

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

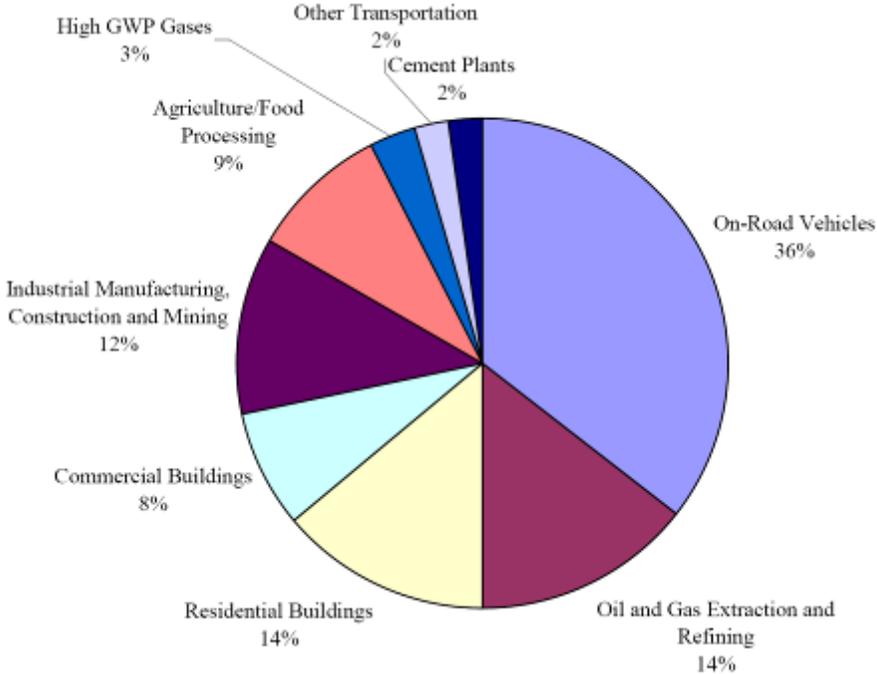
2 In December 2007, the California Air Resources Board (CARB) approved a greenhouse
 3 gas (GHG) emissions target for 2020 equivalent to the state's calculated GHG gas
 4 emissions level in 1990. CARB developed the 2020 target after extensive technical
 5 work and a series of stakeholder meetings. The 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).