction, by mail to all sensitive receptors and  
20 residences within 300 feet of construction sites, staging areas, and access  
21 roads. The announcement shall state specifically where and when  
22 construction will occur in the area. If construction delays of more than  
23 seven days occur, an additional notice shall be made, either in person or  
24 by mail. Notices shall provide tips on reducing noise intrusion, for  
25 example, by closing windows facing the planned construction. The notice  
26 shall also advise the recipient on how to inform the applicant/contractor if  
27 specific noise or vibration sensitive activities are scheduled so that  
28 construction can be rescheduled, if necessary, to avoid a conflict. Pacific  
29 Gas and Electric shall also publish a notice of impending construction in  
30 local newspapers, stating when and where construction will occur. Prior to  
31 public notification, copies of all notices shall be submitted to the California  
32 State Lands Commission for review and approval.

1 **MM NOI-1e.** Pacific Gas and Electric shall identify and provide a public liaison before  
2 and during construction to respond to concerns of neighboring receptors,  
3 including residents, about noise construction disturbance. Procedures for  
4 reaching the public liaison officer via telephone or in person shall be  
5 included in notices distributed to the public. Pacific Gas and Electric shall  
6 also establish a toll-free telephone number for receiving questions or  
7 complaints during construction and develop procedures for responding to  
8 callers. Prior to public notification, procedures included in the notices shall  
9 be submitted to the California State Lands Commission for review and  
10 approval. Pacific Gas and Electric shall provide to the California State  
11 Lands Commission a monthly letter report on the number of calls received  
12 and a summary of caller concerns and how concerns were addressed.

13 Rationale for Mitigation

14 These mitigation measures would protect nearby sensitive receptors from noise impacts  
15 related to proposed construction activities. Impacts would be reduced to less than  
16 significant (Class II).

17 **(b) Impact NOI-2: Exposure to Groundborne Vibration or Groundborne Noise.**

18 **Groundborne vibration or groundborne noise levels would be considered less**  
19 **than significant (Less than Significant, Class III).**

20 Groundborne vibration resulting from construction activities would be associated  
21 primarily with the use of drills, truck excavators, and graders, which can result in levels  
22 of groundborne vibration that cause temporary annoyance. However, because the  
23 nearest residential structures would be located approximately 70 or more feet from the  
24 construction site at the nearest point and groundborne vibration dissipates rapidly with  
25 distance, vibration levels are not anticipated to exceed typical annoyance or structural  
26 damage thresholds at these nearby residential structures or commercial buildings.  
27 Thus, the temporary construction vibration associated with on-site equipment would not  
28 be anticipated to expose sensitive receptors to excessive groundborne vibration or  
29 groundborne noise levels. Therefore, this impact would be less than significant,  
30 requiring no mitigation (Class III).

1 **(c) Impact NOI-3: Substantial Permanent Increase in Noise.**

2 **Noise impacts due to Project construction and operation, including corona noise,**  
3 **would be a less-than-significant impact (Less than Significant, Class III).**

4 Audible power line noise would be generated from corona discharge, which is usually  
5 experienced as a random crackling or hissing sound. Corona is the breakdown of air  
6 very near conductors and occurs when the electric field is locally intensified by  
7 irregularities on the conductor surface, such as scratches or water drops. Corona, as  
8 an issue for transmission lines, is more significant for extra-high voltage lines of 345 kV  
9 or above but will also occur on lower voltage lines during rain or fog conditions. The  
10 physical manifestations of corona include a crackling or hissing noise and very small  
11 amounts of light. Besides the nuisance aspects of corona, it also results in undesirable  
12 power loss over a transmission line. Therefore, the design of transmission lines  
13 incorporates specific conductor and equipment designs to limit or eliminate corona. The  
14 current ambient noise level includes potential intermittent corona noise from the existing  
15 60 kV transmission line. The proposed Project would add a second 60 kV circuit which  
16 could increase the corona noise level by approximately three dB. This potential noise  
17 level increase would be intermittent depending in part on atmospheric conditions, and  
18 would not substantially affect the current ambient condition; therefore, noise impacts  
19 due to corona noise would be a less-than-significant impact, requiring no mitigation  
20 (Class III).

21 Routine inspection and maintenance of the transmission lines would be accomplished  
22 with either ground access or occasional helicopter fly-over. This would cause short-  
23 term or intermittent noise along the route of the inspection or maintenance. As no  
24 increases in frequency of inspections or maintenance are expected as a result of the  
25 proposed Project, noise impacts due to operation and maintenance of the proposed  
26 Project would be less than significant; therefore, mitigation would not be required  
27 (Class III).

1 **(d) Impact NOI-4: Substantial Temporary or Periodic Increase in Ambient Noise**  
2 **Levels.**

3 **Substantial temporary or periodic noise created by the Project would be mitigated**  
4 **to a level considered less than significant with the appropriate mitigation (Less**  
5 **than Significant with Mitigation, Class II).**

6 The Project's potential to generate substantial temporary or periodic noise is outlined  
7 under Impact NOI-1. Impacts would be mitigated to a less-than-significant level with  
8 implementation of Mitigation Measures NOI-1a through NOI-1e.

9 **(e) Impact NOI-5: Exposure of People to Excessive Noise from Airport**  
10 **Operations.**

11 **The Project doesn't include housing or structures that would house people;**  
12 **therefore, people would not be exposed to excessive noise from nearby aircraft**  
13 **(No Impact).**

14 The closest Project component to a public airport is the Marysville Substation, which is  
15 located 1.5 miles northeast of the Sutter County Airport and three miles north of the  
16 Yuba County Airport. The Project is not located within either of the airports'  
17 Comprehensive Land Use Plan overflight zones (Airport Land Use Commission 2008).  
18 Because the transmission line construction doesn't include housing or structures that  
19 would house people, individuals would not be exposed to excessive noise from nearby  
20 aircraft.

21 **(f) Impact NOI-6: Exposure of People to Excessive Noise from Private Airstrip**  
22 **Operations.**

23 **The Project would not expose people residing or working in the area to excessive**  
24 **noise levels (No Impact).**

25 The Pease Substation is located approximately six miles northeast of the Vanderford  
26 Ranch Company Airport. However, the Project would not expose people residing or  
27 working in the area to excessive noise levels. Because the transmission line  
28 construction doesn't include housing or structures that would support permanent  
29 residents, people would not be exposed to excessive noise from nearby aircraft.

1 **3.3.12 Population and Housing**

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
(a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 **Environmental Setting**

3 Population

4 *Yuba County*

5 According to State of California, Department of Finance estimates, in January 2008  
 6 Yuba County had a population of 71,929 (State of California 2008a). Yuba County is  
 7 predominantly rural with the exception of the city of Marysville and smaller communities  
 8 such as Plumas Lake, Loma Rica, and River Highlands. Between January 2007 and  
 9 January 2008, the California Department of Finance estimated that the county  
 10 experienced a 1.8 percent growth in population. Yuba County’s population is projected  
 11 to increase to 137,322 by the year 2030 (State of California 2007). These population  
 12 characteristics are outlined in Table 3.3.12-1, Socioeconomic Characteristics of Yuba  
 13 and Sutter Counties.

1 *Sutter County*

2 According to State of California, Department of Finance estimates in January 2008,  
3 Sutter County had a population of 95,878 (State of California 2008a). Sutter County is  
4 predominantly rural with the exception of Live Oak and Yuba City and their surrounding  
5 suburban areas. Between January 2007 and January 2008, the California Department  
6 of Finance estimated that the county experienced a 2.2 percent population growth rate  
7 (State of California 2008a). Sutter County's population is projected to increase to  
8 182,401 by the year 2030, representing a near doubling of residents (State of California  
9 2007). These population characteristics are outlined in Table 3.3.12-1, Socioeconomic  
10 Characteristics of Yuba and Sutter Counties.

11 Housing

12 There were 27,672 housing units within Yuba County and 33,491 housing units within  
13 Sutter County in 2008 (State of California 2008c). Yuba County's homeownership rate  
14 was 51.4 percent and Sutter County's was 61.5 percent as of 2000 (U.S Census Bureau  
15 2006). Of the total number of housing units within Yuba County, 12.2 percent were  
16 vacant as of January 2008 (State of California 2008c). Of the total number of housing  
17 units in Sutter County, 4.5 percent were vacant as of January 2008 (State of California  
18 2008c). Housing units within Yuba County are projected to increase to 57,301, or a 107  
19 percent increase by 2035. Similarly, housing units within Sutter County are projected to  
20 increase to 49,921 or 49 percent by 2035 (SACOG 2008b). Within Yuba County, 22  
21 percent of the housing units are within incorporated cities, while in Sutter County, 74  
22 percent of the housing units are within incorporated cities (State of California 2008c).  
23 Table 3.3.12-1, Socioeconomic Characteristics of Yuba and Sutter Counties, outlines  
24 housing characteristics of both counties.

25 Employment Characteristics

26 Table 3.3.12-1 also provides employment data for the counties traversed by the  
27 proposed Project for the year 2008. To examine labor force characteristics, it is  
28 assumed that a majority of construction workers would commute to the Project site from  
29 the local Yuba/Sutter County area.

1 **Table 3.3.12-1. Socioeconomic Characteristics of Yuba and Sutter Counties**

	Yuba County	Sutter County
<b>Population</b>		
Population (2007) <sup>a</sup>	70,683	93,835
Population (2008) <sup>a</sup>	71,929	95,878
Population (2030 Projection) <sup>b</sup>	137,322	182,401
<b>Housing<sup>c</sup></b>		
Housing Units (2008)	27,672	32,956
Vacancy Rate (2008)	12.15	4.49
Homeownership Rate (%) <sup>d</sup> (2000)	54.1	61.5
<b>Employment<sup>e</sup></b>		
Total Labor Force (2008)	28,100	42,300
Total Employed (2008)	24,500	37,200
Total Unemployed (2008)	3,600	5,100
Construction Industry Employees* (2008) <sup>f</sup>	1,600	1,600
Percent Construction Industry Employees (%) <sup>f</sup> (2008)	6	6

2 Sources:  
 3 <sup>a</sup> 2007 and 2008 Population Estimates. California Department of Finance 2008.  
 4 <sup>b</sup> 2030 Population Projections: California Department of Finance 2007.  
 5 <sup>c</sup> 2008 Population and Housing Estimates: California Department of Finance 2008.  
 6 <sup>d</sup> 2000 Homeownership Rate: US Census Bureau 2000.  
 7 <sup>e</sup> October 2008 Labor Force and Unemployment Data: California Employment Development Department 2008.  
 8 <sup>f</sup> October 2008 Yuba City Metropolitan Statistical Area (MSA) (Includes Yuba and Sutter Counties) Employment by  
 9 Industry Data. California Employment Development Department, Labor Market Information Division 2008.  
 10 \* These data were compiled for the Yuba City Metropolitan Statistical Area (MSA), which includes both Yuba and  
 11 Sutter counties. Six percent of the employed labor force in the MSA is employed in the construction industry.

12 **Regulatory Setting**

13 Federal

14 There are no federal population and housing regulations that are relevant to the  
 15 proposed Project.

16 State

17 There are no state population and housing regulations that are relevant to the proposed  
 18 Project.

1 Local

2 Each local jurisdiction is required by the State of California to prepare and update a  
3 Housing Element every five years. This planning tool, which is often a component of  
4 the local General Plan, provides an assessment of the existing housing stock, a  
5 projection of future housing needs, and outlines land uses and policies necessary to  
6 meet projected housing demand. None of the local jurisdictions have policies or goals  
7 related to population and housing that are relevant to the proposed Project.

8 **Impact Analysis and Mitigation**

9 Impact Discussion

10 **(a) Impact PH-1: Potential to Induce Population Growth.**

11 **The Project would not induce substantial population growth in the area either**  
12 **directly or indirectly (Less than Significant, Class III).**

13 Short-term population impacts would be limited to non-local construction workers  
14 assisting local construction crews periodically for a 10 to 12 month construction period.  
15 Due to the relatively short construction period, most non-local construction workers  
16 would be accommodated in hotels or motels in Marysville and Yuba City and would not  
17 become permanent residents of the area.

18 Once completed, the proposed Project would create additional capacity and improve  
19 service reliability for the existing Pease–Marysville Transmission Line. While the  
20 Project would create new, larger, and more reliable infrastructure, it would not extend  
21 service to previously unserved areas. The proposed Project would accommodate  
22 current demand projections identified by Pacific Gas and Electric (PG&E), consistent  
23 with population projections for the Yuba City and Marysville Project area. No additional  
24 permanent employees would be necessary for operation and no housing or commercial  
25 facilities are related to the proposed Project. In addition, the proposed Project would  
26 not modify zoning designations to permit new housing or commercial development and  
27 therefore would not directly or indirectly substantially induce growth in the area,  
28 resulting in impacts considered less than significant (Class III).

1 **(b) Impact PH-2: Potential to Displace Existing Housing.**

2 **The Project would not displace existing housing or necessitate the construction**  
3 **of replacement housing (No Impact).**

4 Construction activities along the proposed alignment route would not displace existing  
5 housing. Although several portions of the alignment are located close to existing  
6 housing, displacement would not occur as a result of the Project. Since the proposed  
7 Project would not result in the displacement of any existing housing, no replacement  
8 housing would be required, therefore no impact would occur.

9 **(c) Impact PH-3: Potential to Displace People.**

10 **The Project would not displace people or necessitate the construction of**  
11 **replacement housing (No Impact).**

12 Construction and operation of the proposed Project would not result in displacement of  
13 local community members; therefore, replacement housing would not be necessary and  
14 no impact would occur.

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1 **3.3.13 Public Services**

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
(i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 **Environmental Setting**

3 Fire

4 *City of Marysville*

5 The Marysville fire department serves the city of Marysville, Reclamation District 10,  
 6 and the community of Hallwood, a service area of 85 square miles. The all-risk  
 7 department responds to approximately 2,500 calls per year, including structural and  
 8 vegetation fires, medical emergencies, and hazardous materials incidents (City of  
 9 Marysville 2008c). The fire department staffs four full-time personnel on duty, including  
 10 a battalion chief, a fire captain, and two fire engineers. Additionally, the department has  
 11 an active, 15-member volunteer firefighter staff (City of Marysville 2008c).

1 *Yuba County*

2 The Marysville Fire Department also serves that portion of the Project area located in  
3 Yuba County (City of Marysville 2008c).

4 *Sutter County*

5 Within Sutter County, the alignment route and Pease Substation would be within the  
6 jurisdiction of the Sutter County Fire Department. In addition to fire suppression  
7 services, the Sutter County Fire Department provides medical aid and also has a  
8 Hazardous Materials Response Team with equipment and personnel trained to mitigate  
9 hazardous materials releases. Other services provided include technical rescue  
10 capabilities and public education programs promoting fire safety at all local elementary  
11 schools. The Sutter County Fire Department consists of five fire stations located in the  
12 communities of Live Oak, Sutter, East Nicolaus, Pleasant Grove, and Meridian. Within  
13 the county there are six separate fire districts; three of them are County Board of  
14 Supervisor-dependent districts known as County Service Areas. Two of the remaining  
15 districts are independent districts and the last district is served by the Yuba City Fire  
16 Department. Portions of the proposed Project alignment would also be served by the  
17 Yuba City Fire Department (Sutter County 2008d).

18 *Yuba City*

19 Although the Project is not located within the city, the Yuba City Fire Department would  
20 serve the Project along Pease Road (Sutter County 2008d).

21 Police

22 *City of Marysville*

23 Project components located in Marysville would be served by the Marysville Police  
24 Department. The Marysville Police Department maintains one station located at City  
25 Hall (526 C Street). The Marysville Police Department is staffed by 24 sworn officers  
26 and a staff of 13 civilians (Brumley 2008).

27 *Yuba County*

28 The Project traverses areas within unincorporated Yuba County, which would be served  
29 by the Yuba County Sheriff's Department. The Yuba County Sheriff's Department  
30 includes three divisions: Operations, Support Services, and Jail/Civil. According to the

1 2007 Sheriff's Department Annual Report, Patrol Operations is the largest unit within the  
2 Operations division and duties are split between Valley Patrol and Foothill Patrol.  
3 Valley Patrol (which would cover the Project area) has 38 allocated deputy sheriff  
4 positions, five sergeants, four community service officers and one lieutenant (Yuba  
5 County 2007b). Support Service staff include 15 dispatchers, a communication records  
6 supervisor, and a records clerk working out of the Department's Communications  
7 Center. The Yuba County Sheriff's Department office is located in the city of Marysville.

#### 8 *Sutter County*

9 Police protection within the portion of the Project located in Sutter County would be  
10 provided by the Yuba City Police Department.

#### 11 *Yuba City*

12 The Yuba City Police Department is headquartered at 1545 Poole Avenue in Yuba City.  
13 According to the 2007 Sheriff's Annual Report, the Police Department consists of 69  
14 sworn officers, 29 civilian officers, and six reserve officers. The service area for the  
15 Yuba City Police Department includes approximately 12 square miles divided into four  
16 geographical beats. The Yuba City Police Department received approximately 43,900  
17 calls in 2007 with alarm calls being the most common (Yuba City 2007).

#### 18 Schools

##### 19 *City of Marysville/Yuba County*

20 The Marysville Joint Unified School District serves the city of Marysville and the  
21 surrounding unincorporated Yuba County area. The district includes 14 elementary  
22 schools, four middle schools, two high schools, three charter schools, and five  
23 alternative education schools (Marysville Joint Unified School District 2008). The  
24 closest school to the proposed alignment route is Anna McKenney Intermediate School,  
25 located at 1904 Houston Street in the city of Marysville. This school is approximately  
26 0.25 mile from the existing/proposed transmission line.

##### 27 *Yuba City/Sutter County*

28 The Yuba City Unified School District serves Yuba City and Sutter County. The district  
29 includes eight K–5 schools, four K–8 schools, three 6–8 schools, and two high schools  
30 (Yuba City Unified School District 2007). The closest school to the proposed alignment

1 route is Albert Powell High School, located at 1875 Clark Avenue in Yuba City. This  
2 school is approximately 0.60 mile from the existing/proposed transmission line.

3 Parks

4 See Section 3.3.14, Recreation, for a summary of existing park and recreation facilities  
5 within the Project area.

6 Hospitals/Medical Facilities

7 Area hospitals include Rideout Memorial Hospital in Marysville and Fremont Medical  
8 Center in Yuba City. The Rideout Memorial Hospital includes the 18,000-square foot  
9 Fremont-Rideout Cancer Center (affiliated with UC Davis Health System) and the state-  
10 of-the-art Heart Center. The Fremont Medical Center emphasizes family care and  
11 includes a pediatrics department. The Fremont Medical Center has 132 active beds  
12 (Freemont-Rideout Health Group 2005).

13 **Regulatory Setting**

14 Federal

15 There are no federal regulations relating to public services applicable to the proposed  
16 Project.

17 State

18 There are no state regulations that pertain to public services applicable to the proposed  
19 Project.

20 Local

21 *City of Marysville*

22 The Marysville General Plan does not contain any policies associated with public  
23 services that are relevant to the proposed Project.

24 *Yuba County*

25 The Yuba County General Plan does not contain any policies associated with public  
26 services. However, the Yuba County Environmental Health Department serves as the  
27 Solid Waste Local Enforcement Agency. Under this program, solid waste facilities are

1 reviewed, permitted, and regulated, and solid waste complaints are investigated on  
2 behalf of the community.

3 *Sutter County*

4 The Public Facilities and Services Element of the Sutter County General Plan contains  
5 the following goals relevant to the proposed Project (Sutter County 1996):

- 6 • Goal 3A: To properly serve the residents and developments with efficient public  
7 facilities, utilities, and services.
- 8 • Goal 3E: To ensure the safe and efficient disposal or recycling of solid waste  
9 generated in Sutter County.

10 **Impact Analysis and Mitigation**

11 Impact Discussion

12 **(a) Impact PS-1: Potential Public Service System Disruptions Necessitating New**  
13 **or Altered Facilities.**

14 **Project construction activities would not disrupt local public services (i.e., fire)**  
15 **(Less than Significant, Class III).**

16 **(i) Fire Protection**

17 The proposed reconfiguration of the existing 60 kV transmission line to a double-circuit  
18 wood pole line would not introduce new fire hazards that would require an increase in  
19 fire protection services. During construction of the proposed Project, fire protection  
20 services are not anticipated but could unexpectedly be required at Pacific Gas and  
21 Electric (PG&E) substations and/or work areas along the alignment. This would be an  
22 infrequent occurrence and would not necessitate the addition of new fire protection  
23 personnel, equipment, or new/modified support facilities. Therefore, impacts would be  
24 less than significant (Class III).

1 **(a) Impact PS-1: Potential Public Service System Disruptions Necessitating New**  
2 **or Altered Facilities.**

3 **(ii) Police Protection**

4 **Project construction activities would not disrupt local public services (i.e., police)**  
5 **(Less than Significant, Class III).**

6 Given that local law enforcement currently provides service to the existing transmission  
7 line and the reconfigured line would be an unmanned facility, no new demand would be  
8 placed on police protection. During construction of the proposed Project, police  
9 protection services are not anticipated but could unexpectedly be required at Pacific  
10 Gas and Electric (PG&E) substations and/or work areas along the alignment. This  
11 would be an infrequent occurrence and would not necessitate the addition of new police  
12 protection personnel, equipment, or new/modified support facilities. Therefore, impacts  
13 would be less than significant (Class III).

14 **(a) Impact PS-1: Potential Public Service System Disruptions Necessitating New**  
15 **or Altered Facilities.**

16 **(iii) Schools**

17 **Project construction activities would not disrupt local public services (i.e.,**  
18 **schools) (No Impact).**

19 Construction and operation of the proposed Project would not result in an increase in  
20 the local population. The majority of construction workers would be local and any that  
21 are not are not expected to relocate due to the short-term construction schedule.  
22 Operation of the Project would not result in the creation of any new permanent jobs; as  
23 such, operation would not result in an increase to the local population. Therefore, no  
24 new demand would be placed on local schools and no impact would occur.

25 **(a) Impact PS-1: Potential Public Service System Disruptions Necessitating New**  
26 **or Altered Facilities.**

27 **(iv) Parks**

28 See Section 3.3.14, Recreation, for a summary of impacts to park and recreation  
29 facilities within the Project area as a result of the proposed Project.

1 **(a) Impact PS-1: Potential Public Service System Disruptions Necessitating New**  
2 **or Altered Facilities.**

3 **(v) Other Public Facilities: Hospitals/Medical Facilities**

4 **The Project would have no impact on other public facilities (i.e., hospitals/medical**  
5 **facilities) (No Impact).**

6 Construction and operation of the proposed Project would not result in an increase in  
7 the local population that could demand additional public facilities, including the need to  
8 alter or construct new hospitals and/or medical facilities. Therefore, no impact would  
9 occur.

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1 **3.3.14 Recreation**

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Does the project conflict with existing recreational facilities or opportunities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2 **Environmental Setting**

3 Recreational Facilities

4 Within Yuba County, Yuba Park and Basin Park in the city of Marysville are the closest  
 5 recreational facilities to the proposed alignment. Yuba Park is a 3.0-acre neighborhood  
 6 park located at Yuba Street and East 10th Street, north of the Marysville Substation and  
 7 northwest of Levee Road. Play equipment, picnic facilities, and a large open play area  
 8 are located at Yuba Park. Basin Park is a 2.4-acre neighborhood park located on Hall  
 9 Street between East 17th Street and Harris Street in the East Marysville area. Also  
 10 located adjacent to the proposed alignment and Levee Road is Basin Park, a seasonal  
 11 park used for storm drain storage during the rainy season and sports practice during the  
 12 dry season (City of Marysville 1985). The closest park facility to the proposed alignment  
 13 in Sutter County is Regency Park, a 7.5-acre neighborhood park located on Stabler  
 14 Lane, offering open play areas, benches, and a walking trail. Regency Park is located  
 15 approximately one mile southeast of the Pease Substation in Yuba City (Yuba City  
 16 2008a).

1 Hunting Opportunities

2 The majority of the land parcels along the proposed alignment route are active  
3 agricultural fields used for rice production and as orchards. Due to required and routine  
4 flooding, rice fields are often transformed into wetlands-like habitat and become  
5 seasonal homes to a variety of waterfowl, including ducks, geese, and shorebirds.  
6 Often, these types of lands are retained for agricultural production and waterfowl habitat  
7 and are managed by private hunting clubs for recreational use.

8 **Regulatory Setting**

9 Federal

10 There are no federal regulations regarding recreation that are relevant to the proposed  
11 Project.

12 State

13 There are no state regulations regarding recreation that are relevant to the proposed  
14 Project.

15 Local

16 *City of Marysville*

17 The Open Space, Conservation, and Recreation Element of the Marysville General Plan  
18 contains the following policies relevant to the proposed Project (City of Marysville 1985):

- 19 • Policy 2: Encourage compatible recreational uses in the floodplains of the Yuba  
20 and Feather Rivers.
- 21 • Policy 3: Provide and maintain adequate outdoor recreation facilities within all  
22 residential areas.
- 23 • Policy 5: Provide for the maximum use of public open space by the use of such  
24 areas for outdoor recreation.

25 *Yuba County*

26 The Open Space and Conservation Element of the Yuba County General Plan contains  
27 the following policies relevant to the proposed Project (Yuba County 1996):

- 1 • Policy 79: The County shall zone rice lands located north of the City of  
2 Marysville for agricultural use in order to promote their retention for agriculture,  
3 waterfowl habitat, and waterfowl hunting clubs.
  
- 4 • Policy 82: Waterfowl hunting clubs shall be viewed by the County as compatible  
5 with District 10 agriculture and shall be afforded protection from encroachment by  
6 incompatible uses.
  
- 7 • Policy 112: The County shall encourage multiple use of agricultural lands to  
8 enhance their viability, including hunting clubs and preserves and other  
9 recreational development.
  
- 10 • Policy 136: The County shall attempt to balance the distribution of neighborhood  
11 and community parks to assure that all areas of the county are equally served.
  
- 12 • Policy 145: Privately owned park and recreation facilities shall be encouraged,  
13 including private campgrounds, hunting and fishing areas, sports centers, and  
14 private picnicking areas, in order to reduce demands on public agencies.

15 *Sutter County*

16 The Conservation/Open Space-Recreation and Cultural Resources Element of the  
17 Sutter County General Plan contains the following goal and policy relevant to the  
18 proposed Project (Sutter County 1996):

- 19 • Goal 5.A: To provide adequate park and open space areas for passive and  
20 active recreational, social, educational and cultural opportunities for the residents  
21 of Sutter County.
  
- 22 • Policy 5.A-1: The County shall strive to maintain and improve the distribution of  
23 local and regional parks to support the recreational needs of Sutter County  
24 residents.

1 **Impact Analysis and Mitigation**

2 Impact Discussion

3 **(a) Impact REC-1: Potential for Increased Use of Existing Recreational Facilities.**

4 **Project activities would not result in a temporary increase in demand for**  
5 **recreational facilities (Less than Significant, Class III).**

6 Approximately 40 construction workers would be required to construct the Project, most  
7 of which are anticipated to be from the Yuba/Sutter county area. Local construction  
8 workers have already been accounted for in the provision of recreational facilities within  
9 the cities of Marysville and Yuba City, as well as Yuba and Sutter counties.

10 Due to the few non-local workers expected, existing facilities and recreational  
11 opportunities would be adequate to handle the small potential increase in demand for  
12 recreational facilities during the construction phase of the Project. Operation of the  
13 proposed Project would not require the addition of any permanent workers. Project-  
14 related increase in demand for recreational facilities would be considered less than  
15 significant (Class III).

16 **(b) Impact REC-2: Potential Inclusion of or Required Construction or Expansion**  
17 **of Recreational Facilities.**

18 **Project activities would not result in construction or expansion of recreational**  
19 **facilities, which might have an adverse physical effect on the environment (No**  
20 **Impact).**

21 Project activities would not result in the need to construct or expand recreational  
22 facilities. Any non-local construction workers would be working in the area temporarily.  
23 Due to the temporary nature of this construction work, it is not anticipated that  
24 construction workers' families would move into the area and result in an added strain on  
25 existing recreational facilities. Construction is short term in nature and non-local  
26 workers are not expected to remain in the immediate area once the Project is  
27 operational; therefore, no impact would occur.

1 **(c) Impact REC-3: Potential Conflict with Recreational Facilities or Opportunities.**

2 **Project activities would not conflict with or impede existing recreational facilities**  
3 **or opportunities (Less than Significant, Class III).**

4 Construction within the agricultural fields, specifically within the rice field between the  
5 two railroad spurs north of Marysville in Yuba County may result in a reduced  
6 opportunity for hunting. As described above under Policy 79 of the Yuba County  
7 General Plan, the county is encouraging zoning/preservation of rice fields north of the  
8 city of Marysville to preserve waterfowl hunting opportunities. The Project would  
9 temporarily alter a portion of the subject rice field to allow construction, thereby  
10 restricting hunting opportunities within this rice field.

11 Given that no known recreational hunting use occurs along the Project alignment,  
12 coupled with hunting opportunities available throughout the rest of Yuba, Sutter, and  
13 other surrounding counties, and considering the temporary nature of this potential  
14 reduction in hunting opportunity in local rice fields, this impact would be considered less  
15 than significant (Class III).

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1 3.3.15 Transportation/Traffic

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
(a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Exceed, either individually or cumulatively, a level of service standard established by the County Congestion Management Agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1 **Environmental Setting**

2 Regional Setting

3 *Roadways*

4 The Project area is primarily served by three state highways and several local roads.  
5 State Route 20 traverses the Project area in an east–west direction while State Route  
6 70 and State Route 99 traverse the Project area in a north–south direction. Several  
7 major county roads, including Pease Road, Live Oak Boulevard, Laurellen Road, and  
8 Tierra Buena Road connect the rural portions of Sutter County and Yuba County with  
9 the urban areas of Yuba City and Marysville. Much of the Project area is traversed by  
10 unnamed, unimproved field and orchard access roadways.

11 *Airports*

12 The majority of Central Valley air traffic uses the Sacramento International Airport;  
13 however, regional air traffic often uses the Yuba County Airport, which is three miles  
14 south of Marysville, and Sutter County Airport, which is located approximately 1.5 miles  
15 from the Project alignment. Beale Air Force Base, located approximately eight miles  
16 east of Marysville, supports military transportation and training activities and is not  
17 considered a regional public airport facility.

18 *Rail*

19 The area’s mining and agricultural operations have resulted in the development of  
20 numerous railroad corridors throughout this portion of the Sacramento River Valley.

21 *Bikeways/Trails*

22 An informal regional bikeway/pedestrian trail system atop the local levee structure  
23 network provides non-motorized transportation routes throughout Yuba and Sutter  
24 counties (Yuba County 2008b).

25 Local Setting

26 The Pease Substation is located at the junction of Tierra Buena Road and Pease Road.  
27 Because the alignment is currently parallel to Pease Road, access to this portion of the  
28 Project area would be easily gained from Pease Road. Work areas east of the  
29 intersection of Pease Road and Live Oak Boulevard would require use of levee and/or

1 agricultural access roads. Between State Route 70 and the Feather River, access to  
2 the alignment would occur via Laurellen Road. Between the East Marysville Substation  
3 and State Route 70, work areas would be accessible via construction/agricultural  
4 field/access roads. Primary access to the Marysville Substation is available via State  
5 Route 70, State Route 20, and city streets within the city of Marysville. Access to the  
6 Marysville Substation and to the portion of the Project located along/atop the levee  
7 structure along the eastern edge of Marysville, would be available from Marysville city  
8 streets and State Route 20.

9 With the exception of portions of the levee roadway atop the levee along the eastern  
10 edge of Marysville and the roadway atop the levee (adjacent to the railroad) on the  
11 western Jack Slough Levee, access to many of the levee and agricultural access  
12 roadways are restricted to non-motorized traffic by locked gates.

13 Traffic is generally measured by calculating average daily traffic (ADT) for a roadway  
14 segment or intersection. ADT indicates the number of trips on the given street segment  
15 or that pass through an intersection in a specified time period, i.e., 24-hour period,  
16 morning-peak travel period, and evening-peak travel period. Level of service (LOS) is  
17 the term used to denote the different operating conditions, which occur on a given  
18 roadway segment or intersection under various traffic volume loads. The LOS  
19 designations range from A to F, with LOS A representing the best operating conditions,  
20 i.e., free flowing conditions, and LOS F representing the worst operating conditions, i.e.,  
21 gridlock. Table 3.3.15-1, Local Roadway Traffic Levels, provides a summary of the  
22 most recent ADT and/or LOS data available for each public roadway that would be used  
23 during construction.

1 **Table 3.3.15-1. Local Roadway Traffic Levels**

Roadway	ADT/LOS
Pease Road (Tierra Buena Road to State Route 99)	1,884 ADT/LOS A <sup>1</sup>
Pease Road (State Route 99 to Live Oak Boulevard)	2,200 ADT/LOS A <sup>2</sup>
Laurellen Road	No ADT or LOS available <sup>3</sup>
State Route 70 (within vicinity of State Route 20/central Marysville city streets)	32,000 ADT/No LOS available <sup>4</sup>
State Route 20	29,500 ADT/No LOS available <sup>4</sup>
Marysville surface streets (within vicinity of Marysville Substation)	No ADT available/streets around Marysville Substation operate at LOS B or C <sup>5</sup>

2 Notes:  
 3 All ADT and LOS data are approximate and were calculated at various times/in the context of various public works or  
 4 land development projects over the last five years. Data was provided by local Public Works and Planning  
 5 Department staff (for city/county roads) and via Caltrans' Traffic Vehicle Data System Unit website.  
 6 Sources:  
 7 <sup>1</sup> Hay, pers. comm. 2009.  
 8 <sup>2</sup> Langley, pers. comm. 2009.  
 9 <sup>3</sup> Van Boeck, pers. comm. 2009.  
 10 <sup>4</sup> Caltrans 2009.  
 11 <sup>5</sup> Dykes, pers. comm. 2009.

12 **Regulatory Setting**

13 Federal

14 The proposed Project, including all helicopter construction activities, would be required  
 15 to comply with all Federal Aviation Administration (FAA) regulations. Further, the FAA  
 16 requires notification of any facilities or structures that extend 200 feet aboveground.

17 State

18 *California Department of Transportation*

19 The California Department of Transportation (Caltrans) is the state agency tasked with  
 20 improving and maintaining roads in the State of California. In areas with designated  
 21 State Routes, the state has the responsibility to maintain these roadways while the local  
 22 jurisdiction is responsible for maintaining local roads. Local jurisdictions work with  
 23 Caltrans to designate transportation network requirements and critical areas in need of  
 24 improvement.

25 The proposed Project is located in Caltrans District 3, which includes Yuba and Sutter  
 26 counties. This district is responsible for planning, designing, and maintaining state

1 highways in the Sacramento Valley and northern Sierra counties including State Route  
2 20, State Route 70, and State Route 99 (Caltrans 2007b).

3 Local

4 *Marysville General Plan*

5 The Circulation and Scenic Highways Element of the Marysville General Plan contains  
6 the following policies relevant to the proposed Project (City of Marysville 1985):

- 7     • Policy 1: Maintain existing streets in a safe condition and require that new  
8         streets be built to city standards.
- 9     • Policy 7: Encourage the study of a north–south Highway 70 and an east–west  
10        Highway 20 bypass to alleviate through automobile and truck traffic.

11 *Yuba County General Plan*

12 Yuba County regulates traffic primarily through the implementation of policies and the  
13 achievement of goals discussed in the Circulation Element of their General Plan. The  
14 following goals and policies are relevant to the proposed Project (Yuba County 1996):

- 15     • Goal 1: Achieve and maintain an efficient, feasible, cost effective, and multi-  
16         modal countywide transportation system.
- 17     • Policy 1: The County roadway system shall provide for the safe and efficient  
18         movement of goods as well as people.
- 19     • Policy 2 (Level of Service): Maintain roadway levels of service that recognize  
20         differences between urban and rural environments and minimize congestion.
- 21     • Policy 21: On County roads in rural areas, Level of Service C shall be  
22         maintained.
- 23     • Goal 5 (Quality of Life): Avoid traffic and circulation impacts which affect quality  
24         of life in residential neighborhoods and other traffic sensitive areas.

1 *Sutter County General Plan*

2 The policies contained in the Sutter County Transportation and Circulation Element of  
3 the General Plan help to regulate traffic within the county. The following goals and  
4 policies are relevant to the proposed Project (Sutter County 1996):

- 5 • Policy 2.A-4: The County shall strive to develop and manage its roadway system  
6 to maintain a minimum Level of Service D (LOS D).
- 7 • Policy 2.A-13: The County shall encourage, where feasible, the development of  
8 local roads parallel to State Highways to reduce congestion and increase traffic  
9 safety on state facilities.

10 **Impact Analysis and Mitigation**

11 Impact Discussion

12 **(a) Impact TRA-1: Increase in Traffic/Congestion.**

13 **Project activities would not result in a significant increase in traffic/congestion**  
14 **(Less than Significant, Class III).**

15 During operations, the proposed Project is expected to generate approximately one to  
16 two vehicles trips per day. This limited number of vehicle trips would result in less-than-  
17 significant impacts to traffic/congestion (Class III).

18 During construction, additional traffic on Project area roadways would consist of daily  
19 trips by construction workers and equipment and delivery trips to and from the Project  
20 area. Up to 40 construction workers would be working on the Project during peak  
21 construction periods. Because workers would be transported to the transmission line  
22 work area in crews (i.e., several workers per vehicle) during peak construction periods,  
23 an estimated 20 truck trips per day would occur. The short-term increase in traffic along  
24 Project area roadways may be detectable during the construction phase but due to the  
25 relatively small workforce required and due to multiple Project sites, additional trips on  
26 any one roadway would not exceed an established LOS standard nor substantially  
27 impact traffic volumes or change traffic patterns in a way that congestion and delay  
28 would be substantially increased. Therefore, impacts from construction worker traffic  
29 and scheduled delivery traffic would be considered less than significant (Class III).

1 **(b) Impact TRA-2: Exceed Level of Service Standards.**

2 **The Project would not exceed LOS standards (Less than Significant, Class III).**

3 As described in Impact TRA-1, although the Project would result in a temporary  
4 increase in traffic (20 trips during peak construction periods), short-term and limited  
5 construction-related traffic would not substantially impact traffic volumes nor change  
6 traffic patterns in such a way as to affect the LOS or vehicle to congestion ratios on  
7 study area roadways. Table 3.3.15-1, Local Roadway Traffic Levels, indicates that  
8 existing roadway ADTs range from 1,884 on Pease Road to 32,000 on State Route 70.  
9 Given the small number of trips anticipated during peak construction periods, existing  
10 traffic volumes and/or service levels would not be significantly impacted during Project  
11 construction. Therefore, this impact would be considered less than significant (Class  
12 III).

13 **(c) Impact TRA-3: Potentially Change Air Traffic Patterns.**

14 **The Project would not result in a significant change in air traffic patterns (Less**  
15 **than Significant, Class III).**

16 Project impacts could occur during both construction and operation of the proposed  
17 transmission line because physical impediments to navigable airspace would occur from  
18 increasing the existing pole height by up to 55 feet in places and from the use of guard  
19 structures and helicopters during construction. However, according to FAA guidelines,  
20 construction of the proposed Project would potentially have a significant effect on  
21 aviation activities only if a structure, crane, or wire were positioned such that it would be  
22 more than 200 feet aboveground or if the object would penetrate the imagery surface  
23 extending outward and upward from a public or military airport runway. Because the  
24 maximum height of the new poles would be approximately 105 feet, these Project  
25 components would not extend into navigable airspace. In addition, the Project  
26 alignment is not located within overflight zones of a public airport (SACOG 2008a).  
27 Therefore, the impact to air traffic patterns as a result of the proposed Project would be  
28 considered less than significant (Class III).

29 Refer to Section 3.3.2, Agriculture Resources, for a discussion of potential temporary  
30 conflicts with low-flying aircraft applying agricultural pesticides.

1 **(d) Impact TRA-4: Substantially Increase Hazards Due to a Design Feature.**

2 **The Project would not substantially increase hazards due to a design flaw or**  
3 **incompatible uses with implementation of the appropriate mitigation (Less than**  
4 **Significant with Mitigation, Class II).**

5 Transmission line stringing may result in a potential hazard to vehicular and/or non-  
6 motorized traffic traveling on area roadways crossing the alignment, particularly State  
7 Route 99 and State Route 70. In order to protect roadway users from accidental  
8 exposure to transmission lines, the Project applicant will erect guard structures at all  
9 proposed transmission line highway, street, levee road/trail, and railroad crossings.  
10 Guard structures provide a protective netting surface beneath the transmission line to  
11 essentially “catch” the line in the event of accidental release from the string rig. With the  
12 use of guard structures and implementation of the following mitigation measures,  
13 hazards associated with transmission line stringing would be considered less than  
14 significant (Class II).

15 Due to construction atop levees that also serve as components of the regional non-  
16 motorized transportation network, potential temporary hazards to pedestrians, cyclists,  
17 and levee maintenance crews may be present during construction. This impact would  
18 be mitigated to less than significant with implementation of Mitigation Measure TRA-4b.

19 Mitigation Measures for Impact TRA-4:

20 **MM TRA-4a. Coordination with Law Enforcement and Off-Peak Construction.** The  
21 applicant shall coordinate with the California Highway Patrol and/or the  
22 local law enforcement agency to temporarily stop traffic on each roadway  
23 during transmission line stringing. If possible, stringing should occur  
24 during off-peak traffic periods.

25 **MM TRA-4b. Traffic Control Plan.** Prior to the start of construction, the Project  
26 applicant shall submit a Traffic Control Plan to the Marysville Levee  
27 District and Reclamation District 10. The Traffic Control Plan shall outline  
28 the process by which levee roads/non-motorized trails would be  
29 temporarily closed. To ensure safety of non-motorized travelers, any  
30 temporary closures will be clearly marked and an alternative route  
31 provided. Any open holes or construction stockpiles that are left overnight

1 will be visibly fenced and/or restricted to prohibit intrusion by non-vehicular  
2 travelers.

3 Rationale for Mitigation

4 These mitigation measures would reduce impacts associated with transmission line  
5 construction to a level that is less than significant (Class II).

6 **(e) Impact TRA-5: Potential to Interfere with Emergency Access.**

7 **The Project would not result in inadequate emergency access (Less than**  
8 **Significant with Mitigation, Class II).**

9 Emergency evacuation routes and strategies are defined on a case-by-case basis,  
10 depending on the specific emergency. In order to reduce potential conflicts with  
11 emergency evacuations or emergency vehicle access, Mitigation Measures TRA-4a and  
12 TRA-4b have been included. Inclusion of these mitigation measures would reduce this  
13 impact to less than significant (Class II).

14 **(f) Impact TRA-6: Potentially Result in Inadequate Parking Capacity.**

15 **The Project would not result in inadequate parking capacity (No Impact).**

16 All construction vehicles and equipment would be staged on substation property or  
17 within work areas along the proposed alignment route (within Pacific Gas and Electric's  
18 (PG&E's) existing right-of-way). Therefore, no loss of public parking would occur during  
19 construction and operation of the proposed Project.

20 **(g) Impact TRA-7: Potentially Conflict with Adopted Policies, Plans, or Programs**  
21 **Supporting Alternative Transportation.**

22 **Project activities would not conflict with adopted policies, plans, or programs**  
23 **supporting alternative transportation (Less than Significant, Class III).**

24 Project activities would not conflict with adopted policies or eliminate facilities supporting  
25 alternative transportation, such as bus routes/stops or bikeways. Construction activities  
26 may temporarily interfere with bikeways along levees; however, construction activities  
27 would be short term and limited and would not result in significant restrictions.  
28 Therefore, this impact would be considered less than significant (Class III).

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## 1 3.3.16 Utilities and Service Systems

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
(a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(e) Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider/s existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(h) Would the project conflict with existing utility service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1 **Environmental Setting**

2 The Project area is served by public service and utility systems within Yuba and Sutter  
 3 counties and the cities of Marysville and Yuba City. A variety of local purveyors in this  
 4 area provide and maintain utilities associated with electricity, water, stormwater,  
 5 wastewater, solid waste, and natural gas. Due to the rural, undeveloped nature of  
 6 several areas the Project traverses, municipal water, wastewater, and stormwater  
 7 systems may not be present. Residents within these areas typically rely on their own  
 8 wells and septic systems.

9 Water and Wastewater

10 Water service is supplied by the California Water Service Company within Marysville,  
 11 and the Yuba City Utilities Department within Yuba City and Yuba City’s sphere of  
 12 influence along Pease Road (California Water Service 2008). Wastewater is provided  
 13 to Marysville residents by the city of Marysville’s Public Works Department. The Yuba  
 14 City Utilities Department provides service within Yuba City and its sphere of influence.  
 15 Both cities maintain a municipal stormwater drainage system. Residents that live within  
 16 unincorporated areas of Yuba and Sutter counties rely on individual wells and septic  
 17 systems and are not typically connected to the municipal stormwater system.

18 Solid Waste

19 Solid waste management is conducted under a joint powers agreement between Sutter  
 20 and Yuba counties. Yuba-Sutter Disposal Incorporated collects nearly all municipal  
 21 waste generated in the Project area. After waste has been processed at their disposal  
 22 site in Marysville, Yuba-Sutter Disposal Incorporated transports waste to the Ostrom  
 23 Road landfill located near Wheatfield. Ostrom Landfill has a total design capacity of 41  
 24 million cubic yards and an expected closure date of 2066 (Norcal Waste Systems 2008;  
 25 Yuba-Sutter Disposal 2008).

1 **Regulatory Setting**

2 Federal

3 There are no federal utility or service system policies relevant to the proposed Project.

4 State

5 The responsibilities of utility operators and other excavators working in the vicinity of  
6 utilities are detailed in the California Public Utilities Code. The California Public Utilities  
7 Code requires that any contractor or operations and/or maintenance worker planning  
8 work within existing buried or aboveground facilities provide adequate notice to ensure  
9 that the location of all utilities are understood prior to ground disturbance.

10 Local

11 The municipal plans for the cities of Yuba City as well as Marysville and Yuba and  
12 Sutter counties have a variety of goals and policies related to utilities and public service  
13 systems, and specifically the safety aspects of the location of utilities. Appropriate  
14 locations and permitted uses are typically listed in the zoning code within the permitted  
15 uses discussion for each specific zoning district.

16 **Impact Analysis and Mitigation**

17 Impact Discussion

18 **(a) Impact UTI-1: Potential to Exceed Wastewater Treatment Requirements of the**  
19 **Applicable Regional Water Quality Control Board.**

20 **The Project would not exceed wastewater treatment requirements (No Impact).**

21 The proposed Project is not expected to generate wastewater during construction or  
22 operation. Therefore, no impact would occur.

1 **(b) Impact UTI-2: Potential to Require/Result in the Construction of New Water or**  
2 **Wastewater Treatment Facilities.**

3 **The Project would not require or result in the construction of new water or**  
4 **wastewater treatment facilities (Less than Significant, Class III).**

5 The proposed Project would not require the use of water or wastewater during operation  
6 and may only require a minimal amount of water during construction. Any water that is  
7 required during operation can be hauled to the specific location from existing water  
8 sources at the Marysville, East Marysville, or Pease substations. As such, no new  
9 treatment facilities would be required; therefore, a less-than-significant impact would  
10 occur (Class III).

11 **(c) Impact UTI-3: Potential to Require/Result in the Construction of New**  
12 **Stormwater Drainage Facilities.**

13 **The Project would not require or result in the construction of new stormwater**  
14 **drainage facilities (No Impact).**

15 The proposed Project would not increase the impervious surface in the existing Pacific  
16 Gas and Electric (PG&E) right-of-way and therefore would not impact drainage or the  
17 need for new stormwater drainage facilities. Therefore, no impact would occur.

18 **(d) Impact UTI-4: Potential to Result in the Need for Expanded Entitlements to**  
19 **Provide Sufficient Water Supplies.**

20 **The Project would not necessitate expanded entitlements to provide sufficient**  
21 **water supplies (Less than Significant, Class III)**

22 Water may be necessary during construction for dust suppression. The amount of  
23 water depends on various factors, including the length of the subject access road,  
24 weather conditions, road surface conditions, and other site-specific conditions. It is  
25 likely that water would be obtained from a local municipal source within the urban areas  
26 and hauled to the construction site during construction. This minimal amount of water  
27 required would have a less-than-significant impact to water resources (Class III).

28 Operation of the Project would not increase the demand for additional water supplies  
29 such that additional entitlements would be necessary. The replacement and removal of

1 the transmission poles and addition of a 60 kV transmission line would not necessitate  
2 access to a water supply.

3 **(e) Impact UTI-5: Potential to Exceed Capacity of Local Wastewater Treatment**  
4 **Provider.**

5 **The Project would not affect or exceed the capacity of the local wastewater**  
6 **treatment provider (No Impact).**

7 Due to the Project's nature as a transmission line, wastewater is not expected to be  
8 generated during construction or operation of the proposed Project. Therefore, Project  
9 activities would not exceed the capacity of a local wastewater treatment provider and no  
10 impact would occur.

11 **(f) Impact UTI-6: Potential to Exceed Capacity of Local Solid Waste Disposal**  
12 **Site.**

13 **The Project would not exceed the capacity of the local solid waste disposal site**  
14 **(Less than Significant, Class III).**

15 Construction activities would result in the temporary generation of solid waste.  
16 Materials associated with construction activities requiring disposal include asphalt, old  
17 transmission poles, and equipment. All transmission poles and equipment that are  
18 removed from the Project alignment would be taken to the Marysville Substation and  
19 either hauled off site for recycling at a licensed recycling facility or stored on site for  
20 future use. Hazardous wastes (i.e., conductors), would be removed from the right-of-  
21 way and disposed of at a licensed disposal facility. Due to the value of transmission  
22 equipment metals and potential for pole reuse coupled with the small amount of  
23 anticipated waste due to the size of the proposed Project, the amount of construction  
24 waste that would be disposed of at a landfill or other permitted facility is expected to be  
25 minimal and would have a less-than-significant impact on local solid waste facilities and  
26 would not result in the need for expansion of a landfill or other disposal site (Class III).

27 Operational solid waste generation would consist of periodic apparatus replacement.  
28 Similar to construction waste, if the damaged apparatus or Project component cannot  
29 be recycled or refurbished, it would be disposed of at a licensed facility equipped to  
30 handle such waste. Given the extremely infrequent need for operational waste  
31 disposal, this impact would be considered less than significant (Class III).

1 **(g) Impact UTI-7: Potential to Conflict with Federal, State, and Local Statutes and**  
2 **Regulations Related to Solid Waste.**

3 **The Project would not conflict with federal, state, and local solid waste statutes**  
4 **and regulations (No Impact).**

5 The amount of solid waste generated by the proposed Project is expected to be  
6 minimal. As discussed in response to Impact UTI-6, construction activities would  
7 require the disposal of asphalt, old transmission poles, and dismantled transmission  
8 equipment. All solid waste will be disposed of in accordance with federal, state, and  
9 local statutes and regulations. Therefore, the Project would not conflict with applicable  
10 regulations related to solid waste and no impact would occur.

11 **(h) Impact UTI-8: Conflicts with Existing Utilities.**

12 **The Project would not conflict with or interrupt existing utility service with the**  
13 **implementation of appropriate mitigation (Less than Significant with Mitigation,**  
14 **Class II).**

15 Various utilities, including aboveground telephone lines and other transmission lines  
16 and belowground water and wastewater lines, either share or traverse the transmission  
17 line right-of-way. Because the new poles would be slightly offset from those existing,  
18 there is a potential for both deliberate and accidental service interruption of utilities that  
19 may be within the Project alignment. In order to avoid a potential service interruption  
20 impact from occurring, mitigation is provided (Class II).

21 Mitigation Measures for Impact UTI-8:

22 **MM UTI-8a. Protection of Underground Utilities.** Prior to construction of the  
23 transmission line, the applicant shall submit to the California State Lands  
24 Commission written documentation, including evidence of review by the  
25 appropriate jurisdictions, including the following:

- 26                   • Construction plans designed to protect existing utilities and showing  
27                   the dimensions and location of the finalized alignment;

- 1                   • Records that the applicant provided the plans to affected  
2                   jurisdictions, including levee districts, for review, revision, and  
3                   approval;
- 4                   • Evidence that the Project meets all necessary local requirements.

5 **MM UTI-8b. Notification of Utility Service Interruption.** Prior to construction in  
6 which a utility service interruption is known to be unavoidable, the  
7 applicant shall notify members of the public and the utility affected by the  
8 planned outage by mail of the impending interruption. Copies of the  
9 notices and dates shall be provided to the California State Lands  
10 Commission at the time the notices are distributed to the public.

11 Rationale for Mitigation

12 These mitigation measures would protect underground utilities and provide proper  
13 notification of service interruption to the public, thereby reducing impacts to less than  
14 significant (Class II).

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1 3.4 MANDATORY FINDINGS OF SIGNIFICANCE

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1 Impact Discussion

2 **(a) Impact MFS-1: Potential to Degrade the Quality of the Environment, Cause a**  
3 **Fish or Wildlife Population to Fall Below Self-Sustaining Levels, Threaten to**  
4 **Eliminate a Plant or Animal Community, Reduce the Number or Restrict the**  
5 **Range of a Rare or Endangered Plant or Animal or Eliminate Important Examples**  
6 **of the Major Periods of California History or Prehistory.**

7 **Impacts to biological and cultural resources would be considered less than**  
8 **significant with mitigation incorporated (Less than Significant with Mitigation,**  
9 **Class II).**

10 As outlined in Section 3.3.4, Biological Resources, impacts to biological resources may  
11 occur as a result of the Project. However, Mitigation Measures BIO-1a through BIO-1x  
12 would reduce potential impacts to a level that is less than significant. Similarly, Section  
13 3.3.5, Cultural Resources, outlines potential impacts to cultural resources and Mitigation  
14 Measures CUL-1 through CUL-4 would reduce potential impacts to below a level of  
15 significance. Therefore, the Project would not substantially degrade the quality of the  
16 environment, nor would it substantially affect biological resources, including plant  
17 communities, fish and wildlife species, and special-status plant and animal species.  
18 This would result in a less-than-significant impact with mitigation incorporated (Class II).

19 **(b) Impact MFS-2: Cumulative Impacts.**

20 **Cumulative impacts would be considered less than significant with mitigation**  
21 **incorporated (Less than Significant with Mitigation, Class II).**

22 No long-term significant impacts are associated with the Project. An incremental  
23 accumulation of environmental effects may occur temporarily during construction. The  
24 Project as proposed may have cumulative, but not significant impacts on air quality and  
25 hydrology/water quality when combined with other public facility and urban construction  
26 projects and normal vehicular travel occurring throughout the area. Because impacts of  
27 the proposed Project would be less than significant with mitigation, as described in the  
28 previous sections, cumulative impacts would be considered less than significant with  
29 mitigation incorporated (Class II).

1 **(c) Impact MFS-3: Direct or Indirect Impacts on Human Beings.**

2 **All direct and indirect impacts on human beings would be considered less than**  
3 **significant with mitigation incorporated (Less than Significant with Mitigation,**  
4 **Class II).**

5 As discussed in the previous environmental analysis, any economic impacts to  
6 agricultural resources or operations, which could directly or indirectly affect the  
7 livelihood of area farmers, would be mitigated to a level below significance through  
8 Mitigation Measure AGR-1 and Applicant Proposed Measure AGR-3. The Project's  
9 contribution to air quality emissions would be mitigated through incorporation of  
10 pollutant best management practices (see Mitigation Measures AQ-4a through AQ-4f  
11 and AQ-6a through AQ-6h). Potential hazards associated with accidental exposure to  
12 hazardous transmission line waste or contact with live wires during transmission line  
13 stringing would be reduced to less than significant through Mitigation Measures HAZ-2a  
14 through HAZ-2c. Construction within levee structures would follow a strict construction  
15 and follow-up process, as outlined in Mitigation Measures HYD-9a and HYD-9b, to  
16 ensure stability of the levee structure after the poles have been installed. Potential  
17 impacts to temporary noise sources during construction would be mitigated to a less-  
18 than-significant level through implementation of Mitigation Measures NOI-1a through  
19 NOI-1e. Mitigation Measures TRA-4a and TRA-4b would necessitate coordination with  
20 the California Highway Patrol or appropriate law enforcement agency to close local  
21 roadways during stringing operations so as to avoid potential hazards to traffic. Any  
22 potential hazards associated with levee road/trail user and transmission line  
23 construction activities would be mitigated to a level below significance through  
24 implementation of Mitigation Measure TRA-4b. Finally, implementation of Mitigation  
25 Measures UTI-8a and UTI-8b would ensure against hazards associated with impacting  
26 other public utility or infrastructure systems within the Project work area. In summary,  
27 all direct and indirect impacts to humans would be mitigated to a level below  
28 significance (Class II).

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