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1 **1.0 INTRODUCTION**

2 This document is a Mitigated Negative Declaration (MND) with environmental studies
3 that support the justification for an MND. This document has been prepared in
4 accordance with the California Environmental Quality Act (Public Resources Code
5 section 21000 et. seq.) (CEQA) and the CEQA Guidelines (Title 14, California Code of
6 Regulations, section 15000 et seq.).

7 **1.1 PROJECT OBJECTIVES, PURPOSE, AND NEED**

8 Pacific Gas and Electric (PG&E) is proposing to reconstruct an existing 8.3-mile 60 kV
9 transmission line between the Pease and Marysville substations in the Yuba City and
10 Marysville area. PG&E has identified the following objectives for this Project:

- 11 • Improve service reliability to electric customers in Yuba County; and
- 12 • Add transmission capacity to better serve Yuba County.

13 This Project would allow PG&E to continue providing reliable electrical service to the
14 Yuba County and Sutter County areas, in addition to providing sufficient electrical
15 resources to support growth projected within the area served by the Project.
16 Furthermore, installation of automated and more sophisticated equipment would help
17 PG&E better restore service to customers in the event of a power outage.

18 **1.2 PURPOSE AND SCOPE OF THE MITIGATED NEGATIVE DECLARATION**

19 The MND is a public document to be used by the Lead Agency to determine whether
20 the proposed Project may have a significant effect on the environment pursuant to
21 CEQA. The following discussion identifies the ways in which the Lead Agency and any
22 responsible agencies would use this document in the approval and/or permitting
23 processes for the Project. The following discussion summarizes the roles of the
24 agencies and the intended uses of the MND.

25 The California State Lands Commission (CSLC) is acting as the Lead Agency
26 responsible for preparing the MND. PG&E is required to obtain approval of a new
27 General Lease—Right-of-Way Use for operation of the reconstructed/expanded
28 transmission line across the Feather River. CSLC’s leasing jurisdiction is to the low-
29 water mark of the Feather River. The MND will be used by the CSLC to exercise its

1 jurisdictional responsibilities in making its decision to approve a lease of California
2 sovereign lands to PG&E.

3 It should be noted that due to its location within Rancho New Helvetia, the portion of the
4 Project that traverses Jack Slough is not located within sovereign title interest;
5 therefore, issuance of a lease to span this waterway is not required.

6 The proposed Project will also be approved or reviewed by a number of state, federal,
7 and/or local agencies, as noted in Section 1.4, Permits, Approvals, and Regulatory
8 Requirements.

9 **1.2.1 Organization of the Mitigated Negative Declaration**

- 10 • Section 1.0 provides an Introduction to the Objectives, Purpose, and Need for the
11 proposed Project as well as the Purpose and Scope of the MND;
- 12 • Section 2.0 of this MND describes the proposed Project, its location, layout and
13 facilities, and presents an overview of its operation;
- 14 • Section 3.0 is the Initial Study, which describes existing environmental
15 conditions, Project-specific impacts, and mitigation measures;
- 16 • Section 4.0 presents the socioeconomic effects and environmental justice
17 evaluation of the proposed Project;
- 18 • Section 5.0 presents the Mitigation Monitoring Program (MMP);
- 19 • Section 6.0 presents information on those who prepared the report;
- 20 • Section 7.0 lists reference materials used to prepare the report;
- 21 • Section 8.0 lists acronyms and abbreviations used in the report;
- 22 • Appendix A to this MND contains the mailing list;
- 23 • Appendix B contains an air quality emissions model for the proposed Project; and
- 24 • Appendix C contains a listing of the special-status species potentially occurring in
25 the Project area in tabular format.

1 **1.3 PUBLIC REVIEW AND COMMENT**

2 This MND is being circulated to local and state agencies and to interested individuals
3 who may wish to review and comment on the report. Written comments may be
4 submitted to the CSLC during the 30-day public review period. All comments received
5 will be considered for the proposed Project.

6 This MND identifies the environmental impacts of the proposed Project on the existing
7 environment and indicates how those impacts will be mitigated or avoided. This
8 document is intended to provide the CSLC the information required to exercise its
9 jurisdictional responsibilities with respect to the proposed Project, which will be
10 considered at a noticed public meeting of the CSLC.

11 **1.4 PERMITS, APPROVALS, AND REGULATORY REQUIREMENTS**

12 In addition to action by the CSLC, the proposed Project will require the following permits
13 and approvals from reviewing authorities and regulatory agencies:

- 14 • Clean Water Act, Section 404, Certification (use of Nationwide Permit #12)—U.S.
15 Army Corps of Engineers (ACOE);
- 16 • Clean Water Act, Section 401, Certification—California Regional Water Quality
17 Control Board (RWQCB);
- 18 • Endangered Species Act, Section 7, Consultation for potential impacts to giant
19 garter snake—U.S. Fish and Wildlife Service (USFWS);
- 20 • General Permit for Stormwater Discharges Associated with Construction—State
21 Water Resources Control Board;
- 22 • Levee Permit Application—The Central Valley Flood Protection Board (CVFPB)
23 and the Reclamation Board;
- 24 • Local Endorsement—Marysville Levee District;
- 25 • Local Endorsement—Reclamation District 10;
- 26 • Encroachment Permit, for work in county roads—Sutter County Public Works;
- 27 • Encroachment Permit, for work in county roads—Yuba County Public Works;

- 1 • Encroachment Permit, for work in city streets—Yuba City; and
- 2 • Encroachment Permit, for work in city streets and on city-owned levees—city of
- 3 Marysville.

1 **2.0 PROJECT DESCRIPTION**

2 **2.1 PROJECT SETTING**

3 Pacific Gas and Electric (PG&E) is proposing to reconstruct an existing 8.3-mile 60 kV
4 transmission line between the Pease and Marysville substations in the Yuba City and
5 Marysville area. The proposed Project is located in both Yuba and Sutter counties, in
6 the Sacramento Valley area of Central California. Figure 2-1, Regional Map, provides
7 the regional context of the Project.

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

19 **2.2 PROJECT BACKGROUND**

20 PG&E's 60 kV transmission network, with 135 miles of power lines and 10 distribution
21 substations, serves over 70 percent of the electric customers in Yuba County. Due to
22 recent growth, the PG&E transmission planning analysis concluded that the Yuba
23 County 60 kV network is deficient and currently operates at 110 percent design
24 capacity. To add transmission capacity and improve service reliability, PG&E is
25 proposing to reconstruct the existing single-circuit 60 kV transmission line to a double-
26 circuit line.

27 The northern area of Yuba City and Marysville is experiencing a high level of new
28 residential development, including Canterbury Estates and Cresleigh Peaks. Other
29 public infrastructure providers are currently undergoing expansion and improvement
30 projects such as the California Department of Transportation's (Caltrans') State Route
31 99/Pease Road intersection improvements and Sutter County's eventual Pease Road
32 widening project. Electric demand within Yuba County is expected to grow at a rate of

1 three percent per year. This growth, coupled with current system inefficiencies, is
2 prompting the need for additional electric capacity within the region.

3 **2.3 PROPOSED FACILITIES**

4 The proposed Project would reconfigure the existing Pease–Marysville 8.3-mile 60 kV
5 transmission line to a double-circuit wood and tubular steel pole line. The Project would
6 consist of removing all 155 existing 50- to 85-foot-high wooden poles that support the
7 current 60 kV transmission line between the Pease and Marysville substations. Existing
8 wood poles would be replaced with wood poles that are up to 10 feet taller. Angle
9 points and select equipment poles would also be replaced and tubular steel poles,
10 which range from 60 to 105 feet, would be installed for strength and to eliminate the
11 need for guying. Approximately 125 wood poles and 35 tubular steel poles are
12 proposed as replacements. Figure 2-3, Proposed Alignment (West) and Figure 2-4,
13 Proposed Alignment (East), depict the approximate location of the proposed facilities.
14 Figure 2-5, Proposed Transmission Line Cross Section, shows sample dimensions and
15 characteristics of proposed tubular steel poles.

16 **2.4 LAND REQUIREMENTS**

17 The following are land requirements for construction work associated with the
18 transmission line and description of the proposed aboveground facilities.

19 **2.4.1 Transmission Line Right-of-Way and Additional Construction Work Areas**

20 Figure 2-3, Proposed Alignment (West) and Figure 2-4, Proposed Alignment (East),
21 show the proposed work areas for the Project, including construction staging areas and
22 lay-down areas. All work would be contained within the existing PG&E right-of-way with
23 the exception of an existing franchise or utility corridor area north of Pease Road
24 between the Pease Substation and State Route 99.

25 **2.4.2 Aboveground Facilities**

26 The Project would replace 155 wood poles and the existing single-circuit 60 kV
27 transmission line with 125 wood poles that are up to 10 feet taller than the existing
28 poles, 35 tubular steel poles ranging in height from 60 to 105 feet, and a second 60 kV
29 circuit.

1 Figure 2-1 Regional Map

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1 Figure 2-2 Project Overview Map

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1 Figure 2-3 Proposed Alignment (West)

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1 Figure 2-4 Proposed Alignment (East)

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Figure 2-5 Proposed Transmission Line Cross Section

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2.5 CONSTRUCTION PROCEDURES

2.5.1 Transmission Line Reconstruction Procedures

Construction of the overhead transmission line would take place within PG&E's existing right-of-way. A total of 17.5 acres would be disturbed during construction of the Project. Of that total, 17.3 acres would be temporarily disturbed. Areas temporarily disturbed would include lay-down areas, staging areas, pull and tension sites, and splice and snubbing sites. All of the areas that are temporarily disturbed will be restored to preconstruction conditions following Project construction. To eliminate the need to enhance unimproved access routes, those sections of the Project alignment that may become muddy during wet conditions would be scheduled for improvements during dry periods. Once access roads have been established, an area approximately 30 feet by 30 feet would be cleared around each new pole location prior to the commencement of construction activities. This would allow for a safe working area and provide for the placement of equipment, vehicles, and materials at each location.

Installation of new wood poles would begin with the excavation of holes 18 inches in diameter and 10 feet deep. In most cases, new poles would be placed immediately adjacent to the existing pole, "in line" to avoid oversway beyond PG&E's existing alignment. Wood pole holes would be drilled using a truck-mounted auger affixed to PG&E's line trucks. Once excavated, the holes would be cleaned and prepared. New poles would be lifted into place using a mobile crane. The holes would then be backfilled with the excavated material and compacted. Any remaining excavated material would be placed around the holes or spread onto adjacent access roads.

Steel pole holes would be 4 to 6 feet in diameter and 25 feet deep. Holes would be drilled using a 4- to 6-foot auger. Once excavated, the holes would be cleaned and prepared. In the event that soil conditions are unstable, a metal casing (such as a corrugated metal pipe or "culvert" section) would be inserted into the augured hole to keep the wall from caving or sloughing. Holes for new steel poles would require the installation of a concrete foundation. This would involve installation of a reinforcing steel cage and anchor bolt cage followed by the pouring of concrete to form the foundation. The steel pole structures would then be assembled within proximity of each site, and using a mobile crane, each structure would be lifted into position, while the construction crew bolts the pole to the foundation.

Once the new holes and/or concrete foundations are established and the new poles erected, the existing structures would be removed and the lines transferred to the new poles. The old structures would be dismantled by cranes or helicopter and would be hauled away by truck. All transmission poles and equipment that are removed from the Project alignment would be taken to the Marysville Substation and either hauled off site for recycling at the licensed recycling facility or stored on site for future use. Hazardous wastes would be removed from the right-of-way and disposed of at a licensed disposal facility.

It is estimated that approximately four construction crews of 10 workers each would be required to construct the Project. Construction equipment would include backhoes, graders, air compressors, man lifts, generators, drill rigs, truck-mounted augers, flatbed trucks, boom trucks, rigging and mechanic trucks, small to medium-sized cranes, concrete trucks, crew trucks, pullers, tensioners, and wire reel trailers.

2.5.2 Special Construction Techniques

Construction within the existing PG&E right-of-way could necessitate special construction techniques, including possible helicopter installation; levee construction techniques; specialized techniques around roadway and railroad crossings; construction within the vicinity of sensitive resource areas, such as the Feather River; and nighttime construction techniques.

Helicopter Installation. Helicopter assistance would generally occur in the Feather River crossing area.

Levee Construction Techniques. All wood poles currently located within federal flood project levees would be replaced in place (or in the immediate vicinity) with either a wood pole or a tubular steel pole, with the exception of the existing wood pole located atop the eastern levee of the Feather River. This wood pole would be replaced by a steel pole immediately east, completely off the levee structure.

Roadway and Railroad Crossing Construction Techniques. In areas that cross State Route 20, State Route 99, city and county roads, and railroads, guard structures would be established to protect against accidental contact with new conductors during re-stringing. PG&E would install temporary wood H-frame guard structures spanning each site. An auger would be used to excavate the holes where the guard structures would be installed and a crane would lift the structures into place. No concrete

foundations would be required to set the guard structures and no grading or other site work would be required. The temporary guard structures would be removed following the completion of conductor stringing operations and the holes would be backfilled with excavated soil.

Feather River Construction. Given the sensitive nature of the Feather River, several specialized construction techniques will be used to minimize disturbance. An existing pole located between the left bank of the river and the easternmost levee, as well as a pole atop the eastern levee, would be replaced with the installation of two new steel poles immediately outside of the Feather River Levees. Because of the strength and height of the new steel poles, the entire river can be spanned. Once the two new steel poles are erected, the stringing line would be affixed with the aid of a helicopter. The stringing line would then be attached to the stringing equipment on the outside of the levee. Stringing would occur without disturbance to sensitive habitat within the river corridor.

Once the new line has been constructed, the existing pole on the periphery of the riparian area (within the confines of the levee), would be dismantled by hand. After the line has been turned off, a construction worker would scale the wood pole and saw 2 to 4 foot lengths of the pole. The subterranean pole structure would remain in place although the pole would be sawed off at the base. Workers would hand carry sections of the old wood poles to minimize construction equipment intrusion in the sensitive areas.

Nighttime Construction. Construction during summer months could occur at night when daytime temperatures exceed 90 degrees. This would eliminate potential disruption to the electrical grid during peak use. Nighttime construction may also be necessary during transmission line stringing across roadways. Nighttime construction would necessitate portable lighting. In an effort to minimize disruption to adjacent residences, PG&E would utilize the following techniques as necessary:

- Lighting shields;
- Work area shields; and
- Notification to local jurisdictions and/or to affected property owners.

2.6 CONSTRUCTION SCHEDULE

The Project would require approximately 10 to 12 months for completion. Construction would generally occur from 8:00 a.m. to 5:00 p.m., Monday through Friday; however, as described above, nighttime work may occur when daytime temperatures exceed 90 degrees or during transmission line stringing across roadways.

2.7 ENVIRONMENTAL COMPLIANCE INSPECTION AND MITIGATION MONITORING

PG&E would implement the Mitigation Monitoring and Reporting Program (MMRP), as required. The MMRP would be overseen by the CSLC.

2.8 OPERATION, MAINTENANCE, AND SAFETY CONTROLS

Operation or maintenance personnel would require access to the right-of-way for routine maintenance and inspection activities or during emergency situations. Maintenance to the right-of-way would include patrol of the lines, climbing inspections, and maintenance of necessary access and spur roads. PG&E would keep the areas around all structures clear of vegetation and would limit the height of vegetation on the right-of-way. Routine maintenance activities to the transmission towers generally occur every three to four months.

2.9 FUTURE PLANS AND ABANDONMENT

PG&E intends to maintain the proposed Project throughout the life of the transmission line. There are no current plans to abandon either the right-of-way or the proposed Project features.

1 **3.0 ENVIRONMENTAL ANALYSIS**

2 **3.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

3 The environmental factors checked below would be potentially affected by this Project,
4 involving at least one impact that is a “Potentially Significant Impact” (prior to mitigation)
5 as indicated by the checklist on the following pages.

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Aesthetics | <input checked="" type="checkbox"/> Agriculture Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology/Soils |
| <input checked="" type="checkbox"/> Hazards & Hazardous
Materials | <input checked="" type="checkbox"/> Hydrology/Water
Quality | <input type="checkbox"/> Land Use/Planning |
| <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation/Traffic |
| <input checked="" type="checkbox"/> Utilities/Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance | |

1 **3.2 DETERMINATION OF ENVIRONMENTAL DOCUMENT**

2 On the basis of this initial evaluation:

3 I find that the proposed Project COULD NOT have a significant effect on the
4 environment, and a NEGATIVE DECLARATION will be prepared.

5 I find that although the proposed Project could have a significant effect on the
6 environment, there will not be a significant effect in this case because revisions in
7 the Project have been made by or agreed to by the applicant. A MITIGATED
8 NEGATIVE DECLARATION will be prepared.

9 I find that the proposed Project MAY have a significant effect on the environment,
10 and an ENVIRONMENTAL IMPACT REPORT is required.

11 I find that the proposed Project MAY have a “potentially significant impact” or
12 “potentially significant unless mitigated” impact on the environment, but at least one
13 effect 1) has been adequately analyzed in an earlier document pursuant to
14 applicable legal standards, and 2) has been addressed by mitigation measures
15 based on the earlier analysis as described on attached sheets. An
16 ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the
17 effects that remain to be addressed.

18 I find that although the proposed Project could have a significant effect on the
19 environment, because all potentially significant effects (a) have been analyzed
20 adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable
21 standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or
22 NEGATIVE DECLARATION, including revisions or mitigation measures that are
23 imposed upon the proposed Project, nothing further is required.


Signature

4/2/09
Date

Christopher Huitt
Printed Name

California State Lands Commission
For

1 **3.3 EVALUATION OF ENVIRONMENTAL IMPACTS**

2 The MND follows the environmental checklist form presented in Appendix G of the
3 California Environmental Quality Act (CEQA) Guidelines. The checklist form is used to
4 describe the impacts of the proposed Project. A discussion follows each environmental
5 issue identified in the checklist. Included in each discussion are Project-specific
6 mitigation measures incorporated into the proposed Project.

7 For this checklist, the following designations are used:

8 **Potentially Significant Impact:** An impact that could be significant, and for which no
9 mitigation has been identified. If any potentially significant impacts are identified and
10 cannot be mitigated, an Environmental Impact Report (EIR) must be prepared.

11 **Less-Than-Significant Impact With Mitigation Incorporated:** An impact that requires
12 mitigation to reduce the impact to a less-than-significant level.

13 **Less-Than-Significant Impact:** Any impact that would be adverse, but not considered
14 significant.

15 **No Impact:** The Project would not have any impact. This could also include a
16 beneficial impact.

17 Impacts are also classified as:

- 18 • Class I (significant adverse impact that remains significant after mitigation);
- 19 • Class II (significant adverse impact that can be eliminated or reduced below an
20 issue’s significance criteria);
- 21 • Class III (adverse impact that does not meet or exceed an issue’s significance
22 criteria); or
- 23 • Class IV (beneficial impact).

24 Each environmental issue area analyzed in this document provides background
25 information and describes the environmental setting (baseline conditions) to help the
26 reader understand the conditions that would cause an impact to occur. In addition, each
27 section describes how an impact is determined to be “significant” or “less than significant.”
28 Finally, the individual sections recommend mitigation measures (MMs) to reduce
29 significant impacts. Throughout Section 3.0, both impacts and the corresponding MMs
30 are identified by a bold **letter-number designation**, e.g., **Impact BIO-1** and **MM BIO-1**.

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1 **3.3.1 Aesthetics**

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
(a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2 **Environmental Setting**

3 Visual resources of the Project area encompass the on-site landscapes directly affected
 4 by Pacific Gas and Electric's (PG&E's) proposed transmission line upgrade between the
 5 Pease and Marysville substations and the surrounding off-site areas that would be
 6 within view of the proposed Project. This analysis of potential visual effects is based on
 7 review of a variety of data, including Project maps and drawings, aerial and ground-level
 8 photographs of the Project area, relevant governmental plans and policies regarding
 9 visual resources, and a site visit. The visual analysis focuses on changes to
 10 residential/commercial, agricultural, and travel route views, and the effects on
 11 conformity with plans and policies regarding visual quality.

12 Description of Terms and Concepts

13 **Scenic Quality** is a measure of the intrinsic scenic beauty of a landscape and the
 14 positive responses it evokes. Scenic quality is described in terms of the composition of
 15 the built and natural environment, considering landform, vegetation, rocks, cultural

1 features, and water features. The scenic quality of the Project area was evaluated
2 according to the following three classifications.

3 Distinctive: where the landscape composition provides unusual, unique, or outstanding
4 scenic quality. These landscapes have strong positive attributes of variety, unity,
5 vividness, intactness, order, harmony, uniqueness, pattern, and/or balance.

6 Typical: where the landscape composition provides scenic quality that is representative
7 of the area, given the characteristic natural features and land use developments. These
8 landscapes have generally positive, although commonly seen, attributes with respect to
9 variety, unity, vividness, intactness, order, harmony, uniqueness, pattern, and/or
10 balance. These landscapes are representative of the region's natural and ecological
11 qualities and land use patterns.

12 Indistinctive: where the landscape composition provides low scenic quality. These
13 areas typically have weak, degraded, or missing attributes of variety, unity, vividness,
14 intactness, order, harmony, uniqueness, pattern, and/or balance.

15 **Visual Sensitivity** is a measure of an existing landscape's susceptibility to adverse
16 visual changes, based on the combined factors of number and type of viewers and
17 potential visual exposure to the proposed Project. Visual sensitivity is evaluated
18 according to high, moderate, and low visual sensitivity ratings. A landscape with a high
19 degree of visual sensitivity is less able to accommodate adverse visual changes from
20 the proposed Project than areas deemed to be of moderate or low sensitivity. The
21 following describes factors that contribute to a landscape's sensitivity rating.

22 • **Viewer Type and Volume of Use.** This factor considers the type of use and
23 volume of use that various land uses receive that may be visually sensitive to the
24 proposed Project. Areas considered to be of potential high visual sensitivity
25 include residential areas, park and recreation areas, and major travel and
26 recreation routes.

27 • **Viewer Exposure.** This factor addresses the variables that affect viewing
28 conditions from potentially sensitive areas. Viewer exposure considers the
29 following factors: (1) landscape visibility (the ability to see the landscape where
30 the Project will be); (2) the viewing distance (i.e., the proximity of viewers to the
31 Project); (3) the viewing angle (whether the Project would be viewed from above
32 (superior), below (inferior) or from a level (normal) line of sight); (4) extent of

1 visibility (whether the line of sight is open and panoramic to the Project area or
2 restricted by terrain, vegetation, and/or buildings); and (5) duration of view.

3 *Scenic Quality of the Project Area*

4 The Project area, located in the city of Marysville, the Yuba City sphere of influence,
5 and in unincorporated areas of Sutter and Yuba counties, is relatively homogeneous in
6 aesthetic characteristics. The terrain is relatively flat and allows for expansive views of
7 the rural agricultural setting. Agricultural lands, predominately orchards and rice fields,
8 characterize the western and northern portion of the Project area, interspersed with
9 rural and newer suburban residential uses. The eastern portion of the Project is
10 characterized by urban residential, commercial, and industrial uses to the west of the
11 right-of-way corridor and open space to the east. Several levees are along the
12 alignment and partially block views of the transmission line poles.

13 The landscape of the Project area is influenced by human development, but from a few
14 locations on Pease Road where the views are unobstructed by the orchards there are
15 scenic views of the foothills and mountains toward the east and of Sutter Buttes to the
16 west. The western horizon is dominated by the Sutter Buttes, renowned for being the
17 "smallest mountain range in the world." The Sutter Buttes rise to over 2,100 feet above
18 mean sea level (amsl) and provide the only geographic relief in the otherwise level
19 Sacramento Valley (Sutter County 2008c).

20 The road network throughout the area influences the visual character of the area, with
21 corridor types including the state highway routes, a local road system, and private
22 residential access roads and driveways. The existing roadway views along the alignment
23 route are dominated by overhead transmission lines. These roadways can be key
24 vantage points from which to view the Project area. The following provides a description
25 of the views motorists and residents have of the existing transmission line alignment.

26 **Pease Substation to Live Oak Boulevard:** As motorists travel along Pease Road, a
27 collector street, they have existing foreground views of the overhead transmission and
28 phone lines and support poles on both sides of the street. New suburban and rural
29 residential uses along this segment have the same foreground views of the 60 kV line
30 alignment. Photo 1 on Figure 3-1, Representative Views, depicts a view looking
31 westward along Pease Road adjacent to the Cresleigh Peaks housing development.
32 Due to the road widening that occurred because of the housing development, the
33 transmission line support poles are currently in the roadway within this area. This

1 Project will move the lines to the north side of the roadway. The scenic quality of this
2 segment of the alignment is considered “typical.”

3 **Live Oak Boulevard to the Northern Marysville Levee:** This segment primarily
4 traverses through agricultural fields, including orchards and rice fields. There are no
5 major arterials in this segment that provide scenic or open views along the transmission
6 corridor. Photo 2 on Figure 3-1 depicts a view looking eastward from the top of the
7 levee east of Live Oak Boulevard. This view shows a typical view of the alignment
8 through the agricultural fields. The alignment crosses the Feather River in this
9 segment; however, there are no public crossings nearby that provide open views of the
10 transmission line alignment. Along Laurellen Road there are rural residential uses that
11 have foreground views of the existing transmission lines. The scenic quality of this
12 segment of the alignment is considered “typical.”

13 **Northern Marysville Levee to the Marysville Substation:** The homes on Olson
14 Court, located west of the East Marysville Substation, face the transmission line;
15 however, the view of the lines and poles is broken up by the presence of the levee.
16 Residents have views of the top of the lines and poles. The scenic quality of this
17 segment of the alignment is considered “typical.”

18 As motorists travel south on State Route 20/Levee Road, their typical view is of existing
19 overhead transmission lines and support poles on both sides of the street. The east
20 side of State Route 20/Levee Road is bordered by a levee, which provides a partially
21 obstructed view of the transmission line where it is located on the east side of the levee.
22 Urban residential uses are located on the west side of this roadway. Just south of the
23 East Marysville Substation, Glen Street provides a frontage road between the alignment
24 and residential uses down to East 17th Street, which sets residential uses further away
25 from the alignment in this part of the segment. In addition, mature vegetation is planted
26 along Glen Street, providing a visual buffer from the residential uses toward the
27 alignment. Therefore, these residents have partially obstructed views of the alignment.

28 Urban residential, commercial, and light industrial uses are located along the southern
29 end of State Route 22/Levee Road. The majority of the west side of the road is planted
30 with mature vegetation providing a visual buffer of the alignment. Photo 3 on Figure 3-1
31 is a view looking north along State Route 20/Levee Road, which shows mature
32 vegetation along this portion of the alignment. Views of the transmission lines and
33 support poles along this segment are considered “typical” to motorists traveling along
34 the roadway and to residents in this area.

1 Figure 3-1 Representative Views

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1 *Visual Sensitivity of the Project Area*

2 Visual sensitivity is a composite measurement of the overall susceptibility of an area or
 3 viewer group to adverse visual or aesthetic impacts, given the combined factors of
 4 landscape, visual quality, viewer types, exposure conditions, and duration. Table 3.3.1-
 5 1, Visual Sensitivity of the Proposed Project, summarizes the visual sensitivity of the
 6 major viewer types that would be affected by the proposed Project.

7 **Table 3.3.1-1. Visual Sensitivity of the Proposed Project**

Viewer Type	Visual Quality	Viewer Exposure	Visual Sensitivity
Pease Substation to Live Oak Boulevard			
Residential New suburban	Typical	Foreground distances; unobstructed and partially obstructed views; medium number of viewers; moderate view duration	Moderate
Rural	Typical	Foreground distances; unobstructed and partially obstructed views; low number of viewers; long view duration	Moderate
Travel Routes Pease Road	Typical	Foreground distances; unobstructed and partially obstructed views; high number of viewers; long view duration	Moderate to low
Live Oak Boulevard to Northern Marysville Levee			
Rural Residential	Typical	Foreground distances; unobstructed and partially obstructed views; low number of viewers; moderate view duration	Moderate
Travel Routes Local and agricultural roads	Typical	Foreground distances; unobstructed and partially obstructed views; low number of viewers; long view duration	Low
Northern Marysville Levee to Marysville Substation			
Urban Residential	Typical	Foreground distances; unobstructed and partially obstructed views; high number of viewers; moderate view duration	Moderate
Travel Routes State Route 22/Levee Road	Typical	Foreground distances; unobstructed and partially obstructed views; high number of viewers; long view duration	Moderate to low

8 **Regulatory Setting**

9 Federal

10 There are no federal regulations that apply to potential impacts on aesthetic resources
 11 in the Project area.

1 State

2 The California Department of Transportation Scenic Highway Program was established
3 in 1963 to preserve corridors of outstanding scenic quality. The selection of scenic
4 routes throughout the state has been based on the concept that such routes should:

- 5 • Traverse areas of high visual quality or significant landscape features;
- 6 • Be interconnected and part of a “network”;
- 7 • Be coordinated with bicycle routes;
- 8 • Be predominantly used for recreation; and
- 9 • Connect major recreational, historical, or cultural features (Caltrans 2007a).

10 Local

11 The city of Marysville, Yuba City, and Sutter and Yuba counties have goals and policies
12 in their various General Plan elements regarding natural scenic areas with provisions
13 that they should be maintained and protected from encroachment and development.
14 However, these plans do not specifically address goals and policies in regard to views
15 within public utility transmission corridors.

16 **Impact Analysis and Mitigation**

17 Impact Discussion

18 **(a) Impact AES-1: Potential Adverse Effect on a Scenic Vista.**

19 **The Project would not have a substantial adverse effect on a scenic vista (Less**
20 **than Significant, Class III).**

21 The proposed Project would reconfigure the existing Pease–Marysville 8.3-mile 60 kV
22 transmission line to a double-circuit wood pole line. The western segment of the Project
23 traverses orchards and row crops, which are important scenic resources to the
24 community. However, once construction is completed, the visual environment along the
25 alignment route will be similar to that which currently exists. The existing wood poles
26 range in height from 50 to 85 feet and the new wood poles would be up to 10 feet taller.
27 The scale and character of the wood replacement poles would be consistent with the

1 existing views of the Pease–Marysville 60 kV transmission line and would not
2 substantially affect existing views. The tubular steel poles, which could be up to 105
3 feet in height (approximately 20 to 55 feet higher than the existing wood poles), would
4 be placed intermittently along the 8.3-mile alignment. Views of the proposed tubular
5 steel poles would be limited to foreground viewing distances due to both view blockages
6 generated by community uses and the on-site elevations that are similar to the
7 surrounding area. Although taller, the placement of new tubular steel poles
8 intermittently along the 8.3-mile alignment would be similar in nature to the existing
9 poles and would not be considered a significant aesthetic alteration or impact.
10 Therefore, impacts to scenic vistas would be less than significant (Class III).

11 **(b) Impact AES-2: Potential to Damage Scenic Resources within a State Scenic**
12 **Highway.**

13 **The Project would not damage scenic resources, including trees, rock**
14 **outcroppings, and historic buildings within a state scenic highway (No Impact).**

15 According to state and local plans for the Project site, no state scenic highway or other
16 state scenic resources exist in the Project area or on site. Therefore, the proposed
17 Project would have no impact to scenic resources within a state scenic highway.

18 **(c) Impact AES-3: Potential to Degrade the Existing Visual Character or Quality**
19 **of the Site and Surroundings.**

20 **The Project would not substantially degrade the existing visual character or**
21 **quality of the site and its surroundings (Less than Significant, Class III).**

22 Construction-related impacts to visual quality would result from the presence of
23 construction equipment, materials, and work crews along the transmission line corridor
24 and on local access roads and staging areas. Crews would be required to maintain
25 clean work areas as they proceed along the line and would not leave any debris behind
26 at any stage of the Project. The construction impacts to visual quality would be
27 relatively short term in duration (approximately 10 to 12 months, spread out along
28 different portions of the transmission line alignment). Overall, the presence of
29 construction crews and equipment during the construction phase would create short-
30 term aesthetic impacts to the local area, including impacts to motorists traveling along
31 Pease Road and State Route 20/Levee Road, as well as for residents in the rural, new

1 suburban, and urban areas of the alignment. However, these impacts are considered
2 less than significant due to the short-term duration of the visual effect (Class III).

3 Long-term impacts to the existing visual quality of the areas would be most noticeable
4 from major roadways where the transmission line is part of the foreground. In locations
5 where the transmission line is effectively screened from public views by the agricultural
6 fields and other natural and urban features, such as the levees, the impacts to visual
7 quality are considered less noticeable. As depicted on Figure 2-3, Proposed Alignment
8 (West), and Figure 2-4, Proposed Alignment (East), the tubular steel poles would be
9 located intermittently along the alignment but specifically concentrated near the Pease
10 Substation along Pease Road between State Route 99 and Live Oak Boulevard and
11 along the Yuba River levee, between the East Marysville Substation and the Marysville
12 Substation. The presence of these new tubular steel poles, within the vicinity of the
13 Pease Substation and along Pease Road, would not represent a dominate land use
14 within this corridor given the presence of several aboveground utility lines. Similarly,
15 there are several existing aboveground utility lines along State Route 20 (see Photo 3
16 on Figure 3-1, Representative Views), which would reduce the impact of several new
17 tubular steel poles within this roadway view corridor.

18 Finally, as discussed under Impact AES-4, the scale and character of the proposed
19 Project would be consistent with the existing views of the Pease–Marysville 60 kV
20 transmission line and would not substantially affect the existing visual character or
21 quality of the site and its surroundings. Therefore, impacts to the existing visual
22 character of the site and surroundings would be less than significant (Class III).

23 **(d) Impact AES-4: Potential to Create a New Source of Substantial Light or Glare**
24 **Adversely Affecting Day or Nighttime Views.**

25 **The Project would not adversely affect day or nighttime views by creating a new**
26 **source of substantial light or glare with implementation of appropriate mitigation**
27 **(Less than Significant with Mitigation, Class II).**

28 The addition of 35 new tubular steel poles could alter glare potential from the existing
29 wood poles. However, the tubular steel poles would be a light, non-reflective shade of
30 matte gray and would not create a new source of substantial light or glare, which would
31 adversely affect day or nighttime views in the area.

1 During construction, nighttime lighting could occur during summer months when
2 daytime temperatures exceed 90 degrees. Nighttime construction may also be
3 necessary during transmission line stringing across roadways. PG&E would use
4 portable lighting during nighttime construction activities. The nighttime light and glare
5 associated with this construction activity would be mitigated to less than significant with
6 implementation of Mitigation Measure AES-4 (Class II).

7 Mitigation Measure for Impact AES-4:

8 **MM AES-4. Nighttime Lighting and Glare Reduction Techniques.** During nighttime
9 construction, PG&E will use the following techniques to reduce impacts to
10 adjacent residents:

- 11 • Lighting shields;
- 12 • Work area shields; and
- 13 • Notification to local jurisdictions and/or affected property owners.

14 Rationale for Mitigation

15 Implementation of this mitigation measure would ensure that nighttime lighting and glare
16 introduced by the Project would be reduced to less than significant (Class II).

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1 **3.3.2 Agriculture Resources**

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<p><i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:</i></p>				
<p>(a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>(b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>(c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2 **Environmental Setting**

3 Regional Setting

4 Western Yuba County and Sutter County land uses are dominated by agriculture,
 5 including fruit and nut orchards, cultivated field crops, and dry pasture land (Yuba
 6 County 2007; Sutter County 2008a). It is estimated that approximately 55 percent of
 7 Yuba County and 88 percent of Sutter County land is dominated by agricultural
 8 operations (State of California 2007a, 2007b). The gross agricultural production value

1 for Yuba County and Sutter County farms totaled \$153,364,000 and \$377,950,800,
2 respectively, in 2007 (Yuba County 2007; Sutter County 2008b).

3 Local Setting

4 As seen on Figure 2-3, Proposed Alignment (West), and Figure 2-4, Proposed
5 Alignment (East), a majority of the existing Pease–Marysville alignment traverses or is
6 located adjacent to existing orchards and/or cultivated agricultural fields. Approximately
7 4.5 miles of the total alignment traverses or is located adjacent to agricultural lands,
8 including 2.6 miles in Yuba County and 1.9 miles in Sutter County. Beginning east of
9 the Pease Substation, the alignment traverses the northern edge of orchards located
10 immediately south of the roadway. East of Live Oak Boulevard, the transmission line
11 traverses or runs adjacent to several fruit and nut orchards before reaching the western
12 bank of the Feather River. Once east of the eastern levee of the Feather River, the
13 transmission line is located along the edge of several fruit and nut orchards along
14 Laurellen Road. The alignment bisects an existing orchard immediately east of
15 Highway 70. The alignment then traverses an existing rice field between the two
16 railroad spurs. East of the easternmost railroad spur, the alignment is located alongside
17 or within existing orchards until its intersection with the levee surrounding the northern
18 end of the city of Marysville, south of an unnamed irrigation channel. The final portions
19 of the existing transmission line are located along the eastern edge of the city of
20 Marysville and/or within the levee that protects the western bank of the Yuba River and
21 is therefore not located within agricultural areas.

22 **Regulatory Setting**

23 Federal

24 There are no federal regulations that pertain to agricultural resources relevant to this
25 Project.

26 State

27 *Prime Farmland and Farmland of Statewide Importance*

28 The State of California Farmland Mapping and Monitoring Program produces maps and
29 statistical data used for analyzing impacts on California’s agricultural resources.
30 Agricultural land is rated according to soil quality and irrigation status; the best quality
31 land is designated as Prime Farmland (Department of Conservation 2007c).

1 The existing/proposed transmission line crosses lands designated as prime farmland,
2 as well as farmland of statewide importance within Yuba County (Department of
3 Conservation 2007a). Prime farmlands are generally located adjacent to Jack Slough
4 and west of Highway 70, north of Laurellen Road. Farmlands of statewide importance
5 are generally located northwest of the East Marysville Substation and west of Jack
6 Slough between Jack Slough and Highway 70.

7 Within Sutter County, specifically the area west of the Feather River between the
8 Feather River and Live Oak Boulevard, the existing/proposed transmission line crosses
9 lands designated as farmland of statewide importance and prime farmland (Department
10 of Conservation 2007b). West of Highway 99 along Pease Road, the existing/proposed
11 transmission line crosses land designated as farmland of statewide importance.

12 *Williamson Act*

13 The California Land Conservation Act of 1965, commonly referred to as the Williamson
14 Act, enables local governments to enter into contracts with private landowners for the
15 purpose of restricting specific parcels of land to agricultural or related open space use,
16 and provides landowners with lower property tax assessments. Local government
17 planning departments are responsible for the enrollment of land into Williamson Act
18 contracts (Department of Conservation 2007c). The Williamson Act states that a board
19 or council, by resolution, shall adopt rules governing the administration of agricultural
20 preserves. The rules of each agricultural preserve specify the uses allowed. Generally,
21 any commercial agricultural use would be permitted within any agricultural preserve. In
22 addition, local governments may identify compatible uses pursuant to an approved use
23 permit (Department of Conservation 2007c).

24 Within Sutter County, the existing/proposed transmission line does not and would not
25 traverse lands enrolled in a Williamson Act or Farmland Security Zone Contract as of
26 January 1, 2006 (State of California 2006). Yuba County does not participate in the
27 Williamson Act program (Yuba County 2004).

28 Local

29 The existing/proposed transmission line is located in Yuba and Sutter counties and the
30 city of Marysville. The transmission line is also located within Yuba City's sphere of
31 influence.

1 A portion of the existing/proposed transmission line west of State Route 99 and north of
2 Pease Road (within Sutter County) traverses land designated as Agriculture, 20-acre
3 minimum parcel, by the Sutter County General Plan Land Use Map (Sutter County
4 2008a).

5 *City of Marysville*

6 The city of Marysville General Plan does not contain goals, objectives, or policies
7 pertinent to agricultural resources (City of Marysville 1985).

8 *Yuba County*

9 According to the Zoning Map for Yuba County, the existing/proposed alignment
10 traverses or is located adjacent to lands within the Exclusive Agriculture minimum 40-
11 acre parcel (AE-40) zone (Yuba County 2004). As stated in Title XII, section 12.20.040
12 (14) of the Yuba County Zoning Ordinance, public utility buildings and public service or
13 utility uses, including power stations and transformer stations, are not permitted within
14 the AE-40 zone without a use permit. Transmission and distribution lines are an
15 exception to this requirement—they are allowed within the AE-40 zone and do not
16 require a use permit (Yuba County 2008a).

17 *Sutter County*

18 According to the Zoning Map for Sutter County, the existing/proposed alignment
19 traverses or is located adjacent to lands within the General Agriculture (AG) zoning
20 district. As stated in the Sutter County Zoning Code (§1500-1412), new electrical
21 distribution lines are not permitted within the AG zoning district without a use permit
22 (Sutter County 2008c). Reconstruction of an existing line within an existing right-of-way
23 does not require a use permit and is therefore an allowable use within the General
24 Agriculture zoning district (Vergis, pers. comm. 2009).

25 *Yuba City*

26 The Yuba City General Plan Environmental Conservation chapter outlines goals,
27 objectives, and policies primarily relating to preserving agricultural resources outside the
28 urban growth area.

1 **Impact Analysis and Mitigation**

2 Impact Discussion

3 **(a) Impact AGR-1: Conversion of Prime Farmland, Unique Farmland, or Farmland**
4 **of Statewide Importance (Farmland), as Shown on the Maps Prepared Pursuant to**
5 **the Farmland Mapping and Monitoring Program of the California Resources**
6 **Agency, to Non-Agricultural Use.**

7 **Project construction would not result in the conversion of designated farmland to**
8 **non-agricultural use (Less than Significant, Class III).**

9 The proposed renovation of the existing transmission line, including addition of a new
10 60 kV transmission line to the circuit, would occur within PG&E's existing right-of-way.
11 All new poles would be located immediately adjacent to the existing poles. Construction
12 of the new poles immediately adjacent to the existing poles would entail permanent
13 conversion of these portions of agricultural fields to non-agricultural use. However,
14 because the amount of land that would be disturbed is so minor and so close to the
15 existing pole locations, impacts to the ability of surrounding agricultural operations to
16 continue agricultural activities within the Project area would not change as a result of
17 the proposed Project.

18 During construction, temporary conversion of prime farmland and farmland of statewide
19 importance in the rice field between the two railroad spurs would occur. Within Yuba
20 County, approximately 2.6 miles of the alignment traverses or is located adjacent to
21 agricultural lands, while in Sutter County approximately 1.9 miles of the alignment
22 traverses or is located adjacent to agricultural lands. Within the rice field near Jack
23 Slough, water checks would be installed approximately 125 feet from either side of the
24 alignment to ensure a dry surface within which to operate construction equipment.
25 Installation of the water checks would render the rice field temporarily unusable for
26 agricultural production for a season. However, due to the temporary nature of the
27 impact to farmland resources, this impact would be less than significant (Class III).

1 **(b) Impact AGR-2: Conflict with Existing Zoning for Agricultural Use or a**
2 **Williamson Act Contract.**

3 **Project construction would not conflict with existing zoning for agricultural use**
4 **or lands protected under a Williamson Act contract (Less than Significant,**
5 **Class III).**

6 According to Title XII of the Yuba County Zoning Ordinance, transmission and
7 distribution lines are allowable uses within agricultural lands. Chapter 15, Division 14 of
8 the Sutter County Zoning Code indicates that all new transmission lines and structures
9 are not permitted in agricultural lands without a use permit. The existing transmission
10 line was constructed in the early 1950s (Viscarra, pers. comm. 2009). However,
11 because the Project consists of reconstruction of a new transmission line in place of the
12 existing line, a use permit is not required (Vergis, pers. comm. 2009). Therefore,
13 impacts would be considered less than significant (Class III).

14 Project activities would not conflict with a Williamson Act contract as no lands within the
15 existing/proposed transmission line alignment are within Williamson Act contracts.
16 Therefore, no impact to Williamson Act lands would occur.

17 **(c) Impact AGR-3: Involve Other Changes in the Existing Environment, Which**
18 **Could Result in Conversion of Farmland to Non-Agricultural Use.**

19 **Impacts associated with Project activities that could involve changes in the**
20 **existing environment, which, due to their location or nature, could result in the**
21 **conversion of Farmland to non-agricultural use, will be mitigated to less than**
22 **significant (Less than Significant with Mitigation, Class II).**

23 All construction access routes are existing and current conditions allow construction
24 vehicle access during dry periods. Therefore, the Project would not necessitate new
25 roadway construction or improvements that could lead to conversion of agricultural
26 resources (Farmland) to non-agricultural use.

27 As discussed under Impact AGR-1, construction activities would occur along the
28 proposed alignment route, which is located within the existing PG&E right-of-way, and
29 which currently supports the existing 60 kV transmission line. Removal and
30 replacement of transmission poles and stringing of replacement transmission line would
31 constitute a temporary, short-term disruption to farmland along the proposed alignment

1 route. The economic impact caused by the temporary fallowing of the rice fields or
2 orchard trees will be mitigated by the following applicant proposed measure (Class II).

3 Applicant Proposed Measure (APM) for Impact AGR-3

4 **APM AGR-3. Compensation for Temporary Impact to Agricultural Land.** Pursuant
5 to Pacific Gas and Electric's right-of-way joint use policy, the rice farmer
6 shall be fully compensated for the temporary loss of this portion of their
7 rice field. Further, any damage to or removal of orchard trees shall require
8 full compensation to the owner.

9 Rationale for Mitigation (Applicant Proposed Measure)

10 The applicant proposed measure will provide for adequate compensation to local
11 farmers whose crops or production cycles are affected as a result of construction of the
12 Project (Class II).

13 Orchard crops within the Project area are often sprayed with pesticides to reduce
14 potential insect infestation. Pesticides are typically applied via low-flying aircraft. As
15 stated in Section 2.3 of the Project Description, existing wood transmission poles would
16 be replaced with wood poles that are up to 10 feet taller than the existing wood poles,
17 which may result in a conflict with the application of pesticides via low-flying aircraft.
18 Disclosure of the height of Project structures to landowners and aerial pesticide
19 applicators would minimize the potential for conflicts with low-flying aircraft.
20 Additionally, the use of cranes and helicopters to install and string the replacement
21 transmission line may result in a conflict with low-flying aircraft, a potentially significant
22 impact. Implementation of the following mitigation measure would reduce this impact to
23 a less-than-significant level (Class II).

24 Mitigation Measure for Impact AGR-3:

25 **MM AGR-3. Advanced Notification of Project Activity.** At least 30 days before
26 cranes, helicopters, and stringing operations are employed along the
27 alignment, the applicant shall notify landowners, aerial applicators, and the
28 Sutter and Yuba County Farm Bureaus to provide adequate warning of
29 potential helicopter and/or crane activity within the Project vicinity. Prior to
30 construction, the Project applicant shall consult with the Sutter County
31 Department of Agriculture, the Yuba County Agricultural Commissioner's
32 Office, and local landowners whose lands are traversed by the proposed

1 alignment in order to identify the aerial pesticide applicators operating in
2 the immediate Project area. Once identified, aerial applicators shall be
3 provided written notification detailing the location of the Project area, the
4 location of transmission poles, and when the new poles would be erected.
5 The notification shall also state the location of the new transmission line.
6 In addition to written notification, the applicant shall also provide aerial
7 photos and/or topographic maps clearly showing the location of the new
8 transmission line and poles.

9 Rationale for Mitigation

10 This mitigation measure will provide for adequate warning to those potentially affected
11 by helicopter and/or crane activities associated with Project installation and will avoid
12 potential conflicts with low-flying aircraft. Impacts would be reduced to less than
13 significant (Class II).

1 3.3.3 Air Quality

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Where available, the significance criteria established by the applicable air quality management or air pollution district may be relied upon to make the following determinations. Would the project:</i>				
(a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(f) Contribute significantly to the production of Greenhouse Gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1 Environmental Setting

2 Criteria air pollutants are those air pollutants for which federal or state air quality
3 regulatory agencies have adopted ambient air quality standards. Criteria air pollutants
4 include ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂),
5 particulate matter (PM₁₀ and PM_{2.5}), and lead. Most of the criteria pollutants are emitted
6 directly from sources such as motor vehicles, construction equipment, and stationary
7 industrial sources. Ozone, however, is a secondary pollutant that is formed in the
8 atmosphere by chemical reactions between nitrogen oxides (NO_x) and reactive organic
9 gases (ROGs). Particulate matter may also be formed from reactions between other air
10 pollutants, such as NO_x and sulfur oxides (SO_x).

11 The attainment status of criteria air pollutants with federal and state ambient air quality
12 standards is classified in each air basin, county, or in some cases, within a specific
13 urbanized area. The classification is determined by comparing actual monitoring data
14 with national and California ambient air quality standards (NAAQS and CAAQS).
15 Generally, if the recorded concentrations of a pollutant are lower than the standard, the
16 area is classified as “attainment” for that pollutant. If an area exceeds the standard, the
17 area is classified as “nonattainment” for that pollutant. If there are not enough data
18 available to determine whether the standard is exceeded in an area, the area is
19 designated “unclassifiable” (federal designation) or “unclassified” (state designation).

20 The Project site is located in the Sacramento Valley Air Basin. Air quality models relating to
21 the proposed Project are provided as Appendix B, Construction Emissions Model, for
22 reference. The southern portion of Sutter County is in nonattainment with the federal 8-hour
23 ozone standard; however, the Project site is located to the north of the nonattainment area
24 boundary. Both Sutter and Yuba counties are in nonattainment of the state standards for
25 ozone (1-hour and 8-hour standards) and particulate matter less than 10 microns in diameter
26 (PM₁₀). Designations with respect to NAAQS and CAAQS in the area of the proposed
27 Project are summarized in Table 3.3.3.-1, State and Federal Attainment Designations.

1 **Table 3.3.3.-1. State and Federal Attainment Designations**

Air Pollutant	State Designation	Federal Designation
Ozone (O3)	Nonattainment	Unclassifiable/Attainment
Nitrogen Dioxide (NO2)	Attainment	Unclassifiable/Attainment
Carbon Monoxide (CO)	Sutter – Attainment Yuba – Unclassified	Unclassifiable/Attainment
Sulfur Dioxide (SO2)	Attainment	Unclassifiable
Respirable Particulate Matter (PM10)	Nonattainment	Unclassifiable
Fine Particulate Matter (PM2.5)	Unclassified	Unclassifiable/Attainment
Lead	Attainment	Attainment
Sulfates ¹	Attainment	—
Hydrogen Sulfide ¹	Attainment	—
Vinyl Chloride ¹	Unclassified	—
Visibility-Reducing Particles ¹	Unclassified	—

2 ¹ No NAAQS have been established for these pollutants.

3 The nearest air monitoring station to the proposed Project is located on Almond Street
4 in Yuba City; no monitoring stations are located in Yuba County. Table 3.3.3-2,
5 Summary of Ambient Air Quality Data in the Vicinity of the Proposed Project, presents
6 the recorded concentrations of the primary air pollutants of concern in the vicinity of the
7 proposed Project.

1 **Table 3.3.3-2. Summary of Ambient Air Quality Data in the Vicinity of the**
 2 **Proposed Project**

	Units	Ambient Air Quality Standard	2005	2006	2007
Ozone (O₃)					
Maximum 1-hour concentration	ppm	—	0.092	0.102	0.095
Days over state standard	—	0.090 ppm	0	1.0	0
Maximum 8-hour concentration	ppm	—	0.074	0.081	0.082
Days over state standard	—	0.070 ppm (state)	7.0	13.0	6.0
Days over federal standard ¹	—	0.075 ppm (federal)	0	4.0	3.0
Nitrogen Dioxide (NO₂)					
Maximum 1-hour concentration	ppm	—	0.062	0.070	0.054
Days over state standard ²	—	0.180 ppm	0	0	0
Annual concentration	ppm	0.030 ppm (state) 0.053 ppm (federal)	0.012	0.012	0.012
Carbon Monoxide (CO)					
Maximum 1-hour concentration	ppm	—	4.4	3.1	N/A
Days over state standard	—	20.0 ppm	0	0	0
Days over federal standard	—	35.0 ppm	0	0	0
Maximum 8-hour concentration	ppm	—	3.4	2.3	N/A
Days over state standard	—	9.0 ppm	0	0	0
Days over federal standard	—	9.0 ppm	0	0	0
Respirable Particulate Matter (PM₁₀)					
Maximum 24-hour conc. (state method)	µg/m ³	—	60.0	66.0	54.0
Samples over state standard	—	50.0 µg/m ³	5.0	4.0	1.0
Maximum 24-hour conc. (federal method)	µg/m ³	—	59.0	63.0	51.0
Samples over federal standard	—	150.0 µg/m ³	0	0	0
Annual concentration (state method)	µg/m ³	20.0 µg/m ³	25.0	ND	ND
Annual concentration (federal method)	—	none	24.7	23.0	19.7
Fine Particulate Matter (PM_{2.5})					
Maximum 24-hour conc. (state method)	µg/m ³	—	45.0	42.0	45.0
Maximum 24-hour conc. (federal method)	—	—	47.2	51.6	55.8
Samples over federal standard	—	35.0 µg/m ³	2	3	6
Annual concentration (state method)	µg/m ³	12.0 µg/m ³	10.2	11.2	ND
Sulfur Dioxide³ (SO₂)					
Maximum 24-hour concentration	ppm	—	0.002	0.003	0.004
Days exceeding state standard	—	0.040 ppm	0	0	0
Annual concentration	—	0.030 ppm	0.001	0.001	0.001

3 Notes: ND—insufficient data available to determine.

4 N/A—data are not available from the listed sources.

5 ¹ The federal O₃ standard was revised effective May 27, 2008, to lower the 8-hour standard to 0.075 ppm. The
 6 statistics for O₃ reflect the previous federal standard of 0.080 ppm.

7 ² The state NO₂ standard was amended February 22, 2007, to lower the 1-hour state standard to 0.180 ppm and establish
 8 a new annual state standard of 0.030 ppm. The statistics for NO₂ reflect the previous state standard of 0.250 ppm.

9 ³ Sulfur dioxide is not monitored in Yuba or Sutter counties. The nearest monitoring station is North Highlands—
 10 Blackfoot Way in Sacramento County.

11 Sources: CARB 2008a; U.S. EPA 2008.

1 Greenhouse Gases

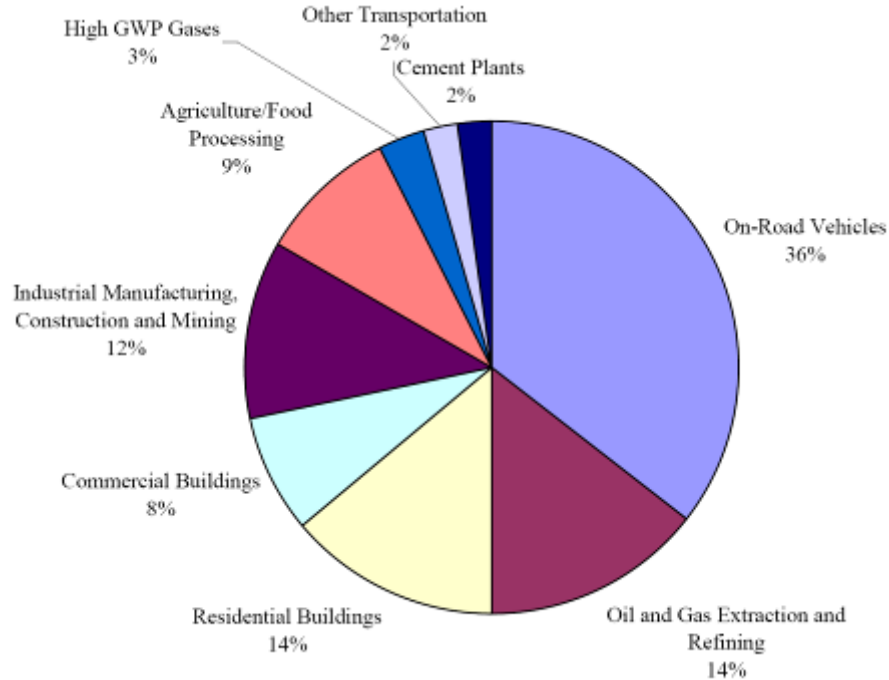
2 In December 2007, the California Air Resources Board (CARB) approved a greenhouse
 3 gas (GHG) emissions target for 2020 equivalent to the state's calculated GHG gas
 4 emissions level in 1990. CARB developed the 2020 target after extensive technical
 5 work and a series of stakeholder meetings. The 2020 target of 427 million metric tons
 6 carbon dioxide equivalent (MMTCO₂e) requires the reduction of 169 MMTCO₂e, or
 7 approximately 30 percent, from the state's projected 2020 emissions of 596 MMTCO₂e
 8 (business as usual (BAU)) and the reduction of 42 MMTCO₂e, or almost 10 percent,
 9 from 2002 to 2004 average emissions. CARB GHG emission inventories are
 10 summarized by source sectors in Table 3.3.3-3, 2002–2004 Average Emissions and
 11 2020 Projected Emissions (MMTCO₂e).

12 **Table 3.3.3-3. 2002–2004 Average Emissions and 2020 Projected Emissions**
 13 **(MMTCO₂e)**

Sector	2002–2004 Average Emissions (MMTCO ₂ e)	Projected 2020 Emissions (BAU) (MMTCO ₂ e)
Transportation	179.3	225.4
Electricity	109.0	139.2
Commercial and Residential	41.0	46.7
Industry	95.9	100.5
Recycling and Waste	5.6	7.7
High GWP	14.8	46.9
Agriculture	27.7	29.8
Forest Net Emissions	-4.7	0.0
<i>Emissions Total</i>	<i>469 MMTCO₂e</i>	<i>596 MMTCO₂e</i>

14 Source: CARB 2008b.

15 The following pie chart presents California's historic GHG emissions in a different way,
 16 based not on the source of the emissions, but on the end use. This chart highlights the
 17 importance of addressing on-road transportation sources of GHG emissions, as well as
 18 the significant contribution from the heating, cooling, and lighting of buildings.



1 In summary, the data shown in this section provide two ways to look at California’s GHG
 2 profile: emissions based and end-use (demand-side) based. While it is possible to
 3 illustrate the inventory many different ways, no chart or graph can fully display how
 4 diverse economic sectors fit together. California’s economy is a web of activity where
 5 seemingly independent sectors and subsectors operate interdependently and often
 6 synergistically.

7 **Regulatory Setting**

8 Federal

9 *U.S. Environmental Protection Agency*

10 The U.S. Environmental Protection Agency (U.S. EPA) is the federal agency
 11 responsible for setting and enforcing the federal ambient air quality standards for
 12 atmospheric pollutants and regulates emission sources that are under the exclusive
 13 authority of the federal government, such as aircrafts, ships, and certain locomotives.
 14 U.S. EPA also has jurisdiction over emissions sources outside state waters (outer
 15 continental shelf), and establishes various emissions standards for vehicles sold in
 16 states other than California.

1 As part of its enforcement responsibilities, U.S. EPA requires each state with
2 nonattainment areas to prepare and submit a State Implementation Plan (SIP) that
3 demonstrates the means to attain the federal standards. The SIP must integrate
4 federal, state, and local plan components and regulations to identify specific measures
5 to reduce pollution in nonattainment areas using a combination of performance
6 standards and market-based programs.

7 *Federal Clean Air Act*

8 The Federal Clean Air Act (CAA), as amended, establishes air quality standards for
9 several pollutants. These standards are divided into primary standards and secondary
10 standards. Primary standards are designed to protect public health and secondary
11 standards are intended to protect public welfare from effects such as visibility reduction,
12 soiling, nuisance, and other forms of damage. CAA requires that regional plans be
13 prepared for nonattainment areas to demonstrate how the federal air quality standards
14 will be met. Collectively, these regional plans and rules and regulations adopted
15 pursuant to the plans comprise the SIP. The SIP is submitted by a state to the U.S.
16 EPA for approval.

17 State

18 *California Air Resources Board*

19 The California Air Resources Board (CARB), a branch of the California Environmental
20 Protection Agency (California EPA), is responsible for the coordination and
21 administration of both federal and state air pollution control programs within California.
22 CARB conducts research, sets state ambient air quality standards, compiles emission
23 inventories for criteria pollutants and toxic air contaminants, develops suggested control
24 measures, and provides oversight of local programs. CARB establishes emissions
25 standards for motor vehicles sold in California, consumer products (e.g., hairspray,
26 aerosol paints, and barbecue lighter fluid), and various types of commercial equipment.
27 It also sets fuel specifications to further reduce vehicular emissions. CARB also has
28 primary responsibility for the development of California's SIP, in conjunction with the US
29 EPA and the local air districts.

30 *California Clean Air Act*

31 The California Clean Air Act of 1988 requires nonattainment areas to achieve and
32 maintain the state ambient air quality standards by the earliest practicable date and

1 local air districts to develop plans for attaining state ozone, carbon monoxide, nitrogen
2 dioxide, and sulfur dioxide standards.

3 *Portable Equipment Registration Program*

4 CARB also implements the portable equipment registration program, which may apply
5 to equipment, such as portable generators and compressors, used to construct the
6 proposed Project. Owners or operators of portable engines and certain other types of
7 equipment can register their units under the CARB Statewide Portable Equipment
8 Registration Program (PERP) in order to operate their equipment throughout California
9 without having to obtain individual permits from local air districts. To be registered
10 under PERP, equipment must comply with certain requirements, including Best
11 Available Control Technology, in lieu of meeting local air district requirements (CARB
12 2006).

13 *Airborne Toxic Control Measure for Construction Equipment*

14 In July 2007, CARB adopted an Airborne Toxic Control Measure (ATCM) to reduce
15 emissions from existing off-road diesel vehicles used in California in construction,
16 mining, and other industries. The regulation applies to self-propelled vehicles that are
17 not registered to operate on highways, such as loaders, crawler tractors, skid steers,
18 backhoes, forklifts, and airport ground support equipment. The regulation does not
19 apply to stationary equipment or portable equipment, such as generators. The
20 regulation establishes fleet average emission rates for particulate matter and nitrogen
21 oxide that decline over time. To achieve the requirements of the regulation, the
22 equipment owner must replace the equipment, repower it (i.e., replace older engines
23 with newer engines), or retrofit it with certified emission-control devices. Large fleets,
24 such as those owned by Pacific Gas and Electric (PG&E), would have to commence
25 compliance with the regulation starting in 2010. Thus, some Project equipment may
26 comply in the 2009 to 2010 timeframe. The regulation also requires that no vehicle or
27 engines subject to the regulation may idle for more than five consecutive minutes,
28 unless the vehicle is idling for specific circumstances defined in the regulation or a
29 waiver has been granted. The idling limits were effective as of June 15, 2008.

30 Local

31 Air quality at the county and regional air basin level is regulated by air quality
32 management districts or air pollution control districts. These districts can cover a county

1 or sometimes multiple counties. Sutter and Yuba counties have general plans with
2 elements that address air quality.

3 The Project site is located in Sutter and Yuba counties. Sutter and Yuba counties are in
4 the jurisdiction of the Feather River Air Quality Management District (FRAQMD).
5 FRAQMD has adopted rules that would apply to the Project and are listed as follows
6 (FRAQMD 2008b).

7 **Regulation II (Open Burning):** Prohibits the burning of natural vegetation on land
8 being developed for industrial or commercial purposes as well as the burning of
9 construction or demolition debris.

10 **Rule 3.0 (Visible Emissions):** This rule prohibits the release of air contaminants in a
11 manner that would result in visible emissions as dark or darker in shade as that
12 designated as No. 2 on the Ringelmann Chart, as published by the United States
13 Bureau of Mines; or of such opacity as to obscure an observer's view to an equal to or
14 greater degree. The Ringelmann Chart consists of a series of charts, numbered zero
15 through five, that simulate various smoke densities by presenting different percentages
16 of black. A Ringelmann No. 1 is equivalent to 20 percent black; a Ringelmann No. 5 is
17 100 percent black. These charts are used for measuring the opacity or equivalent
18 obscuration of smoke arising from stacks and other sources by matching the actual
19 effluent with the various numbers, or densities, indicated by the charts.

20 **Rule 3.15 (Architectural Coatings):** This rule restricts the volatile organic content of
21 architectural coatings offered for sale, applied, solicited for application, or manufactured
22 for use within the FRAQMD.

23 **Rule 3.16 (Fugitive Dust Emissions):** This rule requires that reasonable precautions
24 be taken to restrict emissions of fugitive dust from being airborne beyond the property
25 line from any construction, handling or storage activity, or any wrecking, excavation,
26 grading, clearing of land or solid waste disposal operation.

27 **Rule 4.0 (General Requirements):** This rule prohibits the construction or modification
28 of any source of air pollutants without first obtaining an Authority to Construct from the
29 Air Pollution Control Officer (APCO).

30 **Rule 4.1 (Permit Requirements):** This rule requires that a person building, erecting,
31 altering or replacing any article, machine, equipment or other contrivance that emit air

1 pollutants first obtain an Authority to Construct from the APCO. In addition, any person
2 operating such a device must first obtain a Permit to Operate from the APCO.

3 **Rule 11.1 (State Airborne Toxic Control Measures):** This rule incorporates the ATCM
4 adopted by CARB, including the “Airborne Toxic Control Measure for Diesel Particulate
5 Matter from Portable Engines Rated at 50 Horsepower and Greater.”

6 In addition to these rules and other air quality programs, FRAQMD has produced
7 guidance on evaluating the potential air quality impacts of a project. This guidance is
8 found on the FRAQMD website (<http://www.fraqmd.org/PlanningTools.htm>) and was
9 developed so that projects that comply with the requirements in the guidance and that
10 do not exceed any thresholds of significance in the guidance, will be in conformity with
11 air district air quality plans.

12 Greenhouse Gases and Global Climate Change

13 California, a leader in GHG regulation, has passed several bills and the Governor has
14 signed three executive orders aimed at reducing GHG emissions and related climate
15 change impacts. The most prominent of these is Assembly Bill 32 (AB 32), the
16 California Global Warming Solutions Act of 2006 (Nuñez 2006). Among other things,
17 the statute is designed to reduce California’s statewide-GHG emissions to 1990 levels
18 by 2020.

19 AB 32 states that it is the intent of the legislature that CARB design emissions reduction
20 measures to meet the statewide emissions limits for GHG in a manner that minimizes
21 costs and maximizes benefits for California’s economy, improves and modernizes
22 California’s energy infrastructure and maintains electric system reliability, maximizes
23 additional environmental and economic co-benefits for California, and complements the
24 state’s efforts to improve air quality.

25 The California Climate Action Registry (CCAR) has developed general and industry-
26 specific protocols for assessing and reporting GHG emissions that have been approved
27 for reporting purposes. CARB has adopted regulations for the mandatory reporting of
28 GHG emissions from major sources, commencing in 2009.

29 CARB adopted the AB 32 Scoping Plan on December 11, 2008. The Scoping Plan
30 contains the main strategies California will use to reduce GHGs that cause global
31 climate change. One control measure contained in the Scoping Plan that may affect
32 Project emissions is the Low Carbon Fuel Standard (LCFS). This measure, initiated

1 through one of the Governor's Executive Orders, will reduce the carbon intensity of
2 California's transportation fuels by at least 10 percent by 2020.

3 Senate Bill 375 (SB 375), Transportation Planning: Travel Demand Models: Sustainable
4 Communities Strategy: Environmental Review, was signed by the governor on
5 September 30, 2008. According to the governor's press release, SB 375 requires
6 CARB to develop regional GHG emission-reduction targets to be achieved from the
7 automobile and light truck sectors for 2020 and 2035. The 18 metropolitan planning
8 organizations (MPOs) in California will prepare a "sustainable communities strategy" to
9 reduce the amount of vehicle miles traveled (VMT) in their respective regions and
10 demonstrate the ability for the region to attain CARB's targets. SB 375 also provides
11 the following guidelines.

- 12 • CARB would later determine if each region is on track to meet their targets.
- 13 • Builders also would get relief from certain environmental reviews under the
14 California Environmental Quality Act (CEQA) if they build projects consistent with
15 the new sustainable community strategies.
- 16 • In addition, cities would get extra time—eight years instead of five—to update
17 housing plans required by the state (State of California 2008a).

18 **Impact Analysis and Mitigation**

19 Impact Discussion

20 **(a) Impact AQ-1: Potential to Conflict with or Obstruct Implementation of the** 21 **Applicable Air Quality Plan.**

22 **The Project would not conflict with or obstruct implementation of the Northern** 23 **Sacramento Valley Air Quality Attainment Plan for the Project area (Less than** 24 **Significant, Class III).**

25 The Northern Sacramento Valley Air Basin (consisting of Butte, Colusa, Glenn, Shasta,
26 Sutter, Tehama, and Yuba counties) adopted the *Northern Sacramento Valley Planning*
27 *Area 2006 Air Quality Attainment Plan*, which was the plan developed to achieve the
28 state and federal 1-hour ozone standards (the federal 1-hour standard has since been
29 revoked and the area in the vicinity of the Project site is designated currently as
30 Unclassifiable/Attainment for the federal 8-hour standard). Air quality plans for the

1 southern portion of Sutter County were developed by the air districts comprising the
2 Sacramento Metropolitan Federal Ozone Nonattainment Area. The proposed Project is
3 outside of this area.

4 The 2006 Air Quality Attainment Plan describes control measures that were identified in
5 the 2003 Air Quality Attainment Plan as well as new measures that have been or will be
6 adopted by the air districts in the Northern Sacramento Valley Air Basin. These
7 measures apply to stationary and area sources that are under the regulations of these
8 air districts. The emission sources associated with the construction of the Project are
9 primarily from mobile sources, such as mobile construction equipment and motor
10 vehicles, which are regulated by CARB. Therefore, none of the measures proposed in
11 the 2006 Air Quality Attainment Plan would apply to the emission sources associated
12 with the proposed Project. The Project may also involve construction equipment, such
13 as portable generators, which are considered stationary sources; however, such
14 equipment would likely be regulated under CARB's PERP rather than subject to a
15 FRAQMD permit to operate. In addition, as described below, the Project emissions
16 would be less than FRAQMD's thresholds of significance. For these reasons, the
17 Project would not conflict with or obstruct implementation of the area's Air Quality
18 Attainment Plan (Class III).

19 **(b) Impact AQ-2: Potential to Violate an Air Quality Standard or Contribute**
20 **Substantially to an Existing or Projected Air Quality Violation.**

21 **The Project's construction emissions would be less than significant and the**
22 **Project would not violate any air quality standard or contribute significantly to an**
23 **existing or projected air quality violation (Less than Significant, Class III).**

24 The emissions associated with construction of the proposed Project were estimated
25 using the Sacramento Metropolitan Air Quality Management District's (SMAQMD's)
26 Road Construction Emissions Model (SMAQMD 2008). This model is recommended by
27 FRAQMD when a project consists primarily of linear construction features, such as a
28 roadway or a levee project. Due to the intermittent construction schedule, five
29 construction scenarios, based on information from PG&E, were developed to estimate
30 the maximum daily construction emissions that could occur on a given day. The first
31 and second scenarios would represent the types and numbers of construction
32 equipment and associated worker trips that may occur during preparation of the sites for
33 new metal and wood power poles, respectively. The third and fourth scenarios would
34 represent the types and numbers of construction equipment and associated worker trips

1 that may occur during installation of metal and wood power poles, respectively. The
2 fifth scenario would represent the types and numbers of construction equipment and
3 associated worker trips that may occur during conductor and framing operations. In
4 addition, it was assumed that Scenarios Three or Four and Five could occur
5 concurrently on a given day. The following assumptions were made to estimate the
6 associated construction emissions.

7 Scenario One (Site Preparation—Steel Poles):

- 8 • Fifty foot by 50 foot graded area per power pole;
- 9 • Up to five areas prepared per day;
- 10 • One tractor/backhoe/loader operated for six hours;
- 11 • One water truck;
- 12 • Work crew of 10 persons; and
- 13 • Twelve work days.

14 Scenario Two (Site Preparation—Wood Poles):

- 15 • Fifty foot by 50 foot graded area per power pole;
- 16 • Up to 15 areas prepared per day;
- 17 • One tractor/backhoe/loader operated for six hours;
- 18 • One water truck;
- 19 • Work crew of 10 persons; and
- 20 • Twenty-five work days.

21 Scenario Three (Power Pole Installation—Steel Poles):

- 22 • One drill rig operated for six hours;
- 23 • One cement mixer operated for three hours;

- 1 • One crane operated for six hours;
- 2 • Work crew of 10 persons; and
- 3 • Twenty-five work days.

4 Scenario Four (Power Pole Installation—Wood Poles):

- 5 • Two line trucks, including one with a truck-mounted auger, travelling 30 miles per
6 day (model default for “soil hauling” truck trips);
- 7 • Work crew of 10 persons; and
- 8 • One hundred and thirty-five work days (total of 160 work days for all pole
9 installation).

10 Scenario Five (Conductor and Framing):

- 11 • Two line trucks, travelling 30 miles per day (model default for “soil hauling” truck
12 trips);
- 13 • Work crew of 10 persons; and
- 14 • One hundred and sixty work days.

15 The Road Construction Emissions Model was run with these assumptions to generate
16 daily emissions for individual equipment and vehicles. The daily emissions for each
17 scenario (or combination of scenarios) were then calculated from the individual
18 equipment and vehicle emissions based on the specified assumptions described above.
19 The resultant emissions estimates are shown in Table 3.3.3-4, Estimated Construction
20 Emissions. Detailed calculations of the construction emissions are found in Appendix B.

1 **Table 3.3.3-4. Estimated Construction Emissions**

Activity/Source	Daily Emissions (pounds/day)				
	Reactive Organic Gas (ROG)	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Sulfur Oxides (SO _x) ¹	Fine Particulate Matter (PM ₁₀)
Site Preparation—Steel Poles					
Fugitive Dust	—	—	—	—	2.87
Construction Equipment	0.17	1.17	1.61	—	0.06
Water Trucks	0.11	1.39	0.75	—	0.05
Worker Trips	0.03	0.04	0.48	—	0.01
<i>Total Emissions</i>	<i>0.31</i>	<i>2.60</i>	<i>2.84</i>	—	<i>2.99</i>
Site Preparation—Wood Poles					
Fugitive Dust	—	—	—	—	8.60
Construction Equipment	0.17	1.17	1.61	—	0.06
Water Trucks	0.11	1.39	0.75	—	0.05
Worker Trips	0.03	0.04	0.48	—	0.01
<i>Total Emissions</i>	<i>0.31</i>	<i>2.60</i>	<i>2.84</i>	—	<i>8.72</i>
Power Pole Installation—Steel Poles					
Line Trucks	1.26	14.23	4.69	—	0.50
Worker Trips	0.03	0.04	0.48	—	0.00
<i>Total Emissions</i>	<i>1.29</i>	<i>14.27</i>	<i>5.17</i>	—	<i>0.50</i>
Power Pole Installation—Wood Poles					
Line Trucks	0.16	2.09	1.13	—	0.08
Worker Trips	0.03	0.04	0.48	—	0.00
<i>Total Emissions</i>	<i>0.19</i>	<i>2.13</i>	<i>1.61</i>	—	<i>0.08</i>
Conductor and Framing					
Line Trucks	0.16	2.09	1.13	—	0.08
Worker Trips	0.03	0.04	0.48	—	0.00
<i>Total Emissions</i>	<i>0.19</i>	<i>2.13</i>	<i>1.61</i>	—	<i>0.08</i>
Maximum Daily Emissions ²	1.48	16.41	6.77	—	8.72
FRAQMD Threshold	25	25	—	—	80
Exceeds Threshold?	NO	NO	—	—	NO

2 ¹ The Road Construction Emissions Model does not estimate SO_x emissions. However, by state regulation, all
3 diesel equipment and vehicles must use ultralow sulfur diesel fuel, and the SO_x emissions would be negligible.

4 ² Maximum daily emissions would occur during concurrent installation of steel power poles and conductor and
5 framing operations, except for PM₁₀, which would occur during site preparation for wood poles.

1 As indicated in Table 3.3.3-4, Estimated Construction Emissions, the maximum daily
2 construction emissions would be less than FRAQMD's significance thresholds.
3 Accordingly, the Project's construction emissions would be less than significant, and the
4 Project would not generate emissions high enough to cause or contribute substantially
5 to existing violations of ambient air quality standards or result in a cumulatively
6 considerable net increase of any nonattainment pollutant (Class III).

7 **(c) Impact AQ-3: Potential to Result in a Cumulatively Considerable Net Increase**
8 **of any Criteria Pollutant for Which the Project Region is Non-Attainment Under an**
9 **Applicable Federal or State Ambient Air Quality Standard (Including Releasing**
10 **Emissions that Exceed Quantitative Thresholds for Ozone Precursors).**

11 **The Project would not result in a cumulatively considerable net increase of any**
12 **nonattainment pollutant (Less than Significant, Class III).**

13 See the relevant discussion under Impact AQ-2, which describes estimated construction
14 emissions of the proposed Project and compares this estimate with FRAQMD's
15 significance thresholds.

16 **(d) Impact AQ-4: Potential to Expose Sensitive Receptors to Substantial Pollutant**
17 **Concentrations.**

18 **The Project would not expose sensitive receptors to substantial pollutant**
19 **concentrations with the implementation of appropriate mitigation (Less than**
20 **Significant with Mitigation, Class II).**

21 Fugitive dust emissions would be generated during construction. Such activities and
22 emissions have the potential to result in nuisance levels of PM₁₀ if not adequately
23 controlled through watering and other control measures. FRAQMD will require that
24 PG&E submit and obtain approval of a fugitive dust control plan. Approval and
25 implementation of the plan would ensure that fugitive dust emissions would not cause a
26 violation of the requirements of FRAQMD Rule 3.16.

27 Construction equipment and diesel trucks would emit criteria pollutants as well as diesel
28 particulate matter, which has been designated by CARB as a toxic air contaminant. As
29 discussed in the Regulatory Setting discussion of the ATCM, CARB has required
30 retrofits of existing, in-use construction equipment and installation of particulate-control
31 devices. Without precautionary planning, the Project may result in exposure of sensitive

1 receptors to pollutants; therefore, a significant impact could potentially occur absent the
2 following mitigation (Class II).

3 Mitigation Measures for Impact AQ-4:

4 **MM AQ-4a. Fugitive Dust Control Plan.** Prior to construction, Pacific Gas and
5 Electric will file a fugitive dust control plan with the Feather River Air
6 Quality Management District and the California State Lands Commission.
7 Construction will not commence until the Feather River Air Quality
8 Management District has approved the plan. Upon approval of this plan,
9 Pacific Gas and Electric will implement the dust control plan.

10 The plan shall include the following:

- 11 • Site location;
- 12 • Project type;
- 13 • List of responsible persons;
- 14 • Start and end dates; and
- 15 • Acknowledgement that Pacific Gas and Electric will ensure that
16 employees and contractors are made aware of state and local
17 fugitive dust laws and available mitigation measures.

18 **MM AQ-4b. Fugitive Dust Control Measures.** Pacific Gas and Electric shall
19 implement the following fugitive dust control measures:

- 20 • All grading and clearing operations shall be suspended when winds
21 exceed 20 miles per hour or when winds carry dust beyond the
22 property line despite implementation of all feasible dust control
23 measures.
- 24 • Construction sites shall be watered as necessary to prevent fugitive
25 dust violations.
- 26 • An operational water truck shall be on site during grading and site
27 preparation activities. Water shall be applied as needed to prevent
28 visible emissions violations and off-site dust impacts.

- 1 • On-site stockpiled earthen materials shall be covered, wind breaks
2 installed, and water and/or soil stabilizers employed to reduce wind-
3 blown dust emissions.

- 4 • All transfer processes involving a free fall of soil or other particulate
5 matter shall be operated in such a manner as to minimize the free-
6 fall distance and fugitive dust emissions.

- 7 • Approved chemical soil stabilizers shall be applied according to the
8 manufacturers' specifications to all inactive construction areas
9 (previously disturbed areas that remain inactive for 96 hours),
10 including unpaved roads, staging areas, and employee/equipment
11 parking areas.

- 12 • Wheel washers shall be installed to prevent track-out where Project
13 vehicles and/or equipment exit onto paved streets from unpaved
14 roads. Vehicles and/or equipment shall be washed prior to each
15 trip or, alternatively, a gravel bed shall be installed at
16 vehicle/equipment site exit points to effectively remove soil buildup
17 on tires and tracks to prevent or diminish track-out.

- 18 • Paved streets adjacent to Project sites shall be swept frequently if
19 soil material has been carried onto public thoroughfares from the
20 Project sites.

- 21 • Traffic speeds on all unpaved surfaces shall not exceed 15 miles
22 per hour.

- 23 • Ground cover on the construction sites shall be reestablished as
24 soon as possible through seeding and watering.

25 **MM AQ-4c. Limitations on Construction Equipment.** Construction equipment
26 exhaust emissions shall not exceed Feather River Air Quality
27 Management District Regulation III, Rule 3.0, Visible Emissions limitations
28 (40 percent opacity or Ringelmann Chart 2.0). Operators of vehicles and
29 equipment found to exceed opacity limits shall take action to repair the
30 equipment within 72 hours or remove the equipment from service.

1 **MM AQ-4d. Responsibility of Applicant to Ensure Construction Equipment**
2 **Maintenance.** Pacific Gas and Electric shall be responsible for ensuring
3 that all construction equipment is properly tuned and maintained.

4 **MM AQ-4e. Restrictions on Idling Time for Motor Vehicles.** Pacific Gas and
5 Electric shall restrict idling time for motor vehicles and construction
6 equipment to no more than five minutes.

7 **MM AQ-4f. Restrictions on Temporary Power Generators.** The Project shall use
8 existing power sources (e.g., power poles) or clean fuel generators rather
9 than temporary power generators in residential areas.

10 **MM AQ-4g. Registration or Portable Equipment with California Air Resources**
11 **Board.** Portable engines and engine-driven equipment units used at the
12 Project work site, with the exception of on-road and off-road vehicles, may
13 require California Air Resources Board Portable Equipment Registration.
14 Pacific Gas and Electric shall arrange appropriate consultations with the
15 California Air Resources Board or the district to determine registration and
16 permitting requirements prior to equipment operation at the site. Pacific
17 Gas and Electric shall maintain documentation at the Project site
18 demonstrating that the equipment has been registered with the California
19 Air Resources Board.

20 Rationale for Mitigation

21 These mitigation measures will provide for adequate protection against exposure to potential
22 pollutant concentrations. Impacts would be reduced to less than significant (Class II).

23 **(e) Impact AQ-5: Potential to Create Objectionable Odors Affecting a Substantial**
24 **Number of People.**

25 **The Project would not create objectionable odors affecting a substantial number**
26 **of people (Less than Significant, Class III).**

27 The construction equipment and diesel trucks would emit air pollutants that have the
28 potential to result in odors in proximity to the construction site. However, these emissions
29 would be intermittent and are not expected to be present in the vicinity of sensitive
30 receptors for a substantial enough period of time to cause levels of odors considered a
31 nuisance. Therefore, this impact would be considered less than significant (Class III).

- 1 **(f) Impact AQ-6: Contribute Significantly to the Production of Greenhouse Gases.**
 2 **The Project would not contribute significantly to the production of greenhouse**
 3 **gases (Less than Significant, Class III).**

4 The GHG emissions associated with the proposed Project were estimated using
 5 SMAQMD's Road Construction Emissions Model. Along with the criteria pollutant
 6 emissions, the model also estimates the emissions of CO₂, a primary GHG. The
 7 assumptions used for this emission estimate are the same as those discussed under
 8 Impact AQ-2. An adjustment of the CO₂ emissions estimated by the model was made to
 9 reflect other GHGs (e.g., methane and nitrous oxide). The CO₂ emissions associated
 10 with construction worker trips were multiplied by a factor based on the assumption that
 11 CO₂ represents 95 percent of the CO₂ equivalent emissions associated with passenger
 12 vehicles (U.S. EPA 2005). The GHG emissions from diesel trucks and equipment are
 13 nearly all CO₂; thus, no adjustment of the emissions from these sources was made.
 14 The annual GHG emissions were based on both nine months (using PG&E's assumed
 15 construction schedule) and 12 months (assuming the maximum time period for
 16 construction of the proposed Project). The short tons of CO₂ equivalent emissions
 17 estimated using the Road Construction Emissions Model were converted to metric tons
 18 (MT) (1 metric ton = 1.1102 tons). The estimated GHG emissions associated with the
 19 proposed Project are shown in Table 3.3.3-5, Estimated Construction GHG Emissions.
 20 Detailed calculations of the construction emissions are found in Appendix B.

21 **Table 3.3.3-5. Estimated Construction GHG Emissions**

Activity/Source	GHG (MTCO ₂ e)
Construction Equipment	24.5
Water Trucks	2.7
Line Trucks	32.7
Worker Trips	8.4
<i>Total Emissions (based on 9 months of construction)</i>	68.3
<i>Total Emissions (based on 12 months of construction)</i>	91.1

22 Project-related GHG emissions of up to 91.1 MTCO₂e per year occur only during the
 23 construction phase of the Project. Operational-phase GHG emissions from electricity
 24 transmission are mainly related to line maintenance activities, which are not expected to
 25 change since the line length and the number of poles would not change. The creation
 26 of up to 91.1 MTCO₂e per construction year is a less-than-significant impact (Class III).

1 3.3.4 Biological Resources

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
(a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1 Environmental Setting

2 Methods

3 Information for the proposed Pacific Gas and Electric (PG&E) Pease–Marysville 60 kV
4 Transmission Line Project compiled in the following section was gathered from a
5 number of sources, including the following:

- 6 • Documentation regarding on-site biological resources including *Biological*
7 *Assessment Report for the Pacific Gas & Electric Company Pease–Marysville 60*
8 *kV Transmission Line Project* (PG&E 2007); *Preliminary Delineation of Water of*
9 *the United States, Including Wetlands, for the Pease–Marysville 60 kV Line*
10 *Project* (Jones & Stokes 2007a); *Valley Elderberry Longhorn Beetle Survey*
11 *Results for the Pease–Marysville 60 kV Transmission Line Project* (Jones &
12 *Stokes 2007b*); and *United States Fish and Wildlife Service Species List for*
13 *Pease–Marysville 60 kV Transmission Line Project* (USFWS 2007).
- 14 • Field surveys and site visits, including a reconnaissance-level habitat survey for
15 special-status plants and wetlands performed for the proposed alignment in June
16 2005 (Jones & Stokes 2005); a survey for special-status plants and animals
17 within the proposed east Onstott lay-down area conducted in December 2007
18 (Jones & Stokes 2007c); a focused survey for the valley elderberry longhorn
19 beetle (*Desmocerus californicus dimorphus*) conducted within and adjacent to
20 the proposed alignment in January 2007 (Jones & Stokes 2007b); and field visits
21 to verify characterization and location of on-site biological resources as described
22 in the above reports conducted by Dudek in July and November 2008.

1 Reports on biological resources prepared for PG&E are available for review at the
2 California State Lands Commission (CSLC), located at 100 Howe Avenue, Suite 100
3 South, Sacramento, California 95825-8202.

4 **Biological Setting**

5 Regional Overview

6 Agriculture is the dominant land use in Yuba and Sutter counties (55 percent and 88
7 percent, respectively) and surrounds much of the existing/proposed alignment. Portions
8 of the eastern-most segment of the alignment are within the urban development
9 associated with the city of Marysville, while more rural development occurs along the
10 middle and western-most portions of the alignment. Natural communities occurring
11 along the alignment and in the immediate region include annual grasslands, oak
12 woodlands, and small amounts of wetland and riparian habitats associated with the
13 Feather River and Jack Slough. Numerous irrigation and agricultural drainages occur
14 throughout the area and cross the alignment.

15 Project Overview

16 Vegetation

17 Upland vegetation communities occurring within the Project alignment include non-
18 native annual grasslands and agricultural/ruderal areas. Riparian and aquatic
19 vegetation communities include riparian forest, riparian scrub, freshwater marsh, and
20 drainages. Riparian forest, riparian scrub, and freshwater marsh are also considered
21 sensitive communities by natural resource agencies. The following discussion briefly
22 describes each of these communities.

23 *Non-Native Grassland*

24 Non-native grassland is generally found in valleys and foothills throughout California,
25 except for the north coastal and desert regions. This vegetation type is dominated by a
26 sparse to dense cover of non-native annual grasses and weedy annual and perennial
27 forbs, primarily of Mediterranean origin, that have replaced native perennial grasslands
28 as a result of human disturbance.

29 In the Project area, non-native grasslands intergrade with disturbed areas along
30 roadsides and levees primarily within the southeastern third of the Project alignment.

1 Non-native grass species typical of this community in the region and observed within
2 the Project alignment include Italian ryegrass (*Lolium multiflorum*), soft chess (*Bromus*
3 *hordeaceus*), Bermuda grass (*Cynodon dactylon*), and medusa-head grass
4 (*Taeniatherum caput-medusae*).

5 *Agricultural/Ruderal*

6 The primary vegetation community observed within and adjacent to the Project
7 alignment is classified as agricultural/ruderal. Agricultural crops in the Project area
8 consist of rice (*Oryza sativa*), walnut (*Juglans* spp.), and various stone fruit crops.
9 Ruderal vegetation (typically composed of non-native invasive and/or weedy exotic
10 species) dominates the margins of the agricultural crop fields, road margins (both
11 developed and undeveloped), and levees. Many of the smaller drainage and irrigation
12 ditches identified along the Project alignment also contain ruderal vegetation species.
13 Agricultural/ruderal vegetation is present within the Project alignment along Pease
14 Road, Laurellen Road, and almost entirely between State Route 70 and State Route 20.

15 *Riparian Forest*

16 Riparian forest habitat is characterized by a dense, broadleaved, winter deciduous
17 canopy and occurs along the existing/proposed alignment at the Feather River crossing
18 and along portions of Jack Slough and the Yuba River. This vegetation community was
19 once extensive along the major low-gradient streams throughout the Central Valley but
20 is now reduced to scattered, isolated remnants or young stands. Dominant species
21 observed in this vegetation community include Fremont cottonwood (*Populus fremontii*),
22 willow species (*Salix* sp.), California black walnut (*Juglans californica*), and valley oak
23 (*Quercus lobata*), with Himalayan blackberry (*Rubus discolor*), California grape (*Vitis*
24 *californica*), and Mexican elderberry (*Sambucus mexicana*) as understory components.

25 *Riparian Scrub*

26 Riparian scrub vegetation is described as an open to dense, broadleaved, winter-
27 deciduous shrubby streamside thicket dominated by any of several willow species. It is
28 found along all the major rivers and most of the smaller streams throughout the Central
29 Valley. Dense stands usually have little understory or herbaceous component. More
30 open stands have grassy understories dominated by introduced species.

31 Along the Project alignment, this vegetation community was most commonly found
32 along portions of Jack Slough and the Feather River. Dominant plant species within this

1 community include various species of willow, California grape, and heavy infestations of
2 Himalayan blackberry.

3 *Freshwater Marsh and Drainages*

4 Valley freshwater marsh develops where the water table is at or just above the ground
5 surface, such as around the margins of lakes, ponds, slow-moving streams, ditches,
6 and seepages. This community is most extensive in the upper portion of the
7 Sacramento–San Joaquin River Delta. This plant community is typically dominated by
8 dense, perennial, tall, emergent monocots, such as cattail (*Typha* sp.) and bulrush
9 (*Scirpus* sp.).

10 Within the Project area, valley freshwater marsh vegetation was observed along the toe
11 of the banks of two irrigation ditches (DD-12 and DD-14) identified along the alignment
12 between poles 5/102 and 5/112 (Jones & Stokes 2007a). These ditches are
13 immediately west of State Route 20 and run parallel to the Project alignment for a short
14 section. Observed dominant species of this vegetation community include Pacific soft
15 rush (*Juncus effusus* var. *pacificus*) and hard-stem bulrush (*Scirpus acutus*). Two
16 small, seasonal wetland features (SW-1 and SW-2) were also recorded along the
17 Project alignment, near poles 4/79 and 4/80 (Jones & Stokes 2007a). Dominant plant
18 species in these wetland features include an unidentified rush species (*Juncus* sp.) and
19 semaphore grass (*Pleuropogon californicus*).

20 Special-Status Plant and Animal Species

21 While a number of common plant and animal species occur within the plant
22 communities that characterize the Project alignment, the analysis of potential impacts
23 on biological resources focuses on those species considered “special status” by state
24 and federal resource agencies. For the purposes of this section, “special status” refers
25 to those plant and animal species that meet one or more of the following criteria:

- 26 • Listed, proposed for listing, or candidates for listing, as threatened or endangered
27 under the Federal Endangered Species Act (FESA) (Title 50, Code of Federal
28 Regulations (CFR) 17.11 for animals, 50 CFR 17.12 for plants, 67 FR 40658 for
29 candidates and various notices in the Federal Register for proposed species).
- 30 • Listed, or proposed for listing by the State of California as rare, threatened, or
31 endangered under the California Endangered Species Act (CESA) (Title 14,
32 California Code of Regulations (CCR) section 670.5).

- 1 • Animal species designated as Species of Special Concern or Fully Protected by
2 the California Department of Fish and Game (CDFG). Although these species
3 have no legal status under CESA, CDFG has determined that their populations
4 are generally declining and they could be listed as threatened or endangered
5 (under CESA) in the future.

- 6 • Plants included on Lists 1 or 2 of the California Native Plant Society (CNPS).
7 These species are included because CNPS is an authority recognized by CDFG
8 on the status of rare plant species in California, and because the criteria for
9 placement on Lists 1 or 2 are similar to criteria that CDFG and the U.S. Fish and
10 Wildlife Service (USFWS) use for species considered as candidates for listing or
11 that are already listed as threatened or endangered.

- 12 • Birds designated by the USFWS as Birds of Conservation Concern. Although
13 these species have no legal status under FESA, the USFWS has determined that
14 their populations are generally declining and they could be listed as threatened or
15 endangered (under FESA) in the future.

- 16 • Plant and animal species considered “endangered, rare, or threatened,” as defined
17 by section 15380 of the California Environmental Quality Act (CEQA) Guidelines.
18 Section 15380(b) states that a species of animal or plant is “endangered” when its
19 survival and reproduction in the wild are in immediate jeopardy from one or more
20 causes, including loss of habitat, change in habitat, overexploitation, predation,
21 competition, disease, or other factors. A species is “rare” when either:
 - 22 (a) Although not presently threatened with extinction, the species is existing in
23 such small numbers throughout all or a significant portion of its range that
24 it may become endangered if its environment worsens; or
 - 25 (b) The species is likely to become endangered within the foreseeable future
26 throughout all or a portion of its range and may be considered
27 “threatened” as that term is used in the Federal Endangered Species Act.

28 Figure 3-2, Special-Status Biological Resources Key, provides an overview of the locations
29 of the special-status biological resources described below. Descriptions of all special-
30 status plant and animal species known to occur within the Project region are summarized in
31 the special-status species tables included in Appendix C, Special-Status Species
32 Potentially Occurring within the Project Area.

1 Figure 3-2 Special-Status Biological Resources Key

1

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1 *Special-Status Plants*

2 A number of special-status plant species are known to occur in the region, including one
3 state-listed and federally listed endangered plant species, Hartweg's golden starburst
4 (*Pseudobahia bahiifolia*), and two species listed by CNPS as 1B plant species, Ferris'
5 milk-vetch (*Astragalus tener* var. *ferrisiae*) and Veiny monardella (*Monardella douglasii*
6 ssp. *Venosa*). However, neither these nor any other special-status plant species were
7 identified as occurring within the transmission alignment during the pre-field database
8 review and analysis, and no habitat to support special-status plant species was found
9 during the field survey conducted by Jones & Stokes in June 2005. Since special-status
10 plant species are not expected to occur in the Project area, they will not be considered
11 further in this assessment. Descriptions of all special-status plant species known to
12 occur within the Project region are summarized in Appendix C, Special-Status Species
13 Potentially Occurring within the Project Area.

14 *Special-Status Animals*

15 While a number of special-status animal species are known to occur in the Project
16 region (see Appendix C) no special-status species were observed or detected during
17 any of the Project alignment field surveys. However, suitable habitat and the potential
18 for occurrence within or in the immediate vicinity of the Project alignment exists for 27
19 special-status species (including anadromous fish species). Of these, 10 state- and/or
20 federally listed species that have a moderate to high potential of occurring and that
21 could also be subject to significant direct and/or indirect impacts from the Project
22 include vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp
23 (*Lepidurus packardii*), valley elderberry longhorn beetle, giant garter snake (*Thamnophis*
24 *gigas*), Swainson's hawk (*Buteo swainsoni*), western yellow-billed cuckoo (*Coccyzus*
25 *americanus*), white-tailed kite (*Elanus leucurus*), greater sandhill crane (*Grus*
26 *canadensis tabida*), bald eagle (*Haliaeetus leucocephalus*), and bank swallow (*Riparia*
27 *riparia*). Because of their high sensitivity status as state- or federally listed species,
28 their potential to occur within or immediately adjacent to the Project area, and their
29 potential to be subject to Project impacts, these ten species are discussed in more
30 detail in this section. A brief description of the remaining special-status species with
31 some potential to occur within or in the vicinity of the Project alignment, including
32 anadromous fish species within the Feather River, follows. All 27 special-status species
33 are discussed in Appendix C, Special-Status Species Potentially Occurring within the
34 Project Area.

1 State- and Federally Listed Species

2 **Vernal Pool Fairy Shrimp/Vernal Pool Tadpole Shrimp.** Vernal pool fairy shrimp
3 inhabit vernal pools with clear to tea-colored water, most commonly in grass or mud-
4 bottomed swales or basalt flow depression pools in unplowed grasslands. Vernal pool
5 tadpole shrimp inhabits vernal pools containing clear to highly turbid waters ranging
6 from a few square meters to several hectares in size, most commonly in swales of
7 grasslands in old alluvial soils underlain by hardpan or in mud-bottomed pools
8 containing highly turbid water (USFWS 1994). In California, the fairy shrimp's range
9 includes the Central Valley from Shasta County to Tulare County and along the central
10 coast range from northern Solano County to San Benito County. A few populations
11 exist in San Luis Obispo, Santa Barbara, and Riverside counties (USFWS 1994). The
12 tadpole shrimp occurs in the Central Valley from Shasta to Merced counties and in one
13 vernal pool complex in Alameda County. The California Natural Diversity Database
14 (CNDDDB) lists one occurrence for the fairy shrimp in the Project area and five
15 occurrences for the tadpole shrimp (CDFG 2007). No formal surveys were performed
16 for either shrimp species within or adjacent to the Project alignment.

17 Seasonal wetlands (SW-1, SW-2) identified along the Project alignment near poles 4/79
18 and 4/80, provide low to moderate potential habitat for these two shrimp species. Other
19 wetland features identified in the Project area, such as irrigation ditches, are not
20 considered suitable habitat for shrimp as they experience prolonged inundation at
21 various times throughout the season and may be subject to routine disturbance to
22 maintain water conveyance.

23 **Valley Elderberry Longhorn Beetle.** Valley elderberry longhorn beetle occurs
24 exclusively in the Central Valley of California. It is completely dependant on its host
25 plant, Mexican elderberry, which is a common component of the remaining riparian
26 forests and adjacent upland habitats within the Central Valley (USFWS 1980, 1999).
27 Three CNDDDB occurrences for valley elderberry longhorn beetle exist in the vicinity of
28 the Project alignment (CDFG 2007). The three occurrences are all in the same general
29 area and describe elderberry shrubs along another electric transmission line; these
30 occurrences are approximately five miles east of the East Marysville Substation and the
31 middle portion of the Project alignment.

32 Elderberry shrubs that could provide suitable habitat for valley elderberry longhorn
33 beetle were identified along the banks of the Feather River near poles 2/47 to 2/50 and
34 along the Yuba River levee near poles 6/130 and 7/152 (see Figure 3-3, Elderberry

1 Shrub and Cluster Locations (a); Figure 3-4, Elderberry Shrub and Cluster Locations
2 (b); and Figure 3-5, Elderberry Shrub and Cluster Locations (c)) (Jones & Stokes
3 2007b). Pole 2/50, which is currently located on the east bank of the Feather River,
4 would be removed as part of the proposed Project so is not depicted on graphical
5 representations of the Project. Exit holes indicating the presence of elderberry beetles
6 were not found during focused surveys conducted in 2007 (Jones & Stokes 2007b).
7 Nevertheless, this species could potentially occur within these shrubs in the future.

8 **Giant Garter Snake.** Giant garter snake is endemic to valley floor wetlands and
9 drainages of the Sacramento and San Joaquin valleys. Its current range extends from
10 near Chico in Butte County south to Fresno County with 13 known populations
11 concentrated in portions of the rice production zones in the Butte, Colusa, Sutter,
12 American, Sacramento, and Yolo basins, as well as the areas of Badger Creek/Willow
13 Creek, Caldoni Marsh, East Stockton Diverting Canal and Duck Creek, North and South
14 Grasslands, Mendota, and Burnell/Lanare (USFWS 1993; CDFG 2006). The species
15 inhabits freshwater marshes, wetlands, slow-moving streams, drainage ditches,
16 irrigation canals, and rice fields of the Central Valley. Giant garter snake requires
17 emergent or riparian vegetation for cover, foraging, and basking, and upland habitat for
18 retreat and hibernation activities. Giant garter snake also requires permanent water
19 during its active period of March through October (USFWS 1993).

20 Suitable giant garter snake habitat was identified along the Project alignment between
21 poles 4/80 and 4/94 (see Figure 3-6, Giant Garter Snake Suitable Habitat Locations
22 (a)), and again between poles 5/103 and 5/112 (see Figure 3-7, Giant Garter Snake
23 Suitable Habitat Locations (b)). Giant garter snake aquatic habitat along these two
24 sections of the alignment consists of Jack Slough, irrigation drainage ditches (i.e., DD-5
25 and DD-14), and rice crop fields. Four other irrigation ditches (DD-1 through DD-4 at
26 poles 3/74 to 3/76) were identified during the wetland delineation survey but are not
27 considered suitable giant garter snake breeding habitat as they carry little water during
28 the snake's active period (and may dry up completely) and adjacent habitats are
29 generally incompatible (i.e., orchard crops and road right-of-ways). The Feather River
30 and its associated riparian habitat is also not considered potential giant garter snake
31 habitat.

32 The other irrigation ditches that either cross or parallel the alignment are considered
33 seasonal in nature as they have been observed dry more often than inundated at
34 different times of the year. These ditches likely convey runoff from agricultural crops in
35 the area and it is assumed that they are intermittently inundated during the snake's

1 active period and not considered suitable for breeding purposes. These waterways
2 may, however, potentially serve as dispersal corridors between suitable permanent
3 aquatic habitats in the area if inundated during the snake's active period.

4 Irrigation ditches DD-5 and DD-14 (see Figures 3-6 and 3-7) have been observed to be
5 consistently inundated at different times of the year and during the snake's active
6 period. These ditches, along with Jack Slough and Project-area rice fields, contain the
7 required habitat components of inundation during the giant garter snake's active period
8 as well as emergent or shrubby vegetation for cover. Continuous or adjacent upland
9 habitat (excluding orchard crop areas) to these aquatic features were observed during
10 field surveys to contain the necessary hibernacula or retreat mediums such as small-
11 mammal burrows, soil cracks, and other ground cover objects, and thus provide the
12 necessary upland habitat component for giant garter snake. Together, the aquatic and
13 adjacent upland habitats provide the necessary physical components of suitable giant
14 garter snake habitat in the Project area and create a high potential for the snake's
15 occurrence.

16 Only one CNDDDB occurrence for giant garter snake was found for the Project area.
17 This occurrence was recorded within the Snake River (a canal-like waterway
18 surrounded by rice crop fields), approximately 2.5 miles northwest of the western
19 terminus of the Project alignment (at Pease Substation). It should be noted that
20 focused surveys for giant garter snake were not conducted because the USFWS has
21 determined that while focused surveys may provide valuable demographic information
22 for this snake, negative results of a focused survey cannot be accepted as proof of
23 absence. In addition, the snake's sensitivity to human activities and its somewhat
24 illusive nature and cryptic coloring, makes it extremely difficult to detect. Consequently,
25 if a particular area or Project site contains suitable habitat for this species and the site is
26 located within the snake's known range of distribution, the habitat is generally
27 considered to be occupied.

28 **Swainson's Hawk.** The breeding range of the Swainson's hawk includes the interior
29 western United States, northern-central Mexico, northeastern Alaska, northwestern and
30 south-central Canada, and the Central Valley of California. It winters primarily in South
31 America (Johnsgard 1990). Breeding occurs from March through August (Dunne et al.
32 1988).

1 Figure 3-3 Elderberry Shrub and Cluster Locations (a)

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1 Figure 3-4 Elderberry Shrub and Cluster Locations (b)

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1 Figure 3-5 Elderberry Shrub and Cluster Locations (c)

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1 Figure 3-6 Giant Garter Snake Suitable Habitat Locations (a)

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1 Figure 3-7 Giant Garter Snake Suitable Habitat Locations (b)

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1 Nesting habitat consists of open areas with stands of few, dense-topped trees in
2 juniper-sage flats, riparian areas, and oak savannas. Foraging habitat consists of open
3 grasslands, grain, and alfalfa fields (supporting rodent populations) adjacent to nesting
4 opportunities. Swainson's hawk typically nests in stands with only a few trees in the
5 aforementioned habitats, as well as within agricultural areas. Swainson's hawk can
6 become relatively habituated to human presence and activity as they readily occupy
7 habitat within agricultural and rural residential areas, usually along roadsides where
8 suitable nest trees are located. Sudden changes in activity regimes (construction in
9 previously open areas or human intrusion) frequently cause nest abandonment,
10 particularly during certain times of the breeding season (Johnsgard 1990; Woodbridge
11 1998).

12 Riparian forest habitat and scattered isolated trees and tree groves along the Feather
13 River, Jack Slough, and Yuba River levees provide suitable nesting habitat for
14 Swainson's hawk. Scattered single trees or clumps of trees amongst rural residences
15 along Laurellen Road also provide potential nesting opportunities. The Project area's
16 open agricultural areas and river floodplains provide suitable foraging habitat. Four
17 CNDDB occurrences of the hawk exist in the Project area, with most of these recorded
18 along the Feather River (one of the records is located just north of the Project
19 alignment's crossing of the river).

20 **Western Yellow-Billed Cuckoo.** The breeding range of the yellow-billed cuckoo
21 formerly included most of North America from southern Canada to the Greater Antilles
22 and northern Mexico. In recent years, its distribution in the west has contracted. The
23 northern limit of breeding in the coastal states is within Sacramento Valley, California,
24 and the northern limit of breeding in the western interior states is southern Idaho. In
25 northern California, this species is limited to the Sacramento River from Red Bluff to
26 Colusa, with smaller populations along the Feather River from Oroville to Verona in
27 Butte, Yuba, and Sutter counties.

28 Cuckoos nest in riparian forests along broad, lower floodplains of larger river systems.
29 The cuckoo requires broad, well-developed, low-elevation riparian woodlands of
30 primarily mature cottonwoods and willows in large, contiguous tracts of habitat. Dense
31 understory foliage seems to be an important habitat characteristic in nest site selection,
32 and cottonwood trees are an important foraging habitat component in California
33 (USFWS 2001).

1 The broad, well-developed riparian forest habitat along the Feather River is considered
2 suitable habitat for the cuckoo. Two CNDDDB occurrences of the species exist for the
3 Project area in the immediate vicinity of the Project alignment's river crossing.

4 **White-Tailed Kite.** The white-tailed kite is a permanent resident of river valleys,
5 riparian woodlands, and adjacent open fields and marshes in the Central Valley and
6 along the west coast (Johnsgard 1990). It nests in dense, usually deciduous, tree
7 groves adjacent to open foraging areas, but will use oak woodlands and savanna as
8 well.

9 Riparian forest habitat and scattered isolated trees and tree groves along the Feather
10 River, Jack Slough, and Yuba River levees provide suitable nesting habitat for the kite.
11 Scattered single trees or clumps of trees amongst rural residences along Laurellen
12 Road also provide potential nesting opportunities. The Project area's open agricultural
13 areas and river floodplains provide suitable foraging habitat. One CNDDDB occurrence
14 of the kite was sighted in the Project area: a kite nest in a non-native tree adjacent to a
15 rural residence in the Olivehurst area.

16 **Greater Sandhill Crane.** Nesting pairs of this crane occur in Lassen, Modoc, Plumas,
17 Shasta, Sierra, and Siskiyou counties. Historically, the crane wintered on the expansive
18 wetlands of California's Central Valley. Currently it winters in lowland areas of
19 Sacramento, San Joaquin, and Imperial valleys. In California, the crane breeds in
20 wetlands and forages within meadows, irrigated pastures, fields, and marshes. Sandhill
21 cranes roost together at night in shallow water (an important habitat characteristic) and
22 commonly feed on grains, seeds, aquatic invertebrates, insects, small reptiles,
23 amphibians, and rodents (CDFG 1994).

24 The open agricultural areas in the Project area offer suitable wintering habitat for
25 potentially occurring sandhill cranes. These open and usually inundated agricultural
26 fields (rice) have potential to attract wintering cranes. The Project area is outside of the
27 species' breeding range.

28 **Bald Eagle.** Currently, this eagle's main California breeding range is restricted to the
29 northern Sierra Nevada and southern Cascade ranges and the interior northern Coastal
30 range, with outlying populations in the mountains and coastal areas of southern
31 California (Johnsgard 1990). The bald eagle winters generally throughout its breeding
32 range, but more frequently along coastal areas and at interior reservoirs and other water

1 bodies in the Central Valley. The bald eagle nests in large, mature trees and on cliffs
2 near large bodies of water or rivers that provide an abundant fish prey base.

3 The Project area is not located near known nesting territories of this species, but an
4 occasional wintering bald eagle may occur along the Feather River or nearby Yuba
5 River.

6 **Bank Swallow.** This swallow is a locally common to uncommon breeding-season
7 resident in northern and central California (Garrison 1998). The major breeding
8 population is confined to the Sacramento and Feather rivers and their major tributaries
9 north of their confluence (Laymon et al. 1988). The Sacramento River population
10 occurs between Redding (in Shasta County) and the Yolo Bypass (in Yolo County).
11 The Feather River population occurs between Oroville (in Butte County) and the
12 confluence of the Sacramento and Feather rivers (in Sutter County). Smaller
13 populations occur in association with other rivers and creeks in the northern and central
14 portions of the state.

15 Nesting colonies only occur in vertical banks or bluffs of friable soils suitable for
16 burrowing by these small birds. Banks or bluffs must be at least three feet tall to have
17 some predator deterrence values, and some source of continual erosion is almost
18 always present. Breeding habitat vegetation is extremely varied because breeding sites
19 are mostly selected for the suitability of the nesting bank. Throughout California,
20 colonies are mostly located amidst lowland vegetation types, including riparian forests
21 dominated by willows and Fremont cottonwood.

22 River bank habitat along the Feather River and Jack Slough provides potential nesting
23 substrates; appropriate friable sandy or loamy soil substrates were observed along
24 these waterways. Five CNDDDB occurrences of the species exist for the Project area; all
25 five records are of the Feather River, and some are in the immediate vicinity of the
26 Project alignment's Feather River crossing.

27 Other Special-Status Animal Species

28 In addition to the state- and federally listed species previously discussed that have
29 some potential to occur on or in the immediate vicinity of the Project alignment, a
30 number of other special-status species are addressed in this section. These include
31 species that while not state- or federally listed as threatened or endangered, are
32 nevertheless considered sensitive by resource agencies and that either potentially occur

1 within or in the vicinity of the Project alignment. It also includes listed species that are
2 known to occur in the region but that would not be expected to occur within the Project
3 alignment for various reasons. All of these species are discussed in more detail in
4 Appendix C, Special-Status Species Potentially Occurring within the Project Area.
5 These additional special-status species include the following:

6 **Amphibians.** The California red-legged frog and California tiger salamander, both
7 state-listed as threatened, are known to occur in the general region but no records of
8 these species occurring within or in the immediate vicinity of the Project alignment exist
9 and overall habitat suitability within the alignment is considered marginal. Therefore,
10 these two amphibians are not expected to occur.

11 **Reptiles.** In addition to the giant garter snake, some suitable habitat for the western
12 pond turtle occurs within and adjacent to the Project alignment. However, no CNDDDB
13 records exist for this species in the Project vicinity.

14 **Fish.** A total of six special-status fish species have some potential to occur in the
15 portion of the Feather River that crosses the Project alignment. Most of these species
16 are expected to use this portion of the river as migratory and movement habitat.

17 **Birds.** In addition to the six state- and/or federally listed bird species previously
18 discussed, an additional seven special-status bird species have some potential to occur
19 within or in the vicinity of the Project alignment. However, several of these species
20 would only be expected to occur in the area as winter migrants.

21 **Mammals.** Only one special-status mammal, Townsend's big-eared bat, has some
22 potential to occur within or adjacent to the Project alignment. However, no CNDDDB
23 records exist for this species in the immediate Project vicinity.

24 **Regulatory Setting**

25 Federal

26 *Federal Endangered Species Act*

27 FESA of 1973 (16 U.S.C. 1531 et seq.), as amended, is administered by the USFWS
28 for most plant and animal species, and by the National Oceanic and Atmospheric
29 Administration National Marine Fisheries Service for certain anadromous and marine
30 species. This legislation is intended to provide a means to conserve the ecosystems

1 upon which endangered and threatened species depend and provide programs for the
2 conservation of those species, thus preventing extinction of plants and wildlife. FESA
3 defines an endangered species as “any species that is in danger of extinction
4 throughout all or a significant portion of its range.” A threatened species is defined as
5 “any species that is likely to become an endangered species within the foreseeable
6 future throughout all or a significant portion of its range.” Under FESA, it is unlawful to
7 “take” any listed species, and “take” is defined as to “harass, harm, pursue, hunt, shoot,
8 wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”

9 FESA allows for the issuance of incidental take permits for listed species under section
10 7, which is generally available for projects that also require other federal agency permits
11 or approvals, and under section 10, which provides for the approval of Habitat
12 Conservation Plans (HCPs) on private property without any other federal agency
13 involvement.

14 FESA also provides for designation of “critical habitat,” defined as specific areas within
15 the geographical range occupied by a species where physical or biological features
16 “essential to the conservation of the species” are found and “which may require special
17 management considerations or protection.” Critical habitat may also include areas
18 outside the current geographical area occupied by the species that are nonetheless
19 “essential for the conservation of the species.”

20 All temporary and permanent impacts associated with aquatic and upland giant garter
21 snake habitats may fall within the guidelines of the USFWS *Programmatic Formal*
22 *Consultation for USACOE 404 Permitted Projects with Relatively Small Effects on the*
23 *Giant Garter Snake within Butte, Colusa, Glenn, Fresno, Merced, Sacramento, San*
24 *Joaquin, Solano, Stanislaus, Sutter, and Yolo Counties, California* (USFWS 1997). The
25 purpose of this programmatic consultation is to expedite ACOE-permitted projects,
26 including activities that may qualify for authorization under nationwide permitting, with
27 relatively small effects (i.e., temporary impacts of less than three acres and permanent
28 impacts of less than 20 acres) on the giant garter snake and its habitat. Projects that
29 meet this impact criteria as well as the terms and conditions of the Biological Opinion
30 and Incidental Take Statement contained within the consultation document, may be
31 appended to this programmatic consultation.

1 *Migratory Bird Treaty Act*

2 The Migratory Bird Treaty Act (MBTA) was originally passed in 1918 as four bilateral
3 treaties, or conventions, for the protection of a shared migratory bird resource. The
4 primary motivation for the international negotiations was to stop the “indiscriminate
5 slaughter” of migratory birds by market hunters and others. Each of the treaties
6 protects selected species of birds and provides for closed and open seasons for hunting
7 game birds. The MBTA protects over 800 species of birds.

8 Clean Water Act

9 Pursuant to Section 404 of the Clean Water Act, the temporary or permanent discharge
10 of dredged or fill material into areas delineated as waters of the United States requires
11 prior authorization from the Army Corps of Engineers (ACOE). Waters of the United
12 States, as defined in 33 CFR 328.3, include (1) waters which are currently used, or
13 were used in the past, or may be susceptible to use in interstate or foreign commerce;
14 (2) waters which are subject to the ebb and flow of the tide; (3) all interstate waters
15 including interstate wetlands; (4) all other waters such as lakes, rivers, intermittent and
16 perennial streams, mudflats, sandflats, wetlands, natural ponds for which the use,
17 degradation or destruction could affect interstate or foreign commerce; and (5) areas
18 which are or could be used for recreation by interstate or foreign travelers, from which
19 fish or shellfish are or could be taken and sold in interstate or foreign commerce, use as
20 habitat for birds that migrate across state boundaries, and use for species protected by
21 FESA (1973), as amended.

22 The recent *John A. Rapanos, et al. v. United States* and *June Carabell, et al. v. ACOE*
23 U.S. Supreme Court decisions (547 U.S. 715) further defined under what conditions a
24 wetland or a tributary is a “water of the U.S.,” and therefore regulated by the Clean
25 Water Act. Pursuant to these decisions, as well as the recent EPA/ACOE 2008
26 guidance memo on interpreting the Rapanos and Carabell decisions (547 U.S. 715),
27 ACOE will continue to assert jurisdiction over wetlands adjacent to traditional navigable
28 waters (i.e., has an unbroken hydrologic connection to jurisdictional waters, or is
29 separated from those waters by a berm or similar feature, or is in reasonably close
30 proximity to those waters); non-navigable tributaries of navigable waters that are
31 relatively permanent; and wetlands that directly abut (i.e., have a continuous surface
32 connection with) such tributaries. On a case-by-case basis, the ACOE will determine
33 whether or not non-permanent, non-navigable tributaries, and wetlands adjacent to such
34 tributaries, have a significant nexus with traditional navigable waters (definitions one

1 and two in the previous paragraph), and would therefore fall under the jurisdiction of the
2 Clean Water Act. A significant nexus exists if the flow characteristics and ecological
3 functions of such a tributary, or wetland adjacent to the tributary, significantly affect the
4 chemical, physical, and biological integrity of downstream traditional navigable waters.

5 State

6 *California Endangered Species Act*

7 The CDFG administers CESA, which prohibits the “take” of plant and animal species
8 designated by the Fish and Game Commission as endangered or threatened in the
9 State of California. CDFG regulations are set forth in the Fish and Game Code of
10 California. Under CESA, take is defined as to “hunt, pursue, catch, capture, or kill, or
11 attempt to hunt, pursue, catch, capture, or kill.” CESA section 2053 stipulates that state
12 agencies may not approve projects that would “jeopardize the continued existence of
13 any endangered species or threatened species or result in the destruction or adverse
14 modification of habitat essential to the continued existence of those species, if there are
15 reasonable and prudent alternatives available consistent with conserving the species or
16 its habitat which would prevent jeopardy.”

17 CESA authorizes the take of endangered, threatened, or candidate species if take is
18 incidental to otherwise lawful activity and if specific criteria are met. These provisions
19 also require the CDFG to coordinate consultations with the USFWS for actions involving
20 federally listed species that are also state-listed species (Fish and Game Code 2080 et
21 seq.). In those circumstances where it is determined that the FESA incidental take
22 authorization is consistent with Chapter 1.5, Endangered Species, of the California Fish
23 and Game Code, no further authorization or approval is necessary (Fish and Game
24 Code section 2080.1).

25 A CESA permit may not authorize the take of "fully protected" species that are protected
26 in other provisions of the Fish and Game Code, discussed further below.

27 *Other California Laws*

28 According to sections 3511 (birds), 4700 (mammals), and 5050 (reptiles and
29 amphibians) of the Fish and Game Code, a “fully protected” species may be taken or
30 possessed only under very limited circumstances, such as take for scientific research or
31 for the protection of livestock. Such “take” can only be undertaken through approval of

1 a permit from the Department of Fish and Game. "Incidental takes" of these species
2 are never authorized.

3 Pursuant to section 3503.5 of the Fish and Game Code, it is also unlawful to take,
4 possess, or destroy any birds of prey; or to take, possess, or destroy any nest or eggs
5 of such birds. "Birds of prey" refers to species in the orders Falconiformes and
6 Strigiformes.

7 Nests of all other birds (except English sparrow and European starling) are also
8 protected under sections 3503 and 3513 of the Fish and Game Code.

9 Pursuant to section 1602 of the Fish and Game Code, CDFG also regulates all
10 diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any
11 river, stream, or lake that supports fish or wildlife. CDFG defines a "stream" (including
12 creeks and rivers) as "a body of water that flows at least periodically or intermittently
13 through a bed or channel having banks and supports fish or other aquatic life. This
14 includes watercourses having surface or subsurface flow that supports or has supported
15 riparian vegetation." CDFG's definition of "lake" includes "natural lakes or man-made
16 reservoirs." Diversion, obstruction, or changes to the natural flow or bed, channel, or
17 bank of any river, stream, or lake that supports fish or wildlife requires authorization
18 from CDFG by means of entering into an agreement pursuant to section 1602 of the
19 Fish and Game Code.

20 Under the Porter-Cologne Water Quality Control Laws, in the California Water Code, the
21 State Water Resources Control Board (SWRCB) and local Regional Water Quality
22 Control Board (RWQCB) regulate state water resources, including streams and other
23 surface waters, wetlands, and groundwater. The state regulates discharge of fill into
24 wetlands and waters to ensure that clean water goals are met. Projects qualifying for
25 an ACOE Section 404 permit must submit materials for review to the appropriate
26 RWQCB and request a Section 401 certification.

27 California Public Resources Code (PRC) § 21083.4 requires a county, as part of the
28 CEQA process, to consider whether a Project would impact oak woodlands, including
29 oak trees (meaning a native tree species in the genus *Quercus*) that are five inches or
30 more in diameter at breast height. If a project may have a significant effect on oak
31 woodlands (defined in Fish and Game Code § 1361(h) as "an oak stand with a greater
32 than 10 percent canopy cover or that may have historically supported greater than 10
33 percent canopy cover"), the PRC requires implementation of specific mitigation

1 measures to reduce impacts to oak woodlands. Mitigation options include conservation
2 of existing oak woodlands, planting of new trees, contribution of funds to the Oak
3 Woodlands Conservation Fund, or any other measures developed by the county.

4 Local

5 *City of Marysville*

6 The city of Marysville General Plan contains policies for the conservation and
7 preservation of resources that encourage the preservation of wildlife habitat areas,
8 protect the fisheries of adjacent waterways, and ensure that existing natural resource
9 areas are protected from encroachment or destruction (City of Marysville 1984).

10 *Yuba County*

11 The Yuba County General Plan contains a number of goals and objectives with respect
12 to vegetation and wildlife protection including the following: protection of lands of
13 unique value to plants, fisheries, waterfowl, and other forms of animal life; no net loss of
14 riparian and wetland habitat; retention and protection from incompatible uses of existing
15 designated wildlife areas; identification and protection of remaining areas containing
16 habitat suitable for threatened, endangered, or special-status species; retention and
17 enhancement of important habitat areas; compliance with state/federal ESAs; protection
18 of migratory deer corridors and wildlife travel routes; and the protection and
19 regeneration of oak woodlands (Yuba County 1996).

20 *Sutter County*

21 The Sutter County General Plan contains several goals and policies regarding the
22 conservation of biological resources including protection and no net loss of federally
23 regulated wetland and riparian areas; discouraging direct discharge of surface runoff
24 into wetland areas; restoration of natural wetland environments; protection and
25 enhancement of fish and wildlife habitat of moderate to high value; preservation and re-
26 establishment of fisheries in county rivers and streams; preservation and protection of
27 waterfowl resources; preservation of existing wildlife corridors; preservation of oak
28 woodlands, riparian areas, and vernal pools; preservation of rare, threatened, or
29 endangered plant species; and the protection of major groves of native trees (Sutter
30 County 1996).

1 *Yuba City*

2 The Yuba City General Plan contains several guiding and implementing policies
3 regarding biological resources. Applicable policies include those that protect special-
4 status species, protect and enhance natural habitat features associated with the
5 Feather River, preserve and enhance heritage oaks, preserve and enhance fisheries in
6 the Feather River, require protection of sensitive habitat areas and special-status
7 species in new development site designs, require protection of oak trees and other
8 native trees of significant size, protect and enhance riparian zones associated with the
9 Feather River, and that protect and enhance wildlife corridors associated with the
10 Feather River (Yuba City 2004).

11 *Yuba and Sutter Counties Habitat Conservation Plan*

12 Yuba and Sutter Counties are currently working with local stakeholders in preparing a
13 bi-county Habitat Conservation Plan/Natural Community Conservation Plan
14 (HCP/NCCP) in an effort to establish a local mechanism for protecting natural and
15 undeveloped habitat within the Yuba and Feather River Valleys. The Yuba-Sutter
16 NCCP/HCP originally began as a planning and conservation document to address
17 proposed highway improvements along State Routes 70 and 99, but now includes a
18 larger coverage area within the Feather and Yuba River watersheds. Through the
19 application of conservation strategies, preserve designs, and various protection
20 measures to preserve identified sensitive biological habitats and species, the plan will
21 provide regulatory authority for planned urban growth and public infrastructure projects
22 while conserving important biological resources within the planning area (Sutter County
23 2006). The HCP is currently being prepared; completion is not anticipated for at least
24 two years (Hartman, pers. comm. 2008).

25 **Impact Analysis and Mitigation**

26 Impact Discussion

27 The proposed Project could result in temporary disturbance and/or permanent loss or
28 disturbance to sensitive vegetation communities and special-status plant and animal
29 species. Temporary disturbance includes short-term impacts to on-ground habitats and
30 associated plant and animal species during removal and installation of transmission
31 poles, construction of new access roads and improvements to existing access roads,
32 and movement of equipment and Project personnel work within the transmission line

1 right-of-way and at tensioning/splicing and staging/lay-down areas. Impacts could
2 include soil compaction, crushing of vegetation, and potential harm to animals within
3 burrows or under vegetative cover. Such disturbance would generally be limited to
4 areas where other existing surface roads are not available. Permanent impacts would
5 occur with installation of new transmission poles and pole foundations that would
6 remain throughout the life of the Project. Impacts would generally involve the
7 permanent loss of habitat in those areas associated with new pole locations.

8 The Project's impacts were quantified by overlaying the limits of Project construction on
9 the biological resources map of the site. The following discusses the direct, indirect,
10 temporary and permanent impacts associated with biological resources within and
11 immediately adjacent to the Project right-of-way.

12 **(a) Impact BIO-1: Potential Adverse Effect on Special-Status Plant or Wildlife**
13 **Species.**

14 **While Project activities would have no impact (i.e., for plant and amphibian**
15 **species) or a less-than-significant impact on some special-status species (i.e.,**
16 **fish), mitigation would be required to reduce impacts to other special-status**
17 **species in the area (i.e., invertebrate, reptile, bird, and mammal species) to a level**
18 **that is less than significant (Less than Significant with Mitigation, Class II).**

19 **Plants.** None of the three special-status plant species reviewed for the Project, Ferris'
20 milk-vetch, Veiny monardella, or Hartweg's golden starburst, are expected to occur
21 within the Project area because of the lack of suitable habitat for these species.
22 Therefore, Project implementation would result in no impact to these species.

23 **Invertebrates.** Three invertebrate species—vernal pool fairy shrimp, vernal pool
24 tadpole shrimp, and valley elderberry longhorn beetle—could potentially be adversely
25 affected by Project-related activities that occur within suitable seasonal wetland habitat
26 within the Project area.

27 Vernal pool fairy shrimp and vernal pool tadpole shrimp: Construction-related activities
28 (e.g., old pole extraction and new pole placement, development of access roads, use of
29 heavy machinery) that occur within the seasonal wetlands near poles 4/79 and 4/80
30 could result in direct fill, excavation, or disturbance of these wetlands and adversely
31 affect any shrimp species that potentially occur there, or alter the hydrology of the
32 wetlands. Indirect impacts, such as sediment introduction through uncontrolled erosion

1 or alteration of the wetland feature's hydrologic regime, can occur from construction
2 activities adjacent to these wetlands and adversely affect potentially occurring shrimp.
3 Without mitigation, direct and indirect effects associated with construction and pole
4 extraction/placement activities would be a potentially significant impact. However,
5 implementation of the following measures will mitigate this impact to less than
6 significant (Class II).

7 Mitigation Measures for Impact BIO-1:

8 **MM BIO-1a. Pre-Construction Identification and Avoidance of Wetlands.** The
9 boundaries of all seasonal wetlands will be clearly identified, marked, and
10 mapped prior to any construction activities within the Project area. No
11 construction activities will take place within identified seasonal wetland
12 areas.

13 **MM BIO-1b. Best Management Practices.** Erosion, stockpile management, and
14 sediment control best management practices shall be implemented for
15 construction areas that occur adjacent to seasonal wetland areas. No fill
16 or runoff shall be allowed to enter any seasonal wetland feature.
17 Appropriate best management practices shall also be implemented at any
18 drainage pattern, culverts, or ditches that have potential to carry sediment
19 runoff from work areas to seasonal wetland areas.

20 **MM BIO-1c. Seasonal Activity Limitations.** Any construction activities that occur
21 adjacent to seasonal wetland areas that provide potential branchiopod
22 habitat shall occur during the dry season (generally May through October,
23 but dependent upon rainfall amounts and extent of inundation of wetland
24 areas and pools) in order to minimize potential introduction of sediment to
25 seasonal wetland features.

26 Valley Elderberry Longhorn Beetle: Removal or damage to identified elderberry shrubs
27 within the Project area, specifically near poles 2/47 to 2/50 and poles 6/130 and 7/152,
28 could adversely affect valley elderberry longhorn beetles should they be inhabiting
29 these shrubs during construction activities. Indirect impacts could include soil
30 compaction near elderberry shrubs, sediment transport onto the elderberry shrub root
31 zone as a result of work site erosion, alteration of hydrologic regimes near shrubs,
32 dusting of leaves due to nearby work activities, and soil compaction, all of which could
33 adversely affect elderberry shrubs and any beetles occupying the shrubs. Without

1 mitigation, direct and indirect effects associated with construction and pole
2 extraction/placement activities would be a potentially significant impact. However,
3 implementation of the following mitigation measures will mitigate this impact to less than
4 significant (Class II).

5 **MM BIO-1d. Pre-Construction Identification and Avoidance of Elderberry Shrubs.**

6 All elderberry shrubs within 100 feet of work areas shall be clearly
7 identified, marked, and mapped prior to any construction activities. No
8 elderberry shrubs will be removed, pruned, or otherwise damaged during
9 the course of any construction activities.

10 **MM BIO-1e. Avoidance Measures.** A minimum setback of at least 20 feet measured

11 from the dripline shall be established around all elderberry shrubs within or
12 adjacent to Project work areas. Temporary exclusion fencing shall be
13 erected at a minimum of 20 feet measured from the dripline of all
14 identified/marked elderberry shrubs, and no permanent or temporary
15 construction work, soil transport, or other activities shall be allowed to
16 occur within this exclusion area.

17 **MM BIO-1f. Best Management Practices.** Erosion, stockpile management, dust, and

18 sediment control best management practices shall be implemented for
19 work areas within 100 feet of identified/marked elderberry shrubs.

20 **MM BIO-1g. Restriction on Chemicals.** No chemicals that might harm the beetle or

21 elderberry shrubs shall be used within 100 feet of any identified/marked
22 elderberry shrubs. Prior to use, the material safety data sheet shall be
23 consulted for any chemicals planned for use/application during windy
24 conditions. The material safety data sheet will indicate wind speed limits
25 and/or distances at which chemicals should be applied to avoid overspray
26 onto other sensitive resources or nearby objects.

27 **MM BIO-1h. Avoidance of Ground Disturbance.** Poles to be removed that are within

28 20 feet measured from the dripline of an identified/marked elderberry
29 shrub shall be cut off at ground level and the pole butt shall be left in place
30 to avoid ground disturbance near the shrub's root zone.

31 **Fish.** Five special-status fish species (green sturgeon, Sacramento splittail, river
32 lamprey, hardhead, and steelhead trout), and three seasonal runs of a sixth special-

1 status fish species (Chinook salmon) could be adversely affected by construction-
2 related activities that would occur within or immediately adjacent to the Feather River.
3 However, no direct effects to these fish species will occur because the Project will not
4 occur within or otherwise directly impact the Feather River. Indirect impacts to the
5 Feather River can include sediment runoff associated with construction activities.
6 However, because construction activities will generally occur well away from the
7 Feather River margins and any sedimentation runoff would therefore likely be minimal,
8 and because most of the six fish species and runs generally only use the Feather River
9 for movement purposes and not for spawning or rearing habitat, indirect impacts on
10 these fish species would be less than significant (Class III).

11 **Amphibians.** Although Jack Slough provides marginal breeding habitat for the two
12 special-status amphibians (California tiger salamander and California red-legged frog)
13 listed in Table C-2 (Appendix C), because of the lack of records for these species in the
14 immediate region, because the Project area is outside the known distribution range for
15 the salamander, and because the red-legged frog is considered extirpated from the
16 valley floor, no impacts to these species would occur.

17 **Reptiles.** Two special-status reptiles, western pond turtle and giant garter snake,
18 potentially occur in the Project area. Because Project construction would not occur
19 within or otherwise directly impact Jack Slough or the larger perennial ditches in the
20 Project area, and because construction activities would generally occur well away from
21 the margins of Jack Slough such that any sedimentation runoff would therefore likely be
22 minimal, no impacts to the western pond turtle are expected to occur.

23 Project activities may result in temporary impacts to approximately 13.0 acres of
24 suitable giant garter snake aquatic habitat (rice fields) between poles 4/80 and 4/90
25 (see Figure 3-6, Giant Garter Snake Suitable Habitat Locations (a)). Temporary
26 impacts include suspension of rice production for one season to accommodate
27 temporary work areas and access to poles. Affected rice fields will be returned to
28 previous grade and conditions upon completion of work.

29 Existing poles 4/90, 4/91, and 4/92 are set directly within irrigation ditches DD-6 and
30 DD-8 and require complete removal; new poles will be located outside the ditches.
31 While these ditches have not been identified as suitable breeding habitat for giant garter
32 snake, they could be used as dispersal or movement corridors during the snake's active
33 period. Pole removal would only cause temporary impacts to these ditches, which will
34 be returned to their previous grades and contours upon work completion.

1 Project activities are anticipated to permanently impact 0.002 acre of upland habitat
2 through the installation of three tubular steel poles along the two sections of the Project
3 alignment where suitable giant garter snake upland habitat was identified. Installation of
4 tubular steel poles at pole locations 4/94, 5/102, 5/105, and 5/112 would result in a net
5 loss of suitable upland giant garter snake habitat (see Figures 3-6 and 3-7).
6 Approximately 5.7 acres of suitable upland habitat would be temporarily impacted by
7 construction activities at work areas and at pole locations 4/80 to 4/94, and 5/103 to
8 5/112, as these locations are considered suitable upland habitat situated within 200 feet
9 of permanent suitable aquatic habitat. Impacts are anticipated to include vegetation
10 denuding and compaction of soil from heavy equipment and personnel activity at these
11 locations. All temporary impacts to upland giant garter snake habitat will be restored to
12 pre-Project conditions. All other work locations and access routes within potential giant
13 garter snake habitat areas will take place on or within previously disturbed/developed
14 areas (such as established roads surfaces and orchards) that offer no upland habitat
15 value for this species.

16 All temporary and permanent Project impacts associated with aquatic and upland giant
17 garter snake habitats fall within the impact criteria and guidelines of the 1997 USFWS
18 Programmatic Formal Consultation (previously discussed in the Regulatory Setting
19 section). The Project applicant has submitted an application to append this Project to
20 the programmatic consultation. If the proposed Project is appended to the
21 programmatic consultation, the Project applicant will be required to comply with the
22 various terms and conditions stated in the Biological Opinion and Incidental Take
23 Statement of the programmatic consultation. The mitigation measures listed herein to
24 avoid/minimize impacts on giant garter snake and its habitat are consistent with these
25 terms and conditions.

26 Without mitigation, direct and indirect effects associated with construction and pole
27 extraction/placement activities would be a potentially significant impact. However,
28 implementation of the following mitigation measures will mitigate this impact to less than
29 significant (Class II).

30 **MM BIO-1i. Limits on Timing of Construction.** Construction activities within giant
31 garter snake habitat areas shall be conducted between May 1 and
32 October 1. This is the active period for this species and the threat of direct
33 mortality is decreased because snakes are expected to actively move
34 away from perceived threats.

- 1 **MM BIO-1j. Pre-Construction Surveys.** The Project area shall be surveyed by a
2 qualified biologist for giant garter snakes no more than 24 hours before
3 the initiation of construction activities that could impact giant garter snake
4 habitat. Surveys of the Project area should be repeated if a lapse in
5 construction activity of at least two weeks or greater has occurred. If a
6 snake is encountered during construction, activities must cease until
7 appropriate corrective measures are implemented or it has been
8 determined that the snake will not be harmed.
- 9 **MM BIO-1k. Avoidance by Construction Personnel.** All construction personnel shall
10 visually check for giant garter snake beneath vehicles and equipment
11 before moving or operating them.
- 12 **MM BIO-1l. Presence of Biological Monitor.** A qualified biological monitor shall be
13 present on site when working within giant garter snake habitat areas.
- 14 **MM BIO-1m. Avoidance of Aquatic Habitat.** Construction within 200 feet of the banks
15 of giant garter snake aquatic habitat will be avoided. The movement of
16 heavy equipment shall be confined to existing roadways to minimize giant
17 garter snake habitat disturbance.
- 18 **MM BIO-1n. Reduced Speed on Access Roads within Habitat.** The maximum
19 speed limit on temporary access roads within giant garter snake habitat
20 areas shall be posted as 15 miles per hour.
- 21 **MM BIO-1o. Avoidance of Environmentally Sensitive Areas.** Identified giant garter
22 snake habitat within or adjacent to the Project area will be identified and
23 marked on all maps as Environmentally Sensitive Areas. These areas
24 shall be avoided by all construction personnel.
- 25 **MM BIO-1p. Daytime Construction in Habitat Areas.** All work activities within giant
26 garter snake habitat areas shall be limited to daylight hours to maximize
27 species detection and avoidance.
- 28 **MM BIO-1q. Dewatered Habitat Restrictions.** Any dewatered habitat shall remain dry
29 for at least 15 consecutive days after April 15 and before excavating or
30 filling the dewatered habitat.

1 **MM BIO-1r. Restoration of Habitat to Pre-Project Conditions.** After completion of
2 construction activities, any temporary fill and construction debris within
3 giant garter snake habitat areas shall be removed and such areas shall be
4 restored to pre-Project conditions. Restoration work will include such
5 activities as replanting species removed from banks or replanting
6 emergent vegetation in active channels.

7 **MM BIO-1s. Restoration of Upland and Aquatic Habitat.** All temporary impacts to
8 upland and aquatic giant garter snake habitat shall be restored to pre-
9 Project conditions upon completion of construction.

10 **MM BIO-1t. Purchase of Habitat Credits.** The permanent loss of giant garter snake
11 upland habitat shall be mitigated accordingly through the purchase of giant
12 garter snake habitat credits (at Level 3 Effects ratio of 3:1) through an
13 approved USFWS conservation bank or USFWS-approved in-lieu fund.
14 This purchase will be finalized before construction activities associated
15 with the Project commence.

16 **Birds.** Thirteen special-status avian species (listed in Appendix C, Table C-2, Special-
17 Status Animal Species Potentially Occurring within the Pease–Marysville 60 kV
18 Transmission Line Project Area) may be directly affected by noise, vibration, dust,
19 vegetation removal, and human presence associated with the electric transmission line
20 reconstruction. Because tricolored blackbird is not expected to occur within or near the
21 proposed alignment, no impacts to this species are expected to occur. Indirect effects
22 may also result from these activities in the form of degraded habitat quality, lost foraging
23 opportunities, or decreased prey base. Work that occurs during the typical avian
24 breeding and nesting season (March through August) would likely have the most
25 detrimental effects on avian species that are known to breed in the area and can include
26 nest destruction (including destruction of eggs and/or harm to young), nest
27 abandonment, or nest failure. Wintering or foraging species present in or near
28 construction areas could experience temporary impacts (such as temporary
29 displacement from wintering/foraging habitat areas).

30 The Project is not expected to result in a substantial loss or degradation of nesting or
31 foraging habitats identified in the Project area (only approximately 0.15 acre of habitat
32 would be permanently disturbed). Work area impacts/disturbances would be temporary
33 in nature and will be restored to pre-Project conditions upon completion of work.
34 However, without mitigation, direct and indirect effects associated with construction and

1 pole extraction/placement activities that could result in the destruction of active nests
2 and/or nest abandonment or failure of nests located adjacent to work areas would be a
3 potentially significant impact. However, implementation of the following mitigation
4 measures will mitigate this impact to less than significant (Class II).

5 **MM BIO-1u. Avoidance of Construction During Breeding Season.** Construction
6 activities shall be scheduled to avoid the breeding and nesting season of
7 special-status avian species in the area (typically March through August).
8 If construction would take place during this time, pre-construction nesting
9 bird surveys for avian species with potential to occur within 300 feet (500
10 feet for potentially occurring raptors) of proposed work areas shall be
11 conducted within one week of construction activities by a qualified
12 biologist. For Swainson's hawks (state-listed as threatened), surveys
13 within suitable habitat areas for this species shall be conducted within 0.25
14 mile of all work areas.

15 **MM BIO-1v. Active Nests and Pre-Disturbance Surveys.** If active nests are found,
16 clearing and construction within 300 feet of the nest (500 feet for raptors)
17 will be postponed or halted until the nest is vacated, juveniles have
18 fledged, and there is no evidence of a second attempt at nesting. These
19 determinations shall be made by a qualified biologist. If ground-disturbing
20 activities are delayed, then additional pre-disturbance surveys will be
21 conducted such that no more than seven days elapse between the survey
22 and ground-disturbing activities. Limits on construction to avoid an active
23 nest will be established in the field with flagging, fencing, or other
24 appropriate barriers and construction personnel will be instructed on the
25 sensitivity of nest areas. The biologist will serve as a construction monitor
26 during those periods when construction activities are to occur near active
27 nest areas to avoid inadvertent impacts to these nests. The biologist may
28 adjust the 300- or 500-foot setback at his or her discretion and in
29 consultation with the CSLC, depending on the species (particularly if a
30 Swainson's hawk nest is located within 0.25 mile of the alignment) and the
31 location of the nest (e.g., if nest is well protected on a rocky outcrop or
32 buffered by dense vegetation).

33 **Mammals.** One special-status mammal, Townsend's big-eared bat, potentially occurs
34 in the Project area. This bat species can be adversely affected by Project activities if
35 buildings, artificial structures, and tree hollows that are used by this species for roosting

1 are inadvertently disturbed or destroyed. Without mitigation, direct and indirect effects
2 associated with construction and pole extraction/placement activities that could result in
3 disturbance or destruction of roosting sites within or immediately adjacent to work areas
4 would be a potentially significant impact. However, implementation of the following
5 mitigation measures will mitigate this impact to less than significant (Class II).

6 **MM BIO-1w. Pre-Construction Surveys.** Pre-construction surveys shall be conducted
7 within one week of construction activities by a qualified biologist within
8 suitable habitat that is within 300 feet of work areas to detect potential bat
9 roosting, hibernation, or maternity sites.

10 **MM BIO-1x. Construction Setbacks Around Roost/Maternity Sites.** If any bat
11 roosts or maternity sites are located within 300 feet of a designated work
12 area, the limits of construction to avoid an active roost/maternity site will
13 be established in the field with flagging, fencing, or other appropriate
14 barriers and construction personnel will be instructed on the sensitivity of
15 these areas. The biologist will serve as a construction monitor during
16 those periods when construction activities are to occur near active
17 roost/maternity sites to avoid inadvertent impacts to these sites. The
18 biologist may adjust the construction area setback at his or her discretion
19 and in consultation with the CSLC depending on the location of the roost
20 or maternity site.

21 Rationale for Mitigation

22 These mitigation measures would identify areas where special-status plant and animal
23 species are present, and avoid, where possible, impacts to these species. Impacts
24 would be reduced to less than significant (Class II).

25 **(b) Impact BIO-2: Potential Adverse Effect on Riparian or Other Sensitive Natural**
26 **Communities.**

27 **The Project would not have a significant impact to riparian habitat or other**
28 **sensitive natural communities (Less than Significant with Mitigation, Class II).**

29 Riparian forest habitat was identified along the Project alignment at the Feather River
30 crossing and along portions of Jack Slough and the Yuba River. Removal of existing
31 transmission poles and installation of new poles may require some light trimming of
32 riparian woodland habitat at the Feather River and Jack Slough crossings to maintain

1 necessary conductor clearances and to accommodate removal of old structures. Any
2 tree trimming would be conducted by foot crews utilizing chainsaws, fannel saws, or
3 loppers and would not entail the use of mechanized equipment such as tractors or
4 trucks. Vegetation removal foot crews would be working within vegetated areas within a
5 short period of time such that these vegetation removal activities would not adversely
6 affect the long-term health of the vegetation community nor the associated subsurface
7 root structure. Therefore, no substantial loss or disturbance to this habitat type are
8 anticipated.

9 Similar minor trimming of vegetation associated with riparian scrub habitat at the Jack
10 Slough crossing is expected to occur in association with pole extraction and installation,
11 but no substantial impacts to this community are expected.

12 However, work within or in the immediate vicinity of sensitive riparian habitats, including
13 the riparian forest associated with the Feather River and Jack Slough, may also expose
14 these habitats to pollutants, such as fuel spills from machinery. The following mitigation
15 measure will be implemented to avoid the potential for direct or indirect impacts to
16 riparian areas (Class II):

17 Mitigation Measure for Impact BIO-2:

18 **MM BIO-2. Best Management Practices for Riparian Habitat and Adjacent**
19 **Waterways.** Service and refueling procedures shall not be conducted
20 where there is potential for fuel spills to seep or wash into riparian habitats
21 or adjacent waterways. Erosion, sediment, material stockpile, and dust
22 control best management practices will be employed on site to avoid any
23 fill or runoff from work areas from entering riparian habitats or adjacent
24 waterways.

25 Rationale for Mitigation

26 This mitigation measure would implement best management practices to avoid impacts
27 to riparian habitat, which would reduce potential impacts to sensitive natural
28 communities to less than significant (Class II).

1 **(c) Impact BIO-3: Potential Adverse Effect on Federally Protected Wetlands.**

2 **The Project would not have a significant adverse effect on federally protected**
3 **wetlands with the implementation of appropriate mitigation (Less than Significant**
4 **with Mitigation, Class II).**

5 Direct or indirect temporary or permanent impacts are anticipated to wetland vegetation
6 that occurs along two irrigation ditches (DD-12 and DD-14) identified along the
7 alignment between poles 5/102 and 5/112 (see Figure 3-7, Giant Garter Snake Suitable
8 Habitat Locations (b)). Direct or indirect temporary or permanent impacts are
9 anticipated to two small, seasonal wetland features near poles 4/79 and 4/80. These
10 direct and/or indirect impacts are associated with potential exposure of these wetland
11 areas to chemical or mechanical pollutants that may be accidentally released into these
12 sensitive areas. Implementation of Mitigation Measure BIO-2 would avoid the potential
13 for direct or indirect impacts to wetland areas and reduce these potential impacts to less
14 than significant (Class II).

15 Rationale for Mitigation

16 Mitigation Measure BIO-2 would ensure the use of best management practices to avoid
17 impacts to federally protected wetlands; therefore, these potential impacts would be
18 reduced to less than significant (Class II).

19 **(d) Impact BIO-4: Potential to Substantially Interfere with Resident or Migratory**
20 **Wildlife Movement or Corridors, or to Impede the Use of Native Wildlife Nursery**
21 **Sites.**

22 **The Project would not impact wildlife movement or corridors or impede the use of**
23 **nursery or breeding sites (No Impact).**

24 While the Feather River serves as a movement and migratory corridor for several
25 special-status fish species, particularly anadromous Chinook salmon (*Oncorhynchus*
26 *tshawytscha*) runs, no new transmission poles would be placed within the river or
27 otherwise impede the ability of these fish species to freely move up and down the river
28 corridor. Therefore, Project implementation would not impede the ability of fish to
29 access and use nursery sites or other spawning locations.

30 While riparian habitats adjacent to rivers, creeks, and drainages are often used by
31 upland wildlife species as movement corridors, the proposed alignment would not result

1 in permanent adverse effects to riparian habitats associated with the Feather River and
2 Jack Slough, and the function of these areas to serve as wildlife movement habitat
3 would remain intact. As previously stated, removal of existing transmission poles and
4 installation of new poles may require some light trimming of riparian woodland habitat at
5 the Feather River and Jack Slough crossings to maintain necessary conductor
6 clearances and to accommodate removal of old structures. Any tree trimming would be
7 conducted by foot crews using chainsaws, fannel saws, or loppers, and would not entail
8 the use of mechanized equipment, such as tractors or trucks. Vegetation removal foot
9 crews would be working within vegetated areas for only a short period of time such that
10 vegetation removal activities would not adversely affect the long-term health of the
11 riparian habitat, nor the associated subsurface root structure. Therefore, no substantial
12 loss or disturbance to riparian habitat and their ability to function as movement corridors
13 are anticipated.

14 **(e) Impact BIO-5: Potential to Conflict with Local Policies or Ordinances**
15 **Protecting Biological Resources.**

16 **The Project would not conflict with any local policies or ordinances protecting**
17 **biological resources (Less than Significant with Mitigation, Class II).**

18 As outlined previously in the Biological Resources Regulatory Setting, the cities of
19 Marysville and Yuba City and Yuba and Sutter counties all have General Plan biological
20 resource protection policies that relate to conservation of sensitive uplands; wetlands;
21 oak trees and oak woodlands; and wildlife and wildlife movement corridors. The
22 removal of existing transmission poles and the installation of new transmission poles
23 would not result in the removal of any native trees or result in substantial losses of
24 native vegetation or sensitive habitat areas, including wetlands, riparian habitats, and
25 oak woodlands. The Project would not result in adverse effects on fisheries or other
26 wildlife associated with the Feather River and would not result in adverse effects on
27 wildlife corridors. With implementation of Mitigation Measures BIO-1a through BIO-1x,
28 the Project would not result in adverse effects on special-status wildlife species
29 potentially occurring within or immediately adjacent to the transmission alignment.

30 Consequently, the Project design, coupled with inclusion of Mitigation Measures BIO-1a
31 through BIO-1x and BIO-2, ensures that there would be no conflict with any local
32 policies or ordinances protecting biological resources (Class II).

1 **(f) Impact BIO-6: Potential to Conflict with the Provisions of an Adopted Habitat**
2 **Conservation Plan or Natural Community Conservation Plan.**

3 **Because the transmission lines and poles are established uses in the area and**
4 **the Sutter and Yuba Counties HCP/NCCP has yet to be adopted, the Project would**
5 **not conflict with any adopted HCP or NCCP (Less than Significant, Class III).**

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

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1 **3.3.5 Cultural Resources**

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
(a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2 **Environmental Setting**

3 Information for the proposed Project compiled in the following section was gathered
 4 from review of the cultural resources technical report prepared for Pacific Gas and
 5 Electric (PG&E) by Far Western Anthropological Research Group, Inc. and PAR
 6 Environmental, Inc., as well as Native American consultations conducted by PG&E
 7 (Berg et al. 2008). These reports are available for review at the California State Lands
 8 Commission (CSLC), located at 100 Howe Avenue, Suite 100 South, Sacramento,
 9 California 95825-8202.

10 **Identified Cultural Resources**

11 Record Search Results

12 In July 2007, letters were sent to the North Central Information Center (NCIC) and
 13 Northeast Information Center (NEIC) requesting the preparation of a records search of
 14 the California Historical Resources Information System (CHRIS) for the Project area.
 15 The records search was completed by the NCIC in July 2007, and was also completed

1 by the NEIC in July 2007. A total of seven cultural resource sites were identified within
2 a 1.5-mile search radius of the Project area; no previously recorded resources were
3 noted within the Project area itself.

4 The record search at NCIC and NEIC of CHRIS that was conducted in July of 2007 did
5 not show any known cultural resources within the Project area. The records search
6 included an examination of the official records and maps for archaeological sites and
7 surveys in Sutter and Yuba counties, as well as a review of the National Register of
8 Historic Places (NRHP), the California Register of Historical Resources (CRHR), the
9 California Inventory of Historic Resources, California State Landmarks, California Points
10 of Historical Interest, the Directory of Properties in the Historical Resources Inventory,
11 Caltrans Local Bridge Surveys, and secondary sources pertaining to state and local
12 prehistory and history.

13 In all, seven cultural resources have been recorded adjacent to the proposed Project
14 (see Table 3.3.5-1, Cultural Resources Identified in Proximity to the PG&E Pease–
15 Marysville 60 kV Transmission Line Project). All of the recorded sites are historical-
16 period built environmental resources and are located well outside of areas of anticipated
17 impact. Cultural resources that qualify as eligible for the CRHR are considered
18 historically or culturally significant resources (14 CCR 15064.5).

19 No Native American sacred sites are known to exist in the Project area. A letter, dated
20 March 31, 2008, was sent to the California Native American Heritage Commission to
21 inform them of the proposed Project and to request a sacred lands file check. The
22 California Native American Heritage Commission responded to the information request
23 letter on April 8, 2008, indicating that no Native American cultural resources were
24 documented in the file but cautioned that the absence of documented sites does not
25 necessarily indicate a lack of resources in the Project area. The commission provided a
26 list of recommended tribes to contact to further research the possibility of sacred sites.
27 Letters were sent to two individuals at the Enterprise Rancheria of Maidu Indians and
28 two individuals at the Strawberry Valley Rancheria. As of February 2, 2009, no
29 response has been received from any of these individuals (Berg et. al 2008).
30 Therefore, no Native American sacred sites are known to exist in the Project area.

1 **Table 3.3.5-1. Cultural Resources Identified in Proximity to the PG&E Pease–**
 2 **Marysville 60 kV Transmission Line Project**

Site No.	Temporal Association	Site Description	Site Status/CRHR Eligibility Status	References
P-58-001354	Historic	Southern Pacific Railroad	Unknown	—
P-58-001634	Historic	Baldwin Contracting Company Yard	6Z ¹	St. John 2004
CA-YUB-1441H	Historic	Brown's Valley Grade Levee	Unknown	—
CA-BUT-2770	Historic	Northern-Electric Railroad (later known as Sacramento Northern, Northern California Line, Western Pacific Railway, and Southern Pacific Railway)	Unknown	—
Unknown	Historic	Southern Pacific Railway	Unknown	—
Unknown	Historic	"Harter House," ca. 1872	Unknown	—
Unknown	Historic	Harter Packing Plant, ca. 1918 and 1945	Unknown	—

3 ¹ Found ineligible for NRHP, CRHR, or Local Designation through survey evaluation.

4 Field Survey Results

5 The field survey conducted in April 2008 surveyed a corridor 100 feet on either side of
 6 the Project alignment. Field survey results did not find any previously unknown
 7 archaeological or historical resources in the survey corridor (Berg et. al 2008). Most of
 8 the structures and features identified during the records search were not recorded, as
 9 they were outside the 200-foot corridor and/or were not subject to impact by the
 10 proposed Project (Berg et. al 2008).

11 One exception was a building complex in the city of Marysville, which had been
 12 recorded recently and did not require an update (P-58-001634, noted above). This
 13 resource was evaluated by Gail St. John of the California Department of Transportation
 14 in 2004 as not eligible for the NRHP and/or CRHR (St. John 2004).

15 The survey crew did record one historical feature, an abandoned segment of the
 16 Northern-Electric Railroad (previously recorded as CA-BUT-2770 where it enters Butte
 17 County). It also appeared on early maps as the Northern California Line and was later

1 acquired by the Southern Pacific Railroad. This feature was recorded because although
2 it had not been constantly maintained and used, it retains some degree of historical
3 integrity. This feature crosses beneath the transmission line immediately east of Jack
4 Slough.

5 **Regulatory Setting**

6 Federal

7 The National Environmental Policy Act (NEPA), under Title 42 United States Code
8 (USC) sections 4321–4327, requires federal agencies to consider potential
9 environmental impacts and appropriate mitigation for projects with federal involvement.
10 Section 106 of the National Historic Preservation Act (NHPA) addresses concerns
11 pertinent to the Project’s cultural resources.

12 NHPA establishes the federal government's policy on historic preservation and
13 programs, including the NRHP, through which that policy is implemented. Under NHPA,
14 historic properties include "any prehistoric or historic district, site, building, structure, or
15 object included in, or eligible for inclusion in, the National Register of Historic Places"
16 (16 USC 470w(5)). Section 106 (16 USC 470f) of NHPA requires federal agencies,
17 prior to implementing an "undertaking" (i.e., conducting its own action or issuing a
18 federal permit), to consider the effects of the undertaking on historic properties and to
19 afford the Advisory Council on Historic Preservation (ACHP) and the State Historic
20 Preservation Office (SHPO) a reasonable opportunity to comment on any undertaking
21 that would adversely affect properties eligible for listing on NRHP.

22 Since this Project may require a permit from the U.S. Army Corps of Engineers (ACOE),
23 NHPA and its implementing regulations (16 USC 470 et seq., 36 CFR Part 800, 36 CFR
24 Part 60, and 36 CFR Part 63) apply. The ACOE, the lead federal agency, is ultimately
25 responsible for NHPA section 106 compliance, including consultation with SHPO and
26 ACHP.

27 The four criteria for evaluation of cultural resources established for NRHP listing, (as
28 follows), are identified at 36 CFR § 60.4. These criteria are in accordance with the
29 regulations outlined in 36 CFR § 800 established by ACHP, outlined in section 106 of
30 NHPA.

31 The quality of significance in American history, architecture, archaeology, engineering,
32 and culture is present in districts, sites, buildings, structures, and objects that possess

1 integrity of location, design, setting, materials, workmanship, feeling, and association,
2 and meet the following criteria (36 CFR § 60.4):

3 (a) Are associated with events that have made a significant contribution to the broad
4 patterns of our history;

5 (b) Are associated with the lives of persons significant in our past;

6 (c) Embody the distinctive characteristics of a type, period, or method of
7 construction, or that represent the work of a master, or that possess high artistic
8 values, or that represent a significant and distinguishable entity whose
9 components may lack individual distinction; or

10 (d) Have yielded, or may be likely to yield, information important in prehistory or
11 history.

12 NHPA uses the term “historic property” for cultural resources that have been determined
13 eligible for NRHP listing. Archaeological resources and structures that do not qualify for
14 listing on the NRHP are not considered to be significant and are not described as
15 historic properties. If a resource has been determined not to be eligible for listing on the
16 NRHP it generally is not considered further in the assessment of the environmental
17 impacts of a project.

18 State

19 The California Environmental Quality Act (CEQA) recognizes that historical resources
20 are part of the environment and that a project that “may cause a substantial adverse
21 change in the significance of an historical resource is a project that may have a
22 significant effect on the environment” (Public Resources Code (PRC) 21084.1).
23 Because historic properties designated under any municipal or county ordinance and
24 determined significant by the State Historical Resources Commission may be eligible for
25 the CRHR (PRC 5024.1(e)(5)), portions of the proposed Project are subject to the
26 Historical Resources Chapter of the Marysville Municipal Code, and the Sutter County
27 and Yuba County ordinances regarding cultural resources.

28 CEQA also requires that the lead agency determine whether the Project will have a
29 significant effect on unique archaeological resources that are not eligible for listing in the
30 CRHR, and to avoid unique archaeological resources when feasible or mitigate any
31 effects to less-than-significant levels (PRC 21083.2).

1 The following State Public Resource Code sections and CEQA regulations apply:

- 2 • **California Environmental Quality Act: Public Resources Code sections**
3 **5020.1, 5024.1, 21083.2, 21084.1, et seq.** requires analysis of potential
4 environmental impacts of proposed projects and application of feasible mitigation
5 measures.

- 6 • **Title 14, Public Resources Code, section 5020.1** defines several terms,
7 including the following: (f) “DPR Form 523” means the Department of Parks and
8 Recreation Historic Resources Inventory Form; (i) “historical resource” includes,
9 but is not limited to, any object, building, structure, site, area, place, record, or
10 manuscript that is historically or archaeologically significant in the architectural,
11 engineering, scientific, economic, agricultural, educational, social, political,
12 military, or cultural annals of California; (j) “local register of historical resources”
13 means a list of properties officially designated or recognized as historically
14 significant by a local government pursuant to a local ordinance or resolution; (l)
15 “National Register of Historic Places” means the official federal list of districts,
16 sites, buildings, structures, and objects significant in American history,
17 architecture, archaeology, engineering, and culture as authorized by the NHPA of
18 1966 (Title 16 USC section 470 et seq.); and (q) “substantial adverse change”
19 means demolition, destruction, relocation, or alteration such that the significance
20 of an historical resource would be impaired.

- 21 • **Title 14, Public Resources Code, section 5024.1** establishes the CRHR, sets
22 forth criteria to determine significance, defines eligible properties, and lists
23 nomination procedures.

- 24 • **Title 14, Public Resources Code, section 21083.2** defines “unique and non-
25 unique archaeological resources” and states that the lead agency determines
26 whether a project may have a significant effect on unique archaeological
27 resources. If a potential for damage to unique archaeological resources can be
28 demonstrated, such resources must be avoided. If avoidance is not feasible,
29 mitigation measures shall be required. This section deals with a number of
30 related cultural resources issues, including excavation as mitigation, mitigation
31 costs, time frames for excavation, and mitigation of unexpected resources.

- 1 • **Title 14, Public Resources Code, section 21084.1** defines “historical resource”
2 and states that a project may have a significant effect on the environment if it
3 causes a substantial change in the significance of an historical resource.

- 4 • **Title 14, Public Resources Code, section 5097.5** states that any unauthorized
5 removal of archaeological resources on sites located on public lands is a
6 misdemeanor. As used in this section, “public lands” means lands owned by, or
7 under the jurisdiction of, the state, or any city, county, district, authority, or public
8 corporation, or any agency thereof.

- 9 • **Title 14, Public Resources Code, section 5097.98** prohibits obtaining or
10 possessing Native American artifacts or human remains taken from a grave or
11 cairn, and sets penalties for violation.

- 12 • **Guidelines for the Implementation of CEQA, section 15064.5** defines
13 “historical resource” and addresses effects on historic and prehistoric
14 archaeological resources in addition to the definition of significance.

- 15 • **Guidelines for the Implementation of CEQA, section 15126.4** discusses
16 mitigation measures to minimize significant effects to cultural resources.
17 Mitigation measures related to impacts on historical resources include data
18 recovery through excavation when it is the only feasible mitigation available.

- 19 • **Title 14, Penal Code, section 622.5** asserts that anyone who damages an item
20 of archaeological or historic interest is guilty of a misdemeanor.

- 21 • **CEQA Guidelines: California Code of Regulations, sections 15000 et seq.,**
22 **Appendix G (j)** defines a potentially significant environmental effect as occurring
23 when the proposed project would “disrupt or adversely affect...an archaeological
24 site, except as part of a scientific study.”

1 Local

2 *City of Marysville*

3 The following city of Marysville municipal code and General Plan policy apply:

- 4 • **Marysville Municipal Code Chapter 18.94** specifies applicable standards,
5 objectives, policies, and enforcement measures concerning designation and
6 treatment of historic buildings within the city of Marysville.
- 7 • **Marysville General Plan, Open Space Conservation and Recreation Element**
8 **(1985)** specifies a policy to protect historically significant areas and encourages
9 their preservation and rehabilitation.

10 *Yuba County*

11 The following Yuba County General Plan elements apply:

- 12 • **Yuba County General Plan, Land Use, Circulation, Open Space and**
13 **Conservation Element (1996)** specifies applicable goals, objectives, policies,
14 and implementation measures concerning cultural resources. The county
15 requires evaluation and protection of archaeological resources during project
16 review, or discovered in the course of construction and development. This
17 element requires coordination of planning decisions/actions involving
18 agricultural/open space lands with the cities, adjoining counties, and other public
19 agencies involved in conservation, preservation, and protection of natural
20 resources.
 - 21 ○ **Objective LOU-35** specifies that significant natural, open space, and
22 cultural resources shall be identified in advance of development and
23 incorporated into site-specific project design, specific and community
24 plans.

25 *Sutter County*

26 The following Sutter County General Plan and zoning code regulation apply to cultural
27 resources:

- 28 • **Sutter County General Plan Section 5 (1996)** includes a policy addressing the
29 identification, protection, and enhancement of Sutter County's important

1 historical, archaeological, and cultural sites. The county requires archaeological
2 reconnaissance be conducted and a report be prepared for development projects
3 located in areas of high archaeological sensitivity, and encourages the use of an
4 architectural historian or other qualified expert to evaluate buildings, structures,
5 and objects for development projects in areas with potential historic significance.
6 The general plan requires solicitation of the views of the local Native American
7 community in the cases where development may result in disturbance to sites
8 containing evidence of Native American activity and/or tomb sites of cultural
9 importance.

- 10 • **Sutter County Zoning Code Division 65** implements the Cultural resource
11 policies of the general plan; to promote the preservation, rehabilitation,
12 restoration, reconstruction, and protection of historic and cultural resources; to
13 encourage and promote public knowledge, understanding, and appreciation of
14 the county's history; to promote appreciation and use of historic resources; to
15 encourage preservation of resources, which may potentially be considered
16 eligible for historic preservation zoning; to promote public awareness of the
17 benefits of preservation; and to encourage public participation in identifying and
18 preserving historic resources, thereby increasing community pride and
19 awareness of the county's cultural and historic heritage.

20 **Impact Analysis and Mitigation**

21 Impact Discussion

22 **(a) Impact CUL-1: Potential Change in the Significance of an Historical Resource** 23 **as Defined in § 15064.5.**

24 **The Project would not cause a substantial adverse change to the significance of**
25 **any known historical resource, as defined in § 15064.5 with mitigation provided**
26 **(Less than Significant with Mitigation, Class II).**

27 Mechanisms that would cause damage, destruction, or alteration of historic structures or
28 their immediate surroundings that could impair the significance of an historic resource or
29 adversely alter those physical characteristics of an historical resource that convey its
30 historical significance would result in a significant impact. There is one historical
31 resource that is located within the Project area—an abandoned segment of the Northern-
32 Electric Railroad. Potential placement of pole 4/90 may impact this railroad resource

1 (Class II). In order to avoid potential significant impacts to this resource, mitigation is
2 provided.

3 Mitigation Measure for Impact CUL-1:

4 **MM CUL-1. Placement of Pole 4/90.** Pole 4/90 must be placed outside of the
5 railroad bed of the Northern-Electric Railroad.

6 Rationale for Mitigation

7 These mitigation measures would ensure that impacts to the Northern-Electric Railroad
8 would be reduced to less than significant (Class II).

9 **(b) Impact CUL-2: Potential Change in the Significance of a Unique**
10 **Archaeological Resource Pursuant to § 15064.5.**

11 **The Project would not cause a substantial adverse change to the significance of**
12 **any known archaeological resource with implementation of the appropriate**
13 **mitigation (Less than Significant with Mitigation, Class II).**

14 No “unique archaeological resources” have been identified within the proposed Project
15 study area, but the nonexistence of subsurface cultural resources cannot be adequately
16 demonstrated; unidentified, buried archaeological resources could be present within the
17 potential work and/or new transmission pole installation areas. Impacts on cultural
18 resources could result from ground-disturbing activities, including Project-related
19 excavation, grading, or other subsurface disturbance that could damage or destroy
20 buried archaeological resources including prehistoric and historic remains or human
21 burials. Buried archaeological resources such as prehistoric midden deposits, flaked
22 and ground stone artifacts, bone, shell, historic artifacts and features, or other cultural
23 resources could be damaged during grading, and other construction-related activities.
24 Implementation of Mitigation Measures CUL-2a and CUL-2b would ensure that impacts
25 to unknown archaeological resources, if present, would be less than significant
26 (Class II).

27 Mitigation Measures for Impact CUL-2:

28 **MM CUL-2a. Limitation on Ground-Disturbing Activities.** Holocene-era deposits
29 with the potential to contain buried archaeological sites, particularly where
30 such deposits are located adjacent to known waterways (e.g., adjacent to

1 Jack Slough), have been identified. A qualified on-site archaeological
2 monitor shall be present during all ground-disturbing activities.

3 **MM CUL-2b. Consultation with Qualified Archaeologist.** In the event that any
4 prehistoric or historic subsurface cultural resources are discovered during
5 ground-disturbing activities, all work within 50 feet of the resources shall
6 be halted and a qualified archaeologist shall be consulted to assess the
7 significance of the find. If any find is determined to be significant,
8 representatives of PG&E and/or the CSLC and the qualified archaeologist
9 shall meet to determine the appropriate avoidance measures or other
10 appropriate mitigation, with the ultimate determination to be made by the
11 CSLC.

12 In considering any suggested mitigation proposed by the consulting
13 archaeologist in order to mitigate impacts to historical resources or unique
14 archaeological resources, the CSLC shall determine whether avoidance is
15 necessary and feasible in light of factors such as the nature of the find,
16 Project design, costs, and other considerations. If avoidance is infeasible,
17 other appropriate measures (e.g., data recovery) shall be instituted. Work
18 may proceed on other parts of the Project site while mitigation for
19 historical resources or unique archaeological resources is carried out.

20 If the CSLC, in consultation with the qualified archaeologist, determines
21 that a significant archaeological resource is present and that the resource
22 could be adversely affected by the proposed Project, PG&E shall be
23 required to:

- 24 • Re-design the Project to avoid any adverse effect on the significant
25 archaeological resource; or
- 26 • Implement an archaeological data recovery program (ADRP)
27 unless the qualified archaeologist determines that the
28 archaeological resource is of greater interpretive use than research
29 significance, and that interpretive use of the resource is feasible. If
30 the circumstances warrant an ADRP, such a program shall be
31 conducted. The Project archaeologist and the CSLC shall meet
32 and consult to determine the scope of the ADRP. The
33 archaeologist shall prepare a draft ADRP that shall be submitted to

1 the CSLC for review and approval. The ADRP shall identify how
2 the proposed ADRP would preserve the significant information the
3 archaeological resource is expected to contain. That is, the ADRP
4 shall identify the scientific/historical research questions that are
5 applicable to the expected resource, the data classes the resource
6 is expected to possess, and how the expected data classes would
7 address the applicable research questions. Data recovery, in
8 general, should be limited to the portions of the historical property
9 that could be adversely affected by the proposed Project.
10 Destructive data recovery methods shall not be applied to portions
11 of the archaeological resources if nondestructive methods are
12 practical.

13 Rationale for Mitigation

14 These mitigation measures would ensure that impacts to unknown archaeological
15 resources, if present, would be reduced to less than significant (Class II).

16 **(c) Impact CUL-3: Potential Destruction of a Unique Paleontological Resource,
17 Site, or Geologic Feature.**

18 **The Project would not have the potential to destroy a unique paleontological
19 resource, site, or geologic feature with the implementation of appropriate
20 mitigation (Less than Significant with Mitigation, Class II).**

21 The likelihood of encountering a significant paleontological discovery in the transmission
22 line right-of-way is considered very unlikely, but significant fossil discoveries can be
23 made even in areas of supposed low sensitivity. If present, Project excavation activities
24 could have a deleterious effect on such resources. In the event that a paleontological
25 resource is encountered, Mitigation Measure CUL-3 would be required and would
26 reduce the impacts to less than significant (Class II).

27 Mitigation Measure for Impact CUL-3:

28 **MM CUL-3. Paleontology Review and Excavation Plan.** In the event of an
29 unanticipated paleontological discovery during construction, excavations
30 within 50 feet of the find shall be temporarily halted or diverted until the
31 discovery is examined by a qualified paleontologist per up-to-date Society
32 of Vertebrate Paleontology standards. The discovery shall be

1 documented as needed, the potential resource evaluated, and the
2 significance of the find shall be assessed under the criteria set forth in
3 section 15064.5 of the CEQA Guidelines. The paleontologist shall notify
4 the appropriate agencies to determine procedures that would be followed
5 before construction is allowed to resume at the location of the find. If the
6 CSLC determines that avoidance is not feasible, the paleontologist shall
7 prepare an excavation plan for mitigating the effect of the Project on the
8 qualities that make the resource important, and such plan shall be
9 implemented. The plan shall be submitted to the CSLC for review and
10 approval prior to implementation.

11 Rationale for Mitigation

12 This mitigation measure would ensure adequate protection of paleontological resources
13 should any be discovered during Project construction. Impacts would be reduced to
14 less than significant (Class II).

15 **(d) Impact CUL-4: Potential to Disturb Human Remains, Including Those Interred**
16 **Outside of Formal Cemeteries.**

17 **The Project is not likely to encounter human remains, but in the event that they**
18 **are, the implementation of the appropriate mitigation would reduce this impact to**
19 **less than significant (Less than Significant with Mitigation, Class II).**

20 There is no indication that any area in the vicinity of the Project alignment has been
21 used for burial purposes in the recent or distant past. Thus, it is unlikely that human
22 remains would be encountered during Project construction. However, in the event of
23 the discovery of any human remains, including those interred outside of formal
24 cemeteries during Project construction, Mitigation Measure CUL-4 would be required,
25 and would reduce the impact to less than significant (Class II).

26 Mitigation Measure for Impact CUL-4:

27 **MM CUL-4. Coordination with the County Coroner.** In the event that human
28 skeletal remains are uncovered during proposed Project construction or
29 demolition activities, PG&E shall immediately halt all work, contact the
30 Yuba or Sutter County Coroner to evaluate the remains, and follow the
31 procedures and protocols pursuant to section 15064.5 (e)(1) of the CEQA
32 Guidelines. If the county coroner determines that the remains are Native

1 American, PG&E shall contact the California Native American Heritage
2 Commission, pursuant to subdivision (c) of section 7050.5 of the Health
3 and Safety Code, and all excavation and site preparation activities shall
4 cease until appropriate arrangements are made. The California Native
5 American Heritage Commission shall assign a most likely descendant,
6 who shall have the right to access the find and provide a recommendation
7 for treatment of the remains to the property owner, PG&E, and the CSLC.

8 Rationale for Mitigation

9 This mitigation measure would provide for appropriate coordination with the county
10 coroner and a subsequent course of action in the unlikely event that human remains are
11 encountered during Project construction. Impacts would be reduced to less than
12 significant (Class II).

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
West of Feather River to Pease Substation	
121	Columbia Fine Sandy Loam
124	Conejo Loam
126	Conejo–Tisdale Complex
132	Gridley Clay Loam
145	Nueva Loam
Between Feather River and East Marysville Substation	
139	Columbia Fine Sandy Loam
182	Kilaga Clay Loam
185	Kimbal Loam
203	Perkins Loam
216	San Joaquin Loam
East Marysville Substation to Marysville Substation	
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))
West Valley Faults		
Dunnigan Hills	30	6.6 ¹
Midland–Sweitzer	40	Pre-Quaternary: No longer considered active ²
Central Valley Faults		
Cleveland Hill	23	5.7 ²
Bear Mountain	40	6.0
New Melones	40	6.0
Stockton	87	5.0 ³
San Andreas Fault System		
Vaca–Kirby Hill	35	6.1 ¹
Green Valley	68	6.2
Antioch	79	Pre-Quaternary: No longer considered active ⁴
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 ¹Wesnouski 1986, Table A.1.4 ²California Geological Survey 2007.5 ³AGS 2005, Table 2.6 ⁴California 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.

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 Discussion

10 **(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
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
A-Weighted Sound Level, dBA	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.
Community Noise Equivalent Level (CNEL)	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.).
Decibel, dB	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.
Equivalent Noise Level, Leq	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 L_{eq} , except for especially steady noise levels, in which case it
3 may be similar to or slightly greater than the L_{eq} .

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_{dn} (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_{dn} or less for residential, schools, libraries, churches, hospitals, office
5 buildings, and commercial uses;
- 6 • 70 dB L_{dn} 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_{dn} or less for low density residential;
- 16 • 65 dB L_{dn} or less for multifamily residential;
- 17 • 70 dB L_{dn} or less for schools, libraries, churches, hospitals, office buildings, and
18 commercial uses; and
- 19 • 75 dB L_{dn} 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
Population		
Population (2007) ^a	70,683	93,835
Population (2008) ^a	71,929	95,878
Population (2030 Projection) ^b	137,322	182,401
Housing^c		
Housing Units (2008)	27,672	32,956
Vacancy Rate (2008)	12.15	4.49
Homeownership Rate (%) ^d (2000)	54.1	61.5
Employment^e		
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) ^f	1,600	1,600
Percent Construction Industry Employees (%) ^f (2008)	6	6

2 Sources:

3 ^a 2007 and 2008 Population Estimates. California Department of Finance 2008.4 ^b 2030 Population Projections: California Department of Finance 2007.5 ^c 2008 Population and Housing Estimates: California Department of Finance 2008.6 ^d 2000 Homeownership Rate: US Census Bureau 2000.7 ^e October 2008 Labor Force and Unemployment Data: California Employment Development Department 2008.8 ^f October 2008 Yuba City Metropolitan Statistical Area (MSA) (Includes Yuba and Sutter Counties) Employment by Industry Data. California Employment Development Department, Labor Market Information Division 2008.9 * These data were compiled for the Yuba City Metropolitan Statistical Area (MSA), which includes both Yuba and
10 Sutter counties. Six percent of the employed labor force in the MSA is employed in the construction industry.
1112 **Regulatory Setting**13 Federal14 There are no federal population and housing regulations that are relevant to the
15 proposed Project.16 State17 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 ¹
Pease Road (State Route 99 to Live Oak Boulevard)	2,200 ADT/LOS A ²
Laurellen Road	No ADT or LOS available ³
State Route 70 (within vicinity of State Route 20/central Marysville city streets)	32,000 ADT/No LOS available ⁴
State Route 20	29,500 ADT/No LOS available ⁴
Marysville surface streets (within vicinity of Marysville Substation)	No ADT available/streets around Marysville Substation operate at LOS B or C ⁵

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 ¹ Hay, pers. comm. 2009.
 8 ² Langley, pers. comm. 2009.
 9 ³ Van Boeck, pers. comm. 2009.
 10 ⁴ Caltrans 2009.
 11 ⁵ 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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1 **4.0 SOCIOECONOMIC EFFECTS AND ENVIRONMENTAL JUSTICE**

2 This section discusses the distributional patterns of high-minority and low-income
3 populations on a regional basis and characterizes the distribution of such populations
4 adjacent to the Pacific Gas and Electric (PG&E) Pease–Marysville 60 kV Transmission
5 Line Project. This discussion focuses, in the main, on whether the proposed Project
6 has the potential to affect area(s) of high-minority population(s) and low-income
7 communities, thus creating an inconsistency with the intent of the environmental justice
8 policy.

9 No regional or local environmental justice assessments have been performed by any
10 agencies within the study area.

11 **4.1 BACKGROUND**

12 On February 11, 1994, President Clinton issued an “Executive Order on Federal Actions
13 to Address Environmental Justice in Minority Populations and Low-Income Populations”
14 (Executive Order 12898) designed to focus attention on environmental and human
15 health conditions in areas of high minority populations and low-income communities,
16 and promote non-discrimination in programs and projects substantially affecting human
17 health and the environment (59 FR 7629). The order requires the U.S. Environmental
18 Protection Agency (U.S. EPA) and all other federal agencies (as well as state agencies
19 receiving federal funds) to develop strategies to address this issue. The agencies are
20 required to identify and address any disproportionately high and adverse human health
21 or environmental effects of the programs, policies, and activities on minority and/or low-
22 income populations.

23 **4.2 CALIFORNIA STATE LANDS COMMISSION POLICY**

24 The California State Lands Commission (CSLC) has developed and adopted an
25 Environmental Justice Policy to ensure equity and fairness in its own processes and
26 procedures. The CSLC adopted an amended Environmental Justice Policy on
27 October 1, 2002, to ensure that “Environmental Justice is an essential consideration in
28 the Commission’s processes, decisions and programs and that all people who live in
29 California have a meaningful way to participate in these activities.” The policy stresses
30 equitable treatment of all members of the public and commits to consider environmental
31 justice in its processes, decision-making, and regulatory affairs which is implemented, in
32 part, through identification of, and communication with, relevant populations that could

1 be adversely and disproportionately affected by CSLC projects or programs. This
2 discussion is provided in this document consistent with and in furtherance of the
3 Commission's Environmental Justice Policy. The staff of the CSLC is required to report
4 back to the Commission on how environmental justice is integrated into its programs,
5 processes, and activities (CSLC 2002).

6 This environmental justice evaluation of the Project has been completed by answering
7 the following three questions sequentially:

8 (1) Would the Project cause high or adverse public health or environmental impacts
9 on the public?

10 (2) Do minority or low-income populations exist within the potential impact area of
11 the proposed Project?

12 (3) If there are any high or adverse Project impacts, would they disproportionately
13 affect minority or low-income populations?

14 **4.3 SETTING (PROJECT STUDY AREA, DEMOGRAPHICS, AND COMMUNITIES**
15 **OF COMPARISON)**

16 The study area for the proposed Project consists of 0.50 mile centered on the proposed
17 Project, 0.25 mile on either side of the alignment. The Area of Potential Effects
18 accounts for both construction-related effects on populations in the direct vicinity of the
19 Project, as well as potential effects following completion of the Project, such as
20 aesthetics and community character. This study area is located within 25 block groups
21 in Yuba and Sutter counties. Information regarding racial diversity and income levels of
22 the residents of these block groups is derived from 2000 U.S. Census Bureau
23 information. A summary of this information for the State of California and for Yuba and
24 Sutter counties is provided in Table 4-1, Summary of Census 2000 Demographics for
25 the Region, and Table 4-2, Summary of Census 2000 Race and Ethnicity
26 Demographics for the Region. The minority population percentage in both Yuba and
27 Sutter counties is lower than the state average. Average per capita income in Yuba
28 County is significantly lower than the state average, while in Sutter County it is slightly
29 higher than the state average. Average poverty levels in Yuba County are significantly
30 higher than the state average, while in Sutter County they are slightly lower than the
31 state average.

1 **Table 4-1. Summary of Census 2000 Demographics for the Region**

County	Total Population	Percent Minority (%)	Annual per Capita Income (\$)	Percent Below Poverty Level (%)	Percent Age 65 or Above (%)
Yuba County	70,396	31.8	17,953	20.2	8.8
Sutter County	91,410	29.5	22,744	12.5	12.3
<i>Total for California</i>	33,871,648	40.6	22,711	14.2	10.6

2 Source: U.S. Census Bureau 2000.

Table 4-2. Summary of Census 2000 Race and Ethnicity Demographics for the Region

County	Total Population	Percent White (%)	Percent Black or African American (%)	Percent American Indian and Alaska Native (%)	Percent Asian (%)	Percent Native Hawaiian and Other Pacific Islander (%)	Percent Some Other Race (%)	Percent Two or More Races (%)	Percent Hispanic or Latino (of Any Race) (%)	Percent Minority (%)
Yuba County	70,396	68.2	2.1	1.6	7.1	0.3	12.6	8.1	21.9	31.8
Sutter County	91,410	70.5	2.1	0.8	12.5	0.1	8.1	5.9	26.6	29.5
<i>Total for California</i>	33,871,648	59.5	6.7	1.0	10.9	0.3	16.8	4.7	32.4	40.6

3 Source: U.S. Census Bureau 2000.

1 The following discussion provides an overview of federal, state, and regional/local
2 policies and regulations related to environmental justice.

3 Federal

4 On February 11, 1994, President Clinton issued an “Executive Order (EO) on Federal
5 Actions to Address Environmental Justice in Minority Populations and Low-Income
6 Populations” (EO12898) designed to focus attention on environmental and human
7 health conditions in areas of high minority populations and low-income communities,
8 and promote non-discrimination in programs and projects substantially affecting human
9 health and the environment (White House 1994). The order requires the United States
10 Environmental Protection Agency (U.S. EPA) and all other federal agencies (as well as
11 state agencies receiving federal funds) to develop strategies to address this issue. The
12 agencies are required to identify and address any disproportionately high and adverse
13 human health or environmental effects of their programs, policies, and activities on
14 minority and/or low-income populations.

15 The 1994 EO on environmental justice (59 FR 7629) set the U.S. EPA on a new road
16 to prioritize the issue of environmental justice. It requires that the U.S. EPA and all
17 other federal agencies identify and address disproportionately high and adverse
18 human health or environmental effects of their programs, policies, and activities in
19 minority populations and low-income populations in the United States.

20 Subsequently, the U.S. EPA’s Office of Environmental Justice released the
21 *Environmental Justice Implementation Plan* (U.S. EPA 1996), supplementing the U.S.
22 EPA’s environmental justice strategy and providing a framework for developing specific
23 plans and guidance for implementing EO 12898. In 1998, U.S. EPA developed a
24 framework for the assessment of environmental justice in the preparation of
25 environmental impact statements and environmental assessments prepared under the
26 National Environmental Policy Act (NEPA) in its *Final Guidance for Incorporating*
27 *Environmental Justice Concerns in EPA’s NEPA Compliance Analysis* (U.S. EPA 1998).

28 State

29 In October of 2002, CSLC developed an environmental justice policy to ensure equity
30 and fairness in its own processes and procedures. In the document, CSLC pledges to
31 continue and enhance its processes, decisions, and programs with environmental
32 justice as an essential consideration by implementing several policy measures to

1 ensure fair treatment of all members of the public in its everyday activities, processes,
2 decision making, and regulatory affairs (CSLC 2002).

3 Regional and Local

4 In some parts of California, Metropolitan Transportation Agencies and Councils of
5 Governments (COGs) have developed environmental justice policies in response to
6 EO 12898, the 1990 Americans with Disabilities Act, the 1990 Clean Air Act
7 Amendments, and the Intermodal Surface Transportation Efficiency Act of 1991. The
8 Feather River Air Quality Management District, a bi-county district between Yuba and
9 Sutter counties, has committed to environmental policy making, community planning,
10 and regulatory enforcement practices that are fair and equitable to all, regardless of
11 age, culture, ethnicity, gender, race, or socioeconomic status (FRAQMD 2008a). At this
12 time, however, neither county has developed a formal environmental justice policy.

13 **4.4 ANALYSIS CRITERIA**

14 According to EO 12898 and CSLC policy (CSLC 2002, 2003), an environmental justice
15 affect would be considered inconsistent if Project construction or operation would cause
16 any minority or low-income population to bear a disproportionate share of an adverse
17 effect.

18 **4.5 POLICY ANALYSIS AND CONDITIONS**

19 Potentially Affected Populations

20 Evaluation of minority and low-income populations within the Area of Potential Effects is
21 based on U.S. Census Bureau 2000 data. The Area of Potential Effects of the Project
22 includes 25 block groups within 10 census tracts. Six of these block groups are located
23 in Sutter County, while the remaining 19 are located in Yuba County. According to
24 census data, these 25 block groups include a total population of 25,823 persons (U.S.
25 Census Bureau 2000).

26 Potential environmental justice areas of concern within the potential Project Area of
27 Potential Effects were identified using a methodology outlined in the U.S. EPA Region 4
28 Interim Policy to Identify and Address Potential Environmental Justice Areas. This
29 methodology involves comparing average minority and low-income population
30 percentages within block groups in the Area of Potential Effects to threshold values.

1 These threshold values are calculated by multiplying the county average for which the
2 block group is located by 1.2.

3 *Low-Income Populations*

4 Table 4-3, Low-Income Populations in the Area of Potential Effects, shows the
5 populations below the poverty level and the average per capita income in the block
6 groups in the Area of Potential Effects of the Project. The block groups crossed by the
7 Project had an average per capita income of \$16,245 in Yuba County and \$21,524 in
8 Sutter County, both of which are slightly lower than the county averages of \$17,953 and
9 \$22,711, respectively. Additionally, the average percent of population below the poverty
10 level in the potentially affected block groups in Yuba County (26.9 percent) is higher
11 than the average for Yuba County (20.2 percent). In Sutter County, the data indicate
12 that in the one potentially affected block group, none of the population is below the
13 poverty level.

14 In all, nine of the 19 block groups in Yuba County contain low-income populations that
15 would be potentially affected, while one of the six block groups in Sutter County
16 contains low-income populations that would be potentially affected.

17 *Minority Populations*

18 Table 4-4, Minority Populations in the Area of Potential Effects, shows the relative
19 minority populations in the block groups in the Area of Potential Effects of the Project.
20 The block groups crossed by the Project had an average minority population of 28.1
21 percent in Yuba County and 22.1 percent in Sutter County, both of which are lower than
22 the county averages of 31.8 percent and 29.5 percent, respectively.

23 In all, three of the 19 block groups in Yuba County contain minority populations that
24 would be potentially affected, while none of the block groups in Sutter County contain
25 minority populations that would be potentially affected.

Table 4-3. Low-Income Populations in the Area of Potential Effects

Block Groups in Potential Impact Area	Total Population	Population Below Poverty Level	Percent Below Poverty Level (%)	Per Capita Income (\$)	Contains Low-Income Populations Potentially in Project Impact Area ¹
Yuba County (countywide average)	70,396	14,220	20.2%	\$17,953	—
Block Group 1, Census Tract 401	780	262	33.6	12,814	YES
Block Group 2, Census Tract 401	835	96	11.5	18,797	NO
Block Group 3, Census Tract 401	870	248	28.5	11,196	YES
Block Group 4, Census Tract 401	869	285	32.8	14,089	YES
Block Group 5, Census Tract 401	688	238	34.6	10,864	YES
Block Group 6, Census Tract 401	564	21	3.7	10,645	YES
Block Group 1, Census Tract 402	517	23	4.4	18,483	NO
Block Group 2, Census Tract 402	763	28	3.7	30,715	NO
Block Group 3, Census Tract 402	2,010	306	15.2	14,930	NO
Block Group 4, Census Tract 402	904	89	9.8	18,227	NO
Block Group 5, Census Tract 402	982	167	17.0	14,602	NO
Block Group 6, Census Tract 402	982	73	7.4	13,833	YES
Block Group 7, Census Tract 402	1,015	287	28.3	12,246	YES
Block Group 8, Census Tract 402	818	149	18.2	15,784	NO
Block Group 2, Census Tract 403	1,814	716	39.5	9,582	YES
Block Group 4, Census Tract 404	687	231	33.6	8,370	YES
Block Group 1, Census Tract 409.01	972	171	17.6	15,826	NO
Block Group 4, Census Tract 410	1,105	90	8.1	15,718	NO
Block Group 5, Census Tract 410	783	40	5.1	41,926	NO
SUBTOTAL	17,958	3,520	18.6% (avg.)	\$16,245 (avg.)	—
Sutter County (countywide average)	91,410	11,426	12.5	22,711	—
Block Group 1, Census Tract 501.01	1,932	154	8.0	20,064	NO
Block Group 1, Census Tract 506.01	1,334	156	11.7	20,567	NO
Block Group 1, Census Tract 506.03	643	72	11.2	18,998	NO
Block Group 2, Census Tract 506.03	655	0	0.0	13,466	YES
Block Group 3, Census Tract 506.03	1,832	84	4.6	28,349	NO
Block Group 1, Census Tract 506.04	1,520	15	1.0	27,698	NO
SUBTOTAL	7,916	481	6.1% (avg.)	\$21,524 (avg.)	—

1 Note:
 2 ¹ Block Groups with potentially significant low-income populations are those block groups with populations with
 3 annual per capita income below 0.8 times the average for the county in which the block group is located or
 4 populations with a percentage of persons below poverty level above 1.2 times the county average.
 5 Source: U.S. Census Bureau 2000.

Table 4-4. Minority Populations in the Area of Potential Effects

Block Groups in Potential Impact Area	Total Population	Minority Population	Percent Minority (%)	Contains Minority Populations Potentially in Project Impact Area
Yuba County (countywide average)	70,396	22,386	31.8%	—
Block Group 1, Census Tract 401	780	186	23.8	NO
Block Group 2, Census Tract 401	835	182	21.8	NO
Block Group 3, Census Tract 401	870	402	46.2	YES
Block Group 4, Census Tract 401	869	291	33.5	NO
Block Group 5, Census Tract 401	688	264	38.4	YES
Block Group 6, Census Tract 401	564	191	33.9	NO
Block Group 1, Census Tract 402	517	89	17.2	NO
Block Group 2, Census Tract 402	763	103	13.5	NO
Block Group 3, Census Tract 402	2,010	612	30.4	NO
Block Group 4, Census Tract 402	904	273	30.2	NO
Block Group 5, Census Tract 402	982	171	17.4	NO
Block Group 6, Census Tract 402	982	371	37.8	NO
Block Group 7, Census Tract 402	1,015	184	18.1	NO
Block Group 8, Census Tract 402	818	238	29.1	NO
Block Group 2, Census Tract 403	1,814	627	34.6	NO
Block Group 4, Census Tract 404	687	268	39.0	YES
Block Group 1, Census Tract 409.01	972	181	18.6	NO
Block Group 4, Census Tract 410	1,105	311	28.1	NO
Block Group 5, Census Tract 410	783	177	22.6	NO
SUBTOTAL	17,958	5,121	28.1% (avg.)	
Sutter County (countywide average)	91,410	26,966	29.5%	—
Block Group 1, Census Tract 501.01	1,932	418	21.6	NO
Block Group 1, Census Tract 506.01	1,334	394	29.5	NO
Block Group 1, Census Tract 506.03	643	121	18.8	NO
Block Group 2, Census Tract 506.03	655	104	15.9	NO
Block Group 3, Census Tract 506.03	1,832	404	22.1	NO
Block Group 1, Census Tract 506.04	1,520	378	24.9	NO
SUBTOTAL	7,916	1,819	22.1% (avg.)	—

Note:

¹ Block groups with potentially significant minority populations are those block groups with minority populations above 1.2 times the average for the county in which the block group is located and residential buildings within the potential Area of Potential Effects.

Source: U.S. Census Bureau 2000.

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1 Identification of Disproportionately High and Adverse Environmental Effects

2 When determining whether environmental effects disproportionately impact relevant
3 populations, the following factors are considered:

- 4 • Would there be an effect on the natural or physical environment that significantly
5 and adversely affects the identified minority, or low-income population?
- 6 • Would the environmental effects of the Project result in an adverse impact on the
7 identified population that appreciably exceeds or is likely to appreciably exceed
8 that impact on the general population or other appropriate comparison group?
- 9 • Would the environmental effects occur in the identified minority population that is
10 affected by cumulative or multiple adverse exposures from environmental
11 hazards?

12 Potential environmental effects that could result from the Project are addressed in
13 Section 3.0, Environmental Analysis, of this Mitigated Negative Declaration (MND). As
14 described in Section 2.0, Project Description, the proposed Project would reconfigure
15 the existing Pease–Marysville 8.3-mile single-circuit 60 kV transmission line to a double-
16 circuit line. No change in alignment is proposed, and the transition from a single-circuit
17 line to a double-circuit line would not result in unmitigable significant impacts. All work
18 would be contained within the existing PG&E right-of-way, with the exception of an
19 existing franchise or utility corridor area along the north of Pease Road between the
20 Pease Substation and State Route 99.

21 No effects resulting from the proposed Project would significantly or adversely affect
22 minority or low-income populations. The condition of the transmission line following
23 completion of the Project would be very similar to pre-Project conditions in terms of its
24 impact on the surrounding community, and thus would not result in any adverse effects
25 that appreciably exceed or are likely to appreciably exceed that impact on the general
26 population. In fact, the need for the Project stems from increased residential
27 development in the northern area of Yuba City and Marysville, both of which are areas
28 included in this analysis. As a result, Project construction would not cause an
29 inconsistency with CSLC’s adopted policy.

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1 **5.0 MITIGATION MONITORING PROGRAM**

2 As the Lead Agency under the CEQA, the CSLC is required to adopt a program for
3 reporting or monitoring regarding the implementation of mitigation measures for this
4 Project, if it is approved, to ensure that the adopted mitigation measures are
5 implemented as defined in this MND. This Lead Agency responsibility originates in Public
6 Resources Code section 21081.6(a) (Findings), and the CEQA Guidelines sections
7 15091(d) (Findings) and 15097 (Mitigation Monitoring or Reporting).

8 **5.1 MONITORING AUTHORITY**

9 The purpose of a Mitigation Monitoring Program (MMP) is to ensure that measures
10 adopted to mitigate or avoid significant impacts are implemented. An MMP can be a
11 working guide to facilitate not only the implementation of mitigation measures by the
12 Project proponent, but also the monitoring, compliance and reporting activities of the
13 CSLC and any monitors it may designate.

14 The CSLC may delegate duties and responsibilities for monitoring to other
15 environmental monitors or consultants as deemed necessary, and some monitoring
16 responsibilities may be assumed by responsible agencies, such as affected jurisdictions
17 and cities, and the California Department of Fish and Game (CDFG). The number of
18 construction monitors assigned to the Project will depend on the number of concurrent
19 construction activities and their locations. The CSLC or its designee(s), however, will
20 ensure that each person delegated any duties or responsibilities is qualified to monitor
21 compliance.

22 Any mitigation measure study or plan that requires the approval of the CSLC must allow
23 at least 60 days for adequate review time. When a mitigation measure requires that a
24 mitigation program be developed during the design phase of the project, the Applicant
25 must submit the final program to CSLC for review and approval for at least 60 days
26 before construction begins. Other agencies and jurisdictions may require additional
27 review time. It is the responsibility of the environmental monitor assigned to each
28 spread to ensure that appropriate agency reviews and approvals are obtained.

29 The CSLC or its designee will also ensure that any deviation from the procedures
30 identified under the monitoring program is approved by the CSLC. Any deviation and its
31 correction shall be reported immediately to the CSLC or its designee by the
32 environmental monitor assigned to the construction spread.

1 **5.2 ENFORCEMENT RESPONSIBILITY**

2 The CSLC is responsible for enforcing the procedures adopted for monitoring through
3 the environmental monitor assigned to each construction spread. Any assigned
4 environmental monitor shall note problems with monitoring, notify appropriate agencies
5 or individuals about any problems, and report the problems to the CSLC or its designee.

6 **5.3 MITIGATION COMPLIANCE RESPONSIBILITY**

7 The Applicant is responsible for successfully implementing all the mitigation measures in
8 the MMCRP, and is responsible for assuring that these requirements are met by all of its
9 construction contractors and field personnel. Standards for successful mitigation also are
10 implicit in many mitigation measures that include such requirements as obtaining permits
11 or avoiding a specific impact entirely. Other mitigation measures include detailed success
12 criteria. Additional mitigation success thresholds will be established by applicable
13 agencies with jurisdiction through the permit process and through the review and
14 approval of specific plans for the implementation of mitigation measures.

15 **5.4 GENERAL MONITORING PROCEDURES**

16 **Environmental Monitors.** Many of the monitoring procedures will be conducted during
17 the construction phase of the Project. The CSLC and the environmental monitor(s) are
18 responsible for integrating the mitigation monitoring procedures into the construction
19 process in coordination with the Applicant. To oversee the monitoring procedures and to
20 ensure success, the environmental monitor assigned to each construction spread must
21 be on site during that portion of construction that has the potential to create a significant
22 environmental impact or other impact for which mitigation is required. The
23 environmental monitor is responsible for ensuring that all procedures specified in the
24 monitoring program are followed.

25 **Construction Personnel.** A key feature contributing to the success of mitigation
26 monitoring will be obtaining the full cooperation of construction personnel and
27 supervisors. Many of the mitigation measures require action on the part of the
28 construction supervisors or crews for successful implementation. To ensure success,
29 the following actions, detailed in specific mitigation measures, will be taken:

- 30 • Procedures to be followed by construction companies hired to do the work will be
31 written into contracts between the Applicant and any construction contractors.

1 Procedures to be followed by construction crews will be written into a separate
2 document that all construction personnel will be asked to sign, denoting agreement.

3 • One or more pre-construction meetings will be held to inform all and train
4 construction personnel about the requirements of the monitoring program.

5 • A written summary of mitigation monitoring procedures will be provided to
6 construction supervisors for all mitigation measures requiring their attention.

7 **General Reporting Procedures.** Site visits and specified monitoring procedures
8 performed by other individuals will be reported to the environmental monitor assigned to the
9 relevant construction spread. A monitoring record form will be submitted to the
10 environmental monitor by the individual conducting the visit or procedure so that details
11 of the visit can be recorded and progress tracked by the environmental monitor. A
12 checklist will be developed and maintained by the environmental monitor to track all
13 procedures required for each mitigation measure and to ensure that the timing specified
14 for the procedures is adhered to. The environmental monitor will note any problems that
15 may occur and take appropriate action to rectify the problems.

16 **Public Access to Records.** The public is allowed access to records and reports used to
17 track the monitoring program. Monitoring records and reports will be made available for
18 public inspection by the CSLC or its designee on request.

19 **5.5 MITIGATION MONITORING TABLE**

20 The following sections present the mitigation monitoring tables for each environmental
21 discipline. Each table lists the following information, by column:

- 22 • Impact (impact number, title, and impact class);
- 23 • Mitigation Measure (title only; full text of the measure is presented in Section 3.0);
- 24 • Location (where the impact occurs and the mitigation measure should be applied);
- 25 • Monitoring/reporting action (the action to be taken by the monitor or Lead Agency);
- 26 • Effectiveness criteria (how the agency can know if the measure is effective);
- 27 • Responsible agency; and
- 28 • Timing (before, during, or after construction; during operation; etc.).

1 **Table 5-1. Mitigation Monitoring Program – Aesthetics**

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
AES-4: Nighttime lighting and glare could be a nuisance to nearby residents.	MM AES-4: Nighttime lighting and glare reduction techniques.	Entire alignment	Observe nighttime construction activities to verify compliance.	Minimizes lighting disturbance outside the work area and to local residences/sensitive receptors.	CSLC	During nighttime construction

2 **Table 5-2. Mitigation Monitoring Program – Agriculture Resources**

Impact	Applicant Proposed Measure/Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
AGR-3: Temporary disruption to farmland and/or removal of orchard trees or temporary fallowing of rice fields would result in a direct impact to agricultural resources.	APM AGR-3: Full compensation to owner/farmer of agricultural resource.	Within active agricultural areas	PG&E to provide proof that compensation has been agreed to/paid to owner/farmer.	Provides for economic compensation to farmer/owner of farm resources.	CSLC	Prior to construction
	MM AGR-3: Advanced notification of project activity.	Entire alignment	PG&E to notify landowners, aerial operators, Sutter and Yuba County Farm Bureaus.	Provides advance warning of Project activity to allow local agricultural operators to plan around construction.	CSLC	30 days prior to construction

1 Table 5-3. Mitigation Monitoring Program – Air Quality

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
AQ-4: Potential to expose sensitive receptors to substantial pollutant concentrations.	MM AQ-4a: Fugitive Dust Control Plan.	Entire Alignment	PG&E to provide proof that Feather River Air Quality Management District (AQMD) has approved plan.	Fugitive dust is minimized throughout construction and has been controlled outside the work area.	CSLC Feather River AQMD	Prior to construction
	MM AQ-4b: Fugitive dust control measures.	Entire Alignment	PG&E to observe construction activities to verify compliance.	Fugitive dust is minimized throughout construction and has been controlled outside the work area.	CSLC Feather River AQMD	During construction
	MM AQ-4c: Construction equipment limits per Feather River AQMD Regulation III, Rule 3.0, Visible Emissions limitations.	Entire Alignment	PG&E to review construction vehicle documentation and provide proof that limits are implemented.	Exhaust emissions are minimized.	CSLC Feather River AQMD	Prior to and during construction
	MM AQ-4d: Construction equipment shall be properly maintained.	Entire alignment	PG&E to review construction vehicle maintenance documentation and provide proof that equipment is properly maintained.	Exhaust emissions are minimized.	CSLC Feather River AQMD	Prior to and during construction
	MM AQ-4e: Restriction of idling time to no more than 5 minutes.	Entire alignment	PG&E to observe construction activities to verify compliance.	Exhaust emissions are minimized.	CSLC Feather River AQMD	During construction
	MM AQ-4f: Restriction of power generation sources.	Within residential areas	PG&E to observe construction activities to verify compliance.	Exhaust emissions are minimized in sensitive residential areas.	CSLC Feather River AQMD	During construction
	MM AQ-4g: Registration of applicable portable equipment with California Air Resources Board (CARB).	Entire alignment	PG&E to provide proof that equipment registration and permitting requirements have been met.	Exhaust emissions are minimized.	CSLC CARB Feather River AQMD	Prior to construction

1 Table 5-4. Mitigation Monitoring Program – Biological Resources

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
BIO-1: Potential impacts to special-status wildlife species (invertebrates [i.e., fairy shrimp]).	MM BIO-1a: Conduct preconstruction surveys to identify and map all seasonal wetlands.	In vicinity of poles 4/79 and 4/80	PG&E to map and mark seasonal wetlands on construction drawings or Project maps. PG&E to monitor for compliance.	Avoidance of seasonal wetlands.	CSLC	Prior to and during construction
	MM BIO-1b: Best management practices for construction adjacent to seasonal wetlands.	In vicinity of poles 4/79 and 4/80	PG&E to review best management practices. PG&E to monitor for compliance.	Prevention of fill or sediment runoff from entering seasonal wetland feature.. Confirmation by Environmental Monitor	CSLC	Prior to and during construction
	MM BIO-1c: Seasonal activity limitations (work limited to dry season only) for construction activities adjacent to seasonal wetlands.	In vicinity of poles 4/79 and 4/80	PG&E to review Project plans to determine approximate timing of work in the vicinity of Poles 4/79 and 4/80. PG&E to monitor for compliance.	Prevention of fill or sediment runoff from entering seasonal wetland feature. Confirmation by Environmental Monitor.	CSLC	Prior to and during construction
BIO-1: Potential impacts to special-status wildlife species (valley elderberry longhorn beetle).	MM BIO-1d: Preconstruction surveys to identify and map elderberry shrubs within 100 feet of work areas.	In vicinity of Poles 2/47 to 2/50, 6/130 and 7/152	PG&E to map and mark elderberry shrub on construction drawings or Project maps. PG&E to monitor for compliance.	Prevent damage to elderberry shrubs.	CSLC	Prior to and during construction
	MM BIO-1e: Establish avoidance areas 20 feet from dripline of all elderberry shrubs within or adjacent to work areas.	In vicinity of Poles 2/47 to 2/50, 6/130 and 7/152	PG&E to map and mark avoidance areas on construction drawings or Project maps. PG&E to monitor for compliance.	Prevent damage to elderberry shrubs.	CSLC	Prior to and during construction

Table 5-4 (Continued)

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	MM BIO-1f: Best management construction practices implemented within 100 feet of marked elderberry shrubs.	In vicinity of Poles 2/47 to 2/50, 6/130 and 7/152	PG&E to map and mark elderberry shrubs on construction drawings or Project maps. PG&E to monitor for compliance.	Prevent damage to elderberry shrubs.	CSLC	Prior to and during construction
	MM BIO-1g: No chemicals that might harm the beetle shall be used within 100 feet of marked elderberry shrubs.	In vicinity of Poles 2/47 to 2/50, 6/130, and 7/152	PG&E to review list of chemicals anticipated during construction. PG&E to monitor for compliance.	Prevent impacts to elderberry shrubs or valley elderberry longhorn beetle.	CSLC	Prior to and during construction
	MM BIO-1h: Poles to be removed within 50 feet of an elderberry shrub shall be cut off at ground level to minimize disturbance.	In vicinity of Poles 2/47 to 2/50, 6/130, and 7/152	PG&E to map and mark elderberry shrubs on construction drawings or Project maps. Clarify construction technique as appropriate on Project plans. PG&E to monitor for compliance.	Prevent damage to elderberry shrubs.	CSLC	Prior to and during construction
BIO-1: Potential impacts to special-status wildlife species (giant garter snake).	MM BIO-1i: Limit construction within giant garter snake habitat to May 1 through October 1.	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E to mark seasonal limits of construction in vicinity of these pole locations on Project maps. PG&E to monitor for compliance.	Prevent impacts to giant garter snake.	CSLC	Prior to and during construction
	MM BIO-1j: Conduct pre-construction surveys within suitable giant garter snake habitat no more than 24 hours in advance of construction to determine presence/absence. If snake is present, delay construction until it is confirmed that snake won't be harmed.	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E to mark suitable giant garter snake habitat areas on Project maps and include construction notes detailing construction procedures to avoid impacts to snakes. PG&E to monitor for compliance.	Prevent impacts to giant garter snake.	CSLC	Prior to and during construction

Table 5-4 (Continued)

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	MM BIO-1k: Visually check for giant garter snakes beneath vehicles and equipment prior to moving or operating.	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E to train construction crews to check for giant garter snake as well as on construction procedures to avoid impacts to snakes. PG&E to observe construction activity to verify compliance.	Prevent impacts to giant garter snake.	CSLC	Prior to and during construction
	MM BIO-1l: A qualified biological monitor shall be present during work in giant garter snake habitat.	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E shall have a qualified biologist observe construction activity to verify procedures for avoidance of impacts to giant garter snake.	Prevent impacts to giant garter snake.	CSLC	During construction
	MM BIO-1m: Construction within 200 feet of banks of giant garter snake aquatic habitat shall be avoided and movement of heavy equipment confined to existing roadways.	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E shall mark giant garter snake habitat areas on Project maps and include construction notes detailing construction procedures and equipment movements to avoid impacts to giant garter snake aquatic habitat.	Prevent disturbance to giant garter snake aquatic habitat,	CSLC	Prior to and during construction
	MM BIO-1n: Limit construction vehicle speed in giant garter snake habitat areas to 15 miles per hour (MPH),	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E to mark giant garter snake habitat areas on Project maps and include construction notes detailing construction procedures to avoid impacts to snakes. PG&E to observe construction activity to verify compliance.	Prevent impacts to giant garter snake.	CSLC	Prior to and during construction
	MM BIO-1o: Avoidance by construction personnel of giant garter snake habitat areas.	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E to mark giant garter snake habitat areas on Project maps. PG&E to observe construction activity to verify compliance.	Prevent disturbance to giant garter snakes and their habitat.	CSLC	Prior to and during construction

Table 5-4 (Continued)

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	MM BIO-1p: All work within giant garter snake habitat will occur during daylight hours.	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E to mark giant garter snake habitat areas on Project maps and include construction notes detailing construction procedures to avoid impacts to snakes. PG&E to observe construction activity to verify compliance.	Prevent impacts to giant garter snake.	CSLC	Prior to and during construction
	MM BIO-1q: Any dewatered habitat shall remain dry for 15 consecutive days after April 15.	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E to mark giant garter snake habitat areas on Project maps and include construction notes detailing construction procedures to avoid impacts to snakes. PG&E to observe construction activity to verify compliance.	Prevent disturbance to giant garter snake habitat.	CSLC	Prior to and during construction
	MM BIO-1r: Restore impacted aquatic giant garter snake habitat areas to preconstruction conditions (i.e., remove debris, fill, etc.; replant any removed native vegetation).	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E to mark temporarily impacted giant garter snake aquatic habitat areas on Project maps and include construction notes detailing procedures to restore habitat to preconstruction conditions. PG&E to observe construction activity to verify compliance.	Restoration of giant garter snake aquatic habitat to preconstruction conditions.	CSLC	After construction

Table 5-4 (Continued)

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	MM BIO-1s: Restore upland giant garter snake habitat to preconstruction conditions.	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E to mark temporarily impacted giant garter snake upland habitat areas on Project maps and include construction notes detailing procedures to restore habitat to preconstruction conditions. PG&E to observe construction activity to verify compliance.	Restoration of giant garter snake upland habitat to preconstruction conditions.	CSLC	After construction
	MM BIO-1t: Purchase giant garter snake habitat credits at 3:1 ratio to compensate for permanent net loss of upland snake habitat.	At accredited giant garter snake habitat mitigation bank	Purchase of credits at accredited mitigation bank.	Completed purchase of habitat credits through an approved U.S. Fish and Wildlife Service (USFWS) conservation bank or approved in-lieu fund.	CSLC	Prior to Construction
BIO-1: Potential impacts to special-status wildlife species (birds) and avian species protected by state/federal regulations.	MM BIO-1u: Avoid construction activities within suitable bird nesting habitat during breeding season (March – August). If not possible, conduct preconstruction surveys within 300 feet (500 feet for raptors, 0.25 mile for Swainson's hawk) of construction area no more than 1 week prior to construction to identify active bird species. nests	Entire alignment	PG&E shall ensure a qualified biologist observes construction activity to verify compliance.	Avoidance of impacts to nesting avian species.	CSLC	Prior to and/or during construction (depending on construction timeframe)

Table 5-4 (Continued)

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	MM BIO-1v: Avoid construction activities within 500 feet of active raptor nests, 300 feet for all other bird species.	Entire alignment	PG&E to ensure a qualified biologist observes construction activity to verify compliance.	Avoidance of impacts to nesting avian species.	CSLC	During construction
BIO-1: Potential impacts to special-status wildlife species (mammals).	MM BIO-1w: Conduct preconstruction surveys if construction activity within 300 feet of suitable bat roosting, hibernation, or maternity sites no more than one week prior to construction.	Entire alignment	PG&E to map and mark suitable bat roosting, hibernation, or maternity habitat on construction drawings or Project maps. PG&E to monitor for compliance.	Avoidance of impacts to Townsend's big-eared bat.	CSLC	Prior to construction
	MM BIO-1x: Avoid construction activities to identified active bat activity sites within 300 feet of construction work areas. Biological monitor must monitor construction activity within 300 feet of known bat activity locations.	Within 300 feet of bat roosting, hibernation, or maternal sites	PG&E to mark bat activity areas on Project maps and include construction notes detailing construction procedures to avoid impacts to bats and their habitat. PG&E to observe construction activity to verify compliance.	Avoidance of impacts to Townsend's big-eared bat.	CSLC	Prior to construction
BIO-2: Riparian areas associated with Jack Slough and Feather River may be indirectly impacted (erosion, sedimentation, dust accumulation, chemical spills) by construction activities.	MM BIO-2: Avoid vehicle service or refueling around riparian areas. Erosion, sediment, material stockpile and dust control best management practices shall be employed to avoid runoff from work areas.	Within vicinity of Jack Slough and Feather River	PG&E to mark sensitive riparian areas on Project maps and include construction notes detailing construction avoidance/minimization procedures to avoid indirect impacts. PG&E to observe construction activity to verify compliance.	Prevent indirect impacts on riparian areas associated with Feather River and Jack Slough.	CSLC	Prior to and during construction

Table 5-4 (Continued)

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
<p>BIO-3: Wetland areas may be directly or indirectly impacted during construction.</p>	<p>MM BIO-3: Avoid vehicle service or refueling around wetland areas. Erosion, sediment, material stockpile and dust control best management practices shall be employed to avoid runoff from work areas.</p>	<p>Entire alignment</p>	<p>PG&E to mark sensitive wetland areas on Project maps and include construction notes detailing construction avoidance/minimization procedures to avoid indirect impacts. PG&E to observe construction activity to verify compliance.</p>	<p>Prevent fuel spills or sediment from entering seasonal wetland features.</p>	<p>CSLC</p>	<p>Prior to and during construction</p>
<p>BIO-5: The Project may conflict with local policies or ordinances protecting biological resources.</p>	<p>MM BIO-1a through MM BIO-1x: See discussion of these mitigation measures above.</p>	<p>—</p>	<p>—</p>	<p>—</p>	<p>—</p>	<p>—</p>

1 Table 5-5. Mitigation Monitoring Program – Cultural Resources

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
CUL-1: Impacts to historical resource (abandoned segment of Northern-Electric Railroad).	MM CUL-1: Place new pole 4/90 outside of railroad bed.	Vicinity of Pole 4/90	PG&E to review Project plans to determine appropriate placement of Pole 4/90. PG&E to monitor for compliance.	Ensure that cultural resources are protected and properly managed.	CSLC	Prior to construction
CUL-2: Impacts to undiscovered Holocene-era archaeological deposits.	MM CUL-2a: All pole placement and work areas shall be confined to previously identified areas. If not possible, archaeological monitoring shall occur during construction.	In vicinity of Jack Slough and other waterways	PG&E to review Project plans to ensure that Project facilities in areas with potential to contain buried sites are confined to previously impacted areas. PG&E To provide qualified archaeological monitor during groundbreaking activities to ensure compliance.	Ensure that cultural resources are protected and properly managed.	CSLC	Prior to construction and, if applicable, during construction
	MM CUL-2b: If a resource is discovered, stop work, analysis by CSLC and qualified archaeologist shall occur. Further avoidance shall be ensured per outlined procedures.	Entire alignment	PG&E to prepare report outlining discovery and appropriate action taken.	Ensure that cultural resources are protected and properly managed.	CSLC County of Sacramento Native American Heritage Commission (NAHC)	During construction
CUL-3: Potential impacts to undiscovered paleontological resources.	MM CUL-3: If a resource is discovered, stop work, analysis by CSLC and qualified paleontologist shall occur. Further avoidance shall be ensured per outlined procedures.	Entire alignment	PG&E To prepare report outlining discovery and appropriate action taken.	Ensure that paleontological resources are protected and properly managed.	CSLC County of Sacramento	During construction
CUL-4: Potential impacts to undiscovered buried human remains.	MM CUL-4: If human remains are discovered, stop work, analysis by CSLC and county coroner shall occur. Further avoidance shall be ensured per outlined procedures.	Entire alignment	PG&E to prepare report outlining discovery and appropriate action taken.	Ensure that human remains are protected and properly managed.	CSLC County of Sacramento	During construction

1 Table 5-6. Mitigation Monitoring Program – Geology and Soils

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
GEO-2: Project structural stability could be adversely impacted by ground shaking.	MM GEO-2: PG&E shall conduct a site-specific geotechnical evaluation identifying all geotechnical hazards. The Project shall incorporate all recommendations into Project design.	Entire alignment	PG&E shall ensure that a geotechnical evaluation is prepared by a California registered geotechnical engineer and that all recommendations are incorporated into the Project design.	Eliminates damage to proposed structure and surrounding land uses, in the case of structure failure, from ground shaking, liquefaction, landslide hazards, lateral spreading, subsidence, collapse, and expansive soils.	CSLC	At least 90 days prior to construction
GEO-3: Project structural stability could be adversely impacted by liquefaction.	MM GEO-2: (See discussion of this mitigation measure above).	—	—	—	—	—
GEO-4: Project structural stability could be adversely impacted by landslide hazards.	MM GEO-2: See discussion of this mitigation measure above.	—	—	—	—	—
GEO-6: Project structural stability could be adversely impacted by on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse.	MM GEO-2: See discussion of this mitigation measure above.	—	—	—	—	—
GEO-7: Project structural stability could be adversely impacted by expansive soils.	MM GEO-2: See discussion of this mitigation measure above.	—	—	—	—	—

1 Table 5-7. Mitigation Monitoring Program – Hazards and Hazardous Materials

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
HAZ-2: Release of hazardous materials or substances may occur during construction.	MM HAZ-2a: Handling and disposal of hazards shall occur under the guidance of a licensed professional.	Entire alignment	PG&E to review hazardous material disposal plans to verify compliance. PG&E to observe construction activity to verify compliance.	Reduces potential for unauthorized or accidental release of hazards.	CSLC	Prior to and during construction
	MM HAZ-2b: Ensure proper storage of hazardous materials.	Entire alignment	PG&E to review hazardous material storage locations on Project plans. PG&E to observe construction activity to verify compliance.	Reduces potential for unauthorized or accidental release or contact with hazards.	CSLC	Prior to and during construction
	MM HAZ-2c: Designate appropriate transportation routes for vehicles carrying hazards. Avoid transport of hazards during adverse weather conditions and if not feasible employ best management practices to avoid accidental release into the environment.	Entire alignment	PG&E to ensure that an Occupational Safety and Health Administration professional reviews hazardous material haul routes to avoid hazardous conditions. PG&E to observe vehicle transport activity during adverse weather.	Reduces potential for accidental release of hazards into the environment during transport to/from construction site.	CSLC	Prior to and during construction
HAZ-3: The Project may result in construction activities within close proximity to a school.	MM HAZ-2a through MM HAZ-2c: See discussion of these mitigation measures above.	—	—	—	—	—
HAZ-5: Potential impacts related to airport facilities or low-flying aircraft may occur.	MM HAZ-5a: Notification to Yuba and Sutter County Airports, Beale Air Force Base and Vanderford Ranch Company Airport of construction activity.	Entire alignment	PG&E shall notify airport facilities of construction activities at least 30 days prior to start of construction.	Reduces potential for conflicts with low flying aircraft during construction.	CSLC	30 days prior to construction
	MM HAZ-5b: Notification to Yuba and Sutter County	Entire alignment	PG&E shall notify airport facilities of new transmission	Reduces potential for conflicts with	CSLC	Upon completion

Table 5-7 (Continued)

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	Airports, Beale Air Force Base and Vanderford Ranch Company Airport of new transmission line dimensions.		line dimensions. Notification shall include map and heights of facilities.	low flying aircraft after construction.		of project construction

1 Table 5-8. Mitigation Monitoring Program – Hydrology and Water Quality

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
HYD-1: Construction activities may violate water quality standards or waste discharge requirements.	MM HYD-1: Prepare a Stormwater Pollution Prevention Plan prior to construction outlining all best management practices, construction staging areas, scheduling and dewatering.	Entire alignment	PG&E to review Stormwater Pollution Prevention Plan. Ensure commitments are incorporated into Project construction. PG&E to monitor for compliance.	Reduces potential for stormwater pollution.	CSLC RWQCB	Prior to and during construction
HYD-6: Construction activities may degrade water quality.	MM HYD-1: See discussion of this mitigation measure above.	—	—	—	—	—
HYD-9: Pole installation activities may affect structural integrity of flood protection levees.	MM HYD-9a: Use specialized levee drilling techniques to ensure structural stability of levee is not compromised.	Portions of Project on levees	PG&E to provide proof that specialized levee drilling techniques pursuant to Army Corps of Engineer (ACOE) requirements and Central Valley Flood Control Protection Bureau have been incorporated into Project plans.	Reduces potential for levee structural damage during construction.	CSLC Central Valley Flood Control Protection Bureau	Prior to and during construction
	MM HYD-9b: Conduct subsurface testing and remediation, if necessary, within one month after pole installation on levees.	Portions of Project on levees	PG&E to provide proof that subsurface testing and remediation has been completed to the satisfaction of the Central Valley Flood Control Protection Bureau.	Reduces potential for levee structural damage post-construction.	CSLC Central Valley Flood Control Protection Bureau	Within one month after construction

1 Table 5-9. Mitigation Monitoring Program – Noise

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
NOI-1: Construction activities may result in noise, which could affect nearby sensitive receptors.	MM NOI-1a: If drill rig is operated within 200 feet of homes, noise barrier of at least 12 feet in height must be installed.	Within vicinity of residences	PG&E to review construction plans to determine where drill rigs will be used. Ensure that construction plans contain noise barriers in those areas. If applicable, observe construction activity to ensure noise barriers are installed.	Reduces potential impact to sensitive residential receptors by ensuring compliance with local noise ordinances.	CSLC	Prior to and during construction
	MM NOI-1b: All construction shall occur during daytime hours. Nighttime construction shall only occur when daytime temperature limits are exceeded.	Entire alignment	PG&E to observe construction activities to verify compliance.	Reduces potential impacts to sensitive residential receptors by ensuring compliance with local noise ordinances.	CSLC	During construction
	MM NOI-1c: Avoid nighttime mechanical activity work within 2,000 feet of residences.	Entire alignment	PG&E to observe construction activities to verify compliance.	Reduces potential impacts to sensitive residential receptors by ensuring compliance with local noise ordinances.	CSLC	During construction
	MM NOI-1d: Provide advance warning (two to four weeks prior) to all residences within 300 feet of Project work area. Notice shall detail construction work, details, and contact information if questions arise.	Entire alignment	PG&E to review draft notices prior to release to public.	Reduces potential impacts to sensitive residential receptors.	CSLC	During construction (but prior to construction within vicinity of residences)
	MM NOI-1e: Provide a public liaison before and during construction to respond to public questions and concerns.	Entire alignment	PG&E shall coordinate establishment of liaison. PG&E to provide Environmental Compliance Monitor with liaison information.	Provides the community with a resource to answer questions/resolve issues and provides evidence of how complaints were resolved.	CSLC	Prior to construction

Table 5-9 (Continued)

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
NOI-4: Construction activities may result in substantial increase in ambient noise levels.	MM NOI-1a through MM NOI-1e: See discussion of these mitigation measures above.	—	—	—	—	—

1 Table 5-10. Mitigation Monitoring Program – Transportation/Traffic

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
TRA-4: Construction activities may present hazards to roadway/levee trail users.	MM TRA-4a: Coordinate with local traffic/law enforcement during transmission line stringing across roadways.	Where temporary road closures would be required including State Routes 99 and 70	PG&E to provide proof of coordinating efforts with local law enforcement and California Highway Patrol (CHP) as stipulated in the measure.	Ensures traffic flows would be maintained without severe congestion.	CSLC CHP Local law enforcement	During construction
	MM TRA-4b: Prepare a traffic control plan outlining roadway or levee roadway/trail closures, detour routes, and safety compliance measures (e.g., hole coverings).	Entire alignment	PG&E to provide proof that traffic control plan has been reviewed and approved by Marysville Levee District and Reclamation District 10 as stipulated in the measure.	Reduces potential conflicts/injury to motorists and/or levee roadway/trail users.	CSLC Marysville Levee District Reclamation District 10	Prior to construction
TRA-5: Construction may interfere with emergency access.	MM TRA-4a and MM TRA-4b: See discussion of these mitigation measures above.	—	—	—	—	—

1 Table 5-11. Mitigation Monitoring Program – Utilities and Service Systems

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
UTI-8: Construction activities may impact underground utilities.	MM UTI-8a: Provide final copy of construction plans detailing location of underground utilities (and how the Project will avoid impacts to said utilities), record of submittal of plans to affected jurisdictions/regulatory agencies, evidence that the Project meets all local requirements for avoidance of underground utilities.	Entire alignment	PG&E to provide proof that construction plans were submitted for review and approval to affected jurisdictions including levee districts and utility companies known within the alignment as stipulated in the measure.	Reduces potential impact to underground utilities.	CSLC Levee Districts	Prior to construction
	MM UTI-8b: Provide advance notice to affected public of any planned electrical outage.	Entire alignment	PG&E to provide proof that notices were distributed to public.	Reduces potential inconvenience of power outage to public.	CSLC	Prior to and/or during construction

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1 **6.0 REPORT PREPARATION SOURCES**

2 **6.1 MND PREPARERS**

3 Table 6-1, Dudek Personnel Involved in MND Preparation, summarizes all Dudek
4 personnel who contributed to this MND.

5 **Table 6-1. Dudek Personnel Involved in MND Preparation**

Name and Title	Issue Area Prepared or Assisted	Degree	Years of Experience in Subject Field
John Porteous, Principal-in-Charge	Reviewed all sections	San Diego State University MA Geography 1984 University of California, Santa Barbara BA Environmental Studies/Geography 1978	25 years
Sarah Lozano, Project Manager	Reviewed all sections 1.0, Introduction 2.0 Project Description 3.0, Environmental Analysis 3.4, Mandatory Findings of Significance 5.0, Mitigation Monitoring	Cornell University MRP Regional Planning 2003 Willamette University BA Environmental Science & History 1997	10 years
Bethany Andreen, Publications Assistant	Formatted all sections	—	7 years
Keith Babcock, Principal Biologist	3.3.4, Biological Resources	Colorado State University MS Business Management 1984 Colorado State University BS Wildlife Biology 1981	20 years
Matthew Caselli, Production Manager	3.3.11, Noise (Editorial review)	University of California, San Diego BA World Literature 2002	4 years

Table 6-1 (Continued)

Name and Title	Issue Area Prepared or Assisted	Degree	Years of Experience in Subject Field
Cynthia Cohen, Technical Editor	7.0, References Cited (Edited)	California State University, Northridge MA English 2007 University of California, Berkeley BS Natural Resource Management 1995	1 year
David Deckman, Principal Air Quality	3.3.3, Air Quality	University of California, Davis MS Ecology 1973 University of California, Los Angeles BS Engineering 1971	30 years
Stephen Dickey, Hydrogeologist	3.3.8 Hydrology and Water Quality	University of Riverside Graduate Work Geophysics and Geology 1990 Occidental College BA Geology 1971	32 years
Becky Golden-Harrell, Technical Editor	Editorial review for all sections	Boston University MS Marketing 2006 California Polytechnic State University, San Luis Obispo BA English 2001	8 years
Andrew Greis, GIS Analyst	Graphics for all sections	Sonoma State University BA Geography 2007	1 year
Brian Grover, Environmental Planner	4.0, Socioeconomic Effects; 3.3.11 Noise	University of North Carolina, Chapel Hill MRP Regional Planning 2007 University of California, San Diego BS Structural Engineering 2005	3 years

Table 6-1 (Continued)

Name and Title	Issue Area Prepared or Assisted	Degree	Years of Experience in Subject Field
Heather Hammermeister, Technical Editor and Publications Manager	Editorial oversight for all sections	University of Colorado, Boulder MA Linguistics 2002 University of Nevada, Reno BA Journalism 1996	11 years
Thomas Liddicoat, Biologist	3.3.4, Biological Resources	San Diego State University BS Biological Sciences 2005	3 years
Michael Komula, Acoustician	3.3.11, Noise	Heriot-Watt University MS Acoustics, Vibration, Noise Control 1996 San Diego State University BA Geography 1984	24 years
Rica Nitka, Environmental Planner	3.3.1, Aesthetics	California State Polytechnic University, San Luis Obispo BS Natural Resources Management 1988	20 years
Josh Sanders, Environmental Analyst	3.3.2, Agriculture Resources; 3.3.8 Hydrology and Water Quality; 3.3.9, Land Use and Planning; 3.3.12, Population and Housing; 3.3.13, Public Services; 3.3.14, Recreation; 3.3.15, Transportation/Traffic; 3.3.16, Utilities and Service Systems	University of California, San Diego BA Urban Studies and Planning 2006	3 years
Shawn Shamlou, Environmental Planner	3.3.10, Mineral Resources	Syracuse University MA Geography 1995 San Diego State University BA Geography 1993	14 years

1 **6.2 MND INFORMATION CONSULTATIONS**2 **Table 6-2. Consultants Involved in MND Preparation**

Name and Title	Firm	Issue Area Assisted	Degree	Years of Experience in Subject Field
Scott Cohen, Managing Engineer	West Coast Environmental	Global climate change	University of California, Santa Barbara BS Mechanical Engineering 1992	17 years
Dharma Cole, Project Engineer	Kennec, Inc.	Water quality	Humboldt State University BS Environmental Resource Engineering 2001	8 years
Robert Dal Farra, Vice President	West Coast Environmental	Global climate change	University of Windsor BASC Chemical Engineering 1981	25 years
Sean Dexter, President	Condor Country Consulting	Cultural resources	California State University, Chico Anthropology MA graduate coursework complete, ABT 1994–1998 University of California, Santa Cruz BA Anthropology 1992	16 years
Dale Schneeberger, President	Golden State Environmental	Hazards	California State University, Long Beach MS Geology 1984 California State University, Fullerton BA Biology 1978 California State University Long Beach BS Geology 1980	30 years experience in geology; 20 years experience in environmental hazards/hazardous materials
Dagan Short, President	Kennec, Inc.	Hydrology and water quality	Portland State University MS Civil Engineering 2001 Humboldt State University BS Environmental Resource Engineering 1997	11 years

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1 **8.0 ACRONYMS**

Acronyms and Abbreviations	
Acronym/Abbreviation	Meaning
ACHP	Advisory Council on Historic Preservation
ACOE	Army Corps of Engineers
ATCM	Airborne Toxics Control Measure
ADRP	Archaeological Data Recovery Program
ADT	average daily traffic
ALUC	Airport Land Use Commission
amsl	above mean sea level
APCO	Air Pollution Control Officer
APM	Applicant Proposed Measure
ATCM	Airborne Toxic Control Measure
BAU	business-as-usual
BMP	best management practice
Caltrans	California Department of Transportation
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CBC	California Building Code
CCAR	California Climate Action Registry
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
California EPA	California Environmental Protection Agency
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CNPS	California Native Plant Society
CO	carbon monoxide
COG	Council of Governments
CHRIS	California Historical Resources Information System
CRHR	California Register of Historical Resources
CRS	Community Rating System
CSLC	California State Lands Commission
CVRWQCB	Central Valley Regional Water Quality Control

Acronyms and Abbreviations	
Acronym/Abbreviation	Meaning
	Board
Delta	Sacramento–San Joaquin River Delta
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
EO	Executive Order
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FRAQMD	Feather River Air Quality Management District
g	vertical acceleration force due to gravity
GHG	greenhouse gas
HCP	Habitat Conservation Plan
IWMB	Integrated Waste Management Board
LCFS	Low Carbon Fuel Standard
L _{dn}	Day-Night Average Sound Level
LOS	level of service
MBTA	Migratory Bird Treaty Act
MMI	Modified Mercalli Intensity Scale
MMP	Mitigation Monitoring Program
MMRP	Mitigation Monitoring and Reporting Program
MMTCO _{2e}	million metric tons carbon dioxide equivalent
MND	Mitigated Negative Declaration
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
Mw	moment magnitude
NAAQS	National Ambient Air Quality Standards
NCCP	Natural Community Conservation Plan
NEIC	Northeast Information Center
NCIC	North Central Information Center
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NO _x	nitrogen oxide

Acronyms and Abbreviations	
Acronym/Abbreviation	Meaning
NO ₂	nitrogen dioxide
NRHP	National Register of Historic Places
O ₃	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OSHA	Occupational Safety and Health Administration
PCB	petroleum hydrocarbon
PERP	Portable Equipment Registration Program
PG&E	Pacific Gas and Electric
PM _{2.5}	Respirable particulate matter less than 2.5 microns in diameter
PM ₁₀	Fine particulate matter less than 10 microns in diameter
ROG	reactive organic gas
RWQCB	Regional Water Quality Control Board
SACOG	Sacramento Area Council of Governments
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
Small LUP	Small Linear Underground/Overhead Projects
SO _x	sulfur oxide
SO ₂	sulfur dioxide
SMAQMD	Sacramento Metropolitan Air Quality Management District
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
UBC	Uniform Building Code
USC	United States Code
USDA	United States Department of Agriculture
U.S. EPA	United States Environmental Protection Agency
USGS	United States Geological Survey
USFWS	United States Fish and Wildlife Service
VMT	vehicle miles traveled

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