

Initial Study
Atlantic-Del Mar Reinforcement Project

IV. BIOLOGICAL RESOURCES <i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</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 type="checkbox"/>	<input checked="" 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.) either individually or in combination with the known or probable impacts of other activities 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 wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities 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"/>

Existing Conditions:

A large portion of the project area contains ruderal-disturbed habitats along existing railroad tracks, but also includes areas of annual grassland, northern volcanic mudflow vernal pools (sensitive natural community found north of Atlantic substation), blue oak and interior live oak woodland, mixed valley riparian, ephemeral and perennial streams, and freshwater marsh. Several streams are present in the proposed project area, including Antelope Creek near the southern end of the alignment, a perennial tributary to Dry Creek, and several unnamed ephemeral drainages. The terrain is level-to-gently-rolling, with elevations ranging from approximately 175 feet to 300 feet above mean sea level (ASL) in the survey area.

The vast majority of the sensitive species and natural communities in the project area would be spanned by the proposed power line and, although the exact tower locations have not yet been determined, they will be sited to avoid impacts to sensitive species and natural communities wherever possible.

Explanation:

a) Adverse Effect on Special Status Species: Potentially Significant Unless Mitigation Incorporated

Plant surveys were conducted in February, March, April and late May in 2000. Although no special status plant species were identified along the project route during these surveys, pre-field research identified 25 special status plant species and 5 sensitive natural communities as having potential for occurrence in the project area (PG&E, 2001a). Table IV-1 lists ten special-status plants that were identified as having the highest potential for occurrence in the project area. The remaining 15 special status species were not included in Table IV-1 because their low potential for occurrence in the project area.

Table IV-1. Potential Special-Status Plant Species in Project Area

Species	Discussion
Big-scale balsamroot <i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	<ul style="list-style-type: none"> • CNPS* List 1B, perennial • Suitable habitat for this is found in the relatively small area of uncultivated annual grasslands and oak woodlands in the project area. • Historic occurrences are known from the Lincoln area and Highway 99 north of Roseville. • Not found in the project area during 2000 surveys. • Flowering/Phenology: March to June.
Hispid Bird's-beak <i>Cordylanthus mollis</i> ssp. <i>Hispidus</i>	<ul style="list-style-type: none"> • Federal Species of Concern, CNPS List 1B, annual • Only marginally suitable habitat is found in the project area in the small patches of salt grass that occur near Sunset Avenue in highly disturbed wetlands along the railroad tracks. • Known occurrence nearby at Stanford Ranch. The presence of salt grass often indicates saline or alkaline substrates. • Not found in the project area during 2000 surveys. • Flowering/Phenology: June to September.
Dwarf Downingia <i>Downingia pusilla</i>	<ul style="list-style-type: none"> • CNPS List 2 species, ephemeral annual • Known from many occurrences in the Roseville and Lincoln area in both hardpan and volcanic mudflow vernal pools. (Volcanic mudflow vernal pools near the Atlantic Substation are very disturbed and shallow, and many appear to be artificially created.) • Not found in the project area during 2000 surveys. • Flowering/Phenology: March to May.
Boggs Lake Hedge-hyssop <i>Gratiola heterosepala</i>	<ul style="list-style-type: none"> • California endangered, CNPS List 1B, ephemeral annual • Known from vernal pools in the immediate vicinity. • The volcanic mudflow vernal pools near the Atlantic Substation are very disturbed and shallow, and many appear to be artificially created, primarily as equipment scars. These shallow pools are probably too dry to provide good habitat for this species. • Not found in the project area during 2000 surveys. • Flowering/Phenology: April to August
Red Bluff Dwarf Rush <i>Juncus leiospermus</i> var. <i>leiospermus</i>	<ul style="list-style-type: none"> • CNPS List 1B, annual • Known from vernal pools and vernal-mesic sites, including an occurrence near Scow Road and Industrial Boulevard in Roseville. • Suitable habitat is found in the project area in the shallow pools near the Atlantic Substation. Another special-status rush, Ahart's rush (<i>Juncus leiospermus</i> var. <i>ahartii</i>), has a known occurrence near the Lincoln Airport. • Red Bluff dwarf rush was not found in the project area. • Flowering/Phenology: March to May.
Legenere <i>Legenere limosa</i>	<ul style="list-style-type: none"> • CNPS List 1B, annual • Known from the deeper portions of hardpan vernal pools in the Stanford Ranch area. • Many historic occurrences have been extirpated. • The small, shallow pools in the project area provide only marginally suitable habitat for this ephemeral annual. • Not found in the project area during 2000 surveys. • Vernal pools within the project area are probably too dry to provide good habitat for this species. • Flowering/Phenology: April to June.
Pincushion Navarretia <i>Navarretia myersi</i> spp. <i>myersii</i>	<ul style="list-style-type: none"> • CNPS List 1B, annual • Known from clay soils in vernal pools and grasslands, including an occurrence at the Phoenix Reserve in Fair Oaks. • Suitable habitat for this species is found in the uncultivated annual grasslands and the vernal pools in the project area. • Not found in the project area during 2000 surveys. • Flowering/Phenology: May.
Sacramento Orcutt Grass <i>Orcuttia viscida</i>	<ul style="list-style-type: none"> • California- and federally-listed endangered species, CNPS List 1B, annual • Vernal pool annual grass associated with larger, deeper vernal pools that remain inundated much longer than those found in the project area. Three occurrences are known from the vicinity in the Folsom quadrangle, including two occurrences at the Phoenix Reserve. • Not found in the project area during 2000 surveys. • Only marginally suitable habitat was identified. • Flowering/Phenology: May to June.
Slender Orcutt Grass <i>Orcuttia tenuis</i>	<ul style="list-style-type: none"> • Federal threatened, California endangered species, CNPS List 1B, annual • Vernal pool annual grass usually occurring on volcanic substrates. Two populations occur in Sacramento County in hardpan soils, at Phoenix Reserve in Fair Oaks and Greenback Lane northwest of Folsom. • Not found in the project area during 2000 surveys. • Only marginally suitable habitat was identified. • Flowering/Phenology: May to July.

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Species	Discussion
Sanford's Arrowhead <i>Sagittaria sanfordii</i>	<ul style="list-style-type: none"> • CNPS List 1B, perennial • Occurs in cattail marsh in irrigation ditches a few miles to the southwest in Roseville and to the south in Citrus Heights. • Marginally suitable habitat was found for this species, north of Sunset Boulevard in a small drainage. • Not found in the project area during 2000 surveys. • Flowering/Phenology: May to October.

* California Native Plant Society (CNPS)
 List 1B: Plants rare, threatened, or endangered in California and elsewhere.
 List 2: Plants rare, threatened, or endangered in California but more common elsewhere.
 List 4: Plants of limited distribution: A watch list.

Source: PG&E, 2001a

Though no special status plant species were identified within the project area during the 2000 surveys, their occurrence is not precluded, based on their potential to exist in the project area. Implementation of APMs 7-1, 7-2, and 7-16 (refer to Table B-7), in addition to the following mitigation measure, would mitigate potential impacts to a less than significant level.

B-1 Floristic surveys of the project area, conducted in 2000, were not performed during the flowering period of two special status species with potential to occur along the right-of way.

- Hispid bird's-beak (*Cordylanthus mollis* ssp. *hispidus*) has a low to moderate potential to occur in a small patch of saltgrass (*Distichlis* sp.) in a disturbed seasonal stream crossing north of Sunset Avenue. This species blooms from June to September.
- Sanford's arrowhead (*Sagittaria sanfordii*) has a high potential to occur in suitable habitat along Antelope Creek and in a seasonal stream and small drainage north of Sunset Avenue. This species blooms from May to October.

To prevent possible disturbance to these species, a qualified biologist, approved by the CPUC, will place flags (or direct installment of exclusion fencing) around the small patch of saltgrass (*Distichlis* sp.) and all suitable habitat of Hispid bird's-beak (*Cordylanthus mollis* ssp. *hispidus*) and Sanford's arrowhead (*Sagittaria sanfordii*) along Antelope Creek and the seasonal stream and small drainage north of Sunset Boulevard within 100 feet of any construction activity. Construction activities will subsequently be prohibited within this exclusion area.

A total of 32 special status mammal, bird, crustacean, fish, and insect species (four federally-listed species, one Federal Candidate for listing, one Federal fully protected, three state-listed species, and 23 Species of Special Concern) were identified to potentially occur in the project area (PG&E, 2001a). Table IV-2 lists only those 13 special status wildlife species with a moderate to high potential for occurrence in the project area. The remaining 19 special status species were not included in Table IV-2 because of their low potential for occurrence in the project area.

Table IV-2. Potential Special Status Wildlife Species in Project Area

Common Name (Scientific Name)	Status*	Potential for Occurrence	Observed Project Area
Cooper's Hawk (<i>Accipiter cooperi</i>)	CSSC	Moderate potential	Observed foraging approximately 1 mile south of Atlantic Substation near Harding Boulevard.
Tricolored blackbird (<i>Agelaius tricolor</i>)	FSSC and CSSC	Moderate potential	Not observed in project area.
Short-eared Owl (<i>Asio flammeus</i>)	CSSC	Moderate potential	Not observed in project area.
Northern Harrier (<i>Circus cyaneus</i>)	CSSC	Moderate potential	Not observed in project area.
White-tailed Kite (<i>Elanus caeruleus</i>)	SFP	High potential	Two observations were made during surveys between MPs 0.55 and 0.70; one near Roseville Landfill and one within 0.25 mile of the Del Mar Substation.
Loggerhead Shrike (<i>Lanius ludovicianus</i>)	FSSC	Moderate potential	Not observed in project area.
Valley Elderberry Longhorn Beetle (<i>Desmocerus californicus dimorphus</i>)	FT	Moderate potential	Two elderberry shrubs documented near MPs 1.1 and

Common Name (Scientific Name)	Status*	Potential for Occurrence	Observed Project Area
			1.5. Both are solitary plants located in upland habitat.
Central Valley fall-and late fall-run Chinook salmon (<i>Oncorhynchus tshawytscha</i>)	FC	High potential	Occurs in Antelope Creek at MP 0.55, and between MPs 3.40 and 3.60.
Western Spadefoot Toad (<i>Scaphiopus hammondi</i>)	CSSC and SP	High potential	Tadpoles were observed in several of the seasonally ponded wetlands between MPs 0.80 and 1.00.
Western Pond Turtle (<i>Clemmys marmorata</i>)	FSSC and SP	High potential	One turtle observed in Antelope Creek near MP 0.55 and likely to also occur in Antelope Creek between MPs 3.40 and 3.60.
Vernal Pool Tadpole Shrimp (<i>Lepidurus packardii</i>)	FE	Low to moderate potential	Protocol surveys were not conducted but species is assumed to be present in some seasonal pools within the project area.
Vernal Pool Fairy Shrimp (<i>Branchinecta lynchii</i>)	FT	Moderate potential	Protocol surveys were not conducted but species is assumed to be present in some vernal pools and seasonal within the project area.
California Linderiella Fairy Shrimp (<i>Linderiella occidentalis</i>)	CSSC	Moderate to high potential	Observed in one seasonal pool between MPs 1.90 and 2.00.

* U.S. Fish and Wildlife Service (USFWS)
 FE: Federally-listed, Endangered
 FT: Federally-listed, Threatened
 FC: Federal Candidate for listing
 FSSC: Federal Non-official Species of Special Concern
 Source: PG&E, 2001a.

California Department of Fish and Game (CDFG)
 CSSC: California Species of Concern
 SP: State protected species
 SFP: Fully Protected

“Take” of individual special status animals can be avoided by conducting pre-construction surveys before the spring breeding season (and prior to start of construction). Four special status raptors (Cooper’s hawk, northern harrier, white-tailed kite and short-eared owl) have the potential to occur in the project area. Potential impacts to these species include loss of individuals and loss of suitable nesting habitat. Construction-related activities within a 250-foot radius of an active nest could cause the birds to permanently leave their nests and abandon eggs or young. It is expected that if construction occurs in suitable habitat before the onset of the breeding season (see Table IV-3), the construction disturbance would cause bird species to seek alternate sites for breeding and nest construction.

**Table IV-3. Breeding-Season Buffer Zones
for Special Status Wildlife Species with Potential to Nest or Breed in the Project Area**

Common Name (Scientific Name)	Breeding Season	Breeding-Season Buffer Zones
Cooper’s Hawk (<i>Accipiter cooperi</i>)	March 1 to August 31	250 feet
Tricolored blackbird (<i>Agelaius tricolor</i>)	April 1 to July 31	250 feet
Short-eared Owl (<i>Asio flammeus</i>)	March 1 to July 31	250 feet
Northern Harrier (<i>Circus cyaneus</i>)	April 1 to September 30	250 feet
White-tailed Kite (<i>Elanus caeruleus</i>)	February 1 to October 31	250 feet
Loggerhead Shrike (<i>Lanius ludovicianus</i>)	March 1 to August 31	250 feet
Western Spadefoot Toad (<i>Scaphiopus hammondi</i>)	February 15 to March 31	200 feet

Implementation of Mitigation Measure **B-2** (in conjunction with APM 7-1 and APM 7-5) would mitigate potential significant impacts to a less than significant level.

B-2 Construction during the breeding season (February through September) should be avoided if practicable. If construction commences between February 15 and August 15, the following measures will apply to reduce the likelihood of impacting sensitive habitat or directly impacting birds that could be nesting:

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- A qualified biologist, approved by the CPUC, shall perform a survey of the construction area for nesting special status raptors within 30 days prior to construction.
- Power line poles, access roads, and equipment staging areas shall be sited to avoid the vicinity of existing raptor nest trees to the greatest extent practicable.
- If avoidance of active nests is not practicable, a construction-free buffer of at least 250 feet (or as otherwise specified by the appropriate resource agency) around the nest shall be maintained to protect breeding birds. If a special status raptor has an active nest in the project area, the biologist approved by the CPUC shall monitor the site during all construction activities to ensure there is no nest abandonment. In the event a Swainson's hawk nest is present, consultation and coordination with CDFG shall occur to determine appropriate actions.
- Should nest abandonment occur during the breeding season, despite all efforts to minimize disturbance, and if the nestlings are still alive, the biological monitor(s) shall notify the appropriate agencies as soon as it becomes apparent that the nest has been abandoned.

The Proposed Project could result in the removal of approximately 21 native oak trees (Refer to section e below for discussion of potential impacts to oak trees). Consequently, impacts to nesting, special status avian species could also result if trees used for nesting are removed or trimmed during the nesting season. Implementation of Mitigation Measure **B-3** (in conjunction with APM 7-1 and APM 7-6) would mitigate this impact to a less than significant level.

B-3 All tree removal or trimming shall occur between September 15 and March 15 to avoid the breeding season of birds protected by the Migratory Bird Treaty Act, and to discourage hawks from nesting in the vicinity of the proposed power line ROW. Prior to the beginning of construction (between March 15 and September 15), all trees within 250 feet of any construction activity shall be surveyed for active raptor nests by a qualified biologist approved by the CPUC. If active raptor nests are found within 250 feet of tree removal or trimming activity, protective fencing shall be erected around the tree at the dripline to prevent construction disturbance and intrusions to the nest area, and a construction-free buffer of at least 250 feet around the nest shall be maintained during the breeding season.

No special status mammals were found to have a moderate to high potential to occur in the project area; however, pre-construction surveys during the spring breeding season will be performed by PG&E. It is expected that if construction occurs in suitable habitat before the onset of breeding season, the construction disturbance would cause mammal species to seek alternate sites for breeding and denning. If special status mammals are identified, potential impacts would be mitigated to a less than significant level with implementation of Mitigation Measure **B-4** (in conjunction with APM 7-1 and APM 7-7).

B-4 Before the spring breeding season (and prior to construction), a survey of the construction area for any denning activity shall be performed by a qualified biologist approved by the CPUC. Sensitive habitat, including burrows and dens, shall be avoided by moving the pole locations. If an active den is located within the construction zone, a biological monitor shall be present during construction activities. A buffer of at least 300 feet (or as otherwise specified by the appropriate resource agency) shall be maintained around known dens of the American badger during the breeding season (March through September) to avoid the direct loss of individuals or den abandonment. PG&E shall notify the CPUC and confer with USFWS to mitigate potentially significant impacts if construction is unavoidable within this buffer. Vehicular speed will be kept to 10 miles per hour in sensitive wildlife habitat along construction access roads and within the construction right-of-way.

The valley elderberry longhorn beetle (VELB), federally-listed as endangered, may be present in the two elderberry plants that exist in the project area near MP 1.1 and MP 1.5. As presented in APM 7-8, these plants will be flagged during pre-construction surveys for avoidance during construction, and construction activities will not occur within 100 feet of the shrubs. In addition, PG&E would implement APM 7-1 and would abide by any additional measures for protecting the VELB following informal consultation with the U.S. Fish and Wildlife Service (USFWS).

The western pond turtle, both a Federal and State Species of Concern, was observed in Antelope Creek. The proposed route crosses Antelope Creek at MP 0.45 and runs parallel to the creek from MP 3.3 to MP 3.6. Potential impacts to the western pond turtle would be mitigated to a less than significant level with implementation of Mitigation Measure **B-5** (in conjunction with APM 7-1 APM 7-14).

B-5 No construction activities shall occur in or immediately adjacent to Antelope Creek. A buffer zone of 200 feet during the wet season (November through April) and 30 feet during the dry season (May through October) shall be established around Antelope Creek to protect the western pond turtle and the Chinook salmon. If work must be conducted within these buffer zones, PG&E shall notify the CPUC in writing prior to construction and shall negotiate with the appropriate resource agencies (i.e., the U.S. Fish and Wildlife Service and the California Department of Fish and Game) the type, timing, and duration of the work to mitigate any potential significant impacts.

Tadpoles of western spadefoot toad, both a Federal and State Species of Concern, were observed in several of the seasonally-ponded wetlands between MP 0.8 and MP 1.0. Potential impacts to the western spadefoot toad would be mitigated to a less than significant level with implementation of Mitigation Measure **B-6** (in conjunction APM 7-1 and APM 7-15).

B-6 To avoid potential construction impacts to vernal pool aquatic habitats, a buffer zone of 200 feet during the wet season (November through April) and 30 feet during the dry season (May through October) shall be established around the seasonal pools in the project area that contain protected species and could potentially be impacted by project activities. If work must be conducted within these buffer zones, PG&E shall notify the CPUC in writing prior to construction and shall negotiate with the appropriate resource agencies (i.e., the U.S. Fish and Wildlife Service and the California Department of Fish and Game) the type, timing, and duration of the work to mitigate any potential significant impacts. To avoid potential construction impacts to aestivation habitat, all of the proposed pole sites shall be surveyed to ensure that poles are placed in locations where aestivation habitat is absent.

Potential habitat for three special status vernal pool crustaceans - vernal pool fairy shrimp, vernal pool tadpole shrimp, and California linderiella shrimp - was observed within the project area. California linderiella shrimp was observed in one seasonal vernal pool between MP 1.9 and MP 2.0 in the project area. According to USFWS, any ground-disturbing activities, such as tower construction, within 250 feet of known or potential habitat for fairy shrimp or tadpole shrimp would be considered a significant impact. PG&E would comply with Federal Endangered Species Act requirements for mitigating impacts to these aquatic species. In areas where a 250-foot buffer zone cannot be adhered to, PG&E would consult with USFWS to formulate necessary precautions and a USFWS-approved monitor must be present during construction activities (APMs 7-1 and 7-9). Therefore, impacts to these species would be less than significant.

Central Valley Fall-Run Chinook salmon are likely to be present in Antelope Creek. The proposed route crosses Antelope Creek at MP 0.45 and runs parallel to the creek from MPs 3.3 to 3.6. Potential impacts to the Central Valley Fall-Run Chinook salmon would be mitigated to a less than significant level with implementation of Mitigation Measure B-5 (in conjunction with APM 7-1 and APM 7-12).

Generally due to the low to moderate potential for quality breeding habitat, there is a low potential for occurrence of the California red-legged frog, foothill yellow-legged frog, and the California tiger salamander. However, implementation of APMs 7-1, 7-10, 7-11, and 7-14 (refer to Table B-7) would avoid construction impacts to any potential aestivation or foraging habitat for this species should they be found to occur during pre-construction surveys (PG&E, 2001a).

Special Status Species Impacts Associated with Mitigation Measure V-1. Since the release of the initial Draft IS/MND, a habitat assessment (Jones & Stokes, 2002) for potential jurisdictional wetlands, other waters of the United States, and special-status aquatic invertebrates and amphibians was conducted on the western and eastern portions of the railroad ROW between proposed milepost (MP) 1.90 and 3.10, in the vicinity of where the underground power line would be placed. One objective of the survey was to identify potential habitat for special-status invertebrates and amphibians including the federally listed vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardii*), and the state species of concern western spadefoot toad (*Scaphiopus hammondi*).

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Invertebrate biologists conducted surveys on April 18, 2002 and a follow-up survey was conducted on April 25, 2002. Although no special-status aquatic invertebrate or amphibian species were observed during the surveys, the biologists did identify 24 sites as potential habitat for special-status aquatic invertebrates (see Figures IV-1a through IV-1c and Table IV-4). In addition, they identified six sites that provide suitable habitat for western spadefoot toads (Nos. 6, 9, 10, 13, 16, and 35 see Figures IV-1a through IV-1c and Table IV-4). In a previous survey conducted for the project (PG&E, 2001), the California linderiella fairy shrimp was observed in one seasonal pool between MPs 1.90 and 2.00, and the western spadefoot toad was observed outside of the current survey area, in pools between MPs 0.80 and 1.00 (Jones & Stokes, 2002).

The biologist identified potential aquatic invertebrate habitat in eight seasonal pools, 11 seasonal wetlands, two seasonal drainages, and three ephemeral drainages. A number of drainages within the study area were not considered suitable habitat because they have flowing water. The drainages the biologist did identify as suitable either had pooled, low-lying areas within the drainage, or appeared to be overflow areas adjacent to a main drainage. In any case the sites considered potential habitat appeared to provide a non-flowing, temporary water source that could sustain aquatic invertebrates. Twenty-two of the 24 sites had indications of disturbance including trash and tire tracks. Only two of the sites (Nos. 14 and 22, see Figures IV-1a through IV-1c and Table IV-4) appeared to be undisturbed (Jones & Stokes, 2002).

Of the six sites where amphibian larvae were found during the April 18th survey, four had dried up by the April 25th survey (Nos. 6, 13, 16, and 35, see Figures IV-1a through IV-1c and Table IV-4). During the April 25th survey, the biologist observed numerous Pacific treefrog and western toad larvae at location Nos. 9 and 10 and two Pacific treefrog metamorphs at location No. 35. The six sites provide potential habitat for western spadefoot toads; however, only two of the sites held water long enough to support successful breeding this year. The dry sites could provide suitable western spadefoot habitat during wetter years. None of the sites are considered suitable for California tiger salamander because of the frequent disturbance in the right-of-way from vehicle traffic (off-road driving and utility maintenance). The frequent disturbance increases the chances of mortality and reduces the suitability of undisturbed overwintering upland habitat. Unlike the western spadefoot toad, which overwinters in upland habitat immediately adjacent to the breeding pool, the tiger salamander uses upland habitats up to a mile from a breeding site (Jones & Stokes, 2002).

According to USFWS, removal or disturbance within 250 feet of known or potential habitat for special-status invertebrates and/or amphibians would be a significant impact. Although none of the 24 sites identified as having potential habitat for special-status invertebrates and/or amphibians would be directly disturbed by the underground power line construction, it appears that all of the 24 sites would be within 250 feet of active construction.

Mitigation Measure **B-6a** is recommended to avoid impacts to these species by ensuring that PG&E enters into Section 7 Consultation with the U.S Fish and Wildlife Service (USFWS) to mitigate potentially significant impacts.

B-6a If PG&E cannot completely avoid direct (100-foot buffer) or indirect (250-foot buffer) impacts to vernal pool crustaceans, they will be required to comply with U.S. Army Corps of Engineers (USACE) 404 permitting/U.S. Fish and Wildlife Service (USFWS) Section 7 process, if necessary, and any other applicable USFWS or USACE consultation requirements. Appropriate compensation to mitigate impacts will be determined by the USFWS. PG&E must provide the CPUC with a copy of the Biological Opinion from USFWS that indicates agreed-upon avoidance buffer zones, compensation for anticipated impacts, and/or measures to reduce impacts to less than significant.

In addition to consultation with USFWS, if there is a potential for the project to impact State threatened or endangered species, PG&E would be required to consult with the California Department of Fish and Game (CDFG) and obtain an "Incidental Take Permit" under Section 2081(b) of the California Endangered Species Act, if necessary. Mitigation Measure **B-6b** is recommended to ensure that PG&E consults with CDFG to reduce potential impacts to State threatened or endangered species to less than significant levels.

B-6b PG&E shall initiate consultation with CDFG to determine if an "Incidental Take Permit" would be required for the project. PG&E shall provide documentation to the CPUC that either: (1) CDFG found that an Incidental Take Permit would be necessary for the project, or that (2) CDFG would not require that PG&E obtain an Incidental Take Permit. If an Incidental Take Permit is required, PG&E must provide all provisions of the permit to the CPUC prior to the commencement of construction and all said provisions shall be incorporated into the Mitigation Implementation and Monitoring Plan and implemented as stipulated.

a) Effect on Riparian Habitat: Less than Significant Impact

Riparian habitat within the project area would be avoided by adhering to pre-construction measures outlined in APMs 7-1 and 7-2 (refer to Table B-7) and Mitigation Measures **B-1, B-5, B-6, and B-6a** which include the presence of biological monitors with the authority to stop construction activities, and flagging and documentation of potential wetland and riparian habitat, and disturbance-free buffer zones, as well as construction measures restricting construction equipment use within the vicinity of riparian habitats and the relocation of the underground segment away from sensitive areas. Plant surveys were conducted in February, March, April and late May of 2000. Although no special status plant species were identified along the project route during these surveys, pre-field research identified 25 special status plant species and 5 sensitive natural communities as having potential for occurrence in the project area (PG&E, 2001a). Table IV-1 lists ten special-status plants that were identified as having the highest potential for occurrence in the project area. The remaining 15 special status species were not included in Table IV-1 because their low potential for occurrence in the project area.

Though noxious weeds are not a sensitive natural community, they are widespread in California and in the project area. There are particular Species of Concern to the California Department of Food & Agriculture (CDFA) for their invasiveness and potential to spread explosively in rangelands and agricultural areas. Although the CDFA¹ 'A List' species are typically the only noxious weed species targeted for eradication, other CDFA-rated invasive weeds found in the project area during the February, March, April, and late May surveys (PG&E, 2001a). These species include:

- C-rated Italian thistle (*Carduus pycnocephalus*) in the oak woodlands north of SR 65
- C-rated yellow star thistle throughout the project area in disturbed areas of open grassland
- C-rated field bindweed (*Convolvulus arvensis*) in the railroad ROW north of Midas Avenue
- C-rated Bermuda grass (*Cynodon dactylon*) in the seasonal pools and stream just north of Sunset Avenue
- C-rated Russian thistle (*Salsola tragus*) in the railroad ROW north of Midas Avenue
- C-rated Medusa-head (*Taeniatherum caput-medusae*) in the understory of oak woodland north of SR 65
- C-rated puncture vine (*Tribulus terrestris*) in the railroad ROW south of Midas Avenue.

Implementation of APM 7-4 (see Table B-7) addresses best management construction practices to avoid the potential spread of noxious weeds. Therefore, impacts would be less than significant.

c) Effect on Wetlands: Potentially Significant Unless Mitigation Incorporated

Potential wetlands are found in the project area in the floodplain of perennial streams (i.e. Antelope Creek), between ordinary low and high water marks of ephemeral streams, in vernal pools and in artificially created depressions along railroad access roads (PG&E, 2001a). Potential wetlands and other "waters of the U.S." in the project area include:

- Vernal pools north of the Atlantic Substation
- Between the low and high water mark of Antelope Creek, northeast of the Atlantic Substation
- Seasonal pools in grassland on the east side of Antelope Creek, north to SR 65
- A seasonal drainage at the north end of the oak woodland, just north of SR 65
- An unnamed ephemeral stream just north of Woodside Drive, within the alignment
- A small, unnamed ephemeral stream just north of Sunset Boulevard
- Railroad access road seasonal pools just north of Sunset Boulevard
- Seasonal pools just north and south of Midas Avenue along the railroad tracks
- Seasonal pools under the trees halfway between Midas Avenue and Yankee Hill Road
- Antelope Creek, at the southern end of the project area
- An unnamed, small ephemeral stream just north of Woodside Drive, within the project alignment
- A small, unnamed ephemeral stream just north of Sunset Boulevard (PG&E, 2001a).

¹ California Department of Food and Agriculture Lists: A = The agency mandates that these species be targeted for eradication or containment; B = These species are more widespread and, therefore, difficult to contain and the agency allows county Agricultural Commissioners to decide whether to target them for eradication or containment in their jurisdictions; C = These weeds are so widespread that the agency does not endorse state- or county-funded eradication or containment efforts except in nurseries or seed lots.

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Wetlands in the project area have not yet been formally delineated; however, a disturbance-free zone of 250 feet from the edge of all identified potential wetland habitats and a disturbance-free zone of 200 feet from the edge of all identified aquatic and wetland habitat would be adhered to during construction, as stated in APM 7-2 (see Table B-7). Therefore, impacts would be less than significant. However, in the event that construction in the disturbance-free zone is unavoidable, implementation of Mitigation Measure **B-7** would mitigate potential impacts to a less than significant level.

B-7 If the 200-foot disturbance free zones described in APM 7-2 cannot be adhered to and construction will occur in jurisdictional wetlands, PG&E must comply with applicable requirements of the U.S. Army Corps of Engineers.

Wetlands Impacts Associated with Mitigation Measure V-1. Since the release of the initial Draft IS/MND, a habitat assessment (Jones & Stokes, 2002) for potential jurisdictional wetlands, other waters of the United States, and special-status aquatic invertebrates and amphibians was conducted on the western and eastern portions of the railroad ROW between proposed milepost (MP) 1.90 and 3.10, in the vicinity of where the underground power line associated with Mitigation Measure V-1 would be placed. One of the objectives of the field survey was to determine the extent of areas that potentially meet the U.S. Army Corps of Engineers jurisdictional wetland criteria (i.e., areas that have positive indicators of hydrophytic vegetation, hydric soils, wetland hydrology, and fit the regulatory definition of waters of the United States) (Jones & Stokes, 2002).

Botanist/wetland ecologist conducted a survey on April 18, 2002 to identify wetlands and other waters of the United States in the study area. Each potential wetland and other waters encountered in the project area was assigned a number that cross references the data in Table IV-4 (illustrated in Figures IV-1a through IV-1c). The results of the assessment indicate an estimate of 1.333 acres of potential jurisdictional wetlands and other waters (Jones & Stokes, 2002) within the project study area. However, PG&E anticipates that the project would only directly impact location Nos. 29 and 30 (see Figure IV-1c and Table IV-4) for a total acreage of 0.0823.

Implementation of Mitigation Measure **B-7a** would reduce potentially significant impacts associated with disruption of jurisdictional wetlands and other waters of the United States to less than significant levels.

B-7a PG&E will be required to initiate U.S. Army Corps of Engineers (USACE) 404 permitting if any of the 'other waters of the U.S.' or associated wetlands, identified in the May 2002 *Assessment of Biological Resources for PG&E's Atlantic Del-Mar Underground Evaluation in Rocklin, CA* by Jones & Stokes are directly impacted by the project. Appropriate compensation for anticipated impacts to these waters and wetlands will be determined by the USACE for this project. PG&E must provide the CPUC with a copy of the 404 permit (or notice of authorization under a Nationwide Permit) that documents the agreed-upon compensation for impacts to these jurisdictional resources.

In addition to consultation with USACE, PG&E may be required to obtain a Streambed Alteration Agreement Permit from CDFG if construction of the project would affect a stream course, pursuant to Section 1603 of the Fish and Game Code. Mitigation Measure **B-7b** is recommended to ensure that PG&E consults with CDFG to reduce potential impacts to stream courses within the project area.

B-7b PG&E shall initiate consultation with CDFG to determine if a Streambed Alteration Agreement Permit would be required for the project. PG&E shall provide documentation to the CPUC that either: (1) CDFG found that a Streambed Alteration Agreement Permit would be required for the project, or (2) CDFG would not require that PG&E obtain a Permit. If a Streambed Alteration Agreement Permit is required, PG&E must provide all provisions of the Permit to the CPUC prior to the commencement of construction and all said provisions shall be incorporated into the Mitigation Implementation and Monitoring Plan and implemented as stipulated.

PG&E has indicated that it will utilize horizontal bore techniques to construct the underground power line under the Sunset Boulevard overpass and under the wetland/other waters area Nos. 2, 4, and 12 so there would not be damage to the overpass or the wetland/other waters areas. However there is a small chance that a release of drilling lubricants through fractures in the wetland called "frac-outs" could occur. The following mitigation measure is designed to reduce potentially significant impacts associated with horizontal boring to levels that are less than significant:

B-7c Boring operations under wetlands shall be limited to daylight hours because of the difficulty in identifying the loss of bentonite or machine pressure without daylight. This shall be defined by the termination of drilling 30 minutes before dusk, and resumption of drilling at dawn. The contractor will make every effort to schedule drilling activities to be completed between dawn and 30 minutes to dusk. Should the drilling activities be within one hour of completion, 30 minutes before dusk, drilling activities may be allowed to continue for one more hour if the project environmental monitor determines that completing the drilling activities will result in less risk to the wetland area. In the event that the wetland is dry and the National Weather Service forecasts indicate no possibility of rain for a 24-hour period, this condition shall not apply.

PG&E shall develop site specific Bore Plans for each proposed bore location that document the design, measures to minimize the risk of spills of all types, and contingency plans in the event of the release of drilling lubricants through fractures in the streambed or wetland ("frac-outs"). In substrates where frac-outs are likely to occur, the plan shall require boring in a manner that would reduce risk, such as using lower pressure and greater boring depths. The Bore Plan(s) shall be approved by the CPUC prior to the start of construction.

Boring plans should include:

- A sketch of the construction site, including equipment staging areas, approximate location of drill entry and exit points, the approximate location of access roads in relation to the surrounding area, and conduit stringing areas (if required).
- Proposed depth of bore and statement of streambed/wetland condition (subsurface strata, percent of gravel and cobble, and estimated scour depth) that support the depth of the bore.
- Approximate length of bores (50-foot increments).
- Type and size of boring equipment to be used (categorized as mini, mid or maxi).
- Estimated time to complete bore.
- List of lubricants and horizontal directional drill additives to be used.
- Name of Operator's agents and cell phone numbers.
- Location of disposal site and description of disposal arrangements.
- Frac-out prevention and contingency plan that includes: name(s) and phone numbers of biological monitor(s), third-party monitors, and crew supervisor(s); site-specific resources of concern (if applicable, include factors such as possible presence of sensitive species); monitoring protocols (include biological monitoring and frac-out monitoring); containment and clean-up plan (include staging location of vacuum trucks and equipment, equipment list, necessary hose lengths, etc., at each location). To prevent frac-outs, the following or similar prevention measures will be instituted: before thermal grout is pumped into the casing, thermal concrete of compressive strength 2,500 psi (same as the duct bank concrete) will be used to form concrete plugs at the casing ends to prevent escape of the grout during the pumping operation. Overflow standpipes will be directed into a sandbagged, fabric or plastic lined dam to prevent contamination of any surrounding areas.

PG&E's biological monitor shall provide on-site training for the work crews to ensure protection of all stream and wetland zones. The contractor will provide continuous monitoring of the boring operation to ensure that adequate protection controls have been installed as specified in the bore plan. In addition, a contractor compliance inspector will be present during drilling operations. All field personnel will be briefed in their responsibility for timely reporting of frac-out releases to the monitor on site.

PG&E's biological monitors will inspect the route within 4 hours prior to the commencement of bore at the permitted sites for the presence of sensitive species. If sensitive species are found, work shall cease immediately and appropriate resource agencies (i.e., the U.S. Fish and Wildlife Service and/or California Department of Fish and Game) shall be consulted in order to develop mitigation and new construction plans.

Secondary containment will be utilized for any portable equipment brought onto the project site (i.e., portable pumps). Secondary containment will consist of spill basins large enough to contain the equipment. In addition, spill kits will be kept on site at all times for use in vehicle/equipment fuel or oil leaks. Spill kits will consist of a 5-gallon plastic bucket, 3-inch ring booms, and absorbent padding. Frac-out containment materials will also be kept on site.

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d) Interference with Wildlife Movement: Less than Significant Impact

The primary wildlife movement corridors in the project area are those riparian habitats associated with Antelope Creek and other streams. Riparian habitat within the project area will be avoided by adhering to pre-construction measures outlined in APMs 7-1 and 7-2 (see Table B-7) and Mitigation Measures **B-5, B-6a, and B-6b** (above), which include the presence of biological monitors with the authority to stop construction activities, and flagging and documentation of potential wetland and riparian habitat, and disturbance-free buffer zones, as well as construction measures restricting construction equipment use within the vicinity of riparian habitats and the requirement of avoiding sensitive habitat areas. Therefore, impacts would be less than significant.

e) Conflict with Policies Protecting Biological Resources: Less than Significant Impact

Construction of the Project Proposed could result in the loss of approximately 21 native or heritage trees. Both the cities of Roseville and Rocklin protect native and heritage oak trees through local tree ordinances, the Roseville CA Municipal Code Title 19, Zoning, Chapter 19.66 – Tree Preservation and Rocklin Municipal Codes Chapters 12.08 and 12.12. As described in APMs 7-3 and 7-17, a complete tree survey would be conducted when construction designs are finalized. The survey would include a list of all trees that would be removed and trimmed in accordance with the minimum requirements outlined in the Cities of Roseville and Rocklin’s tree ordinances and required tree-removal permit applications. Compliance with the measures required in both the Roseville and Rocklin Tree Preservation ordinances, as ensured in APM 7-3, would ensure that impacts to oaks and other native trees would be reduced to a less than significant level, either through avoidance, reduction, or replacement.

f) Conflict with Adopted Conservation Plans: Less than Significant Impact

The Proposed Project is within Placer County, and therefore falls under the Placer Legacy Open Space and Agricultural Conservation Program (Placer Legacy Program). The Placer Legacy Program seeks to achieve a balance the County’s population growth and conservation of the natural open space resources. The goals of the program include:

- Maintaining a viable agricultural segment of the Placer County economy.
- Conserving natural features for access to a variety of outdoor recreation opportunities.
- Retaining important scenic and historic areas.
- Preserving the diversity of plant and animal communities.
- Protecting endangered and other special status plant and animal species.
- Separating urban areas into distinct communities.
- Ensuring public safety.

The Placer Legacy Program objectives specific to biological resources include:

- Working with landowners to conserve and improve creeks and riparian zones through streambed improvement, revegetation, and where appropriate, widening the vegetated zone within the natural flood plain, increasing the retention of surface water run off.
- Protecting existing high quality riparian areas and help prevent degradation from urban encroachment in rural residential and suburban areas.
- Working to preserve large core areas of vernal pools which are relatively undisturbed and help protect small pool complexes, especially the rare varieties, to maintain biological diversity.
- Working to protect large areas of oak woodlands and groves with special values.
- In rural residential areas, protecting oak woodlands by educating landowners, local conservation activities, and current land use policies.
- Protecting grasslands as important components of vernal pools and oak woodland conservation.
- Coordinating with other agencies to protect Sierra Nevada resources, and watch for opportunities to swap lands of particularly high biological values as a means of protection.

Measures incorporated into the Proposed Project by PG&E and implementation of additional mitigation measures in this document would minimize biological resources impacts to a less than significant level. Therefore, the goals of the plan would still be met, after implementation of this project.

Figure IV-1a: Potential Wetlands, Other Waters of the U.S., and Special-Status
Invertebrate Habitat between Mileposts 1.9 and 3.1
(8½ x 11 Color)
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Figure IV-1a: Page 2 of 2

Figure IV-1b: Potential Wetlands, Other Waters of the U.S., and Special-Status
Invertebrate Habitat between Mileposts 1.9 and 3.1
(8½ x 11 Color)
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Figure IV-1b: Page 2 of 2

Figure IV-1c: Potential Wetlands, Other Waters of the U.S., and Special-Status
Invertebrate Habitat between Mileposts 1.9 and 3.1
(8½ x 11 Color)
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Figure IV-1c: Page 2 of 2

**Table IV-4. PG&E's Atlantic-Del Mar Reinforcement Project Between Mileposts (MP) 1.9 and 3.1:
Potential Wetlands, Other Waters of the U.S., and Special-Status Species Habitat**

Resource Number	MP location	Feature Type	Previously Mapped? ¹	Wetland Hydrology Present? ²	Wetland Vegetation Present? ³	Acreage ⁴	Potential Corps Jurisdictional Status ⁵	Comments
1*	1.9 east	Seasonal Wetland	Yes-Seasonal pool	Yes	Yes - Juncus spp., Eleocharis macrostachya, Eryngium castrense	0.1412	Wetland - adjacent	Depressional area, no outlet, probably receives overflow from adjacent drainageway #3
2	1.92 east	Seasonal Drainage	No	Yes-drainage pattern	Yes - Juncus xiphioides	0.0301	Wetland – adjacent	Swale, no inlet or outlet apparent
3	1.9 east to 2.15 west	Seasonal Drainage	Yes-Ephemeral drainage & Seasonal drainage	Yes-inundated 6-10 inches	Yes - Typha latifolia, Rorippa nasturtium-aquaticum, Veronica anagallis-aquatica, Alisma plantago-aquatica; southern end has Salix spp., Populus fremontii	0.0242	Wetland – adjacent	Large ditch, OHWM=5'; at southern end culvert under RR track, Sunset Blvd., and old road bed. This feature was previously mapped as two separate features
4*	1.95 east	Seasonal Drainage	No	Yes-inundated ~2 inches	Yes - Populus fremontii, Salix gooddingii, Typha latifolia	0.0037	Wetland - adjacent	Relict ditch, partially covered by old concrete slab; possibly overflows into #3
4A	1.97 east	Ephemeral Drainage – Depression & Culvert	No	Yes – bed & banks (probably relict feature)	No vegetation	0.0052	Other Waters	Relict ditch profile, has peizometer installed in bottom; dry, culvert under Sunset Blvd
5	2.1 east	Seasonal Drainage	No	Yes-inundated ~4-6 inches	Yes - Typha latifolia	0.0775	Wetland - adjacent	Drainage 3-4' OHWM; connects to #3
6*+	2.02 east	Seasonal Drainage	No	Yes-drainage pattern	Yes - Xanthium strumarium, Callitriche sp., Rumex crispus, Lolium multiflorum, Juncus spp.	0.0624	Wetland - adjacent	Drainage - 5' OHWM, probably overflows into #3
7	2.25 east	Ephemeral Drainage	No	Yes-bed & banks	No vegetation	0.0123	Other waters	Drainage, 23 OHWM
8*	2.0 west	Seasonal Wetland	No	Yes-ponded ~ 4 inches	Yes - Juncus xiphioides, Galium aparine	0.0017	Wetland – adjacent	Small ponded area in deep ruts, no inlet or outlet
9*+	2.05 west	Seasonal Wetland	Yes-Seasonal pool	Yes-inundated up to 10 inches	Yes - Alisma plantago-aquatica, Aquatic grass, Juncus spp.	0.0753	Wetland – adjacent	Depressional area with no inlet or outlet evident, possibly overflows into drainage #3

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Resource Number	MP location	Feature Type	Previously Mapped? ¹	Wetland Hydrology Present? ²	Wetland Vegetation Present? ³	Acreage ⁴	Potential Corps Jurisdictional Status ⁵	Comments
10*+	2.05 west	Seasonal Wetland	Yes-Seasonal pool	Yes-inundated up to 10 inches	Yes - Juncus spp., Lolium multiflorum	0.0473	Wetland – adjacent	Depressional area with no inlet or outlet evident, possibly overflows into drainage #3
11	2.05 west	Potential Seasonal Wetland	No	Possibly, soils saturated at surface	Yes - Juncus spp., Lolium multiflorum, Hordeum marinum ssp. gussoneanum, Rumex crispus	0.0646	Wetland – adjacent	Depressional area with no inlet or outlet evident, possibly overflows into drainage #3
12*	2.01 east	Seasonal Pool	No	Yes – sediment deposits	No vegetation	0.0288	None	Depressional area, no inlet or outlet
13*+	2.1 west	Seasonal Pool	Yes-Seasonal pool	Yes-inundated	No – little vegetation	0.0129	None	Depressional area with no inlet or outlet evident; in middle of access road
14*	2.15 west	Seasonal Wetland	Yes-Seasonal pool	Yes-drift lines	Yes - Phalaris aquatica dominant; Rumex crispus, R. pulcher, Eleocharis macrostachya, Cichorium intybus	0.0988	Wetland – isolated	Depressional area with no inlet or outlet evident
15*	2.1 east	Seasonal Wetland	No	Yes-sediment, drift	Yes - Deschampsia danthonioides, Phalaris lemmonii, Phalaris aquatica, Plagiobothrys stipitata, Vulpia bromoides	0.1640	Wetland – isolated	Some vernal pool plants
16*+	2.28 west	Seasonal Pool / Wetland	Yes-Seasonal pool	Yes-inundated ~ 3-4 inches	Yes, some - Phylla at edges	0.0155	Wetland – isolated	Ponding in track - in middle of access road
17	2.28 west	Potential Seasonal Wetland	No	Yes-depression, drift lines	Yes - Phalaris aquatica is dominant; Geranium dissectum, Limnanthes alba	0.0646	Wetland – isolated	Adjacent to #16, depressional area shown on topo map
18	2.3 west	Ephemeral Drainage	No	Yes – bed & banks	No vegetation	0.0005	Other waters	Short ditch to culvert under road; 1' OHWM
19*	2.35 west	Seasonal Wetland	No	Yes-ponded ~ 3 inches	Yes - Hordeum marinum ssp. gussoneanum, Lythrum salicaria, Juncus bufonius	0.0034	Wetland – isolated	Swale – disturbed area

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Resource Number	MP location	Feature Type	Previously Mapped? ¹	Wetland Hydrology Present? ²	Wetland Vegetation Present? ³	Acreage ⁴	Potential Corps Jurisdictional Status ⁵	Comments
20*	2.42 west	Seasonal Wetland	No	Yes-sediment deposits	Yes - <i>Hordeum marinum</i> ssp. <i>gussoneanum</i> , <i>Lolium multiflorum</i> , <i>Veronica peregrina</i> ssp. <i>xalapensis</i> , <i>Plantago elongata</i>	0.0271	Wetland – isolated	Swale - no inlet or outlet evident
21	2.55 west	Ephemeral Drainage	Yes-Ephemeral drainage	Yes – residual ponding in parts <6 inches; bed & banks	No – no vegetation within OHWM; <i>Lolium multiflorum</i> , <i>Rubus discolor</i> on banks	0.0489	Other Waters	Culvert under road and continues under houses; at RR end culvert dated "1998", continuation of #23 on east of RR
22*	2.55 west	Ephemeral Drainage	No	Possibly – sediment deposits	No vegetation except some annual upland plants	0.0484	Other waters	Swale - possibly overflow from #21
23	2.55 east	Ephemeral Drainage	No	Yes-bed & banks	No vegetation	0.0247	Other waters	2.5' OHWM, drains under RR by culvert dated "1998" into #21
24*	2.55 east	Seasonal Wetland	Yes-Seasonal pool	Yes-sediment deposits, soils saturated	Yes - <i>Lolium multiflorum</i> , <i>Cynodon dactylon</i>	0.0205	Wetland – adjacent	Depressional area adjacent to small drainage #23
25	2.95 east	Ephemeral Drainage	Yes-Ephemeral drainage	Yes-bed & banks	No vegetation within OHWM, <i>Rubus discolor</i> on banks	0.0116	Other waters	Drainage, 3' OHWM, culvert under RR into #21
26*	2.7 west	Seasonal Wetland	No	Yes-ponded ~ 1 inch	Yes - <i>Plantago elongata</i> , <i>Veronica pergrina</i> ssp. <i>xalapensis</i>	0.0081	Wetland – isolated	Seasonal ponding in disturbed area
26A*	2.65 west	Seasonal Pool	No	Yes, sediment deposits	No – little ruderal vegetation	0.0360	None	Disturbed pool near to parking lot
27*	2.7 west	Seasonal Pool	No	Yes-ponded ~ 4 inches	No vegetation	0.0327	None	Seasonal ponding in disturbed area
28*	2.8 east	Ephemeral Drainage	Yes-Ephemeral drainage	Bed & banks	No –some <i>Lolium multiflorum</i> at edge	0.0194	None	Swale, 3' wide, no inlet or outlet apparent
29	2.85 east	Ephemeral Drainage	No	Bed & banks	No vegetation	0.0016	Other waters	Short drainage into culvert at end of #30 under RR
30	2.9 east	Seasonal Drainage	Yes-Ephemeral drainage	Yes-inundated 1 6 inches	Yes - <i>Typha latifolia</i> , <i>Rorippa nasturtium-aquaticum</i> , <i>Veronica anagallis-aquatica</i>	0.0807	Wetland – adjacent	Culvert under RR tracks to southeast, probably same as seen at end of #31
31*	2.92 west	Ephemeral Drainage	No	Yes-drainage pattern	No vegetation	0.0420	Other waters	Bed & banks. Drop culvert; water flowing in buried culvert below.

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Resource Number	MP location	Feature Type	Previously Mapped? ¹	Wetland Hydrology Present? ²	Wetland Vegetation Present? ³	Acreage ⁴	Potential Corps Jurisdictional Status ⁵	Comments
32*	2.9 west	Seasonal Pool	No	Yes-drainage pattern	No, little vegetation - some <i>Lolium multiflorum</i> , <i>Xanthium strumarium</i>	0.0037	None	Overflow from adjacent drainage swale;
33	2.95 west	Willow Scrub	No	Possibly - adjacent to drainage swale	Yes - <i>Salix exigua</i> , <i>Galium aparine</i>	0.0404	Wetland – adjacent	Adjacent to drainage swale
34	3.0 west	Seasonal Wetland	No	Yes-drainage swale	Yes - <i>Crassula aquatica</i> , <i>Cynodon dactylon</i> , <i>Lolium multiflorum</i> ; mowed	0.0232	Wetland – adjacent	Drainage swale, water from 18" culvert under Midas Rd
35*+	3.0 between tracks	Seasonal Wetland	Yes-Seasonal pool	Yes-inundated	Yes - <i>Salix exigua</i> , <i>Cynodon dactylon</i>	0.2230	Wetland – adjacent	Ponded area, large culvert under RR tracks to southeast
36*	3.0 east	Seasonal Pool / Wetland	Yes-Seasonal pool	Yes-drift lines	Yes in part- <i>Lolium multiflorum</i> , <i>Trifolium dubium</i> , <i>Crassula aquatica</i> , <i>Cynodon dactylon</i>	0.1369	Wetland – adjacent	Culvert under RR to # 35?
37*	3.05 east	Seasonal Pool / Wetland	Yes-Seasonal pool	Yes-drift lines	<i>Crassula aquatica</i> , <i>Cynodon dactylon</i> , <i>Lolium multiflorum</i> , <i>Eryngium castrense</i> , <i>Veronica peregrina</i> ssp. <i>xalapensis</i>	0.0847	Wetland – adjacent	24" culvert under Midas Road into #36
38	3.1 east	Seasonal drainage	Unknown	Yes – bed & banks	Undetermined	Mostly outside study area	Other waters	Undetermined

Notes:

* Indicates potential special-status aquatic invertebrate habitat.

+ Indicates potential special-status amphibian habitat.

¹ Figures 7-1D and 7-1E in Atlantic-Del Mar Reinforcement Project PEA [Pacific Gas & Electric, May 2001]

² Wetland hydrology - indicators are present of permanent or periodic inundation or prolonged soil saturation sufficient to create anaerobic conditions in the soil

³ Wetland vegetation - hydrophytic plants (i.e., plants classified as facultative, facultative wetland, and obligate species as defined by Reed [1988]) comprise more than 50% of the dominant plant species

⁴ Acreage figures are preliminary estimates only; final acreages would be verified by field survey

⁵ Several assumptions are made in preliminary determination of likely jurisdictional status, including (1) areas with positive indicators of wetland hydrology would also have hydric soils - this would be investigated by further fieldwork; (2) resource #s 1 to 15 are in within valley shown on topographic map that contains a seasonal creek that is a tributary of Antelope Creek, and therefore some or all of these resources may replace former natural drainageways and would be jurisdictional for that reason; (3) resource #s 21 to 25 are within small valley shown on topographic map, and therefore may replace former natural drainageway and would be jurisdictional for that reason; and (4) resource #s 32, 33, 34, 35, 36, and 37 are connected to drainage 31, which is culverted under adjacent residential area and may replace a former drainage pattern and would be jurisdictional for that reason.

Source: Jones & Stokes, 2002

V. CULTURAL RESOURCES <i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</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 geological 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"/>

Existing Conditions

Cultural Resources. Previous archeological investigations conducted near the Proposed Project route indicate that 18 cultural resource sites lie within the Proposed Project area, which is defined 100 feet on each side of the proposed power line route. Of those 18 resources identified, only one is currently registered with the California Register Historical Resources (CRHR). Two resources have been deemed ineligible for listing on the CRHR, three appear eligible for listing on the CRHR, and nine sites appear to be ineligible for listing on the CRHR. A historical resource may be listed in the CRHR if it meets one or more of the following criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
2. It is associated with the lives of persons important to local, California, or national history;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; and
4. It has yielded or has the potential to yield information important in the prehistory or history of the local area, California, or the Nation.

The Proposed Project route crosses through areas that contain cultural resources including a historic refuse dump, Antelope Creek (used in the prehistoric period for transportation and as a food and water sources), and the corridor for the first transcontinental railroad. CA-Pla-841-H is the first transcontinental railroad, which was constructed during the 1860s and completed in 1869. This site is currently the only site in the Proposed Project area listed on the CRHR. There are 11 specific features of site CA-Pla-841-H: Culvert RM-1, Feature RM-2, the Rocklin Passenger Depot (California Historical Landmarks 780-2 and RM-3), Culvert RM-4, the Rocklin Roadhouse (C-Rocklin-B-10), Culvert-1, Culvert-2, Culvert-3, Culvert-4, Culvert-5, and the Railroad Bridge.

There are three sites that are potentially eligible for listing on the CRHR: Archaeological Site YH-2, Archaeological Site A-1, and Structure 5250 Front Street, Rocklin. Archaeological Site YH-2 is a prehistoric concentration of 24 bedrock mortars, two pestles, and a basalt flake. Archaeological Site A-1 is a refuse dump with at least 30 feet of visible cultural resource deposits from the period between 1900 and 1950 and ash deposits that suggest the area was once used as a burn site. The initial date of dumping at this site is unknown. The site, Structure 5250 Front Street, Rocklin, is a two-story, gable-roofed structure built in 1905.

There are ten structures (eight buildings and two bridges) that appear to be ineligible to be listed on the CRHR because the structures have no association between the structures and persons or events significant at the local, State, or National level.

In addition to the cultural resources described above, Lincoln Highway, the first transcontinental highway connecting New York City and San Francisco, passed through the cities of Rocklin and Roseville. Lincoln Highway opened in 1913 and realigned in 1927. In the vicinity of the project area, the old Lincoln Highway route includes Atlantic Street and Pacific Street. Although the original route of the Lincoln Highway is historic in that it was the first transcontinental highway, the original Lincoln Highway route is no longer preserved (Lincoln Highway, 2001).

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Paleontological Resources. The five sedimentary geological units that have been identified in the project area are the Chico Formation, Ione Formation, Valley Springs Formation, Mehrten Formation, and Pleistocene terrace deposits. Of these sedimentary units, the Chico Formation and Pleistocene terrace deposits are considered to be highly sensitive because of their inclusion of vertebrate, invertebrate, and plant fossils. Vertebrate fossils are known to be close to the Proposed Project route. The other three units are considered to be sensitive because they are known to contain plant fossils in the vicinity of the Proposed Project.

PG&E has proposed three measures to protect documented cultural resources that could potentially be encountered during construction activities. APMs 8-1 and 8-2 establish 15-foot protection zones around specific identified resources. APM 8-3 addresses environmental training, flagging, and discovery of unknown resources (see Table B-7). It is noted that there are several existing underground utilities in a portion of the Proposed Project area, so ground-disturbing activities may have previously disturbed a portion of unrecorded resources in the Proposed Project area. However, because there may be additional resources in the project area that have not been recorded, mitigation measures, in place of the measures proposed by the applicant, are recommended to protect unknown cultural and paleontological resources in the Proposed Project corridor. Mitigation Measures **C-1 through C-4** supersede Applicant Proposed Measures 8-1 through 8-4, and provide additional clarification and enforcement criteria.

APMs 8-1 through 8-3 were considered insufficient because they did not address resources that potentially could be listed on CRHR. Although the applicant believes that some of the 18 resources that were identified could be ineligible for listing, those 18 resources have not yet been deemed ineligible. Therefore, those resources shall be avoided and treated as sensitive resources during ground disturbing activities. Thus, Mitigation Measure **C-1** requires that all 18 cultural resources be identified in the Proposed Project corridor with flagging, prevents transmission towers to be placed close to or on those resources, and restricts vehicles from driving near or on them.

APM 8-3 is incorporated into Mitigation Measure **C-2**. Mitigation Measure **C-2** details the contents of a formal Cultural Resource Management Plan, and ensures that the plan include reporting and monitoring procedures and the qualifications of the specialists be reviewed by CPUC.

Mitigation Measure **C-3** is similar to APM 8-6 except that Mitigation Measure **C-3** requires that the CPUC review and approve the training course prior to implementation and also a training requirement all potential cultural, historic, and archaeological resources.

Mitigation Measure **C-4** incorporates the requirements of APM 8-7 and adds definitions of monitoring plan contents, reporting action and physical parameters.

Explanation

a) Adversely Affected Historic Resources: Potentially Significant Unless Mitigation Incorporated

The construction activities associated with the Proposed Project have the potential to unearth, damage, or destroy historic resources identified above. Structure 5250 Front Street, Rocklin and CA-Pla-841-H and the associated eleven features [Culvert RM-1, Feature RM-2, the Rocklin Passenger Depot (California Historical Landmarks 780-2 and RM-3), Culvert RM-4, the Rocklin Roadhouse (C-Rocklin-B-10), Culvert-1, Culvert-2, Culvert-3, Culvert-4, Culvert-5, and the Railroad Bridge] have been identified in the project area. In addition, the ground disturbing activities in the Proposed Project area could unearth previously unknown historical resources. Implementation of Mitigation Measures **C-1 through C-3** would reduce potential impacts to both known and unknown historical and cultural resources to a less than significant level.

C-1 No transmission towers, anchor points, or construction disturbance shall be placed within 15 feet of the boundaries of CA-Pla-841-H, Archaeological Site YH-2, Archaeological Site A-1, and Structure 5250 Front Street, Rocklin. The transmission towers shall also avoid, within 15 feet, the eleven features that accompany CA-Pla-841-H [Culvert RM-1, Feature RM-2, the Rocklin Passenger Depot (California Historical Landmark 780-2 and RM-3), Culvert RM-4, the Rocklin Roadhouse (C-Rocklin-B-10), Culvert-1, Culvert-2, Culvert-3, Culvert-4, Culvert-5, and the Railroad Bridge]. In addition, vehicles shall be restricted to existing access roads and/or shall not be permitted within 15 feet of the external boundaries of these resources. A Cultural Resources Specialist shall approve all these locations and the specialist shall monitor all excavation.

To prevent physical damage to the 18 identified resources, PG&E shall flag these sites, if within 100 feet of any work area as environmentally sensitive areas for at least 48-hours prior to construction work on the project. A Cultural Resources Specialist approved by the CPUC shall install the flagging.

- C-2** PG&E shall develop and implement a *Cultural Resources Management Plan* (CRMP) for the project covering pre-construction, construction, and post-construction activities. PG&E shall submit the CRMP to the CPUC at least 30 days prior to construction for review and approval. The CRMP shall include procedures for pre-construction field survey, designation, and avoidance of cultural resources areas, significance evaluation including potential testing and possible data recovery prior to construction, archaeological monitoring during construction, treatment of the unexpected discovery of cultural resources (including Native American burials), and treatment of significant sites that may be exposed during all phases of the project. The CRMP shall detail the qualifications of the Project Archaeologist, reporting requirements by the Project Archaeologist; designate a location for the curation of cultural materials collected during the project; and, specify that archaeologists and other discipline specialists meet any Professional Qualifications Standards mandated by the California Office of Historic Preservation (OHP).

The CRMP shall include requirements detailing that prior to construction or ground-disturbing activities, PG&E shall (1) complete cultural resources training for all construction personnel; and, (2) insure that any excavation contract (or contracts for other activities that may have subsurface soil impacts) shall include clauses that require construction personnel to attend training so they are aware of the potential for inadvertently exposing buried archaeological deposits.

The CRMP shall include the requirement for and definition of a background briefing for supervisory construction personnel describing the potential for exposing cultural resources, the location of any potential Environmentally Sensitive Areas (ESA) and anticipated procedures to treat unexpected discoveries. Construction personnel shall be trained regarding the recognition of possible buried prehistoric and historic resources during construction. PG&E shall inform all construction personnel of the procedures to be followed upon the discovery of archaeological materials including Native American burials.

Upon discovery of potential cultural resources during construction, work in the immediate area of the find shall be halted and PG&E's archaeologist and the CPUC Environmental Monitor shall be notified. Once the find has been identified, PG&E's archaeologist shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are found to be important according to CEQA. A report on the find shall be submitted to the CPUC.

- C-3** Prior to the initiation of construction activities, PG&E shall provide all construction personnel with environmental training. Training shall describe the possible cultural resources in the project area and emphasize the importance of the cultural resource sites. Training shall also address the possibility that previously unidentified cultural resources may become apparent during ground-disturbing activities, and shall define procedures to be implemented if possible resources are discovered. The contents of the training course shall be provided to the CPUC for review and approval before the start of construction, and documentation regarding the specific construction personnel who have attended the training shall be provided to the CPUC.

Historic Resources Impacts Associated with Mitigation Measure V-1. The types of potential impacts to historic resources that would be associated with implementation of Mitigation Measure **V-1** (underground power line from Sunset Boulevard to Midas Avenue) would be generally the same as those described above for the Proposed Project. However, with underground construction, there would be much more ground disturbance compared to an overhead power line and therefore more of a potential to disturb previously unknown cultural resources. In addition to Mitigation Measures **C-1 through C-3** described above, Mitigation Measure **C-3a** is recommended to ensure that potential impacts to Historic Resources are less than significant.

- C-3a** PG&E shall ensure that a Cultural Resources Specialist is on site to monitor all excavation activities associated with underground construction required by Mitigation Measure **V-1**. PG&E shall provide the CPUC with the resume of the Cultural Resources Specialist for approval prior to the commencement of construction. The Cultural Resources Specialist shall have the authority to stop construction if there is a perceived impact to Cultural Resources.

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b) Adversely Affect Archeological Resources: Potentially Significant Unless Mitigation Incorporated

The construction activities associated with the Proposed Project and implementation of Mitigation Measure V-1 have the potential to unearth, damage or destroy archaeological resources. Archaeological Site YH-2 and Archaeological Site A-1 have been identified in the project area. In addition, the ground disturbing activities in the Proposed Project area could unearth previously unknown archeological resources. Implementation of Mitigation Measures C-1 through C-3 would reduce potential impacts to both known and unknown archaeological resources to a level less than significant.

c) Destruction of Paleontological Resources: Potentially Significant Unless Mitigation Incorporated

Proposed construction activities could potentially unearth, damage, or destroy paleontological resources. Implementation of Mitigation Measures C-4 would reduce potential impacts to paleontological resources to a level less than significant.

C-4 Prior to construction, PG&E shall develop a Paleontological Resources Monitoring Plan (PRMP) for review and approval by the CPUC, which shall address the treatment of paleontological resources discovered during transmission line construction. The PRMP shall identify specific areas with high sensitivity for paleontological resources and shall define procedures for evaluation of resources found during construction. It shall define procedures for actions to be taken if paleontological resources are found during construction, procedures for fossil recovery, a data recovery program, and a qualified curation facility. A qualified paleontologist approved by the CPUC shall prepare the PRMP; it shall include procedures for significance testing and data recovery. The PRMP shall defer to the Cultural Resources Monitoring Plan (see Mitigation Measure C-1) if paleontological resources are found with archaeological resources.

The PRMP shall include a requirement for training of construction workers on why vertebrate fossils are important and what they look like. The training shall explain prohibitions against collecting fossils found during construction.

Paleontological Resources Impacts Associated with Mitigation Measure V-1. The types of potential impacts to paleontological resources that would be associated with implementation of Mitigation Measure V-1 (underground power line from Sunset Boulevard to Midas Avenue) would be generally the same as those described above for the Proposed Project; however, there would be much more ground disturbance associated with Mitigation Measure V-1 compared to an overhead power line. Nonetheless, Mitigation Measure C-4 would also apply to construction work associated with implementation of Mitigation Measure V-1. Therefore, implementation of Mitigation Measure C-4 would reduce potentially significant impacts associated with implementation of Mitigation Measure V-1 to less than significant levels.

d) Disturb Human Remains: Potentially Significant Unless Mitigation Incorporated

Although there are no known gravesites in the immediate vicinity of the Proposed Project, previously undocumented human remains could be disturbed during construction activities. Implementation of Mitigation Measure C-2 would reduce potential impacts to human remains to a level less than significant.

VI. GEOLOGY AND SOILS <i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Existing Conditions

Geology. The Sierra Nevada foothills are predominantly steeply dipping, folded, and faulted metamorphic rocks intruded by various granitic igneous rocks. Westward tilting of the Sierra Nevada block formed the Great Valley, with subsequent erosion of the mountains and deposition in the valley. Intruded granitic rock and deposits from the Sierras’ drainage channels and from volcanic activity has produced formations in the project and surrounding areas. The topography and soils have resulted from weathering and erosion.

Faults and Seismicity. No active faults are known to exist in the Proposed Project area. An unnamed inactive fault alignment extends from beneath Folsom Lake to the City of Rocklin, south of the Del Mar Substation and crossing the power line route near Midas Avenue and the railroad. The origin and alignment of this fault have not been fully investigated. No Special Studies Zones for faulting (Alquist-Priolo Zones) or other seismically related hazards are designated in the area. The California Division of Mines and Geology classifies the region as a low severity earthquake area.

The Foothills Fault System is the nearest major fault system to the project area. This system is several kilometers wide and more than 350 kilometers in length. The Bear Mountain Fault Zone is the closest segment of this system (approximately five miles from the project area). The closest mapped fault alignment of this zone passes through Browns’s Ravine east of Folsom and continues north toward Auburn. In the past, the Bear Mountain Fault System has been considered inactive; however, studies conducted for the U.S. Army Corps of Engineers by Woodward-Clyde Associates and Tierra Engineering indicate that the Foothill Fault System in the vicinity of Folsom Lake may be undergoing reactivation and should be considered potentially active. There is a slight possibility that an event similar to one that took place on the Cleveland Hill Fault near Oroville in 1975 (quake of Richter magnitude 5.7) could occur elsewhere on this system.

Geotechnical investigations performed by Woodward-Clyde Associates as part of its investigation for the Auburn Dam indicate that a 6.5 Richter scale event should be considered the maximum credible earthquake for the region.

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Soils. Soils in the project area were derived from physical and chemical weathering of young alluvium, transported alluvial materials from granitic and metamorphic terrain, and from granitic, volcanic conglomerate, and volcanic breccia bedrock. Substantial changes of natural soils have been made by landfilling, railroad, highway and street construction, and construction of industrial, commercial, and residential developments.

Explanation

- a) **i Fault Rupture: No Impact.** No portions of the Proposed Project fall within an active fault zone. The closest mapped fault zone to the project area that is not considered inactive is the Bear Mountain Fault Zone. This fault zone passes through Brown's Ravine east of Folsom (approximately five miles from the project area) and continues north toward Auburn (PG&E 2001a). Therefore, it is anticipated that fault rupture would not expose people or structures to substantial adverse effects, including the risk of loss, injury or death.
- ii Strong Ground Shaking: Less than Significant Impact.** Standard substation and power line design requirements take into account ground shaking and seismic activity. Therefore, potential impacts as a result of strong seismic ground shaking are less than significant.
- iii Ground Failure, Including Liquefaction: Less than Significant Impact.** Because the presence of hard rock at shallow depths and a general lack of shallow groundwater (shallow groundwater occurs mostly in fractured zones in the bedrock) within the project area, the potential threat of seismic-related ground failure, including liquefaction is less than significant.
- iv Landslides: Less than Significant Impact.** Soil instability problems at the tubular steel pole or other project component locations are not anticipated because of the relatively strong soils and rock formations and the generally gentle sloping terrain within the project route. Potential slope stability impacts are anticipated to be less than significant.

b) Erosion or Loss of Topsoil: Less than Significant Impact

Power line construction activities such as pier drilling, excavation, and backfilling have the potential to cause accelerated soil erosion do to surface disturbance and removal of vegetation. However, Applicant Proposed Measure APM 9-1 (see Table B-7) includes Best Management Practices, including removal of excavated materials where required, and the use of erosion control measures, such as straw bales, silt fences, and seeding with vegetative cover would reduce potential erosion impacts associated with the Proposed Project and implementation of Mitigation Measure V-1 (underground power line from Sunset Boulevard to Midas Avenue) to less than significant levels.

c) Geological Unit or Soil that is Unstable: Less than Significant Impact

Refer to a-iii and a-iv, above.

d) Expansive Soil: Less than Significant Impact

The Atlantic and Del Mar Substation sites have been previously graded and paved with asphalt or crushed rock, thereby eliminating or minimizing any potential effects of shrinking and swelling (expansive) soils. The design of tubular steel pole foundations accounts for the near-surface effects of expansive soils (PG&E, 2001a). The design of the underground power line portion of the project (Mitigation Measure V-1) would also account for the near-surface effects of expansive soils. Therefore, impacts are considered to be less than significant.

e) Soils for Septic Tank Use: No Impact

The Proposed Project would not involve the use of septic tanks other alternative wastewater disposal systems.

VII. HAZARDS & HAZARDOUS MATERIALS.	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) The creation of or exposure to potential health hazards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) For a project within the vicinity of a private airstrip, would the project result in safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to the risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Existing Conditions

A review conducted by PG&E of regulatory databases and Central Valley Regional Water Quality Control Board (CVRWQCB) files in January and May of 2000, identified eight properties on or adjacent to the proposed power line route or the existing substation sites. The location of these properties are illustrated in Figure VII-1 and described in Table VII-1 (PG&E, 2001a).

In addition, the route passes over a historic sanitary landfill that was not identified in the regulatory database search (see Table VII-1, Site Number 9a and 9b).

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Table VII-1. Potentially Contaminated Sites in the Project Area

Site No.	Name	Address and Location Relative to Project	Nature of Potential Contamination
1	Redwood Oil / Buljan Oil	Pacific Street between Midas Avenue and Yankee Hill Road, Rocklin; the nearest proposed pole location is located about 500 feet west of the site.	The property was used for various industrial and commercial uses between the 1950s and 1990s. A portion of the property is occupied by a fuel dispensing facility composed of four above-ground fuel storage tanks (AST), one underground fuel storage tank (UST), and associated above/underground piping and fuel islands. Petroleum hydrocarbons and volatile organic compounds have been detected in soil and groundwater. Local topography indicates that groundwater flow is probably to the southeast, away from the proposed power line route.
2	Food and Liquor Store #91	3800 Rocklin Road, Rocklin; the nearest proposed pole location is located about 200 feet west of the site.	In March 1987, two gasoline USTs were removed from this site. Soil was excavated to bedrock in March and August 1987. Fuel hydrocarbons remain in the soil in trace amounts. Groundwater has not been sampled since 1987. Groundwater is considered to flow to the northwest, away from the proposed power line route.
3	Hunt Property	5476 Pacific Street, Rocklin; the nearest proposed pole location is about 300 feet northwest of the site.	A leak report was generated for a UST at this site in September 1992. No data was available for this site in the files of the CVRWQCB.
4	South Placer Municipal Corporation Yard	5805 Springview Drive, Rocklin; the nearest proposed pole location is about 200 feet northeast of the site.	This site has had historical releases of petroleum hydrocarbons. In July 1995, two 500-gallon USTs containing petroleum hydrocarbons were removed. Approximately 110 cubic yards of soil adjacent to the former tanks was excavated. The site was officially closed in November 1997.
5	Sierrapine, LTD.	4300 Dominguez Road, Rocklin; the nearest pole location is approximately 600 feet west of the site and the Del Mar Substation is approximately 400 feet west of the site.	Two 400-gallon aboveground storage tanks containing waste oil are present on site. Four 15,000-gallon ASTs containing urea-formaldehyde resin are also present on site. Previous on-site operations included discharging wastewater into unlined ponds. This has resulted in the soil and groundwater being affected by tannin and lignin in trace amounts. However, these substances are non-hazardous. There are no documented releases of waste oil, but no verification sampling has been conducted.
6	Collegewood Inc.	4315 Dominguez Road, Rocklin; the nearest pole location is approximately 1,200 feet west of the site.	There is possible groundwater and soil contamination from hazardous substances used on site, which include toluene, methyl isobutyl ketone, formaldehyde, ethyl benzene, utanol, xylene, methanol, triethanolamine, bis 2-ethylhexyl, phthalate, and manganese.
7	Kinder Morgan Energy Partners	6050 Pacific Street, Rocklin; the nearest pole location is about 200 feet west of the site.	This site has had historical releases of fuel hydrocarbons, including benzene, toluene, ethyl benzene, xylenes, and methyl tertiary butyl ether (MTBE).
8	Berry Street Mall Landfill (The Finger Sanitary Landfill)	Directly across Harding Boulevard from Atlantic Substation; the proposed pole locations along Harding Boulevard are within 500 feet of the landfill perimeter.	The Berry Street Mall Landfill is an inactive waste disposal site located in the City of Roseville. The landfill was operated between 1952 and 1987. During its operation, approximately 300,000 to 325,000 cubic yards of compacted municipal solid wastes were deposited in the landfill. The landfill footprint occupies approximately 13.5 acres. Due to the failure of the Greener Globe Corporation to complete closure of the landfill (including installation of a clay cap and groundwater monitoring) the CVRWQCB issued Cleanup and Abatement Order 99-724. The case is still active, and the impacted area has not been well defined.
9a	Roseville Sanitary Landfill, Area D	Adjacent to and east of Antelope Creek, just south of proposed crossing	Although not identified in the database search as a hazardous waste site, this historic unlined landfill was identified in studies performed for the Roseville Parkway Extension project between Harding Boulevard and Taylor Road. Sanitary municipal landfill waste underlies ash waste moved from the burn dump area (see site number 9b below) in 1992. The waste has been covered with a 1- to 2-ft layer of soil. The State and County have approved a Landfill Closure Plan, but the status of activities associated with the plan is unknown.
9b	Roseville Sanitary Landfill, Burn Dump Area	Beneath and immediately north of Atlantic Substation	Although not identified in the database search as a hazardous waste site, this historic unlined, poorly covered landfill was identified in studies performed for the Roseville Parkway Extension project between Harding Boulevard and Taylor Road. Approximately 100,000 to 160,000 cubic yards of ash waste (ash, cinder, glass, pottery, and metal) are present. The State and County have approved a Landfill Closure Plan, but the status of activities associated with the plan is unknown.

Figure VII-1: Hazardous Materials Spill Sites
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(8½" X 11" Color)

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Figure VII-1: Page 2 of 2

Explanation

a) Use, Transport, or Disposal of Hazardous Materials: Less than Significant Impact

One new mineral oil-filled transformer would be installed at the Atlantic Substation. The mineral oil would not contain Polychlorinated Biphenyls (PCBs).

Approximately 36,866 gallons of mineral oil (501 gallons of which may contain PCBs in concentrations greater than 5 parts per million) already exist in oil-filled equipment at the Atlantic Substation. No new oil-filled equipment would be installed at the Del Mar Substation, but approximately 16,740 gallons of mineral oil (231 gallons of which may contain PCBs in concentrations greater than 5 parts per million) are contained in oil-filled equipment at the substation. Any wastes generated at either of the substation sites would be manifested directly with a USEPA number.

b) Potential for Accidental Release of Hazardous Materials: Potentially Significant Unless Mitigation Incorporated

Construction of the Proposed Project would involve the use of several hazardous materials that could accidentally be released during construction activities. The types of materials that could be released include diesel, gasoline, lubrication oil, hydraulic fluid, antifreeze, transmission fluid, and lubricating grease from a vehicle or other motorized equipment. In addition, a release of liquid concrete during construction of the pole foundations is possible. Surface and groundwater quality could be impacted during construction activities at pole locations, wire pull-sites, equipment laydown areas, and the substation sites.

If soil contamination were present within a construction area, the contaminated soils disturbed or excavated during construction activities could pose a potential health risk to construction workers and/or the public. Contaminated soils must be handled and disposed of in accordance with local, State, and Federal regulations. If soil contamination is discovered to be present in any construction areas, all excavation would proceed according to worker safety requirements of the Federal and California Occupational Safety and Health Administrations (OSHA). If there is any site contamination that would require action, OSHA rules would require a site-specific Health and Safety Plan (HASP) to be prepared and implemented by PG&E and its contractors to minimize exposure of construction workers to potential site contamination and to dispose of construction-generated waste soil in accordance with local, State, and Federal regulations.

Both substations have Spill Prevention Countermeasure and Control (SPCC) plans in place. The new oil-filled transformer would be installed, operated, and maintained in accordance with the existing SPCC plan. The SPCC retention pond is designed to contain 110 percent of the volume contained within the largest transformer (PG&E, 2001a). In the event of an oil release, oil in the pond would be vacuumed out and disposed of in accordance with Federal, State, and County regulations. The release of a relatively small quantity of oil is considered insignificant. PG&E would revise its SPCC plans for the substations if there are significant future changes in the amount of oil used (PG&E, 2001a). Significant impacts would not occur with the implementation of the existing SPCC plan. Potential impacts related to an accidental oil release are considered to be adverse, but less than significant.

Applicant Proposed Measures APM 10-1 and APM 10-2 (see Table B-7) would be adequate to ensure minimal risk of an accidental release of hazardous materials, substances, or waste directly associated with the Proposed Project. Assuming implementation of APM 10-1 and APM 10-2 as part of the Proposed Project, additional mitigation is not required and the potential hazards discussed above are considered to be less than significant.

However, there is a remote possibility that the Proposed Project could indirectly cause an accidental release of hazardous materials contained at the Kinder Morgan tank farm located adjacent to the project route, south of Sunset Boulevard. The existing tanks contain refined petroleum products that are extremely flammable and explosive. The Lead Operator of the tank farm has indicated that if poles or conductors associated with the Proposed Project were sited within striking distance of any of the tanks located on the Kinder Morgan property, there would be a concern of potential system upset in the event that a power pole or conductor were damaged and fell onto one of the tanks (Kinder Morgan, 2001).

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Therefore, the following mitigation measure is recommended to reduce this potential indirect impact to a less than significant level:

HM-1 PG&E shall site all power poles and/or underground transition structures at least 200 feet away from the nearest petroleum products storage tank at the Kinder Morgan tank farm.

It should be noted that the overhead high voltage power line system would include a system protection designed to safeguard the public and line equipment, so in the event that the electrical conductor is severed or in any other way compromised, the electric power would be shut off. These protection systems consist of power line relays and circuit breakers that are designed to rapidly detect faults and cut-off power flow to avoid shock and fire hazards. This equipment is typically set to operate in 2 to 3 cycles, representing a time interval range from 2/60 of a second to 3/60 of a second. Therefore, the risk associated with electrical arcing from a downed power line to one of the high-pressure petroleum tanks is extremely small.

c) Hazardous Materials Near a School: Less Than Significant Impact

Although a school in the City of Rocklin is approximately ¼-mile from the Proposed Project route, Applicant Proposed Measures APM 10-1 and APM 10-2 (see Table B-7) would be adequate to ensure minimal risk of an accidental release of hazardous materials, substances, or waste as described above in (b).

d) Located on Listed Hazardous Site: Potentially Significant Unless Mitigation Incorporated

Although unlikely, it is possible that contamination associated with the sites listed above in Table VII-1 could have migrated to the Proposed Project area and could be encountered during project construction. Improper handling or disposal of excavation spoils (soil or groundwater) could result in the spread of hazardous materials or unhealthy exposure scenarios, which could impact human health or the environment. PG&E has committed to APM 10-10, which does not allow placement of poles directly over landfill waste and requires safety procedures when excavating near landfill sites and APM 10-11, which requires that the County Environmental Health Department be notified if chemical releases are encountered (see Table B-7). To strengthen the intent of APM 10-10 and APM 10-11, Mitigation Measure **HM-2** is recommended to supersede these APMs to ensure that a significant hazard to the public or the environment would not occur in the event that contamination is encountered during project construction.

HM-2 PG&E shall conduct an updated review of regulatory databases and Central Valley Regional Water Quality Control Board (CVRWQCB) files to identify current potentially contaminated properties on or adjacent to the proposed power line route or the existing substation sites. PG&E or its contractor shall assign trained personnel during active excavation in the vicinity of any of sites identified in Table VII-1 or potential new sites discovered as a result of the updated review of databases to observe visual evidence of contamination and perform monitoring with appropriate testing equipment (e.g., photoionization or flame ionization detectors). If field evidence of contamination is observed during excavation, sampling and direct laboratory testing shall be conducted as necessary. Alternately, subsurface sampling and laboratory analysis would be performed prior to excavation, to determine subsurface conditions and appropriate actions. Personnel conducting soil sampling and field analysis should meet the Federal OSHA requirement for 40-Hour Training for Hazardous Waste Operations and Emergency Response and be familiar with the calibration and operation of the testing equipment.

The monitoring personnel shall have authority to implement a health and safety plan that complies with applicable OSHA requirements and is approved by a certified industrial hygienist. The health and safety plan shall present specific alternatives for action to be taken in the event contaminated soils are encountered. The plan shall specify procedures for monitoring, identifying, handling, and disposing of hazardous waste.

Listed Hazardous Site Impacts Associated with Mitigation Measure V-1. Potential impacts that would be associated with installation of an underground power line from Sunset Boulevard to Midas Avenue are the same as those described above for the Proposed Project. However, there would be much more ground disturbance associated with underground construction compared to an overhead power line. Nonetheless, Mitigation Measure **HM-2** would also apply to construction work associated with implementation of Mitigation Measure **V-1**. Therefore, implementation of Mitigation Measure **HM-2** would reduce potentially significant impacts associated with undergrounding to less than significant levels.

e) Exposure to Potential Health Hazards: Less than Significant Impact

Electric and magnetic fields (EMF) are invisible fields of force created by electric voltage (electric fields) and by electric current (magnetic fields). Wherever there is a flow of electricity, both electric and magnetic fields are created. Because the Proposed Project would alter the EMF in the vicinity of the route of the new 60 kV power lines, concerns about potential health-related consequences of EMF are addressed.

Although PG&E has not estimated the strength of the EMF that would be generated by the proposed 60 kV power line, similar power and transmission lines that carry a voltage of between 60 kV and 500 kV under peak load conditions have been estimated to generate an EMF strength of approximately 150 milliGauss (mG) or less at the edge of the right-of-way (PG&E, 1994). The average annual electrical load conditions for the power lines would be less than the peak load conditions described above.

Typically, the highest levels of EMF associated with a power line are directly in the center of the right-of-way, and at a location of the most sag in the power line (i.e., the center of the line between two poles). The Proposed Project can be expected to generate similar EMF levels as those that are currently generated by the existing power line along Pacific Street.

There are no health-based standards for long-term human exposure to EMF in the United States. Agencies at the Federal and state levels, including the California Department of Health Services, reviewed the studies conducted so far to determine if adverse health effects were associated with EMF, and have found no bases for setting health standards to date (PG&E, 1994).

However, in accordance with the CPUC's EMF Decision (D.93-11-013) and PG&E's Transmission and Substation EMF Design Guidelines prepared in accordance with that decision, PG&E will incorporate "no cost" and "low cost" magnetic field reduction steps in the design of the proposed power line and substation facilities. The design guidelines include the following measures that may be available to reduce the magnetic field strength levels from electric power facilities:

- Increase the height of overhead lines to reduce EMF strength at ground level
- Reduce conductor spacing to increase cancellation of the magnetic field and decrease the resultant field strength
- Minimize current through energy efficiency measures (adequate load compensation will be provided by using capacitors)
- Optimize phase configuration by "cross-phasing" individual circuits to cancel magnetic fields.

The EMF Decision and PG&E's Guidelines require PG&E to prepare an EMF Field Management Plan ("FMP") that specifically delineates the no-cost and low-cost EMF measures that will be installed as part of the final engineering design for the project. PG&E will submit the final FMP to the CPUC prior to any construction activity on the project, and will make it available to the public upon request. The FMP will include the following project information:

- Description of the project (cost, design, length, location, etc.);
- Description of the surrounding land uses, using priority criteria classifications;
- No cost options to be implemented;
- Priority areas where low cost measures are to be applied;
- Measures considered for magnetic field reduction, percent reduction and cost; and
- Conclusion - which options were selected and how areas were treated equivalently or why low cost measures cannot be applied to this project due to cost, percent reduction, equivalence, or some other reason.

There is no evidence that EMF associated with the Proposed Project would create a health hazard or potential health hazard. Therefore, the impact associated with EMF is less than significant. For additional background information on EMF, refer to the EMF portion of the Project Description (Section 8).

f) Project Near Public Airport: No Impact

The project is located more than two miles from the nearest public airport (PG&E, 2001a).

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g) Project Near Private Airstrip: No Impact

The project is not located within the vicinity of a private airstrip (PG&E, 2001a).

h) Interference with Emergency Response Plan: Less than Significant Impact

The power line would cross the following roads: SR 65, Sunset Boulevard, Farron Street, Rocklin Road, Midas Avenue, Pacific Street, and Corporation Yard Road. With the exception of SR 65 (see below), construction activities associated with stringing the power line over these roads would result in temporary (approximately 10-minute) road closures. Closures would be conducted under the permit requirements set forth by local agencies. Lane closures would be avoided to the extent possible so as to minimize disruption of city circulation patterns.

Stringing the power line over SR 65 may require closing the freeway for 15 minutes at a time on five different occasions. The temporary closures may impede traffic flow for short durations. Work would be performed according to the encroachment permit from the California Department of Transportation (CalTrans) and in coordination with the California Highway Patrol (CHP). Traffic interruptions due to construction activities would be coordinated with the cities of Roseville and Rocklin, the CHP and Caltrans, as defined in Applicant Proposed Measure APM 14-1 (see Table B-7). No significant interference with the emergency response plans or emergency evacuation plans of the cities of Roseville or Rocklin is evident as a result of the Proposed Project.

Emergency Response Plan Impacts Associated with Mitigation Measure V-1. The underground power line construction associated with Mitigation Measure V-1 would require constructing an open trench across Farron Street and Rocklin Road. Trenching across these roads could impede traffic for hours at a time. To ensure that emergency response vehicles would be able to pass across either of these roads while trenching activities are being conducted, Mitigation Measure T-2 (see Section XV) is recommended to supersede Applicant Proposed Measure APM 14-1 (see Table B-7). Implementation of Mitigation Measure T-2 would reduce potentially significant short-term emergency response interference impacts associated with the construction of the underground power line construction to less than significant levels.

i) Exposure to Wildland Fires: Less than Significant Impact

Welding during construction of towers or support structures could potentially result in the combustion of vegetation located close to the welding site. The use of internal combustion motors, lighted matches, cigarettes, cigars, or other burning objects is a fire hazard, especially within the vicinity of combustible material.

During operation of the Proposed Project, power lines may pose a fire hazard if a conducting object, such as a tree limb, comes in close proximity to a line or if a live-phase conductor falls to the ground. Conductors can be a fire hazard if they fall to the ground and create an electrical arc that ignites combustible material. The use of internal combustion engines (e.g., automobiles, chain saws, string trimmers) for maintenance activities also poses a potential fire hazard.

PG&E's standard procedures as outlined in Applicant Proposed Measures APM 10-4 through APM 10-8 (see Table B-7) would minimize the potential impact of igniting fires to a less than significant level.

VIII. HYDROLOGY & WATER QUALITY	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems to provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood plain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within 100-year flood plain structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Existing Conditions

Surface Water. The Proposed Project is entirely within Placer County, which forms part of the Central Valley Basin. The Central Valley Basin is under jurisdiction of the Central Valley Regional Water Quality Control Board (CVRWQCB). The CVRWQCB Basin Plan does not designate beneficial uses of surface and groundwater bodies within the project area.

The landscape traversed by the Proposed Project route generally slopes toward the west. North and west of the proposed route, runoff generally drains into Antelope Creek. The Proposed Project route crosses Antelope Creek, east of the Atlantic Substation. Antelope Creek flows adjacent to the Proposed Project route for approximately 800 linear feet in the proximity of the Del Mar Substation just before the route turns south. South of the proposed route, runoff drains as sheet flow directly to Secret Ravine. The route does not cross or run adjacent to Secret Ravine. Antelope and Secret Ravine creeks are perennial streams and tributaries of Dry Creek. Dry Creek is a tributary to the Sacramento River via the Natomas Main Drain Canal.

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Wetlands. Small seasonal wetlands are located primarily on volcanic mudflows along the Proposed Project route. Other wetlands associated with streams, riparian corridors, and small seasonal pools are along several segments of the proposed power line route. Vernal pools seasonally collect water from rainfall. Vernal pools that are well developed, with typical wetland vegetation, fall under the jurisdiction of Section 404 of the Clean Water Act. For more discussion of the type and locations of these wetlands, see Section IV, Biological Resources.

Flooding Potential. The Proposed Project route crosses the predicted 100-year flood plain at Antelope Creek, and at two locations along the railroad tracks north and south of Sunset Boulevard, as shown in Figure VIII. However, none of the proposed pole locations are within the 100- or 500-year flood plain.

Antelope Creek does not ordinarily carry large volumes of water, although winter storms occasionally swell Antelope Creek to larger than average flows. These increased flows typically cause flooding of a very local nature, and such flooding is generally restricted within existing flood plain boundaries.

Water Quality. Antelope and Secret Ravine creeks merge less than a mile south of the Atlantic Substation. Downstream of this confluence, the drainage becomes Dry Creek. Surface water quality data does not exist for Antelope and Secret Ravine creeks, but several water quality studies have been conducted on Dry Creek in the vicinity of the City of Roseville Wastewater Treatment Plant. Monitoring results from these studies indicate that good water quality exists in Dry Creek upstream of the water treatment plant, and since Dry Creek water quality is largely influenced by the water quality of Secret Ravine Creek and Antelope Creek, it is assumed that water quality in these tributaries is also good.

Groundwater. Roseville, Rocklin, and most of the Sacramento and South Placer area are located over the north central portion of California's Central Valley groundwater basin. This aquifer is an extensive system of different groundwater sub-basins extending from Red Bluff to Bakersfield. Groundwater supplies are recharged by rainwater infiltration. The rate and quantity of water reaching the aquifer depends on factors that include the amount and duration of precipitation, soil type, moisture content of the soil, and vertical permeability of the unsaturated zone.

In general, the primary locations for potential groundwater recharge are along the major watercourses. The project area is underlain by fractured bedrock and there are no major groundwater aquifers in the immediate project vicinity. Depths to groundwater are unknown, but the water level in nearby quarry ponds indicates that the water table may be within 10 to 20 feet of the ground surface in some areas.

Figure VIII-1: FEMA 100- and 500-Year Floodplain Zones
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(8½" X 11" Color)

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Figure VIII-1: Page 2 of 2

Explanation

a) Violate Water Quality or Waste Discharge Standards: Less than Significant Unless Mitigation Incorporated

Construction of the Proposed Project would require an area of approximately 100 feet by 100 feet at each pole location (approximately 30 in total) for structure assembly and erection. The foundation holes would be approximately four to six feet in diameter and sixteen to twenty feet deep. The Proposed Project route crosses or passes adjacent to Antelope Creek at either end of the route. Without proper precautions, soil erosion rates could be accelerated, causing sedimentation of downstream waterways, increased turbidity, and reduction of surface water quality as a result of:

- Vehicular traffic in the vicinity of the pole locations and foundation construction;
- Grading around pole locations or development of access roads to pole sites; and
- Vehicular traffic and material laydown (e.g., soil stockpiling) at wire pull-sites and equipment laydown areas (PG&E, 2001a).

If sediment-laden runoff enters Antelope Creek, it could increase turbidity, increase channel siltation, reduce water resources, and degrade the aquatic habitat. Although care would be taken at all pole locations to minimize disturbance, special controls would be implemented to reduce the potential for sedimentation and turbidity at pole locations near the creek. Implementation of Applicant Proposed Measures APM 10-1 through APM 10-3 (Best Management Practices for erosion control, no development of new roads, and control of excess water and concrete during foundation construction) would reduce potential erosion and concrete contamination impacts to water quality standards to a level that is less than significant. In addition, petroleum hydrocarbons from construction equipment could be released by accident. PG&E has committed to APM 10-8 (development of a Hazardous Substance Control and Emergency Response Plan; see Table B-7) to reduce potential impacts associated with accidental fuel spills. However, Mitigation Measure **H-1** is recommended to strengthen the intent of APM 10-8. Implementation of Mitigation Measure **H-1**, presented below, would reduce potential water quality impacts associated with petroleum contamination to less than significant levels.

H-1 All refueling, lubrication, and other machinery or vehicular maintenance activities required during construction of the project shall be performed at least 100 feet from any tributary or stream channel, or slough. PG&E shall submit its Hazardous Substance Control and Emergency Response Plan (HSCERP), as described in APM 10-8, to the CPUC for review and approval prior to the commencement of construction. The plan shall describe specific measures, such as the use of drip sheets, to minimize spillage of fuels and lubricants.

With regard to operations of the Proposed Project, surface and groundwater quality could potentially be affected by an accidental release of mineral oil at the Atlantic or Del Mar Substations. A release, whether from slow leaks or a large spill, could wash into nearby drainages or infiltrate into groundwater. PG&E has existing Spill Prevention, Countermeasure, and Control (SPCC) containment systems at each substation, and would revise the SPCC plans for either substation if there are significant changes in the amount of oil used in the future. Implementation of Applicant Proposed Measure APM 10-18 (development of a Hazardous Substance Control and Emergency Response Plan) would reduce potential impacts associated with water quality standards and waste discharge requirements associated with operation of the Proposed Project to a less than significant level.

Water Quality or Waste Discharge Standards Impacts Associated with Mitigation Measure V-1. A large area of earth will be excavated in digging the underground trench. Although spoils will be removed by truck to an adequate disposal site prior to backfilling the trench with selected imported material, there is a possibility that a portion of this dirt could be transported as sediment into the local streams or the storm drainage system. In addition, petroleum hydrocarbons from construction equipment could be released by accident during trenching activities, which could inadvertently contaminate both surface and groundwater. Construction-related water contamination impacts due to potential fuel spills, machinery operation, and trenching could have a significant impact but are avoidable through BMP's required through the permitting process, Applicant Proposed Measure APM 10-8 (Hazardous Substance Control and Emergency Response Plan), Mitigation Measure **H-1** (described above), and Mitigation Measure **H-2**, described below.

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H-2 Trenching spoils shall be removed to an off-site location, and/or temporarily collected and placed in a controlled area surrounded by siltation fencing, hay bales, or a similarly effective erosion control technique that prevents the transport of sediment. Upon completion of trenching activities, excavated soil shall be replaced and graded to match the surroundings. Surplus soil shall be transported from the site and disposed of in a CPUC approved manner. Open portions of the trench shall be covered when not under active construction. Standard erosion and dust control practices shall be used during construction according to PG&E's Best Management Practices (Applicant Proposed Measure APM 10-1) to protect biological and hydrological resources.

b) Deplete Groundwater or Interfere with Groundwater Recharge: Less than Significant Unless Mitigation Incorporated

The Proposed Project does not include construction of additional impervious surfaces at either the Atlantic or Del Mar Substations. Permanent impervious surfaces up to approximately 6 feet in diameter at the proposed 30 pole locations would slightly reduce the amount of groundwater recharge to the basin. However, the increases in impervious surface area are relatively small, so impacts to groundwater recharge would be less than significant.

Groundwater Interference or Recharge Impacts Associated with Mitigation Measure V-1. Impacts to groundwater hydrology associated with the underground transmission line (Mitigation Measure V-1) could be potentially significant in areas with a shallow groundwater depth. Several other factors could also influence the potential for groundwater impacts, including: antecedent soil moisture conditions and soil infiltration rates. Groundwater depths are unknown along the 1-mile underground route. Increased compaction of soils above and below the duct bank, as well as the increased impermeability of the duct bank itself can potentially form a barrier to shallow groundwater flow. The significance of flow blockage is related to the depth and direction of groundwater flow. Mitigation Measure H-3 is recommended to reduce this groundwater hydrology impact to a less than significant level.

H-3 Groundwater levels along the underground transmission line route shall be tested by drilling pilot borings. The location, distribution, or frequency of such tests shall be determined to give adequate representation of the conditions along the underground line. Suitable testing locations (for example at 1,000 or 1,500 ft intervals) shall be determined by a qualified geologist approved by the CPUC. Locations where groundwater depth is less than 8 ft deep shall be identified prior to trenching activities and avoided, where possible, for the underground route. Avoidance is especially recommended where shallow groundwater flow direction is not parallel to the orientation of the underground line. Where avoidance is not possible, PG&E Co. shall consider construction in a wider, shallower trench, depending upon structural requirements of the underground method and other practical concerns. PG&E Co. shall document results of test drilling in a letter report to the CPUC at least 30 days before construction starts and shall propose specific means to minimize the impact on groundwater if shallow groundwater is found. These measures must be approved by the CPUC prior to the start of construction of the underground segment.

This measure can be eliminated if information on local groundwater levels is obtained that indicates that groundwater depth is over 8 feet below the ground surface.

c) Alteration of Drainage Resulting in Erosion: Less than Significant Impact

Construction and operation of the Proposed Project would not substantially alter the existing drainage pattern of the subject project area. Pole foundations and the duct bank associated with the underground line (Mitigation Measure V-1) would reduce runoff infiltration capacity in such small areas that the project would result in a less than significant impact.

d) Alter Drainage Resulting in Flooding: Less than Significant Impact

The proposed new poles and the duct bank associated with the underground line (Mitigation Measure V-1) would not be located within water drainages or alter the course of the existing drainage pattern of the area. Potential impacts as a result of runoff and infiltration patterns from construction of the pole foundations and the duct bank are considered to be less than significant because the total area that would be impacted by foundations and the duct bank along the four mile route would be less than one acre.

e) Create Runoff Exceeding Stormwater Drainage System Capacity: Less than Significant Impact

Potential impacts as a result of runoff and infiltration patterns from construction of the pole foundations and the duct bank associated with the underground line (Mitigation Measures V-1) are considered to be less than significant, because the total area impacted by the pole foundations and the duct bank would be less than one acre along the four mile route.

f) Degrade Water Quality: Less than Significant Impact

Refer to a) above.

g) Place Housing in Flood Zone: No Impact

The Proposed Project does not include construction of any housing.

h) Install Structures Impeding Flood Flows: No Impact

Although exact tower locations have not been defined at this point, none of the proposed tower location areas are within the 100- or 500-year flood plain. Therefore, the towers would not impede or redirect flood flows since they would be constructed entirely outside of the flood plains.

i) Expose Structures to Flooding: No Impact

The Proposed Project itself would not directly expose people or structures to a significant risk of loss, injury, or death involving flooding.

j) Inundation by Seiche, Tsunami, or Mudflow: No Impact

Construction and operation of the Proposed Project would not create or assist in creating an inundation by seiche, tsunami, or mudflow.

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

Existing Conditions

Land Use Designations. Land use designations and existing land use adjacent to and crossed by the Proposed Project are summarized in Table B-1, and described below. The existing Atlantic Substation and associated power lines are along Harding Boulevard in Roseville on land designated as Public/Quasi-Public. The proposed power line route exits the substation and travels in a northern direction along the east side of Harding Boulevard in a Public/Quasi-Public designated area. The proposed route then turns east at approximately milepost (MP) 0.25 and travels along the border of Community Commercial (to the north) and Public-Quasi-Public (to the south) land use designations. This area is currently vacant, except for the recently constructed section of Roseville Parkway.

At approximately MP 0.5, the proposed line enters an area designated as Open Space, crosses Antelope Creek, and continues east through open space until reaching the railroad corridor (approximately MP 0.75). The railroad corridor is contiguous with the North Central Specific Plan Boundary. Land use immediately to the west of the railroad is covered in the North Central Roseville Specific Plan, while land use to the east is addressed in the Stone Ridge Specific Plan. The railroad corridor does not actually fall within the boundary of either specific plan.

The proposed route continues within the railroad ROW, which contains other utilities and structures, from MP 0.75 to MP 3.8. The railroad ROW ranges between 200 and 400 feet wide throughout the project area. The railroad corridor is adjacent to Open Space, Business Professional, and Residential land use designations (on the west), between approximately MP 0.75 and MP 1.2. The land designated as Business Professional is currently undeveloped, but being graded. The land designated as Residential contains a high-density residential housing complex. Just after crossing State Route (SR) 65 at approximately MP 1.25, the proposed route reaches the Rocklin city boundary.

Upon entering the City of Rocklin, the proposed route crosses into a Retail Commercial land use designation containing some retail businesses. Between MP 1.25 and MP 1.4, the route crosses vacant land and then enters an area designated as Heavy Industrial at approximately MP 1.7. Most of this area is developed with a tank farm and associated facilities. The land is vacant from MP 2.0 until Sunset Boulevard.

On the north side of Sunset Boulevard (approximately MP 2.1), the proposed route enters an area designated as Residential. The area to the west is developed with single-family homes offset approximately 0.1 mile from the railroad tracks. From approximately MP 2.25 to Farron Street (approximately MP 2.4), the land is mostly vacant with a few isolated homes.

South of Farron Street, the proposed line would cross the railroad tracks and continues northeast. On the north side of Farron Street (approximately MP 2.4), the land use designation changes to Retail Commercial. The area to the west of Front Street paralleling the railroad corridor is designated as a historic area and contains residences and businesses. The area east of the railroad track contains a landscape materials company and scattered residences. South of Rocklin Road, the proposed line would cross over the Rocklin train depot, which currently does not have any structures on the site, although the City has plans to construct a multi-modal train station at this location. The proposed route continues along the east side of the railroad ROW, north of Rocklin Road from MP 2.8 to MP 3.1, crossing land that is designated as Retail Commercial and contains residential and retail uses.

The land on the north side of Midas Avenue (MP 3.1 to MP 3.8) is designated as Light Industrial and is primarily disturbed (graded), but vacant. One industrial operation is between approximately MP 3.4 and MP 3.6. Just south of Yankee Hill Road, at approximately MP 3.4, the proposed route turns east, following the east-running tracks of the railroad. The proposed route passes adjacent to some additional industrial development after crossing Yankee Hill Road, between approximately MP 3.6 and MP 3.8.

At approximately MP 3.8, the proposed route turns southeast through the industrial development and crosses Pacific Street. The proposed route continues parallel to Sierra Meadows Drive in an existing easement (approximately between MP 3.8 and MP 4.2) that contains several power lines and into the existing Del Mar Substation (approximately MP 4.2). All of the area on the east side of Pacific Street is designated Heavy Industrial, including the existing Del Mar Substation property.

City of Rocklin Plans

The following plans and programs have been adopted and implemented by the City to preserve, protect, create, and enhance the visual character of the City of Rocklin.

The Front Street Historical District Plan. The City created formal Historical District in 1982 by Ordinance No. 480, August 2, 1982 and a follow-up zoning ordinance No. 485, September 2, 1982. The Front Street Historical District Plan discusses the importance of preserving the Front Street Historical Area in Section IV, Architectural Styling & Design Standards. The Plan stresses the City's interest as not merely on the individual structures, but rather the cumulative visual and historical zone within the City of Rocklin Zoning Code, Rocklin Municipal Code Chapter 17 (Rocklin, 2001d).

The Downtown Revitalization Plan. A primary goal of this plan is to "improve the overall image of the community," and a specific goal is to "protect and enhance the special natural features of the downtown area." Design Guidelines Section 4.3.6 of the Plan, Undergrounding of Utilities, provides that "Utility installations should be placed underground. Any installation remaining above ground, such as pad-mounted transformers, should be integrated and compatible with the architecture and landscaping of the project. These installations should be located in areas less visible but easily accessible for servicing and should be screened with a fence or plant material." The plan also discusses overhead power lines in Part 4.4.1: "The City should establish regulations which, through the development application process, requires property owner participation in the cost of placing existing overhead electrical and communication lines underground." In response to this guideline of the Plan, the City established Underground Utility District No. 4, Rocklin Road and Pacific Street, by Resolution No. 88-316 on September 27, 1988 (Rocklin, 2001d). It should be noted that the Proposed Power line is not subject to the Design Guidelines and Resolutions of this plan.

Redevelopment Plan for the Rocklin Redevelopment Project. The major goals of the Redevelopment Plan relevant to the Proposed Project are include: (1) the strengthening of retail and other commercial functions in the downtown area, (2) the strengthening of the economic base of the Project Area and the community by the installation of needed site improvements to stimulate new commercial/light industrial expansion, employment and economic growth, and (3) the establishment and implementation of performance criteria to assure high site design standards and environmental quality and other design elements which provide unity and integrity to the entire project. Section IV of the Redevelopment Plan, Uses Permitted in the Project Area, specifically addresses underground utilities in part IV.D.8, Utilities, "The Agency shall require that all utilities be placed underground whenever physically and economically feasible." (Rocklin, 2001d).

Explanation:

a) Physically Divide an Established Community: No Impact

The project would reinforce an established electrical system. The Proposed Project would be located primarily within existing utility and transportation corridors. Therefore, the Proposed Project would not divide an established community.

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b) Conflict with Adopted Land Use Plan or Policy: Less Than Significant Impact

The Proposed Project would be located primarily within existing utility and transportation corridors. Therefore, no significant long-term land use impacts are anticipated as a result of construction of the project.

According to the City of Rocklin General Plan's (1991) Public Services and Facilities Policy 17, the City encourages the undergrounding of existing and proposed utility lines, where feasible. In addition, the City of Roseville's General Plan (1992) Goal 1, Policy 2 for Privately-Owned Utilities requires the installation of electric lines underground, except when infeasible or impractical. PG&E has determined that undergrounding the entire power line would not only be very costly, but would require greater disturbance along the proposed route to residents, soils and cultural resources, thereby causing greater environmental impacts compared to the proposed above-ground power line. However, based on the recommendation of the revised visual analysis conducted for the project, PG&E has agreed to place the proposed power line underground between Sunset Boulevard and Midas Avenue to avoid significant visual impacts in Rocklin's Historic District.

The City of Rocklin formally requested that the power line be installed underground from Sunset Boulevard to Midas Avenue (Rocklin, 2001a). That request is accepted in Mitigation Measure V-1.

CPUC Decision 94-06-014 and General Order 131-D give exclusive jurisdiction to the CPUC over all privately owned utility electric facilities in California, preempting them from local agency jurisdiction. Therefore, while the CPUC does consider the physical environmental effects in this Initial Study, non-compliance with any of the Cities' land use plans, policies, or regulations would not be a significant impact of land use and planning.

c) Conflict with Habitat Conservation Plan: No Impact

There are no habitat conservation plans or natural community conservation plans that address the proposed project area.

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

Existing Conditions

Mineral Resources. Deposits of sand, gravel, and cobbles along streams are potential sources of aggregate, or cobbles for landscaping. However, their limited extent and the potential environmental impacts of extraction generally make them economically infeasible to mine.

Granitic rock in the area has been quarried for over 130 years and continues to be quarried on a limited scale at the Big Gun Mining Company Quarry, located east of Pacific Street and south of Rocklin Road in Rocklin. This was the former Ruhkala Brothers' Union Granite Company Quarry, where building stone, monuments, wall rock, and rip-rap were produced and finished. Present products are for landscaping and building stone, including cut stone, such as for fireplaces, thresholds, and benches (PG&E, 2001).

Explanation:

a) Loss of Availability of a Known Mineral Resource: No Impact

No mineral resources have been identified within the affected area of the proposed project, and there are no active mineral recovery operations within the proposed project area (PEA, 2001a).

b) Loss of Availability of a Locally Important Mineral Resource: No Impact

Refer to a) above.

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XI. NOISE	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Existing Conditions

Community Noise. To describe noise environments and to assess impacts on noise sensitive areas, a measurement scale that simulates human perception is customarily used. It has been found that *A-weighting* of sound intensities best reflects the human ear's reduced sensitivity to low frequencies and correlates well with human perceptions of the annoying aspects of noise. The A-weighted decibel scale (dBA) is cited in most noise criteria. Decibels are logarithmic units that conveniently compare the wide range of sound intensities to which the human ear is sensitive.

Noise environments and consequences of human activities are usually well represented by an equivalent A-weighted sound level over a given time period (L_{eq})¹, or by the average day-night noise levels (L_{dn})². Noise levels are generally considered low when ambient levels are below 45 dBA, moderate in the 45 to 60 dBA range, and high above 60 dBA. Outdoor L_{dn} levels can vary by over 50 dBA depending on the specific type of land use. In wilderness areas, the L_{dn} noise levels average approximately 35 dBA, 50 dBA in small towns or wooded residential areas, 75 dBA in major metropolitan areas (e.g., Downtown Sacramento), and 85 dBA near major freeways and airports. Although people often accept the higher levels associated with very noisy urban residential and residential-commercial zones, they nevertheless are considered to be adverse levels of noise to public health.

Various environments can be characterized by noise levels that are generally considered acceptable or unacceptable. Lower levels are expected in rural or suburban areas than what would be expected for commercial or industrial zones. Nighttime ambient levels in urban environments are about seven decibels lower than the corresponding average daytime levels. The day-to-night difference in rural areas away from roads and other human activity can be considerably less. Areas with full-time human occupation that are subject to nighttime noise and are the same as daytime levels are often considered objectionable relative to noise disturbance. Noise

¹ The Equivalent Sound Level (L_{eq}) is a single value of sound level for any desired duration, which includes all of the time-varying sound energy in the measurement period.

² Day-night average sound level that is equal to the 24 hour A-weighted equivalent sound level with a 10 decibel penalty applied to nighttime levels.

levels above 45 dBA at night begin to cause sleep interference and at 70 dBA, sleep interference effects become considerable (USEPA, 1971).

Existing Noise Levels. Measurements were taken at four sites along the proposed power line route [between Atlantic Substation and the Union Pacific Railroad (UPRR), along Railroad Avenue, north of Midas Avenue, and northwest of Del Mar Substation on Pacific Street] and at each of the existing substation sites. The measurements cover a long-term span of time, including both weekend and weekday periods. All acoustic measurements for this project were taken for multiple 24-hour periods and produced hourly average noise data.

The acoustic data was obtained using calibrated microphones and Type I and Type II sound-level meters in conjunction with digital audio tape recorders. Table XI-1 summarizes the noise survey results in terms of Average L_{eq} , Minimum L_{eq} , Maximum L_{eq} , and Average L_{dn} .

The average L_{eq} levels along the proposed route ranged from 64 to 70 dBA. The majority of the noise measured was from traffic sources (i.e., cars and trains). Average L_{dn} levels ranged from 65 to 74 dBA, which is generally above the noise standards for both Rocklin and Roseville. However, sound levels at sensitive receptor sites are anticipated to be somewhat lower than those along the proposed route.

Local Regulations

City of Roseville. The stated goal of the Noise Element of the City of Roseville General Plan is "... to protect the health and welfare of the community by promoting community development, which is compatible with the noise level criteria." Noise exposure limits for the property line of noise sensitive uses are L_{eq} of 50 dBA with a maximum level of 70 dBA between 7 a.m. and 10 p.m. and a L_{eq} of 45 dBA with a maximum level of 65 dBA between 10 p.m. and 7 a.m. (Roseville, 1992). Provisions in the Roseville Noise Ordinance are not explicitly related to construction noise or vibration.

Table XI-1. Noise Survey Results (dBA)

Location	Average (L_{eq})	Minimum (L_{eq})	Maximum (L_{eq})	Average (L_{dn})
Project Route				
Atlantic Substation to UPRR	67	55	81	71
Railroad Avenue	70	48	99	74
North of Midas Avenue	70	48	99	74
Pacific Street to Del Mar Substation	64	58	81	65
Substations				
Atlantic	67	55	81	71
Del Mar	64	58	81	65

Source: PG&E, 2001a.

City of Rocklin. Similar to the noise ordinance of Roseville, the City of Rocklin General Plan Noise Element's expressed goal is: "...protecting residents from health hazards and annoyances associated with excessive noise levels." The City of Rocklin General Plan Noise Element quotes existing state and federal noise standards, which prescribe interior noise levels in noise critical areas not to exceed an annual level of 45 CNEL-dB (State) and 65 dB- L_{dn} exterior (Federal). The General Plan also includes noise compatibility guidelines containing normally acceptable L_{dn} or CNEL noise limits. Applicable land use categories and noise limits are indicated in Table XI-2. City noise guidelines for construction projects within or near residential areas prohibit construction noise between 7:00 a.m. and 7:00 p.m. on weekdays and between 8:00 a.m. and 7:00 p.m. on weekends (Rocklin, 2001b). Similar to the City of Roseville, provisions in the Noise Ordinance are not explicitly related to construction generated noise or vibration.

**Table XI-2.
City of Rocklin Normally Acceptable L_{dn}
or CNEL Noise Limits**

Land Use	L_{dn} or CNEL Noise Limits
Residential	60 dBA- L_{dn}
Residential-multi-family	65 dBA- L_{dn}
Hotels, motels	65 dBA- L_{dn}
Schools, libraries, churches, hospitals, etc.	65 dBA- L_{dn}
Office buildings	70 dBA- L_{dn}

Source: Rocklin, 1991.

Vibrations. Most local agencies have not established specific criteria for the evaluation of vibration impacts. Tables X1-3 and XI-4 contain recommended vibration criteria for different vibration-sensitive uses, as measured

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in peak particle velocity (ppv). The human annoyance criteria are primarily intended for construction projects that require several days in one location. Tables XI-3 and XI-4 indicate the level at which a significant vibration impact would occur for humans and for buildings. However, no vibration-based environmental standards have been promulgated for Placer County, Rocklin, or Roseville.

Table XI-3. Human Annoyance Vibration Criteria

Vibration Type and Permissible Aggregate Duration	Vibration Limit (rms)
Sustained (≥ 1 hour/day)	0.01 inch/second
Transient (> 1 hour/day)	0.03 inch/second
Transient (≤ 10 minutes/day)	0.10 inch/second

Source: PG&E, 2001a

Table XI-4. Vibration Criteria for Potential Building Damage

Type of Building	Vibration Limit (ppv)
Industrial, heavy office, modern construction	1.0 inch/second
Residential, reinforced	0.15 inch/second
Historic, unreinforced	0.05 inch/second

Source: PG&E, 2001a

Explanation:

a) Exposure of Persons to Noise Levels in Excess of Local Standards: Less than Significant Impact

Construction of the power line would require cranes, augers, backhoes, generators, trucks, and other equipment. Typical noise levels at 50 feet for many types of construction equipment are listed in Table XI-5.

Two types of noise are associated with on-site construction activities: intermittent and continuous. The maximum intermittent construction noise levels would range from 84 to 94 dBA at 50 feet for foundation development activities and between 81 and 98 dBA during rock drilling and compacting construction activities. Noise levels associated with activities that require jackhammers and rock drills could be as loud as 68 dBA at a distance of approximately 1,600 feet. The continuous noise levels from construction activities at 50 feet would range from 70 to 82 dBA. At 100 feet, the continuous noise levels would be 64 to 76 dBA, and at 200 feet, the noise levels will be 58 to 70 dBA.

Table XI-5. Typical Noise Levels of Construction Equipment

Equipment	Range of Noise Level (dBA) at 50 feet
Earthmoving	
Front loaders	72-84
Backhoes	72-93
Tractors, Dozers	76-96
Scrapers, Graders	80-93
Pavers	86-88
Trucks	82-94
Materials Handling	
Concrete mixers	75-88
Concrete pumps	81-83
Cranes (movable)	75-86
Cranes (derrick)	86-88
Forklifts	76-82
Stationary	
Pumps	69-71
Generators	71-82
Compressors	74-86
Drill Rigs	70-85
Impact	
Jack hammers and rock drills	81-98
Compactors	84-90

Source: PG&E, 2001a and PG&E, 1998.

Off-site noise during construction would occur primarily from commuting workers, and from various truck trips to and from the construction sites. As described in Section 8, Project Description, the construction workers would be meeting at the Atlantic Substation and would then travel to the construction site in groups. In addition, truck trips

would be required to haul poles, conductor line, and other materials to the construction sites. The peak noise levels associated with passing trucks and commuting worker vehicles (approximately 70 to 75 dBA at 50 feet).

Intermittent and continuous on-site and off-site noise levels would affect receptors in the vicinity of the construction areas and haul routes; however, it should be noted that average ambient noise conditions in the Proposed Project area are relative high (63 dBA to 70 dBA; see Table XI-1). Implementation of Applicant Proposed Measure APM 12-1 (see Table B-7) would reduce potentially significant on-site and off-site construction noise impacts to less than significant levels. However, the following mitigation measures (**N-1 and N-2**) would further reduce noise impacts to receptors in the vicinity of the Proposed Project (**Class III**).

- N-1** PG&E or its construction contractor shall provide advance notice, between two and four weeks prior to construction, by mail to all sensitive receptors and residences that would be within 300 feet of construction. The announcement shall state specifically where and when construction will occur in the area. If construction delays of more than 7 days occur, an additional notice shall be made, either in person or by mail. Notices shall provide tips on reducing noise intrusion, for example, by closing windows facing the planned construction. The notice shall also advise the recipient on how to inform the Applicant/contractor if specific noise or vibration sensitive activities are scheduled so that construction can be rescheduled, if necessary, to avoid a conflict and a reasonable deadline for such contact shall be stated. PG&E shall also publish a notice of impending construction in local newspapers, stating when and where construction will occur.
- N-2** PG&E shall identify and provide a public liaison person before and during construction to respond to concerns of neighboring receptors, including residents about noise construction disturbance. Procedures for reaching the public liaison officer via telephone or in person shall be included in notices distributed to the public in accordance with Mitigation Measure **N-1**. PG&E shall also establish a toll-free telephone number for receiving questions or complaints during construction and develop procedures for responding to callers (procedures to be approved by the CPUC).

Construction-related noise is temporary and short-term, and would not result in a significant impact. Implementation of the APM 12-1 (see Table B-7) would ensure that noise levels are reduced to the lowest level possible, while Mitigation Measures **N-1 and N-2** described above would ensure that neighboring receptors would be provided advanced notice of the construction activities and would provide means for PG&E to respond to concerns of those receptors.

For long-term noise impacts associated with operations of the proposed project, refer to XI.c).

Noise Impacts Associated with Mitigation Measure V-1. Construction related noise levels associated with implementation of Mitigation Measure **V-1** would result in approximately the same temporary short-term continuous construction noise levels as those described above, approximately 70 to 82 dBA at 50 feet. However, one difference between construction of the underground power line and construction of the overhead power line in Rocklin's Historical District is that noise associated with construction of the underground line would be audible by more receptors, for longer periods of time. This is because, unlike construction of the overhead power line, which would require construction locations only at approximately every 800 feet, construction of the underground line would require continuous construction between Sunset Boulevard and Midas Avenue.

PG&E estimates that underground power line construction would proceed at a rate of approximately 200 feet per day. Therefore, construction noise could be audible by adjacent sensitive receptors for approximately one week during the hours of construction (generally between the hours of 7 a.m. and 7 p.m.).

Noise associated with construction of the underground power line route would be temporary and short-term, and would not result in a significant impact. As identified for the proposed overhead portion of the project, implementation of Applicant Proposed Mitigation Measure APM 12-1 (see Table B-7) would ensure that noise levels are reduced to the lowest level possible, while Mitigation Measures **N-1 and N-2** described above would ensure that neighboring receptors would be provided advanced notice of the construction activities and would provide means for PG&E to respond to concerns of those receptors.

b) Expose Sensitive Receptors to Excessive Ground Borne Vibration: Less than Significant Impact

Vibration levels from heavy equipment transport might be perceptible to receptors in the vicinity of the construction site locations.

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Mitigation Measures N-1 and N-2 described above would ensure that neighboring receptors would be provided advanced notice of the construction activities and would provide means for PG&E to respond to concerns of those receptors.

c) Substantial Permanent Increase in Ambient Noise: Less than Significant Impact

Audible power line noise is generated from corona discharge on overhead lines, which is usually experienced as a random crackling or hissing sound. The potential for noise from corona discharge is greater with high voltage lines during wet weather. For example noise generated by a 230 kV line during wet weather conditions is generally expected to be 30 to 40 dBA at 100 from the outer conductor. However, corona noise associated with the proposed 60 kV line would be considerably less and barely audible to noise receptors along the route due to its relatively low voltage and the existing ambient noise levels. It should be noted that there would be no audible corona noise associated with the underground portion of the power line between Sunset Boulevard and Midas Avenue. Operational noise impacts associated with corona noise would be less than significant.

Additional noise produced at the substations will be generated by activation of circuit breakers normally twice per day and will constitute an instantaneous sound in the range of 70-90 dBA. Because of the short duration of this noise, the Placer County and the Rocklin and Roseville noise standards will not be exceeded; therefore, this will be a less than significant impact.

d) Substantial Temporary or Periodic Increase in Ambient Noise: Less than Significant Impact

See XI a) and c).

e) Within Two Miles of a Public Airport: No Impact

The Proposed Project is not within an airport land use plan or within two miles of a public airport (PG&E, 2001a).

f) Within the Vicinity of a Private Airstrip: No Impact

The Proposed Project is not within the vicinity of a private airstrip (PG&E, 2001a).

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

Existing Conditions

Population. Placer County’s population was estimated to be nearly 248,400 in 2000. The population increased by approximately 44 percent between 1990 and 2000, a rate of growth exceeding that of both the state (approximately 10 percent) and the Greater Sacramento Area (approximately 15 percent). The greatest rate of growth in Placer County continues to take place in the cities of Rocklin and Roseville, as described below.

Data from the U.S. Census Bureau estimates the City of Rocklin’s year 2000 population at 36,330, approximately 15 percent of Placer County’s population. Since 1990, Rocklin’s population increased by approximately 17,297, a 91 percent increase. In 2000, the City of Roseville’s population was estimated at 79,291 and accounted for approximately 32 percent of Placer County’s population. Since 1990, Roseville’s population has increased by approximately 35,236, which is a 79 percent increase. These population changes are reflected in Table XII-1.

The Sacramento Area Council of Governments (SACOG) projects the Placer County population to nearly double over the next 20 years, with more than half of the growth to take place in the Rocklin, Roseville, and Lincoln areas. By the year 2022, the Rocklin area population is projected to be 65,619, while the City of Roseville is projected to reach 115,980.

Table XII-1. Population Totals

City/County	1990 Census Total	2000 Census Total	Percent Change 1990 to 2000	2022 Projection
Placer County	172,796	248,399	44%	407,561
Rocklin	19,033	36,330	91%	65,619
Roseville	44,685	79,921	79%	115,980

Source: PG&E, 2001c

Housing. Table XII-2 reflects the housing availability and vacancy rates for the Rocklin-Roseville area. As of January 2000, the City of Rocklin had approximately 14,421 total housing units, with an estimated vacancy rate of 13.0 percent. Roseville recorded a total of 31,925 housing units, with an estimated vacancy rate of 3.6 percent. Approximately 74 percent of the housing units for both Rocklin and Roseville are single detached units.

**Table XII-2.
2000 Total Housing Units and Vacancy Rates**

City / County	Total Housing Units	Percent Vacant
Placer County	107,302	13.0
Rocklin	14,421	8.1
Roseville	31,925	3.6

Source: PG&E, 2001c

Forecasts by SACOG have projected that approximately 65 percent of the housing growth in the county will occur in the Roseville, Lincoln, and Rocklin areas between 1997 and 2022. Rocklin is expected to more than double the number of housing units, while Roseville’s increase is projected at 84.9 percent.

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Temporary Housing. Rocklin and Roseville are part of the Greater Sacramento Area. Accommodations in this area are numerous, with at least 15 hotels containing approximately 1,300 rooms in Rocklin and Roseville alone. With ample temporary housing available, there will be no impacts to housing demand during project construction.

Explanation:

a) Induce Substantial Population Growth: No Impact

The Proposed Project is intended to increase the reliability of electrical service to existing customers. The project is designed to accommodate projected and planned growth in southern Placer County. Without the Proposed Project, PG&E anticipates that problems associated with electrical facility outages and disruptions to customer service during peak load times would be compounded as demand increases due to growth in the region. The project is not intended to induce growth, but is intended to accommodate anticipated future electric demand.

b) Displace Substantial Numbers of Existing Housing: No Impact

No residential properties would be displaced by the construction or operation of the Proposed Project (PG&E, 2001a). The proposed power line route is mostly within the existing Union Pacific Railroad (UPRR). Although some residences houses are adjacent to the UPRR, no homes would need to be moved or demolished as a result of the project.

c) Displace Substantial Numbers of People: No Impact

No people would be displaced by construction or operation of the Proposed Project (PG&E, 2001a). As described under b) above, the Proposed Project would be mostly within the railroad ROW and although some residential houses are adjacent to the railroad ROW, no homes would need to be moved or demolished as a result of this project. Therefore, no people would be displaced and there would not be a need for replacement housing as a result of the Proposed Project.

XIII. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provisions of new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Existing Conditions:

Fire Protection. The Rocklin Fire Department force consists of 32 full-time personnel and has two stations within the City of Rocklin. Station Number One is on Rocklin Road, west of I-80. Station Number Two is located near the intersection of Stanford Ranch Road and Whitney Boulevard. The department operates two full engine companies, grass units, and salvage and rescue units. A third engine company is expected to be in operation by October 2000.

The Roseville City Fire Department presently has five fire stations; each station has one pumper fire truck, one 100-foot ladder truck, reserve units, and grass units service the entire Roseville community. There are 70 on-duty fire department personnel at any given time—all having a minimum of Emergency Medical Technician II training. Regional responsibilities for firefighting are shared among municipal fire departments and those assigned to specially designated lands outside city boundaries. The City of Roseville and adjacent agencies have mutual aid arrangements through the Western Placer Joint Powers Authority.

Police Protection. The Rocklin Police Department has 23 sworn peace officers, 2 police service aides, 5 dispatchers, and 3 clerical staff. In the unincorporated area, the Placer County Sheriff's Department provides patrol services, while the California Highway Patrol (CHP) provides traffic control along I-80 and SR 65.

The City of Roseville Police Department (RPD), located near Washington Boulevard and Junction Boulevard, currently employs 79 sworn peace officers. Seven community service officers who respond to non-emergency calls and take reports are on staff as well. RPD has mutual aid relationships with adjacent agencies and the CHP.

Schools. The Rocklin Unified School District (RUSD) serves the City of Rocklin. In 1999, the RUSD had a total of 6,891 students enrolled. The school district provides primary and secondary education to the City of Rocklin. The district operates six elementary schools, one junior high school, one continuation school, and one high school.

The City of Roseville has one high school district and four elementary districts. The project is located within the Roseville Joint Union High School and the Roseville City School Districts. Roseville Joint Union High School District encompasses the entire city limits and includes portions of unincorporated Placer and Sacramento Counties. Four high schools and two continuing education schools presently serve the district. The enrollment in October 1999 was 6,844 students. Eureka Union School District serves a small area within the City of Roseville along its eastern limits. The school district has three primary schools within the city limits. The enrollment at these schools in October 1999 was 1,343 students. Dry Creek Joint Union School District has three elementary and one middle school that serve the western region of the City of Roseville. In October 1999, enrollment at these schools was 2,735 students. Roseville City School District serves the City of Roseville for elementary and intermediate school needs. The district has nine grammar schools, two junior high schools, and one middle school serving 5,840 students in October 1999.

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Explanation:

a) Fire protection: No Impact

Under normal operating conditions, the proposed power line and proposed modifications to the existing substation would not introduce any new fire hazards that would require an increase in fire protection. Therefore, no impact is anticipated.

b) Police Protection: Less than Significant Impact

Because there is no population growth anticipated as a result of the Proposed Project that would require increased police protection to accommodate increases in population or new facilities, the operation of the project would not impact police services. However, during construction, there is a higher risk of vandalism and theft of construction equipment or tampering with a construction site that would rely upon the current police force. However, the construction period is relatively short (4 months) and there is a sufficient police force currently in place. The use of the police force would be a temporary construction related impact but that impact would be less than significant.

c) Schools: No Impact

The Proposed Project is not anticipated to cause a long-term increase in the local student population, which would require additional school facilities. Also, construction of the Proposed Project construction is not anticipated to result in a significant construction force that would require an increase of school services. Therefore, the Proposed Project would have no impact on school services.

d) Parks: Less than Significant Impact

The majority Proposed Project route runs along the UPRR and would not run through any parks. In addition, the Proposed Project would not result in a direct increase of population growth or increased housing. Therefore, the project would not tax existing parks nor necessitate the need for additional parks in the area.

e) Other Public Facilities: Less than Significant Impact

The Proposed Project is not anticipated to cause an increase in the need for other public facilities because it involves the reinforcement of an existing electrical system.

XIV. RECREATION	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreation facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Existing Conditions

Roseville. The only existing recreational facility crossed by the project in Roseville is a Class II bikeway,³ parallel to State Route (SR) 65, which would be crossed by the proposed power line at approximately MP 1.2. Two planned Class I bikeways¹ along Roseville Parkway and Antelope Creek would be crossed at approximately MP 0.4 and MP 0.65, respectively. Both Class I bikeways are scheduled to be constructed within the next few years. In addition, there is an undeveloped city park and recreation area adjacent to the railroad corridor approximately 2,000 feet south of the city limit (approximately MP 0.9). This park site is currently vacant. Open space areas in the City of Roseville are also considered recreational areas and may contain or have plans to contain trail systems.

Rocklin. Old Timers Park, located on the corner of Rocklin and Front Street (at approximately MP 2.75), is the only existing recreational facility in Rocklin located near the Proposed Project. This park consists of 0.1 acres and includes a picnic area.

Explanation:

a) Increase the Use of Existing Neighborhood and Regional Parks or Other Recreational Facilities: Less than Significant Impact

A Class II bikeway in the City of Roseville would be crossed by the project at approximately MP 1.2. Construction and operation of the Proposed Project would have no recreational impact on bikeway users since it would be an overhead line and there would be no construction within the bikeway. Old Timers Park is within close proximity to the Proposed Project at approximately MP 2.75. Although it is not anticipated, users of Old Timer Park displaced during construction of the Proposed Project would have a less than significant impact on other recreational facilities.

b) Require the Construction or Expansion of Recreational Facilities: No Impact

The Proposed Project would not include recreation facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment

³ Class II bikeways provide a restricted ROW designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted. Class I bikeways provide a completely separated ROW designated for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized.

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XV. TRANSPORTATION/TRAFFIC <i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ration on roads, or congestion at intersections)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Existing Conditions

The main transportation corridors that provide access to the project area are Interstate 80 (I-80), State Route 65 (SR 65), Atlantic Street, Harding Boulevard, Taylor Road/Pacific Street, Sunset Boulevard, Rocklin Road, and Sierra Meadows Drive. Neighborhood streets that cross the proposed route include Farron Street, Midas Avenue, and Yankee Hill Road. Figure XV-1 illustrates the locations of these roadways. The City of Rocklin’s most recent traffic counts were taken in 1998 and the City of Roseville’s most recent traffic counts were between 1991 and 2000, depending on the roadway.

Highways

Interstate 80. I-80 is an eight-lane high capacity freeway, running primarily east-west, that connects major urban centers within and beyond State boundaries. I-80 serves as a major commuter route in the Davis-Sacramento-Auburn area and is the major connector for Bay Area-Lake Tahoe-Reno recreation traffic. The four interchanges on I-80 in the project area are at Atlantic Street, Taylor Road, SR 65, and Rocklin Road. Average traffic volumes in the project area for 1998 were between 90,000 and 127,000 trips daily, with peak hour volumes of 7,800 to 11,400 trips.

State Route 65. SR 65, also known as the Roseville Bypass, is a six-lane expressway that originates at I-80 in Roseville and runs north, connecting to State Route 70 (SR 70) south of Marysville. SR 65 serves inter-regional travel between I-80 and SR 70 to the north, as well as serving commute traffic in the South Placer County area. Interchanges on SR 65 in the project area include I-80, Taylor Road, and Harding Boulevard. Washington Boulevard merges into SR 65 north of the project area, where it reduces to a two-lane highway. Daily traffic volumes in the project area for 1998 ranged from 21,000 to 40,000 trips. Peak hour traffic in the project area ranged from 1,900 to 4,050 trips in 1998.

Figure XV-1: Circulation Map
(8½" X 11" B&W)

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Arterials

There are a number of arterial roadways crossed by or adjacent to the Proposed Project route. The primary function of arterial roadways is to move large volumes of traffic through one section of a city to other sections and beyond. According to the Rocklin City Engineering Department, the levels of service (LOS) for arterials and collectors in Rocklin is LOS C or better, except for sections within one-quarter mile of highway interchanges. No roadways are crossed by the project route within the Roseville city limits, except for the section of the Roseville Parkway between Harding Boulevard and I-80. Table XV-1 lists daily average traffic volumes for arterials and collector roads that could be affected by the Proposed Project.

Table XV-1. Average Daily Traffic Volumes

Roadway	City	Average Daily Traffic (both directions)	Count Date
Atlantic Street (from I-80 to Harding Boulevard)	Roseville	20,868	2001
Atlantic Street (from Harding Boulevard to Berry Street)	Roseville	21,361	2001
Galleria Boulevard (from Atlantic Street to SR 65)	Roseville	24,418	2001
Midas Avenue (from Pacific Street to Argonaut Avenue)	Rocklin	9,279	1998
Rocklin Road (from Pacific Street to Fifth Street)	Rocklin	3,319	1998
Roseville Parkway (from Creekside to Galleria)	Roseville	14,356	2001
Sierra Meadows Drive (from Pacific Street to Tuttle Drive)	Rocklin	4,157	1998
Sunset Boulevard (from Pacific Street to Third Street)	Rocklin	14,924	1998
Taylor Road/Pacific Street (from Sierra Meadows Drive to Rocklin Road)	Rocklin	11,373	1998
Taylor Road/Pacific Street (from I-80 to Rocklin city limit)	Roseville	22,512	2001

Source: Roseville 2002; Rocklin 2002.

Air Transportation

The nearest municipal and regional airports are located in Lincoln and Auburn, both approximately 10 to 12 miles away.

Transit and Rail Service

Transit. There are three companies offering transit services in Rocklin-Roseville. Greyhound Bus Lines has a station in Roseville. This station is a stop on the Sacramento to Auburn route and offers four to five trips to Sacramento per day. Roseville Transit Service operates five buses on nine fixed bus routes within the City of Roseville. The Placer Transit System operates the Rocklin Shuttle that follows an hourly route through the City.

Rail. Amtrak provides intercity rail service to Placer County via stations in Roseville and Auburn. The "California Zephyr," the intercity passenger train that provides east-west service has two stops in Roseville daily. Capital Corridor Intercity Rail links the Bay Area with the Sacramento area and Placer County. At present, one round trip train accesses Auburn daily, with stops in Rocklin and Roseville. The current train stop in Rocklin is a dirt lot along the railroad tracks on the south side of Rocklin Road and Railroad Avenue.

UPRR operates a major switching yard in Roseville, south of the project area. A parallel double-tracked mainline runs east from the switching yard, through the center of downtown Rocklin along the north side of Taylor Road/Pacific Street. Near the intersection of Railroad Avenue and Pine Street, the parallel mainline splits into two separate lines. The line that follows Taylor Road/Pacific Street, between the split and the town of Loomis, turns into a downhill, or westbound track. The other line, which follows Sierra College Boulevard, is UPRR's uphill or eastbound track. Average daily train traffic through the project area is 16 to 18 trains, both east and west bound, including Amtrak intercity passenger trains.

Private freight spurs off of UPRR's mainline exist at local industry plants in the Rocklin area. There are nine railroad crossings in the Rocklin area. Only one crossing, Sunset Boulevard, is grade separated. SR 65 is grade separated in the City of Roseville.

Future Road Work Plans

Roseville. The Roseville General Plan proposes a light rail line that would incorporate the existing railroad and installation of a new line, which would be parallel to Roseville Parkway from Washington Boulevard to beyond the City's eastern limits. The City of Roseville has developed an Environmental Impact Report for this proposed line, but there has been no timeframe established for completion of the light rail line. In addition, this proposed light rail line is not included in the Sacramento Area Council of Governments 1999 Metropolitan Transportation Plan, which serves as a 24-year blueprint for transportation improvements in the Sacramento Metropolitan Area.

Rocklin. The City of Rocklin has identified several circulation improvement projects in the North Rocklin Circulation Element. Of those proposed improvements, the following have the potential to be impacted by installation of the Atlantic-Del Mar power line:

- Pacific Street/Taylor Road (expansion to six lanes from Sunset Boulevard to the Roseville city limits and expansion from two to four lanes from Sunset Boulevard to the Loomis city limits);
- Sunset Boulevard (expansion to six lanes); and
- Railroad Avenue (convert to one-way couplet for Pacific Street).

The Proposed Project would be designed to accommodate the relocation of the existing 60 kV power line from its current location along Pacific Street to the proposed new project's pole south of Sunset Boulevard if the road widening is completed as planned. Expansion of Pacific Street/Taylor Road to a four-lane road beyond Midas Avenue is still planned sometime within Rocklin's twenty-year planning range.

Expansion of Sunset Boulevard to six lanes, west of Pacific Street, is still under consideration by the City. The expansion would utilize current landscaped medians and road borders for additional lanes.

There are also plans under discussion for a downtown multi-modal train station project on the south side of Rocklin Road and Railroad Avenue. Expansion of Railroad Avenue is dependent upon construction of the proposed station. Development of the station would also call for the addition of parking areas along Railroad Avenue.

Explanation

a) Increase in Traffic/Congestion: Potentially Significant Unless Mitigation Incorporated

Impacts to traffic congestion resulting from truck trips to and from the project sites during construction would be less than significant due to the small number of trucks required at each site for pole placement and line stringing. Estimated truck trips include an average of five concrete truck trips per day for 30 days during overhead construction, and periodic deliveries of pole segments, conductor spools, hardware, and other equipment.

In addition to the project truck trips, approximately 20 construction workers would be commuting to the Atlantic Substation each workday. From the substation, workers would carpool to the construction sites in company vehicles. This level of project-related traffic is negligible when added to the existing daily traffic on freeways and arterial roadways, and would not exceed the established level of service standard for roads in the project area.

PG&E may be required to obtain an Overload Transportation Permit from the City of Rocklin (Rocklin, 2001c). Some of the stipulations of the permit would be that the City would designate the haul routes to be taken and require the Applicant to repair any damage caused to any of the restricted load limit streets.

The proposed power line would cross Sunset Boulevard, Farron Street, Rocklin Road, Midas Avenue, Pacific Street, Corporation Yard Road, and SR 65. The construction of the Proposed Project would result in temporary lane closures (approximately 10-minutes) for the local roads and approximately five 15-minute closures of SR 65. These closures would result in some level of traffic congestion. However, local road closures would occur in non-peak traffic periods and would be conducted under the permit requirements set forth by local agencies.

Pursuant to Applicant Proposed Measure APM 14-1 (see Table B-7), PG&E would coordinate with the cities of Rocklin and Roseville, California Department of Transportation (Caltrans) and the California Highway Patrol

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(CHP) for timing of closures. In addition, PG&E would provide flagger control to direct traffic and would follow encroachment permit stipulations from Caltrans and local agencies (APM 14-2, see Table B-7). Lane closures would cause temporary adverse, but less than significant impacts with implementation of APM 14-1 and 14-2.

Traffic/Transportation Impacts Associated with Mitigation Measure V-1. The underground power line construction associated with Mitigation Measure V-1 would require constructing an open trench across Farron Street and Rocklin Road. Trenching across these roads could impede traffic for hours at a time. The temporary closure of lanes on these in the area of the UPRR ROW would result in potentially significant impacts, but impacts due to lane closures could be reduced to less than significant levels with implementation of Mitigation Measure T-1 below.

T-1 PG&E shall develop and implement detailed Traffic Control Plans (TCPs) for the entire route at all locations where construction activities would interact with the existing transportation system. Input and approval from the City of Rocklin Public Works Department shall be obtained as required; copies of all required approval letters from City of Rocklin Public Works Department must be provided to the CPUC prior to the start of construction. The TCP shall define the use of flag persons, warning signs, lights, barricades, cones, etc. according to standard guidelines outlined in the Caltrans Traffic Manual, the Standard Specifications for Public Works Construction, and the Work Area Traffic Control Handbook (WATCH).

b) Exceed Level of Service Standards: Less than Significant Impact

Construction of the Proposed Project would cause a minor increase in the local traffic throughout the project study area (see a, above). Therefore, level of service standards would not be exceeded.

c) Result in a Change in Air Traffic Patterns: No Impact

The nearest airports are located in Lincoln and Auburn, where are approximately 10 to 12 miles from the Proposed Project area. There would be no impacts to air traffic patterns as a result of the Proposed Project.

d) Design Feature Hazards: No Impact

The Proposed Project would not increase hazards on area roadways due to a design feature or incompatible uses.

e) Result in Inadequate Emergency Access: Potentially Significant Unless Mitigation Incorporated

The construction of the Proposed Project would result in temporary lane closures for the local roads and SR 65 (see a, above), which could potentially affect emergency access. However, pursuant to Applicant Proposed Measure APM 14-1 (see Table B-7), PG&E would coordinate with the cities of Rocklin and Roseville, California Department of Transportation (Caltrans) and the California Highway Patrol (CHP) for timing of closures. Coordination with these agencies would ensure impacts associated with inadequate emergency access due to temporary lane closures are less than significant.

Emergency Access Impacts Associated with Mitigation Measure V-1. The underground power line construction associated with Mitigation Measure V-1 would require constructing an open trench across Farron Street and Rocklin Road. Trenching across these roads could impede traffic for hours at a time. To ensure that emergency response vehicles would be able to pass across either of these roads while trenching activities are being conducted, Mitigation Measures T-2 described below is recommended to supersede Applicant Proposed Measure APM 14-1 (see Table B-7). Implementation of Mitigation Measure T-2 would reduce potentially significant emergency response interference impacts associated with underground power line construction to less than significant levels.

T-2 PG&E shall coordinate at least 30 days prior to construction with emergency service providers to avoid restricting movements of emergency vehicles. Police departments, fire departments, ambulance services, and paramedic services shall be notified by PG&E of the proposed locations, nature, timing, and duration of potential access restrictions on Farron Street and Rocklin Road that could impact their effectiveness. At locations where lanes are blocked, provision shall be ready at all times to accommodate emergency

vehicles, such as plating over excavations, short detours, and alternate routes in conjunction with City of Rocklin Public Works Department. Traffic Control Plans (Mitigation Measure **T-1**) shall include details regarding emergency services coordination and procedures, and copies shall be provided to all relevant service providers. Documentation of coordination with service providers shall be provided to the CPUC prior to the start of construction.

f) Result in Inadequate Parking Capacity: No Impact

The proposed project does not cross any parking lots and will not affect street parking on the roadways near the proposed project. Therefore, there will be no impact to parking.

g) Conflict with Alternative Transportation Policies: Less than Significant Impact

The Proposed Project would not conflict with adopted policies that support alternative transportation.

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

Existing Conditions

Water Service. The City of Rocklin is supplied with water through long-term contracts with the Placer County Water Agency (PCWA). Water is supplied to the PCWA from PG&E's storage reservoirs in the Sierra Nevada and from the American River through the Middle Fork Project and Central Valley Project supplies. Water supplied to Rocklin is treated at any one of four treatment plants by PCWA. Current contracts entitle the PCWA to a total of 259,000 acre-feet per year (AF/yr).

The City of Roseville obtains its water from the federal Central Valley Project, which supplies water from Folsom Lake. The City's contract with the Central Valley Project entitles Roseville to 62,000 AF/yr. A contract with the Bureau of Reclamation entitles Roseville to 32,000 AF/yr. In addition, the PCWA is under contract with the City of Roseville to allocate 30,000 AF/yr of water for municipal and industrial purposes.

Wastewater Service. The South Placer Municipal Utility District (SPMUD) provides sewer service to Rocklin and Roseville. Wastewater is treated at the Roseville Wastewater Treatment Plant, which is owned and operated by the City of Roseville. This facility, which is designed for 18 million gallons of wastewater per day, operates at 73 percent of designed capacity during the dry season. It presently serves the Dry Creek Basin, consisting of Roseville, Rocklin, Loomis, and surrounding areas. The plant discharges into Dry Creek under strict standards set by the State's Regional Water Quality Control Board. Residual solids are transported to and buried at the sanitary landfill. The City of Roseville owns sufficient property to permit a future capacity of 36 million gallons per day.

Solid Waste Service. Solid waste disposal in the cities of Rocklin and Roseville is under the jurisdiction of the Western Regional Landfill Authority (WRLA). Placer County and the cities of Roseville, Rocklin, and Lincoln formed the WRLS to plan for and provide adequate disposal facilities for each of their jurisdictions. The WRLS purchased a site of approximately 320 acres between Roseville and Loomis for the Western Regional Landfill. The Western Regional Landfill has an estimated total capacity of 8,600,000 cubic yards and is scheduled to close in 2017. A 480-acre expansion, adjacent to the existing location, will be permitted following closure of the existing landfill.

Rocklin currently contracts with a private company to collect its residential, commercial, and industrial solid waste. Refuse collection within the City limits is mandatory for all property owners. Collection of solid waste in the City of Roseville is operated and managed by Roseville's Environmental Utilities Department.

Explanation:

a) Exceed Wastewater Treatment Requirements: No Impact

The Proposed Project would not generate wastewater. Therefore, the wastewater treatment requirements of the Central Valley Regional Water Quality Control Board would not be exceeded.

b) Require Construction of New Wastewater Treatment Facilities: No Impact

The Proposed Project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities.

c) Require Construction of New Storm water Drainage Facilities: No Impact

The Project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities.

d) Sufficient Water Supplies Available: Less than Significant Impact

The Proposed Project would not require new water supplies. Construction crews would bring in potable water for drinking purposes and non-potable water would be used for dust control. Because of the relatively small scale and temporary short-term nature of construction, potential impacts would be less than significant.

e) Adequate Wastewater Treatment Capacity: No Impact

Refer to a) above.

f) Sufficient Landfill Capacity: Less than Significant Impact

Non-hazardous waste, including construction debris that is not contaminated, would be disposed of at the Western Regional Landfill that serves both the cities of Rocklin and Roseville. The Western Regional Landfill has sufficient capacity to serve the Proposed Projects needs. There would be limited waste generated during construction of the Proposed Project, However there is sufficient landfill capacity available. Therefore, impacts would be less than significant.

g) Comply with Statutes and Regulations Related to Solid Waste: No Impact

The Proposed Project would comply with Federal, State and local statutes and regulations related to solid waste (PG&E, 2001a).

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

XVIII. LIST OF PREPARERS OF THIS INITIAL STUDY

Table XVIII-1. Initial Study Preparers

Name	Agency / Firm	Area of Responsibility
Nicolas Procos	CPUC	CPUC Project Manager
Susan Lee	Aspen Environmental Group	Aspen Project Manager
Matt Fagundes	Aspen Environmental Group	Deputy Project Manager, Air Quality, Noise, and Geology/Soils
Bruce Barnett	Aspen Environmental Group	Biological Resources
Valerie Starr	Aspen Environmental Group	Aesthetics, Agricultural Resources, Hazards and Hazardous Material, Hydrology/Water Quality, Land Use and Planning, and Recreation
Rebecca Morgenstern	Aspen Environmental Group	Cultural Resources, Population/Housing, Public Services, Transportation/Traffic, and Utilities/Service Systems
Kati Simpson	Aspen Environmental Group	Graphics, Production
Michelle Yang / Mark Tangard	Aspen Environmental Group	Document Production
Colin Busby	Basin Research Associates	Cultural Resources
Michael Clayton	Michael Clayton & Associates	Aesthetics

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