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CHAPTER 1 – PEA SUMMARY

1.0 INTRODUCTION

In accordance with the California Public Utilities Commission's (CPUC) General Order 131-D, Sierra Pacific Power Company (SPPCo) is submitting this Proponent's Environmental Assessment (PEA) as part of its application for a Permit to Construct for the 625 and 650 Line Upgrade Project (project).

1.1 PROJECT COMPONENTS

The project is divided into the following six components:

1. Removal of the existing 60-kV 625 Line, which is comprised of approximately 15 miles of existing conductor and 341 wood poles
2. Construction of the new 120-kV 625 Line, comprised of approximately 300 steel poles and 16 miles of new 397.5 MCM AA conductor within a new 40-foot-wide permanent ROW
3. Rebuilding the existing 60-kV 650 Line to operate at 120 kV, which will involve the replacement of approximately 225 wood poles with steel poles and 21 span guy poles, as well as the installation of approximately 10 miles of new 397.5 MCM AA conductor
4. Rebuilding the existing 60-kV Northstar Tap into a fold, which will require the replacement of approximately 14 wood poles with steel poles and 0.5 mile of 397.5 MCM AA conductor in order to operate it at 120 kV
5. Rebuilding an approximately 1.6-mile-long portion of the existing 120-kV 132 Line to accommodate a double-circuit configuration with the 650 Line, which will require the replacement of approximately 30 existing wood poles with steel poles and reconductoring as needed with 397.5 MCM AA conductor.
6. Upgrading, modifying, and/or decommissioning six substations and switching stations

1.2 PROJECT LOCATION

The project is located in northeastern Placer County and southeastern Nevada County, California. The components are predominantly located on lands managed by the United States (U.S.) Department of Agriculture, Forest Service (USFS); however, the project also spans the Town of Truckee and the unincorporated communities of Kings Beach and Tahoe City. Approximately 29 miles of the project are located within the Lake Tahoe Basin.

1.3 PROJECT NEED AND ALTERNATIVES

As discussed in Chapter 2 – Project Purpose and Need, SPPCo is proposing this project to maintain a safe and reliable transmission system for the north Lake Tahoe area, while

accommodating current and projected growth in the area. Presently, the north Lake Tahoe transmission system does not have adequate single-contingency reliability; therefore, if one of several critical lines is lost as a result of an intense storm event, fire, or downed trees, a severe power outage could occur. Currently, the 625 Line experiences the most outages in the north Lake Tahoe transmission system due to snow loading and downed trees. Access to perform maintenance and repair work on the existing 625 Line is hampered by a lack of access roads to significant portions of the alignment. SPPCo is planning to reroute the 625 Line so that its alignment more closely follows the existing roadways in the project area. Additionally, because the line is currently constructed with wood poles, fire danger is an ever-present concern. Single-contingency reliability can be achieved by upgrading the 625 Line and the 650 Line to 120-kV conductors and insulators. Utilizing steel poles will further enhance the reliability of the lines and reduce dependence on the Kings Beach Diesel Generation Station.

Although several system alternatives were considered during the development of the project, the project was ultimately selected because it provides the most reliable capacity and will result in lower long-term operation and maintenance costs than the alternatives.

1.4 AGENCY COORDINATION

1.4.0 United States Forest Service

The project will cross land with the Tahoe National Forest by the USFS Lake Tahoe Basin Management Unit. Therefore, SPPCo is required to obtain a Special Use Authorization from the USFS for activities related to the project on its land. SPPCo attended a formal meeting with USFS staff and the Tahoe Regional Planning Agency (TRPA) on February 2, 2009 to discuss the project. During the meeting, SPPCo indicated its preference to have the USFS prepare a joint environmental document with the CPUC.

An additional site visit and tour of the project area involving the USFS, CPUC, and SPPCo was conducted on September 17, 2009. During this site visit, USFS staff toured the alignment, substations, and access roads with SPPCo and CPUC representatives. Sensitive areas and issues were specifically noted and discussed.

While the CPUC will evaluate the environmental impacts of the project in accordance with the California Environmental Quality Act (CEQA), the USFS will evaluate the project in accordance with the National Environmental Policy Act. The USFS will also be responsible Section 106 consultation under the National Historic Preservation Act for potential impacts to cultural resources.

1.4.1 Tahoe Regional Planning Agency

The project is also subject to the regulations and development requirements of the TRPA. Approximately 29 miles of the project are located within the Lake Tahoe Basin, which defines the jurisdiction of the TRPA. As a result, SPPCo is required to obtain a Conditional Permit from the TRPA. As mentioned previously, SPPCo attended a formal meeting with the USFS and TRPA on February 2, 2009. During this meeting, potential resource issues were discussed and the TRPA requested information regarding alternatives to the project, including a justification for not relocating the lines outside of the Lake Tahoe Basin and undergrounding the overhead

transmission lines. They also requested a joint Request for Proposal process to select the environmental consultant to write the Environmental Impact Report/Environmental Impact Statement and a Memorandum of Understanding to spell out the roles for all parties involved in the environmental document preparation and review process. The TRPA also mentioned that they are currently updating their Regional Plan, which will not allow new transmission lines in the Lake Tahoe Basin that serve communities outside of the Basin.

1.4.2 United States Fish and Wildlife Service

SPPCo has been engaged in informal discussions with the U.S. Fish and Wildlife Service (USFWS) regarding the potential for sensitive species in the project area. The project is not expected to have any impact on federally-listed species; as a result, no formal consultation with the USFWS is anticipated.

1.4.3 Native American Heritage Commission

On behalf of SPPCo, Far Western consulted with the California Native American Heritage Commission and the Washoe Tribe of Nevada and California about the project on September 7, 2007. The Commission responded with a list of contacts among the Native American community; however, the contacts were appropriate for western Placer County (traditional Maidu territory), while the project is in the core territory of the Washoe.

The (former) Washoe Tribal Heritage Preservation Officer (THPO), Lynda Shoshone, responded with a phone call to discuss the project details. At that time, she had no specific information to offer about the study corridor. Far Western will provide a copy of the draft Cultural Resources Technical Report to the current Washoe THPO, Darrel Cruz, for review and comment.

1.4.4 United States Army Corps of Engineers

The project will require permits from the U.S. Army Corps of Engineers (USACE) for work involving a portion of the 650 Line and Northstar Staging Area, which are located in the Martis Valley area. Consultation and coordination with the USACE will occur prior to the permitting phase of the project.

1.4.5 Lahontan Regional Water Quality Control Board

The project will require several permits from the Lahontan Regional Water Quality Control Board (LRWQCB), as discussed in Chapter 3 – Project Description. Coordination with the LRWQCB will occur prior to project permitting.

1.4.6 California Department of Fish and Game

The project will require a Section 1602 Streambed Alteration Agreement and a Section 2081 Incidental Take Permit from the California Department of Fish and Game (CDFG). Discussions and coordination with the CDFG will occur prior to project permitting.

1.5 PROPONENT’S ENVIRONMENTAL ASSESSMENT CONTENTS

This PEA, which was prepared in accordance with the PEA Checklist for Transmission Line and Substation Projects issued by the CPUC on November 24, 2008, is divided into five sections.

Chapter 2 – Project Purpose and Need outlines the project’s five primary objectives, specifically:

1. Provide reliable capacity during single-contingency outages
2. Provide additional normal capacity for projected future loads in the north Lake Tahoe area
3. Reduce dependence on the Kings Beach Diesel Generation Station
4. Reduce fire hazards and outage durations associated with old wooden poles and encroaching vegetation
5. Provide reliable access to the 625 Line for operation and maintenance activities

A detailed project description is provided in Chapter 3 – Project Description. This discussion includes specifics regarding the project location; the existing system; the project components; permanent and temporary land/right-of-way (ROW) requirements; construction methods; construction schedule; anticipated operation and maintenance activities; federal, state, and local permits that will be obtained for the project; and a summary of all of the applicant-proposed measures (APMs) and justification for each APM to be implemented as part of the project.

Chapter 4 – Environmental Impact Assessment includes an environmental impact assessment summary and a discussion of the existing conditions and potential and anticipated impacts of the project for each of the following resource areas:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology, Soils, and Seismicity
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems

The CPUC’s PEA Checklist indicates that the environmental setting section can be provided separately or combined with the impacts and APMs. SPPCo has elected to combine the existing

conditions, impacts, and APMs for each resource area in Chapter 4. Chapter 4 also includes a Cumulative Analysis, which discusses past, present, and reasonably foreseeable future projects within the project area, and the project’s potential to contribute to a significant cumulative effect.

Chapter 5 – Detailed Discussion of Significant Impacts identifies the potentially significant impacts resulting from the project, evaluates alternatives to the project, describes the justification for the preferred alternative, and discusses the project’s potential to induce growth in the area.

Within the PEA, SPPCo has addressed all of the items requested in the CPUC’s PEA Checklist. To facilitate confirmation of this and review of the PEA, Table 1-1: PEA Checklist Key, which identifies the section in which each checklist item is addressed, has been included at the end of this section.

1.6 PROPONENT’S ENVIRONMENTAL ASSESSMENT CONCLUSIONS

The PEA analyzes the potential environmental impacts associated with construction and operation and maintenance of the project. Seven resource areas will not be impacted by the project or will experience less-than-significant impacts. These resource areas include:

- Agricultural Resources
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Transportation and Traffic
- Utilities and Service Systems

Although the project will result in potentially significant impacts to eight resource areas, these impacts will be reduced to the less-than-significant level with the implementation of APMs. The APMs are discussed in detail in their relevant sections, and are summarized in Table 3-15: Applicant-Proposed Measures in Chapter 3 – Project Description. These potentially significant impacts (which will be reduced to the less-than-significant level with the implementation of APMs) are summarized by resource area as follows.

- Aesthetics – Temporary visual impacts from construction of the project and permanent visual impacts from the substation modifications, new 625 Line, and new, taller poles that will be installed along the existing 650 Line, 132 Line, and Northstar Fold
- Biological Resources – Temporary and permanent impacts to biological resources, including sensitive species and habitats
- Cultural Resources – Temporary and permanent impacts to cultural resources, including paleontological and archaeological resources
- Geology, Soils, and Seismicity – Temporary and permanent impacts associated with landslides, liquefaction, slope failure, and soil erosion during construction and post-construction

- Hazards and Hazardous Materials – Temporary impacts associated with the transport and use of hazardous materials, the potential release of hazardous materials resulting from the demolition of the existing Brockway Substation, and the potential to start a wildfire during construction
- Hydrology and Water Quality – Temporary and permanent impacts to aquatic resources such as waters of the U.S. (including wetlands), groundwater, streams, and riparian areas
- Noise – Temporary generation of excessive noise and vibration during construction activities near sensitive noise receptors, such as schools, churches, and residences
- Recreation – Temporary impacts to recreationists as a result of trail closures and access restrictions during construction

The project will result in potentially significant impacts to air quality, as discussed in Section 4.3 Air Quality. Air quality in the project area will be temporarily impacted during construction, operation, and maintenance activities. The implementation of the minimization measures described in APM-AIR-01 through APM -AIR-15 will reduce some of these air quality impacts to the less-than-significant level; however, some construction-related impacts will still be considered potentially significant.

1.7 PUBLIC OUTREACH EFFORTS

As a part of the CPUC review and hearing process, all landowners and tenants within 300 feet of project components will be notified of the project. Members of the public will have multiple opportunities to provide comments during the CPUC scoping, environmental review, and public hearing processes. Landowners will be notified again, immediately prior to project construction. In addition, SPPCo will establish a website where the public can obtain project information, ask questions, and lodge complaints.

Table 1-1: PEA Checklist Key

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
Chapter 1: PEA Summary		
	Include major conclusions of the PEA.	Section 1.6 PEA Conclusions
	List any areas of controversy.	Section 1.6 PEA Conclusions Public outreach efforts for the project to date have not resulted in any areas of controversy.
	Include a description of inter-agency coordination, if any.	Section 1.4 Agency Coordination
	Include a description of public outreach efforts, if any.	Section 1.7 Public Outreach Efforts
	Identify any major issues that must be resolved, including the choice among reasonably feasible alternatives and mitigation measures, if any.	Section 1.6 PEA Conclusions Public outreach efforts for the project to date have not resulted in any major issues.
Chapter 2: Project Purpose and Need		
	Include an analysis of Proposed Project objectives and purpose and need that is sufficiently detailed so that the Commission can independently evaluate the Proposed Project need and benefits in order to accurately consider them in light of the potential environmental impacts.	Section 2.0 Overview Section 2.1 Project Objectives
2.1 Overview	Explain the objective(s) and/or purpose and need for implementing the Proposed Project.	Section 2.0 Overview Section 2.1 Project Objectives Section 3.3 Project Objectives
2.2 Project Objectives	Include an analysis of the reason why attainment of these objectives is necessary or desirable. Such analysis must be sufficiently detailed to inform the Commission in its independent formulation of Proposed Project objectives which will aid any appropriate CEQA alternatives screening process.	Section 2.1 Project Objectives Section 3.3 Project Objectives

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>Chapter 3: Project Description</p>	<p>Identify geographical location: County, City (provide Proposed Project location map[s]).</p>	<p>Section 3.1 Project Location Section 3.1.0 Existing 625 Line Section 3.1.1 New 625 Line Section 3.1.2 650 Line Section 3.1.3 132 Line Section 3.1.4 Northstar Tap/Fold Section 3.1.5 Substations and Switching Stations Figure 3-1: Project Location Map Attachment 3-A: Detailed Route Maps</p>
<p>3.1 Project Location</p>	<p>Provide a general description of land uses within the Proposed Project site (e.g., residential, commercial, agricultural, recreation, vineyards, farms, open space, number of stream crossings, etc.).</p>	<p>Section 3.1 Project Location Section 3.1.0 Existing 625 Line Section 3.1.1 New 625 Line Section 3.1.2 650 Line Section 3.1.3 132 Line Section 3.1.4 Northstar Tap/Fold Section 3.1.5 Substations and Switching Stations</p>
	<p>Describe if the Proposed Project is located within an existing property owned by the Applicant, traverses existing rights-of-way (ROW), or requires new ROW. Provide the approximate area of the property or the length of the Proposed Project that is in an existing ROW or which requires new ROWs.</p>	<p>Section 3.1 Project Location Section 3.1.0 Existing 625 Line Section 3.1.1 New 625 Line Section 3.1.2 650 Line Section 3.1.3 132 Line Section 3.1.4 Northstar Tap/Fold Section 3.1.5 Substations and Switching Stations</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.1 Project Location (cont.)</p>		<p>Section 3.6 Right-of-Way Requirements Section 3.6.1 Temporary Section 3.6.2 Permanent</p>
<p>3.2 Existing System</p>	<p>Describe the local system to which the Proposed Project relates. Include all relevant information about substations, transmission lines, and distribution circuits.</p> <p>Provide a schematic diagram and map of the existing system.</p> <p>Provide a schematic diagram that illustrates the system as it would be configured with the implementation of the Proposed Project.</p> <p>Describe the whole of the Proposed Project. Is it an upgrade, a new line, new substations, etc.?</p> <p>Describe how the Proposed Project fits into the regional system. Does it create a loop for reliability, etc.?</p> <p>Describe all reasonably foreseeable future phases or other reasonably foreseeable consequences of the Proposed Project.</p> <p>Provide the capacity increase in megawatts (MW). If the Proposed Project does not increase capacity, state that.</p> <p>Provide geographic information system (GIS) (or equivalent) data layers for the Proposed Project preliminary engineering, including estimated locations of all physical components of the Proposed Project, as well as those related to construction.</p>	<p>Section 3.2 Existing System</p> <p>Figure 3-2: North Lake Tahoe Transmission System Schematic Figure 3-3: Existing North Lake Tahoe Transmission System Map</p> <p>Figure 3-2: North Lake Tahoe Transmission System Schematic</p> <p>Section 3.3 Project Objectives Section 3.4 Proposed Project</p> <p>Section 3.3 Project Objectives</p> <p>Section 3.4 Proposed Project</p> <p>Section 3.3 Project Objectives Chapter 2 – Project Purpose and Need The project increases MW capacity from 88 megavolt-amperes (MVA) to 114 MVA.</p> <p>A CD containing the relevant GIS data for the project has been submitted as part of this PEA package.</p>
<p>3.4 Proposed Project</p>		

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.5 Project Components 3.5.1 Transmission Line</p>	<p>Describe what type of line exists and what type of line is proposed (e.g., single-circuit, double-circuit, upgrade 69 kV to 115 kV).</p> <p>Identify the length of the upgraded alignment, the new alignment, etc.</p> <p>Describe whether construction would require one-for-one pole replacement, new poles, steel poles, etc.?</p> <p>Describe what would occur to other lines and utilities that may be collocated on the poles to be replaced (e.g., distribution, communication, etc.).</p> <p>Provide information for each pole/tower that would be installed and for each pole/tower that would be removed.</p> <p>Provide a unique identification number to match GIS database information.</p>	<p>Section 3.2 Existing System Section 3.5 Project Components Section 3.5.0 Transmission Lines</p> <p>Section 3.5.0 Transmission Lines Table 3-1: Transmission Line Summary</p> <p>Section 3.5.0 Transmission Lines</p> <p>Section 3.5.0 Transmission Lines</p> <p>Section 3.5.0 Transmission Lines</p> <p>Section 3.5.0 Transmission Lines Attachment 3-B: Transmission Pole Summary</p> <p>A CD containing the relevant GIS data, which includes unique identification numbers for poles, has been submitted as part of this PEA package.</p>
<p>3.5.2 Poles/Towers</p>	<p>Provide a structural diagram and, if available, photos of existing structure. Preliminary diagram or “typical” drawings and, if possible, photos of proposed structure. Also provide a written description of the most common types of structures and their use (e.g., tangent poles would be used when the run of poles continues in a straight line, etc.). Describe if the pole/tower design meets raptor safety requirements.</p> <p>Provide the type of pole (e.g., wood, steel, etc.) or tower (e.g., self-supporting, lattice, etc.).</p>	<p>Section 3.5.0 Transmission Lines Attachment 3-C: Transmission Pole Typical Drawings Photographs and visual simulations of the existing and proposed structures have been included in Section 4.2 Aesthetics.</p> <p>Section 3.5.0 Transmission Lines</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.5.2 Poles/Towers (cont.)</p>	<p>Identify typical total pole lengths, the approximate length to be embedded, and the approximate length that would be above ground surface; for towers, identify the approximate height above ground surface and approximate base footprint area.</p>	<p>Section 3.5.0 Transmission Lines Section 3.7.6 Transmission Line Construction Methods</p>
	<p>Describe any specialty poles or towers; note where they would be used (e.g., angle structures, heavy angle lattice towers, stub guys, etc.); make sure to note if any guying would likely be required across a road.</p>	<p>Section 3.5.0 Transmission Lines</p>
	<p>If the Proposed Project includes pole-for-pole replacement, describe the approximate location of where the new poles would be installed relative to the existing alignment.</p>	<p>Section 3.5.0 Transmission Lines</p>
<p>3.5.3 Conductor/Cable 3.5.3.1 Above-Ground Installation</p>	<p>Describe any special pole types (e.g., poles that require foundations, transition towers, switch towers, microwave towers, etc.) and any special features.</p>	<p>Section 3.5.0 Transmission Lines</p>
	<p>Describe the type of line to be installed on the poles/tower (e.g. single-circuit with distribution, double circuit, etc.).</p>	<p>Section 3.5.0 Transmission Lines Table 3-1: Transmission Line Summary</p>
	<p>Describe the number of conductors required to be installed on the poles or tower and the number on each side including applicable engineering design standards.</p>	<p>Section 3.5.0 Transmission Lines Infrastructure Attachment 3-B: Transmission Pole Summary Attachment 3-C: Transmission Pole Typical Drawings</p>
<p>3.5.3.1 Above-Ground Installation</p>	<p>Provide the size and type of conductor (e.g., aluminum conductor, steel reinforced, non-specular, etc.) and insulator configuration.</p>	<p>Section 3.5.0 Transmission Lines</p>
	<p>Provide the approximate distance from the ground to the lowest conductor and the approximate distance between the conductors (i.e., both horizontally and vertically). Provide specific information at highways, rivers, or special crossings.</p>	<p>Section 3.5.0 Transmission Lines</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.5.3 Conductor/Cable 3.5.3.1 Above-Ground Installation (cont.)</p>	<p>Provide the approximate span lengths between poles or towers, note where different if distribution is present or not if relevant.</p> <p>Determine whether other infrastructure would likely be collocated with the conductor (e.g., fiber optics, etc.); if so, provide conduit diameter of other infrastructure.</p>	<p>Section 3.5.0 Transmission Lines</p> <p>Section 3.5.0 Transmission Lines</p>
<p>3.5.3.2 Below Ground Installation</p>	<p>Describe the type of line to be installed (e.g., single circuit cross-linked polyethylene-insulated solid-dielectric, copper-conductor cables).</p> <p>Describe the type of casing the cable would be installed in (e.g., concrete-encased duct bank system); provide the dimensions of the casing.</p> <p>Provide an engineering ‘typical’ drawing of the duct bank and describe what types of infrastructure would likely be installed within the duct bank (e.g., transmission, fiber optics, etc.).</p>	<p>3.5.1 Substations 3.7.6 Transmission Line Construction Methods Figure 3-5: Proposed Typical Underground Distribution Duct Bank Figure 3-6: Proposed 14.4-kV Typical Riser</p> <p>3.5.1 Substations 3.7.6 Transmission Line Construction Methods</p> <p>3.5.1 Substations 3.7.6 Transmission Line Construction Methods Figure 3-5: Proposed Typical Underground Distribution Duct Bank Figure 3-6: Proposed 14.4-kV Typical Riser Figure 3-7: Proposed Typical Underground Splice Vault</p>
<p>3.5.4 Substations</p>	<p>Provide “typical” plan and profile views of the proposed substation and the existing substation if applicable.</p>	<p>Attachment 3-D: Substation Plot Plans and Elevation Drawings</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.5.4 Substations (cont.)</p>	<p>Describe the types of equipment that would be temporarily or permanently installed and provide details as to what the function/use of said equipment would be. Include information such as, but not limited to: mobile substations, transformers, capacitors, and new lighting.</p> <p>Provide the approximate or “typical” dimensions (width and height) of new structures including engineering and design standards that apply.</p> <p>Describe the extent of the Proposed Project. Would it occur within the existing fence line, existing property line or would either need to be expanded?</p> <p>Describe the electrical need area served by the distribution substation.</p>	<p>Section 3.5.1 Substations Table 3-3: Substation Equipment Details</p> <p>Section 3.5.1 Substations Attachment 3-D: Substation Plot Plans and Elevation Drawings</p> <p>Section 3.5.1 Substations</p> <p>Section 3.2 Existing System Section 3.3 Project Objectives</p>
<p>3.6 Right-of-Way Requirements</p>	<p>Describe the ROW location, ownership, and width. Would the existing ROW be used or would new ROW be required?</p> <p>If a new ROW is required, describe how it would be acquired and approximately how much land would be required (length and width).</p> <p>List the properties likely to require acquisition.</p>	<p>Section 3.6 Right-of-Way Requirements Section 3.6.0 Temporary Section 3.6.1 Permanent Table 3-4: Temporary ROW Requirements</p> <p>Section 3.6 Right-of-Way Requirements Table 3-4: Temporary ROW Requirements</p> <p>Refer to the Permit to Construct Application</p>
<p>3.7 Construction 3.7.1 For All Projects 3.7.1.1 Staging Areas</p>	<p>Where would the main staging area(s) likely be located?</p>	<p>Section 3.7.0 Staging Areas Figure 3-1: Project Location Map Attachment 3-A: Detailed Route Map</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.7 Construction 3.7.1 For All Projects 3.7.1.1 Staging Areas (cont.)</p>	<p>Approximately how large would the main staging area(s) be?</p>	<p>Section 3.7.0 Staging Areas Figure 3-1: Project Location Map Attachment 3-A: Detailed Route Maps Table 3-5: Staging Area Summary</p>
	<p>Describe any site preparation required, if known, or generally describe what might be required (i.e., vegetation removal, new access road, installation of rock base, etc.).</p>	<p>Section 3.7.0 Staging Areas Table 3-5: Staging Area Summary Table 3-6: Temporary Workspace Requirements Table 3-7: New Spur Road Summary</p>
	<p>Describe what the staging area would be used for (i.e., material and equipment storage, field office, reporting location for workers, parking area for vehicles and equipment, etc.).</p>	<p>Section 3.7.0 Staging Areas Table 3-5: Staging Area Summary</p>
	<p>Describe how the staging area would be secured; would a fence be installed? If so, describe the type and extent of the fencing.</p>	<p>Section 3.7.0 Staging Areas</p>
	<p>Describe how power to the site would be provided if required (i.e., tap into existing distribution, use of diesel generators, etc.).</p>	<p>Section 3.7.0 Staging Areas</p>
	<p>Describe any grading activities and/or slope stabilization issues.</p>	<p>Section 3.7.0 Staging Areas</p>
<p>3.7.1.2 Work Areas</p>	<p>Describe known work areas that may be required for specific construction activities (i.e., pole assembly, hill side construction, etc.).</p>	<p>Section 3.7.1 Work Areas</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.7.1.2 Work Areas (cont.)</p>	<p>For each known work area, provide the area required (include length and width) and describe the types of activities that would be performed.</p>	<p>Section 3.7.1 Work Areas Table 3-6: Temporary Workspace Requirements Attachment 3-A: Detailed Route Maps</p>
	<p>Identify the approximate location of known work areas in the GIS database.</p>	<p>A CD containing the relevant GIS data, which includes the approximate location of known work areas, has been submitted as part of this PEA package.</p>
<p>3.7.1.3 Access Roads and/or Spur Roads</p>	<p>Describe how the work areas would likely be accessed (e.g., construction vehicles, walk-in, helicopter, etc.).</p>	<p>Section 3.7.1 Work Areas Section 3.7.2 Access and Spur Roads</p>
	<p>If any site preparation is likely required, generally describe what and how it would be accomplished.</p>	<p>Section 3.7.1 Work Areas Section 3.7.6 Transmission Line Construction Methods</p>
	<p>Describe any grading activities and/or slope stabilization issues.</p>	<p>Section 3.7.1 Work Areas Section 3.7.5 Erosion and Sediment Control and Pollution Prevention</p>
	<p>Based on the information provided, describe how the site would be restored.</p>	<p>Section 3.7.7 Cleanup and Post-Construction Restoration</p>
	<p>Describe the types of roads that would be used and/or would need to be created to implement the Proposed Project. Road types may include, but are not limited to: new permanent road; new temporary road; existing road that would have permanent improvements; existing road that would have temporary improvements; existing paved road; existing dirt/gravel road; and overland access.</p>	<p>Section 3.7.2 Access and Spur Roads Table 3-7: New Spur Road Summary Table 3-8: Access Road Construction Equipment Attachment 3-A: Detailed Route Maps</p>
<p>For road types that require preparation, describe the methods and equipment that would be used.</p>		<p>Section 3.7.2 Access and Spur Roads Table 3-8: Access Road Construction Equipment</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.7.1.3 Access Roads and/or Spur Roads (cont.)</p>	<p>Identify approximate location of all access roads (by type) in the GIS database.</p> <p>Describe any grading activities and/or slope stabilization issues.</p> <p>Identify which proposed poles/towers would be removed and/or installed using a helicopter.</p> <p>If different types of helicopters are to be used, describe each type (e.g., light, heavy, or sky crane) and what activities they would be used for.</p>	<p>A CD containing the relevant GIS data for the project, which includes the approximate location of all access roads identified by type, has been submitted as part of this PEA package.</p> <p>Section 3.7.2 Access and Spur Roads</p> <p>Section 3.7.3 Helicopter Access</p> <p>Section 3.7.3 Helicopter Access</p>
<p>3.7.1.4 Helicopter Access</p>	<p>Provide information as to where the helicopters would be staged, where they would refuel, and where they would land within the Proposed Project site.</p> <p>Describe any Best Management Practices (BMPs) that would be employed to avoid impacts caused by use of helicopters, for example: air quality and noise considerations.</p> <p>Describe flight paths, payloads, hours of operations for known locations, and work types.</p> <p>Describe the types of vegetation clearing that may be required (e.g., tree removal, brush removal, flammable fuels removal) and why (e.g., to provide access, etc.).</p>	<p>Section 3.7.3 Helicopter Access Table 3-5: Staging Area Summary</p> <p>Section 3.7.3 Helicopter Access Section 3.10 Applicant-Proposed Measures</p> <p>Section 3.7.3 Helicopter Access</p> <p>Section 3.7.4 Vegetation Clearing</p>
<p>3.7.1.5 Vegetation Clearance</p>	<p>Identify the preliminary location and provide an approximate area of disturbance in the GIS database for each type of vegetation removal.</p>	<p>Section 3.8 Operation and Maintenance</p> <p>A CD containing the relevant GIS data for the project, which includes the area of vegetation removal and disturbance, has been submitted as part of this PEA package.</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.7.1.5 Vegetation Clearance (cont.)</p>	<p>Describe how each type of vegetation removal would be accomplished.</p> <p>For removal of trees, distinguish between tree trimming as required under GO-95 and tree removal.</p> <p>Describe the types and approximate number and size of trees that may need to be removed.</p> <p>Describe the type of equipment typically used.</p>	<p>Section 3.7.4 Vegetation Clearing</p> <p>Section 3.7.4 Vegetation Clearing</p> <p>Section 3.7.4 Vegetation Clearing</p> <p>Section 3.7.4 Vegetation Clearing</p> <p>Table 3-12: Typical Major Construction Equipment</p>
<p>3.7.1.6 Erosion and Sediment Control and Pollution Prevention during Construction</p>	<p>Describe the areas of soil disturbance including estimated total areas and associated terrain type and slope. List all known permits required. For project sites of less than one acre, outline the BMPs that would be implemented to manage surface runoff. Things to consider include, but are not limited to: Erosion and sedimentation BMPs, vegetation removal and restoration, and/or hazardous waste, and spill prevention plans.</p> <p>Describe any grading activities and/or slope stabilization issues.</p> <p>Describe how construction waste (i.e., refuse, spoils, trash, oil, fuels, poles, pole structures, etc.) would be disposed.</p> <p>Describe how cleanup and post-construction restoration would be performed (i.e., personnel, equipment, and methods). Things to consider, but are not limited to, restoration of natural drainage patterns, wetlands, vegetation, and other disturbed areas (i.e., staging areas, access roads, etc.).</p>	<p>Section 3.9 Required Permits and Authorizations</p> <p>Table 3-14: Required Permits and Authorizations</p> <p>Section 3.10 Applicant-Proposed Measures</p> <p>Table 3-15: Applicant-Proposed Measures</p> <p>Chapter 4.6 Geology, Soils, and Seismicity</p> <p>Table 4.6-1: Geology of North Lake Tahoe</p> <p>Section 3.7.5 Erosion and Sediment Control and Pollution Prevention</p> <p>Table 3-15: Applicant-Proposed Measures</p> <p>Section 3.7.7 Cleanup and Post-Construction Restoration</p>
<p>3.7.1.7 Cleanup and Post-Construction Restoration</p>	<p>Describe how cleanup and post-construction restoration would be performed (i.e., personnel, equipment, and methods). Things to consider, but are not limited to, restoration of natural drainage patterns, wetlands, vegetation, and other disturbed areas (i.e., staging areas, access roads, etc.).</p>	<p>Section 3.7.7 Cleanup and Post-Construction Restoration</p> <p>Table 3-15: Applicant-Proposed Measures</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.7.2 Transmission Line Construction (Above Ground) 3.7.2.1 Pull and Tension Sites</p>	<p>Provide the general or average distance between pull and tension sites.</p>	<p>Section 3.7.6 Transmission Line Construction Methods</p>
	<p>Provide the area of pull and tension sites including the estimated length and width.</p>	<p>Section 3.7.6 Transmission Line Construction Methods</p>
<p>3.7.2.2 Pole Installation and Removal</p>	<p>According to the preliminary plan, identify the number of pull and tension sites that would be required, and their locations. Provide the location information in GIS.</p>	<p>Section 3.7.6 Transmission Line Construction Methods Attachment 3-A: Detailed Route Maps A CD containing the relevant GIS data for the project has been submitted as part of this PEA package.</p>
	<p>Describe the type of equipment that would be required at these sites.</p>	<p>Section 3.7.6 Transmission Line Construction Methods Table 3-12: Typical Major Construction Equipment</p>
<p>3.7.2.2 Pole Installation and Removal</p>	<p>If conductor is being replaced, describe how it would be removed from the site.</p>	<p>Section 3.7.6 Transmission Line Construction Methods</p>
	<p>Describe how the construction crews and their equipment would be transported to and from the pole site locations. Provide vehicle type, number of vehicles, estimated number of trips, and hours of operation.</p>	<p>Section 3.7.2 Access and Spur Roads Section 3.7.3 Helicopter Access Section 3.7.6 Transmission Line Construction Methods Table 3-8: Access Road Construction Equipment Table 3-12: Typical Major Construction Equipment</p>
<p>3.7.2.2 Pole Installation and Removal</p>	<p>Describe the process of removing the poles and foundations.</p>	<p>Section 3.7.6 Transmission Line Construction Methods</p>
	<p>Describe what happens to the holes that the poles were in (i.e., reused or backfilled)?</p>	<p>Section 3.7.6 Transmission Line Construction Methods</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.7.2.2 Pole Installation and Removal (cont.)</p>	<p>If the holes are to be backfilled, what type of fill would be used and where would it come from?</p>	<p>Backfilling pole holes is not applicable to this project</p>
	<p>Describe any surface restoration that would occur at the pole sites.</p>	<p>Section 3.7.7 Cleanup and Post-Construction Restoration</p>
	<p>Describe how the poles would be removed from the sites.</p>	<p>Section 3.7.6 Transmission Line Construction Methods</p>
	<p>If topping is required to remove a portion of an existing transmission pole that would now only carry distribution lines, describe the methodology to access and remove the tops of these poles. Describe any special methods that would be required to top poles that may be difficult to access, etc.</p>	<p>Section 3.5.0 Transmission Lines Section 3.7.6 Transmission Line Construction Methods Section 3.7.2 Access and Spur Roads Section 3.7.3 Helicopter Access Section 3.7.6 Transmission Line Construction Methods</p>
	<p>Describe the process of how the new poles/towers would be installed; specifically identify any special construction methods (e.g., helicopter installation) for specific locations or for different types of poles/towers.</p>	<p>Section 3.7.6 Transmission Line Construction Methods Section 3.7.3 Helicopter Access</p>
	<p>Describe the types of equipment and their use as related to pole/tower installation.</p>	<p>Section 3.7.6 Transmission Line Construction Methods Table 3-12: Typical Major Construction Equipment</p>
	<p>Describe the actions taken to maintain a safe work environment during construction (e.g., covering of holes/excavation pits, etc.).</p>	<p>Section 3.7.6 Transmission Line Construction Methods</p>
	<p>Describe what would be done with soil that is removed from a hole/foundation site.</p>	<p>Section 3.7.6 Transmission Line Construction Methods</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.7.2.2 Pole Installation and Removal (cont.)</p>	<p>For any foundations required, provide a description of the construction method(s), approximate average depth and diameter of excavation, approximate volume of soil to be excavated, approximate volume of concrete or other backfill required, etc.</p>	<p>Section 3.7.6 Transmission Line Construction Methods</p>
	<p>Describe briefly how poles/towers and associated hardware are assembled.</p>	<p>Section 3.7.6 Transmission Line Construction Methods</p>
	<p>Describe how the poles/towers and associated hardware would be delivered to the site; would they be assembled off-site and brought in or assembled on site?</p>	<p>Section 3.7.6 Transmission Line Construction Methods</p>
<p>3.7.2.3 Conductor/Cable Installation</p>	<p>Provide the following information about pole/tower installation and associated disturbance area estimates; pole diameter for each pole type (e.g., wood, self-supporting steel, lattice, etc.), base dimensions for each pole type, auger hole depth for each pole type, permanent footprint per pole/tower, number of poles/towers by pole type, average work area around poles/towers by pole type (e.g., for old pole removal and new pole installation), and total permanent footprint for poles/towers.</p>	<p>Section 3.7.6 Transmission Line Construction Methods Attachment 3-B: Transmission Pole Summary Attachment 3-C: Transmission Pole Typical Drawings</p>
	<p>Provide a process-based description of how new conductor/cable would be installed and how old conductor/cable would be removed, if applicable.</p>	<p>Section 3.7.6 Transmission Line Construction Methods Figure 3-8: Conductor Installation</p>
	<p>Generally describe the conductor/cable splicing process.</p>	<p>Section 3.7.6 Transmission Line Construction Methods</p>
	<p>If vaults are required, provide their dimensions and approximate location/spacing along the alignment.</p>	<p>3.5.1 Substations 3.7.6 Transmission Line Construction Methods</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.7.2.3 Conductor/Cable Installation (cont.)</p>	<p>Describe in what areas conductor/cable stringing/installation activities would occur.</p> <p>Describe any safety precautions or areas where special methodology would be required (e.g., crossing roadways, stream crossing, etc.).</p>	<p>Section 3.7.6 Transmission Line Construction Methods Attachment 3-A: Detailed Route Maps</p> <p>Section 3.7.6 Transmission Line Construction Methods</p>
<p>3.7.3 Transmission Line Construction (Below Ground) 3.7.3.1 Trenching</p>	<p>Describe the approximate dimensions of the trench (e.g., depth, width).</p> <p>Describe the methodology of making the trench (e.g., saw cutter to cut the pavement, backhoe to remove, etc.).</p> <p>Provide the total approximate cubic yardage of material to be removed from the trench, the amount to be used as backfill and the amount to subsequently be removed/disposed of off-site.</p> <p>Provide off-site disposal location, if known, or describe possible option(s).</p> <p>If engineered fill would be used as backfill, provide information as to the type of engineered backfill and the amount that would be typically used (e.g., top two feet would be filled with thermal-select backfill).</p> <p>Describe if dewatering would be anticipated, if so, how the trench would be dewatered, what the anticipated flows of the water are, whether there would be treatment, and how the water would be disposed.</p>	<p>3.5.1 Substations 3.7.6 Transmission Line Construction Methods</p> <p>3.5.1 Substations 3.7.6 Transmission Line Construction Methods</p> <p>3.5.1 Substations 3.7.6 Transmission Line Construction Methods</p> <p>3.5.1 Substations 3.7.6 Transmission Line Construction Methods</p> <p>3.5.1 Substations 3.7.6 Transmission Line Construction Methods</p> <p>3.5.1 Substations 3.7.6 Transmission Line Construction Methods</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.7.3 Transmission Line Construction (Below Ground) 3.7.3.1 Trenching (cont.)</p>	<p>Describe the process for testing excavated soil or groundwater for the presence of pre-existing environmental contaminants that could be exposed as a result of trenching operations.</p> <p>If pre-existing hazardous waste was encountered, describe the process of removal and disposal.</p> <p>Describe any standard BMPs that would be implemented.</p>	<p>3.7.6 Transmission Line Construction Methods</p> <p>3.5.1 Substations 3.7.6 Transmission Line Construction Methods</p> <p>3.7.6 Transmission Line Construction Methods 3.7.5 Erosion and Sediment Control and Pollution Prevention</p>
<p>3.7.3.2 Trenchless Techniques: Microtunnel, Bore and Jack, Horizontal Directional Drilling</p>	<p>Provide the approximate location of the sending and receiving pits.</p> <p>Provide the length, width and depth of the sending and receiving pits.</p> <p>Describe the methodology of excavating and shoring the pits.</p> <p>Describe the methodology of the trenchless technique.</p> <p>Provide the total cubic yardage of material to be removed from the pits, the amount to be used as backfill and the amount to subsequently be removed/disposed of off-site.</p> <p>Describe the process for safe handling of drilling mud and bore lubricants.</p> <p>Describe the process for detecting and avoiding “fracturing-out” during horizontal directional drilling operations.</p> <p>Describe the process for avoiding contact between drilling mud/lubricants and stream beds.</p>	<p>No trenchless construction is planned for the project.</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.7.3.2 Trenchless Techniques: Microtunnel, Bore and Jack, Horizontal Directional Drilling (cont.)</p>	<p>If engineered fill would be used as backfill, provide information as to the type of engineered backfill and the amount that would be typically used (e.g., top two feet would be filled with thermal-select backfill).</p>	<p>No trenchless construction is planned for the project.</p>
	<p>If dewatering is anticipated, describe how the pit would be dewatered, what the anticipated flows of the water are, whether there would be treatment, and how the water would be disposed.</p>	
	<p>Describe the process for testing excavated soil or groundwater for the presence of pre-existing environmental contaminants.</p>	
	<p>If a pre-existing hazardous waste was encountered, describe the process of removal and disposal.</p>	
	<p>Describe any grading activities and/or slope stabilization issues.</p>	
	<p>Describe any standard BMPs that would be implemented.</p>	
	<p>3.7.4 Substation Construction</p>	
<p>Provide a conceptual landscape plan in consultation with the municipality in which the substation is located.</p>		<p>No additional landscaping is planned for the project substations</p>
<p>Describe any grading activities and/or slope stabilization issues.</p>		<p>Section 3.7.8 Substation Construction Methods</p>
<p>Describe possible relocation of commercial or residential property, if any.</p>		<p>No relocation of existing structures is planned for the Project</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.7.5 Construction Workforce and Equipment</p>	<p>Provide the estimated number of construction crew members.</p>	<p>Section 3.7.9 Construction Workforce and Equipment Table 3-11: Peak Construction Personnel</p>
	<p>Describe the crew deployment, whether crews would work concurrently (i.e., multiple crews at different sites), if they would be phased, etc.</p>	<p>3.7.5 Erosion and Sediment Control and Pollution Prevention</p>
	<p>Describe the different types of activities to be undertaken during construction, the number of crew members for each activity (i.e., trenching, grading, etc.), and the number and types of equipment expected to be used for said activity. Include a written description of the activity.</p>	<p>Section 3.7.6 Transmission Line Construction Methods Section 3.7.9 Construction Workforce and Equipment Table 3-11: Peak Construction Personnel</p>
<p>3.7.6 Construction Schedule</p>	<p>Provide a list of the types of equipment expected to be used during construction of the Proposed Project as well as a brief description of the use of the equipment.</p>	<p>Section 3.7.6 Transmission Line Construction Methods Section 3.7.9 Construction Workforce and Equipment Table 3-12: Typical Major Construction Equipment Table 3-8: Access Road Construction Equipment</p>
	<p>Provide a preliminary project construction schedule; include contingencies for weather, wildlife closure periods, etc.</p>	<p>Section 3.7.10 Construction Schedule Table 3-13: Proposed Construction Schedule</p>
<p>3.8 Operation and Maintenance</p>	<p>Describe the general system monitoring and control (i.e., use of standard monitoring and protection equipment, use of circuit breakers and other line relay protection equipment, etc.).</p>	<p>Section 3.8 Operation and Maintenance Section 3.8.0 Transmission Lines Section 3.8.1 Substations and Switching Stations</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.8 Operation and Maintenance (cont.)</p>	<p>Describe the general maintenance program of the Proposed Project including timing of inspections (i.e., monthly, every July, as needed), type of inspection (i.e., aerial inspection, ground inspection), and a description of how the inspection would be implemented. Things to consider: who/how many crew members, how would they access the site (i.e., walk to site, vehicle, all terrain vehicle), would new access be required, would restoration be required, etc.).</p> <p>If additional full time staff would be required for operation and/or maintenance, provide the number of workers and for what purpose they are required.</p>	<p>Section 3.8 Operation and Maintenance Section 3.8.0 Transmission Lines Section 3.8.1 Substations and Switching Stations</p>
<p>3.9 Applicant-Proposed Measures</p>	<p>If there are measures that the Applicant would propose to be part of the Proposed Project, include those measures and reference plans or implementation descriptions.</p>	<p>Section 3.10 Applicant-Proposed Measures Table 3-15: Applicant-Proposed Measures</p>
<p>Chapter 4: Environmental Setting</p>		
	<p>For each resource area discussion within the PEA, include a description of the physical environment in the vicinity of the Proposed Project (e.g., topography, land use patterns, biological environment, etc.), including the local environment (site-specific) and regional environment.</p>	<p>Section X.X.2 under each resource area provides a discussion of both the physical environment in the vicinity of the project and the regulatory environment.</p>
	<p>For each resource area discussion within the PEA, include a description of the regulatory environment/context (federal, state, and local).</p>	<p>Section X.X.2 under each resource area provides a discussion of both the physical environment in the vicinity of the project and the regulatory environment.</p>
	<p>Limit detailed descriptions to those resource areas which may be subject to a potentially significant impact.</p>	<p>Chapter 5 – Detailed Discussion of Significant Impacts</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
Chapter 5: Environmental Impact Assessment Summary		
5.1 Aesthetics	Provide visual simulations of prominent public view locations, including scenic highways, to demonstrate the views before and after project implementation. Additional simulations are highly recommended.	Figure 4.1-5: through Figure 4.1-16: Visual Simulations Attachment 4.1-B: Photos of the Project Area in Winter Conditions Attachment 4.1-C: Visual Simulation in Winter Conditions - Mount Watson Road (VP 14)
5.2 Agriculture Resources	Identify the types of agricultural resources affected.	Section 4.2.2 Impacts
	Provide supporting calculations/spreadsheets/technical reports that support emission estimates in the PEA.	Attachment 4.3-A: Air Quality Calculations
	Provide documentation of the location and types of sensitive receptors that could be impacted by the Project (e.g., schools, hospitals, houses, etc.). Critical distances to receptors are dependent on type of construction activity.	Section 4.3.2 Existing Conditions Section 4.3.3 Impacts
5.3 Air Quality	Identify Proposed Project GHG emissions.	Section 4.3.4 Impacts Table 4.3-7: GHG Emissions from Construction
	Quantify GHG emissions from a business as usual snapshot. That is, what the GHG emissions will be from the Proposed Project if no mitigations were used.	Section 4.3.4 Impacts
	Quantify GHG emission reductions from every APM that is implemented. The quantifications will be itemized and placed in tabular format.	Project emissions were modeled based on GHG APMs that reflect a business-as-usual scenario, so quantification of reductions by APM was not conducted.
	Identify the net emissions of the Proposed Project after mitigation have been applied.	Section 4.3.4 Impacts

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>5.3 Air Quality (cont.)</p>	<p>Calculate and quantify GHG emissions (CO₂ equivalent) for the Proposed Project, including construction and operation.</p>	<p>Section 4.3.4 Impacts</p>
	<p>Calculate and quantify the GHG reduction based on reduction measures proposed for the Proposed Project.</p>	<p>Project emissions were modeled based on GHG APMs that reflect a business-as-usual scenario, so quantification of reductions by APM was not conducted.</p>
	<p>Propose APMs to implement and follow to maximize GHG reductions. If sufficient, CPUC will accept them without adding further mitigation measures.</p>	<p>Section 4.3.5 Applicant-Proposed Measures</p>
	<p>Discuss programs already in place to reduce GHG emissions on a system-wide level. This includes the Applicant's voluntary compliance with the U.S. Environmental Protection Agency (EPA) SF₆ reduction program, reductions from energy efficiency, demand response, long-term procurement plan, et.al.</p>	<p>Section 4.3.3 Existing Conditions Section 4.3.5 Applicant-Proposed Measures</p>
	<p>Ensure that the assessment of air quality impacts is consistent with PEA Sections 3.7.5 and 3.7.6, as well as with the PEA's analysis of impacts during construction, including traffic and all other emissions.</p>	<p>Attachment 4.3-A: Air Quality Calculations</p>
	<p>Provide a copy of the Wetland Delineation and supporting documentation (i.e., data sheets). If verified, provide supporting documentation. Additionally, GIS data of the wetland features should be provided as well.</p>	<p>Wetland Delineations will be prepared prior to permitting for portions of the project impacting wetland features.</p>
<p>5.4 Biological Resources</p>	<p>Provide a copy of special-status surveys for wildlife, botanical and aquatic species, as applicable. Any GIS data documenting locations of special-status species should be provided.</p>	<p>Attachment 4.4-A: Biological Resources Technical Report Attachment 4.4-B: Interim Protocol-Level Survey Reports A CD containing the relevant GIS data for the project has been submitted as part of this PEA package.</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>5.5 Cultural Resources</p>	<p>Cultural Resources Report documenting a cultural resources investigation of the Proposed Project. This report should include a literature search, pedestrian survey, and Native American consultation.</p> <p>Provide a copy of the records found in the literature search.</p> <p>Provide a copy of all letters and documentation of Native American consultation.</p>	<p>Attachment 4.5-A: Cultural Resources Technical Report</p> <p>The cultural records found during the literature search have been submitted under separate cover due to their confidential nature.</p> <p>The (former) Washoe THPO, Lynda Shoshone, discussed the project details with Far Western on behalf of SPPCo. No specific information was offered about the study corridor. Far Western will provide a copy of the draft technical report to the current Washoe THPO, Darrel Cruz, for review and comment.</p>
<p>5.6 Geology, Soils, and Seismic Potential</p>	<p>Provide a copy of the geotechnical investigation if completed, including known and potential geologic hazards such as ground shaking, subsidence, liquefaction, etc.</p>	<p>A geotechnical investigation has not yet been completed. However, a detailed discussion of geologic hazards is included in Section 4.6 Geology, Soils, and Seismicity.</p>
<p>5.7 Hazards and Hazardous Materials</p>	<p>Include an Environmental Data Resources report.</p> <p>Include a Hazardous Substance Control and Emergency Response Plan, if required.</p> <p>Include a Health and Safety Plan, if required.</p> <p>Describe the Worker Environmental Awareness Program.</p>	<p>Section 4.7.3 Impacts Table 4.7-1: Hazardous Materials Sites</p> <p>The plan has not yet been prepared for the project.</p> <p>The plan has not yet been prepared for the project.</p> <p>Section 4.7.4 Applicant-Proposed Measures</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
5.7 Hazards and Hazardous Materials (cont.)	Describe which chemicals would be used during construction and operation of the Proposed Project. For example, fuels for construction, naphthalene to treat wood poles before installation, etc.	Table 4.7-2: Hazardous Materials Typically Used for Construction Section 4.7.3 Impacts
5.8 Hydrology and Water Quality	Describe impacts to groundwater quality including increased runoff due to construction of impermeable surfaces, etc. Describe impacts to surface water quality including the potential for accelerated soil erosion, downstream sedimentation, and reduced surface water quality.	Section 4.8.3 Impacts Section 4.8.3 Impacts
5.9 Land Use and Planning	Provide GIS data of all parcels within 300 feet of the Proposed Project with the following data: APN number, mailing address, and parcel’s physical address.	The property owner information has been submitted under separate cover due to its confidential nature.
5.10 Mineral Resources	Data needs already specified under Chapter 3 would generally meet the data needs for this resource area.	Not Applicable
5.11 Noise	Provide long-term noise estimates for operational noise (e.g., corona discharge noise, and station sources such as substations, etc.).	Section 4.11.4 Impacts
5.12 Population and Housing	Data needs already specified under Chapter 3 would generally meet the data needs for this resource area.	Not Applicable
5.13 Public Services	Data needs already specified under Chapter 3 would generally meet the data needs for this resource area.	Not Applicable
5.14 Recreation	Data needs already specified under Chapter 3 would generally meet the data needs for this resource area.	Not Applicable
5.15 Transportation and Traffic	Discuss traffic impacts resulting from construction of the Proposed Project including ongoing maintenance operations.	Section 4.15.3 Impacts

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>5.15 Transportation and Traffic (cont.)</p>	<p>Provide a preliminary description of the traffic management plan that would be implemented during construction of the Proposed Project.</p>	<p>A specific Traffic Management Plan is not proposed for this project because traffic impacts and road closures are expected to be minimal. Encroachment permits from local and state jurisdictional agencies will provide guidance on required traffic management measures.</p>
<p>5.16 Utilities and Services Systems</p>	<p>Describe how treated wood poles would be disposed of after removal, if applicable.</p>	<p>Section 4.15.3 Impacts</p>
<p>5.17 Cumulative Analysis</p>	<p>Provide a list of projects (i.e., past, present, and reasonably foreseeable future projects) within the Proposed Project area that the applicant is involved in.</p> <p>Provide a list of projects that have the potential to be proximate in space and time to the Proposed Project. Agencies to be contacted include, but are not limited to, the local planning agency, Caltrans, etc.</p>	<p>The applicant is not involved in any other projects within 5 miles.</p> <p>Table 4.17-1: Planned and Proposed Projects Within 5 Miles</p>
<p>5.18 Growth-Inducing Impacts, If Significant</p>	<p>Provide information on the Proposed Project’s growth-inducing impacts, if any.</p> <p>Provide information on any economic or population growth in the surrounding environment that will, directly or indirectly, result from the Proposed Project.</p> <p>Provide information on any increase in population that could further tax existing community service facilities (e.g., schools, hospitals, fire, police, etc.), that will directly or indirectly result from the Proposed Project.</p> <p>Provide information on any obstacles to population growth that the Proposed Project would remove.</p>	<p>The project will not result in any significant growth-inducing impacts.</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
5.18 Growth-Inducing Impacts, If Significant (cont.)	Describe any other activities, directly or indirectly encouraged or facilitated by the Proposed Project, that would cause population growth that could significantly affect the environment, either individually or cumulatively.	The project will not result in any significant growth-inducing impacts.
Chapter 6: Detailed Discussion of Significant Impacts		
6.1 Mitigation Measures Proposed to Minimize Significant Effects	Discuss each mitigation measure and the basis for selecting a particular mitigation measure should be stated.	Table 3-15: Applicant-Proposed Measures
6.2 Description of Project Alternatives and Impact Analysis	Provide a summary of the alternatives considered that would meet most of the objectives of the Proposed Project and an explanation as to why they were not chosen as the Proposed Project.	Section 5.2 Description of Project Alternatives and Impact Analysis Table 5-1: Alternatives Considered Table 5-2: Transmission Corridor Alternative Constraints Comparison Section 5.2.4 System Alternatives Section 5.2.5 Substation Alternatives Section 5.2.6 Transmission Line Alternatives
	Alternatives considered and described by the Applicant should include, as appropriate, system or facility alternatives, route alternatives, route variations, and alternative locations.	Section 5.2.4 System Alternatives Section 5.2.5 Substation Alternatives Section 5.2.6 Transmission Line Alternatives Figure 5-1: Transmission Line Alternatives Overview Map Figure 5-2: Transmission Line Alternatives Detail Maps 1 through 3
	Include a description of a “No Project Alternative” should be included.	Section 5.2.3 No Project Alternative

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>6.2 Description of Project Alternatives and Impact Analysis (cont.)</p>	<p>If significant environmental effects are assessed, the discussion of alternatives shall include alternatives capable of substantially reducing or eliminating any said significant environmental effects, even if the alternative(s) substantially impede the attainment of the Proposed Project objectives and are more costly.</p>	<p>Section 5.2.4 System Alternatives</p>
<p>6.3 Growth-Inducing Impacts</p>	<p>Discuss if the Proposed Project would foster economic or population growth, either directly or indirectly, in the surrounding environment.</p> <p>Discuss if the Proposed Project would cause an increase in population that could further tax existing community services (e.g., schools, hospitals, fire, police, etc.).</p> <p>Discuss if the Proposed Project would remove obstacles to population growth.</p> <p>Discuss if the Proposed Project would encourage and facilitate other activities that would cause population growth that could significantly affect the environment, either individually or cumulatively.</p>	<p>Section 4.12.3 Impacts Section 5.3 Growth-Inducing Impacts</p> <p>Section 4.13.3 Impacts Section 5.3 Growth-Inducing Impacts</p> <p>Section 5.3 Growth-Inducing Impacts</p> <p>Section 5.3 Growth-Inducing Impacts</p>
<p>6.4 Suggested Applicant-Proposed Measures to address GHG Emissions</p>	<p>Include a menu of suggested APMs that applicants can consider to address GHG emissions. Suggested APMs include, but are not limited to:</p> <ol style="list-style-type: none"> 1. If suitable park-and-ride facilities are available in the Project vicinity, construction workers will be encouraged to carpool to the job site to the extent feasible. The ability to develop an effective carpool program for the Proposed Project would depend upon the proximity of carpool 	<p>Section 4.3.5 Applicant-Proposed Measures A selection of these measures was included to reduce GHG emissions.</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>6.4 Suggested Applicant-Proposed Measures to address GHG Emissions (cont.)</p>	<p>facilities to the job site, the geographical commute departure points of construction workers, and the extent to which carpooling would not adversely affect worker show-up time and the Project’s construction schedule.</p> <p>2. To the extent feasible, unnecessary construction vehicle and idling time will be minimized. The ability to limit construction vehicle idling time is dependent upon the sequence of construction activities and when and where vehicles are needed or staged. Certain vehicles, such as large diesel powered vehicles, have extended warm-up times following start-up that limit their availability for use following startup. Where such diesel powered vehicles are required for repetitive construction tasks, these vehicles may require more idling time. The Proposed Project will apply a “common sense” approach to vehicle use; if a vehicle is not required for use immediately or continuously for construction activities, its engine will be shut off. Construction foremen will include briefings to crews on vehicle use as part of pre-construction conferences. Those briefings will include discussion of a “common sense” approach to vehicle use.</p> <p>3. Use low-emission construction equipment. Maintain construction equipment per manufacturing specifications and use low-emission equipment described here. All offroad construction diesel engines not registered under the California Air Resources Board (CARB) Statewide Portable Equipment Registration Program shall meet at a minimum the Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, Sec. 2423(b)(1).</p>	<p>Section 4.3.5 Applicant-Proposed Measures A selection of these measures was included to reduce GHG emissions.</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>6.4 Suggested Applicant-Proposed Measures to address GHG Emissions (cont.)</p>	<ol style="list-style-type: none"> 4. Diesel Anti-Idling: In July 2004, the CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling. 5. Alternative Fuels: CARB would develop regulations to require the use of one to four percent biodiesel displacement of California diesel fuel. 6. Alternative Fuels: Ethanol, increased use of ethanol fuel 7. Green Buildings Initiative. 8. Facility wide energy efficiency audit. 9. Complete GHG emissions audit. The audit will include a review of the GHG emitted from those facilities (substations), including carbon dioxide, methane, CFC, and HFC compounds (SF6). 10. There is an EPA approved SF6 emissions protocol (http://www.epa.gov/electricpowersf6/resources/index.html#three). 11. SF6 program wide inventory. For substations, keep inventory of leakage rates. 12. Increase replacement of breakers once leakage rates exceed one percent within 30 days of detection. 13. Increased investment in current programs that can be verified as being in addition to what the utility is already doing. 14. The SF₆ Emission Reduction Partnership for the Electric Power Systems was launched in 1999 and currently includes 57 electric utilities and local governments across the U.S. 	<p>Section 4.3.5 Applicant-Proposed Measures A selection of these measures was included to reduce GHG emissions.</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>6.4 Suggested Applicant-Proposed Measures to address GHG Emissions (cont.)</p>	<p>15. SF6 is used by this industry in a variety of applications, including that of dielectric insulating material in electrical transmission and distribution equipment, such as circuit breakers. Electric power systems that join the Partnership must, within 18 months, establish an emission reduction goal reflecting technically and economically feasible opportunities within their company. They also agree to, within the constraints of economic and technical feasibility, estimate their emissions of SF6, establish a strategy for replacing older, leakier pieces of equipment, implement SF6 recycling, establish and apply proper handling techniques, and report annual emissions to the EPA. The EPA works as a clearinghouse for technical information, works to obtain commitments from all electric power system operators and will be sponsoring an international conference in 2000 on SF6 emission reductions.</p> <p>16. Quantify what comes into the system and track programmatically SF6.</p> <p>17. Applicant can propose other GHG reducing mitigations.</p>	<p>Section 4.3.5 Applicant-Proposed Measures A selection of these measures was included to reduce GHG emissions.</p>
<p>Chapter 7: Other Process-Related Data Needs</p>		
<p>Noticing</p>	<p>Include an excel spreadsheet that identifies all parcels within 300 feet of any Proposed Project component with the following data: APN number, owner mailing address, and parcels physical address.</p>	<p>The property owner information has been submitted under separate cover due to its confidential nature.</p>