# CHAPTER 1 PEA Summary

In accordance with California Public Utilities Commission (CPUC) General Order 131-D, Southern California Edison Company (SCE) is submitting this Proponent's Environmental Assessment (PEA) as part of its application for a Permit to Construct the Banducci 66/12 kilovolt (kV) Substation and associated distribution, subtransmission, and telecommunication facilities (Proposed Project) to add capacity to meet forecasted electrical demands, maintain system reliability, resolve anticipated service delivery voltage problems, and enhance operational flexibility in the unincorporated Cummings Valley area of Kern County.

#### **1.1 Project Components**

The Proposed Project consists of the following primary components:

- Construction of a new Banducci 66/12 kV Substation. Banducci Substation would be an unstaffed, automated, 56 megavolt-ampere (MVA), low-profile substation with a potential capacity of 112 MVA at final build out. The proposed 66/12 kV distribution substation would be located on an approximately 6.3 acre parcel in the unincorporated Cummings Valley area of Kern County.
- 2. Construction of two new 66 kV subtransmission line segments that would loop the existing Correction-Cummings-Kern River 1 66 kV Subtransmission Line: one that would enter and one that would exit the proposed Banducci Substation creating the new Banducci-Kern River 1 66 kV Subtransmission Line and the new Banducci-Correction-Cummings 66 kV Subtransmission Line.
- 3. Construction of three new underground 12 kV distribution getaways.
- 4. Installation of telecommunications facilities to connect the proposed Banducci Substation to SCE's existing telecommunications system.

## **1.2 Project Location**

The Proposed Project is located at the south east corner of the intersection of Pelliser Road and unimproved Dale Road in the unincorporated Cummings Valley area of the southern central portion Kern County, California (see Figures 1.1: Proposed Project Location and 1.2: Electrical Needs and Substation Study Area).

## **1.3 Project Need and Alternatives**

The Proposed Project is needed to address reliability and operational flexibility issues in the Electrical Needs Area (ENA). Customers in the ENA are currently served from Cummings Substation by three existing 12 kV distribution circuits. This substation is interconnected to the 66 kV subtransmission system with Monolith 66/12 kV Substation to the east and Correction 66/12 kV Substation, which is a customer dedicated substation, to the west. Cummings Substation currently serves the ENA's approximately 7,250 metered customers. Anticipated load growth in this area is expected to exceed the capacity of Cummings Substation beyond 2016. Therefore, the Proposed Project is needed to increase distribution substation and circuit capacity to serve increased electrical demand in the ENA. In addition, the Proposed Project is needed to address reliability and operational flexibility issues in the ENA.

Although several locations and subtransmission route alternatives and system alternatives were considered, the Proposed Project described in this PEA was ultimately selected because it is technically feasible, and would result in the fewest potential environmental impacts while still meeting the project objectives.

## **1.4 Agency Coordination**

Prior to and in conjunction with the drafting of this PEA, SCE has reached out to a number of Federal, State and local government entities to discuss various aspects of the Proposed Project and its potential environmental impacts. SCE's coordination with various agencies in support of this PEA did not disclose significant areas of controversy or any major issues that must be resolved regarding the Proposed Project. A summary of these efforts is provided in the following subsections.

## **1.4.1 Native American Heritage Commission**

SCE requested a search of the Sacred Lands File maintained by the Native American Heritage Commission (NAHC) on June 22, 2011. The Sacred Lands File search revealed that no Native American cultural resources were identified within the Proposed Project Area. The NAHC suggested that SCE consult with 11 Native American tribes and communities and Native American individuals who hold special interest in the Proposed Project Study Area and provided a list of those individuals (Singleton, 2011).

SCE sent a certified letter on July 9, 2011 to the 11 Tribal entities and individuals on the NAHC list. The letter described the Proposed Project, the cultural resource survey and background research that had been completed at that time. Recipients were requested to reply with information they were able to share regarding any Native American resources that may be affected by the Proposed Project. To date, only the Tejon Indian Tribe has responded. The Tribe had no conflict with the Proposed Project but asked to be notified should any sites or artifacts be discovered during the Proposed Project (Morgan, 2011).

Additional follow-up letters and correspondence were sent on April 4, 2012, to the same 11 tribal entities and individuals describing updated information regarding the cultural surveys performed since the initial letter. The Tübatulabal Tribe (Begay 2012) and the Tejon Indian Tribe (Morgan 2012) responded that they had no conflict with the Proposed Project. In June 2012, phone calls were made to those Tribal entities and individuals that had not responded. Three additional comments were received via phone.

# 1.4.2 U.S. Fish and Wildlife Service

SCE engaged in informal discussions with the U.S. Fish and Wildlife Service (USFWS) regarding the potential for impacts to California condors in the Proposed Project area. On June 22, 2011, SCE met with the USFWS and discussed the low likelihood of the Proposed Project causing take of condors. USFWS stated condors occur in the mountains close to the Proposed Project, but are not likely to use the Proposed Project area due to a lack of suitable habitat. Therefore, USFWS opined that the Proposed Project construction activities would not likely

cause result in a "take," and additional actions to avoid impacts to condors (such as line marking or undergrounding of facilities) would not be necessary.

## 1.4.3 Kern County

SCE communicated with representatives of Kern County while still in the early planning stages of the Proposed Project. Initial briefings to provide information about the need for upgrades to the electric infrastructure serving that the region were conducted in September 2010. Following those meetings, SCE conducted regular briefings with representatives of the County to provide additional information about the Proposed Project, the estimated timeline for construction of the Proposed Project, and an overview of the CPUC review and approval process. SCE also solicited input from the County regarding SCE's outreach and education efforts for the Proposed Project. In discussing potential substation sites, SCE communicated its preference for constructing the new substation in the middle of the valley, midway between and closest to the two community service districts, where the majority of customers are located, in order to minimize the amount of new 66 kV subtransmission lines and poles that would be needed to connect this substation to the existing electrical system. The County understood and supported this assessment.

### 1.4.4 Stallion Springs and Bear Valley Springs Community Services Districts

The Stallion Springs and Bear Valley Springs Community Services Districts (CSDs) are districts established to provide services to the residential communities located on opposite sides of the Cummings Valley, on either side of the Cummings Valley, location where the new Proposed Project located.is proposed. In March 2011, SCE contacted representatives from both of these CSDs to provide preliminary project information about the need for a new substation in the Cummings Valley to serve customers in the area. Following that initial meeting, SCE conducted regular briefings with representatives from both CSDs to provide additional information about the Proposed Project, the estimated timeline for construction of the Proposed Project, and an overview of the CPUC review and approval process. SCE also communicated its preferred substation location.

#### 1.4.5 Tehachapi-Cummings County Water District

SCE communicated with representatives of the Tehachapi-Cummings County Water District (Water District) while still in the early planning stages of the Proposed Project. An initial briefing to provide the Water District information about the need for upgrades to the electric infrastructure serving the region was conducted in March 2011. Following that meeting, SCE conducted subsequent briefings with Water District representatives to provide updates and additional information about the Proposed Project. This information included the estimated timeline for construction of the Proposed Project, and an overview of the CPUC's review and approval process. In discussing potential substation sites, SCE communicated its preference for constructing the new substation in the middle of Cummings Valley, midway between and closest to the two community service districts, where the majority of customers are located, in order to minimize the amount of new 66 kV subtransmission lines and poles that would be needed to connect this the proposed Banducci Substation to the existing electrical system. The Water District did not express any concerns with either SCE's proposed preferred or alternate substation locations.

#### **1.4.6** City of Tehachapi

SCE provided an initial briefing and follow-up briefing to representatives from the City of Tehachapi about the Proposed Project in September 2010 and May 2011, respectively. Tehachapi is the only incorporated city in the project area. Though it is located far from Cummings Valley (approximately 10 miles to the east), portions of the proposed telecommunication routes for the Proposed Project pass through the City limits, so SCE wanted to make sure the City was apprised about the Proposed Project. The City has expressed no concerns with the Proposed Project.



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#### Legend

- Proposed Banducci Substation Existing SCE Substation
- Banducci Electrical Needs Area — Existing Subtransmission Lines
- Freeway / Major Highway
- Substation Study Area CA Correctional Institution  $\langle \rangle$ ----- Major Road / Minor Highway



FIGURE 1.2: ELECTRICAL NEEDS AREA AND SUBSTATION STUDY AREA

**PROPOSED BANDUCCI SUBSTATION PROJECT** 





## **1.5 PEA Contents**

This PEA, which was prepared in accordance with the Working Draft Proponent's Environmental Assessment (PEA) Checklist for Transmission Line and Substation Projects, November 2008 (PEA Checklist) issued by the CPUC, is divided into six sections:

Chapter 1 – PEA Summary provides an overview of the components of this PEA document.

Chapter 2 – Project Purpose and Need outlines the Project's primary objectives.

Chapter 3 – Project Description includes specifics regarding the Project location, the existing system, the Project components, permanent and temporary land/ROW requirements, construction methods, construction schedule, anticipated operations and maintenance activities, federal and local permits that will be obtained for 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 resource areas identified by the CEQA Guidelines.

The CPUC's PEA Checklist indicates that the environmental setting section can be provided separately or combined with the impacts and applicant proposed measures (APMs). SCE has elected to combine the environmental settings section, impacts, and APMs for each resource area in Chapter 4.

Chapter 5 – Detailed Discussion of Significant Impacts identifies the potentially significant impacts resulting from the Proposed Project and justifications for the APMs that would be implemented to reduce these impacts, evaluates alternatives to the Proposed Project, describes the justification for the preferred alternative, and discusses the Proposed Project's potential to induce growth in the area.

Chapter 6 – Other Process-Related Data Needs requires that SCE provide property owner information. SCE provided this confidential information to the CPUC under separate cover.

Throughout the PEA, SCE has addressed all items requested in the CPUC's PEA Checklist. To facilitate CPUC's confirmation of this required information and review of the PEA, Table 1-1: PEA Checklist Key has been included at the end of this section.

## **1.6 PEA Conclusions**

The PEA analyzes the potential environmental impacts associated with construction, operation, and maintenance of the Proposed Project. SCE did not identify applicant proposed measures (APMs) for the following resource areas which would experience no or less than significant impacts as a result of the construction, operation, or maintenance of the Proposed Project:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Geology, Soils and Seismic Potential
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems

APMs have been provided for the following resource areas to avoid or reduce the environmental impact levels to less than significant:

• Biological Resources - SCE has proposed either pre-construction surveys and/or construction monitoring (where appropriate) for nesting birds/raptors, burrowing owl,

Tehachapi slender salamander, and sensitive habitats to avoid potential impacts (APMs BIO-1 through BIO-5).

- Cultural Resources Paleontological Resources Treatment Plan. A Paleontological Resources Treatment Plan shall be developed for construction within areas that have been identified as having a high sensitivity for paleontological resources or in areas where construction activities would exceed 10 feet in depth. The Paleontological Resources Treatment Plan would be prepared by a professional paleontologist in accordance with the recommendations of the Society of Vertebrate Paleontology (APM PA-1).
- Hazards and Hazardous Materials A Fire Management Plan would be developed by SCE prior to the start of construction (APM HAZ-1).

Each of the resource areas and the APMs are discussed in detail in their respective sections in Chapter 4 of this PEA.

SCE's investigations in support of this PEA did not disclose significant areas of controversy or any major issues that must be resolved regarding the Proposed Project.

## 1.7 Public Outreach

Public outreach and communications are critical elements of SCE's planning process. SCE identified and reached out to key stakeholders in the Proposed Project area to solicit input and provide information about this infrastructure Proposed Project. SCE began outreach early in the project-planning process and intends to continue it throughout the construction process.

In particular, SCE reached out to several community-based organizations, including Smart Growth Tehachapi Valleys (SGTV) and Cummings Valley Protective Association (CVPA), which are community organizations that monitor development and land use activity in the Cummings Valley. Both organizations expressed support for the proposed improvement to the electrical system in the area, although they raised concerns with the potential siting of a new substation in the middle of the valley. One member expressed a preference for the new substation to be located at the outskirts of the valley and was agreeable to the need for more poles and wires crossing the valley to connect the new substation to existing 66 kV subtransmission lines. SCE intends to keep these groups informed about the Proposed Project.

Additionally, SCE reached out to Grimmway Farms, a major agricultural producer with farming operations in the Cummings Valley near the potential substation sites reviewed by SCE. Following several discussions with Grimmway representatives, during which SCE provided information about the proposed and alternative sites for the Banducci Substation, Grimmway Farms representatives indicated that they did not have any concerns with either of the studied substation locations.

SCE's public outreach efforts have not disclosed significant areas of controversy or any major issues that must be resolved regarding the Proposed Project.

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
Chapter 1: PEA Sur	nmary	
	Include major conclusions of the PEA.	Section 1.6 PEA Conclusions
	List any areas of controversy.	Section 1.4 Agency Coordination, Section 1.6 PEA Conclusions, and Section 1.7 Public Outreach
	Identify any major issues that must be resolved, including the choice among reasonably feasible alternatives and mitigation measures, if any.	Section 1.3 Project Need and Alternatives, Section 1.4 Agency Coordination, Section 1.6 PEA Conclusions, and Section 1.7 Public Outreach
	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
		Public outreach efforts have not resulted in any major issues with the Proposed Project

Table 1.1 PEA C	Checklist Key
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Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
	Identify any major issues that must be resolved, including the choice among reasonably feasible alternatives and mitigation measures, if any.	Section 1.3 Project Need and Alternatives
Chapter 2: Project I	Purpose and Need	<u> </u>
2.1 Overview	Include an analysis of Project objectives and purpose and need that is sufficiently detailed so that the Commission can independently evaluate the Project need and benefits in order to accurately consider them in light of the potential environmental impacts.	Section 2.1 Overview and Section 2.2 Project Objectives
	Explain the objective(s) and/or purpose and need for implementing the Project.	Section 2.1 Overview
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 2.2 Project Objectives
Chapter 3: Project I	Description	
3.1 Project Location	Identify geographical location: County, City (provide Proposed Project location map[s]).	Section 3.1 Project Location
	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.).	Section 3.1 Project Location
	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.	Section 3.1 Project Location and Section 3.6 Right-of-Way Requirements and Land Use Rights
3.2 Existing System	Describe the local system to which the Proposed Project relates. Include all relevant information about substations, transmission lines, and distribution circuits.	Section 3.2 Existing System
	Provide a schematic diagram and map of the existing system.	Figure 3.3 Existing 12 kV Distribution System
	Provide a schematic diagram that illustrates the system as it would be configured with the implementation of the Proposed Project.	Figure 3.4 Banducci 66 kV / 12 kV Substation Electrical Needs Area System Configuration
3.3 Project Objectives	Can refer to Chapter 2, Purpose and Need, if already described there.	Section 3.3Proposed Project Objectives and Chapter 2 Purpose and Need
	Describe the whole of the Proposed Project. Is it an upgrade, a	Section 3.4 Proposed

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
	new line, new substations, etc.?	Project
3.4 Proposed Project	Describe how the Proposed Project fits into the regional system. Does it create a loop for reliability, etc.?	Section 3.4 Proposed Project
	Describe all reasonably foreseeable future phases or other reasonably foreseeable consequences of the Proposed Project.	Section 3.4 Proposed Project
	Provide the capacity increase in megawatts (MW). If the Proposed Project does not increase capacity, state that.	Section 3.4 Proposed Project
	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.	Provided under separate, confidential cover
3.5 Project Components	Describe what type of line exists and what type of line is proposed (e.g., single-circuit, double-circuit, upgrade 69 kV to	Section 3.5 Project Components
3.5.1 Transmission Line	115 kV).	Section 3.5.1 Subtransmission Line
	Identify the length of the upgraded alignment, the new alignment, etc.	Section 3.5 Project Components
		Section 3.5.1 Subtransmission Line
	Describe whether construction would require one-for-one pole replacement, new poles, steel poles, etc.?	Section 3.5 Project Components
	Describe what would occur to other lines and utilities that may be collocated on the poles to be replaced (e.g., distribution,	Section 3.5 Project Components
	communication, etc.).	Section 3.5.1 Subtransmission Line
3.5.2 Poles/Towers	Provide information for each pole/tower that would be installed and for each pole/tower that would be removed.	Section 3.5 Project Components
		Section 3.5.2 Poles/Towers
	Provide a unique identification number to match GIS database information.	Provided under separate, confidential cover
	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.	Figure 3.6 Subtransmission Structures and Section 3.5.2 Poles/Towers
	Provide the type of pole (e.g., wood, steel, etc.) or tower (e.g.,	Section 3.5.1.1 66 kV Subtransmission Line

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
	self-supporting, lattice, etc.).	Route Description
	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.	Section 3.5.2 Poles/Towers
	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.	Section 3.5.2 Poles/Towers
	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.	Section 3.5.2 Poles/Towers
	Describe any special pole types (e.g., poles that require foundations, transition towers, switch towers, microwave towers, etc.) and any special features.	Section 3.5.2 Poles/Towers
3.5.3 Conductor/Cable	Describe the type of line to be installed on the poles/tower (e.g. single-circuit with distribution, double circuit, etc.).	Section 3.5.3 Conductor/Cable
3.5.3.1 Above- Ground Installation	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.	Section 3.5.3 Conductor/Cable
	Provide the size and type of conductor (e.g., aluminum conductor, steel reinforced, non-specular, etc.) and insulator configuration.	Section 3.5.3 Conductor/Cable
	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.	Section 3.5.3 Conductor/Cable
	Provide the approximate span lengths between poles or towers, note where different if distribution is present or not if relevant.	Section 3.5.3 Conductor/Cable
	Determine whether other infrastructure would likely be collocated with the conductor (e.g., fiber optics, etc.); if so, provide conduit diameter of other infrastructure.	Section 3.5.3 Conductor/Cable
3.5.3.2 Below Ground Installation	Describe the type of line to be installed (e.g., single circuit crosslinked polyethylene-insulated solid-dielectric, copper- conductor cables).	Section 3.5.3.2 Below- Ground Installation
	Describe the type of casing the cable would be installed in (e.g., concrete-encased duct bank system); provide the dimensions of the casing.	Figure 3.7 Typical Distribution Vault, Figure 3.8 Typical Duct Bank and Section 3.5.3.2 Below-Ground Installation
	Provide an engineering 'typical' drawing of the duct bank and describe what types of infrastructure would likely be installed	Figure 3.7 Typical Distribution Vault,

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
	within the duct bank (e.g., transmission, fiber optics, etc.).	Figure 3.8 Typical Duct Bank and Section 3.5.3.2 Below-Ground Installation
3.5.4 Substations	Provide "typical" plan and profile views of the proposed substation and the existing substation if applicable.	Figure 3.1 Proposed Banducci Substation Layout and Plan and Section 3.5.3 Substations
	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.	Section 3.5.4 Substations
	Provide the approximate or "typical" dimensions (width and height) of new structures including engineering and design standards that apply.	Section 3.5.4 Substations
	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?	Section 3.5.4 Substations
	Describe the electrical need area served by the distribution substation.	Section 3.2 Existing System and Section 3.5.4.12 Electrical Need Area of the Proposed Substation
3.6 Right-of-Way Requirements	Describe the ROW location, ownership, and width. Would the existing ROW be used or would new ROW be required?	Section 3.6 Right-of- Way Requirements and Land Use Rights
	If a new ROW is required, describe how it would be acquired and approximately how much land would be required (length and width).	Section 3.6 Right-of- Way Requirements and Land Use Rights
	List the properties likely to require acquisition.	Provided under separate, confidential cover
3.7 Construction 3.7.1 For All	Where would the main staging area(s) likely be located?	Section 3.7.1.1 Staging Areas
Projects 3.7.1.1 Staging Areas	Approximately how large would the main staging area(s) be?	Section 3.7.1.1 Staging Areas
	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.).	Section 3.7 Construction
	Describe what the staging area would be used for (e.g., material and equipment storage, field office, reporting location for	Section 3.7 Construction

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
	workers, parking area for vehicles and equipment, etc.).	
	Describe how the staging area would be secured; would a fence be installed? If so, describe the type and extent of the fencing.	Section 3.7 Construction
	Describe how power to the site would be provided if required (e.g., tap into existing distribution, use of diesel generators, etc.).	Section 3.7 Construction
	Describe any grading activities and/or slope stabilization issues.	Section 3.7 Construction
3.7.1.2 Work Areas	Describe known work areas that may be required for specific construction activities (i.e., pole assembly, hill side construction, etc.).	Section 3.7.1.2 Work Areas
	For each known work area, provide the area required (include length and width) and describe the types of activities that would be performed.	Section 3.7.1.2 Work Areas
	Identify the approximate location of known work areas in the GIS database.	Provided under separate, confidential cover
	Describe how the work areas would likely be accessed (e.g., construction vehicles, walk-in, helicopter, etc.).	Section 3.5.2 Poles/Towers Section 3.7.1.2 Work Areas
	If any site preparation is likely required, generally describe what and how it would be accomplished.	Section 3.7 Construction
	Describe any grading activities and/or slope stabilization issues.	Section 3.7.1.2 Work Areas
	Based on the information provided, describe how the site would be restored.	Section 3.7.1.7 Cleanup and Post-Construction Restoration
3.7.1.3 Access Roads and/or Spur Roads	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.	3.7.1.3 Access Roads
	For road types that require preparation, describe the methods and equipment that would be used.	Section 3.7 Construction
	Identify approximate location of all access roads (by type) in the GIS database.	Provided under separate, confidential cover
	Describe any grading activities and/or slope stabilization issues. Section 2.7.1 Access Roads/Overland Access Routes	Section 3.7 Construction

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
3.7.1.4 Helicopter Access	Identify which proposed poles/towers would be removed and/or installed using a helicopter.	Not Applicable as stated in Section 3.7.1.4 Helicopter Access
	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.	Not Applicable as stated in Section 3.7.1.4 Helicopter Access
	Provide information as to where the helicopters would be staged, where they would refuel, and where they would land within the Proposed Project site.	Not Applicable as stated in Section 3.7.1.4 Helicopter Access
	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.	Not Applicable as stated in Section 3.7.1.4 Helicopter Access
	Describe flight paths, payloads, hours of operations for known locations, and work types.	Not Applicable as stated in Section 3.7.1.4 Helicopter Access
3.7.1.4 Vegetation Clearance	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.).	Section 3.7.1.4 Vegetation Clearance
	Identify the preliminary location and provide an approximate area of disturbance in the GIS database for each type of vegetation removal.	Provided under separate, confidential cover
	Describe how each type of vegetation removal would be accomplished.	Section 3.7.1.5 Vegetation Clearance
	For removal of trees, distinguish between tree trimming as required under GO-95 and tree removal.	Not Applicable
	Describe the types and approximate number and size of trees that may need to be removed.	Not Applicable
	Describe the type of equipment typically used.	Section 3.7.1.5 Vegetation Clearance
3.7.1.5 Erosion and Sediment Control and Pollution Prevention during Construction	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.	3.7.1.5 Erosion and Sediment Control and Pollution Prevention during Construction
	Describe any grading activities and/or slope stabilization issues.	Section 3.5.4.8 Substation Grading and

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
		Drainage
		Section 3.7.4 Substations
	Describe how construction waste (i.e., refuse, spoils, trash, oil, fuels, poles, pole structures, etc.) would be disposed.	Section 3.7.1.6 Reusable, Recyclable, and Waste Material Management
3.7.1.6 Cleanup and Post- Construction Restoration	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.).	Section 3.7.1.6 Cleanup and Post- Construction Restoration
3.7.2 Transmission Line Construction (Above Ground)	Provide the general or average distance between pull and tension sites.	Section 3.7.2 Subtransmission Line Construction (Above Ground)
	Provide the area of pull and tension sites including the estimated length and width.	Section 3.7.2 Subtransmission Line Construction (Above Ground)
3.7.2.1 Pull and Tension Sites	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.	Provided under separate, confidential cover
	Describe the type of equipment that would be required at these sites.	Section 3.7.2.1 Pull and Tension Sites
	If conductor is being replaced, describe how it would be removed	Section 3.7.2.1 Pull and Tension Sites
3.7.2.2 Pole Installation and Removal	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.	Section 3.7.2.2 Pole Installation and Removal
	Describe the process of removing the poles and foundations.	Section 3.7.2.2 Pole Installation and Removal
	Describe what happens to the holes that the poles were in (i.e., reused or backfilled)?	Section 3.7.2.2 Pole Installation and Removal
	If the holes are to be backfilled, what type of fill would be used and where would it come from?	Section 3.7.2.2 Pole Installation and Removal
	Describe any surface restoration that would occur at the pole sites.	Section 3.7.2.2 Pole Installation and Removal

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
	Describe how the poles would be removed from the sites.	Section 3.7.2.2 Pole Installation and Removal
	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.	Section 3.7.2.2 Pole Installation and Removal
	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.	Section 3.7.2.2 Pole Installation and Removal
	Describe the types of equipment and their use as related to pole/tower installation.	Section 3.7.2.2 Pole Installation and Removal
	Describe the actions taken to maintain a safe work environment during construction (e.g., covering of holes/excavation pits, etc.).	Section 3.7.2.2 Pole Installation and Removal
	Describe what would be done with soil that is removed from a hole/foundation site.	Section 3.7.2.2 Pole Installation and Removal
	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.	Section 3.7.2.2 Pole Installation and Removal
	Describe briefly how poles/towers and associated hardware are assembled.	Section 3.7.2.2 Pole Installation and Removal
	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?	Section 3.7.2.2 Pole Installation and Removal
	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.	Section 3.7.2.2 Pole Installation and Removal
3.7.2.3 Conductor/Cable Installation	Provide a process-based description of how new conductor/cable would be installed and how old conductor/cable would be removed, if applicable.	Section 3.7.2.3 Conductor/Cable Installation

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
	Generally describe the conductor/cable splicing process.	Section 3.7.2.3 Conductor/Cable Installation
	If vaults are required, provide their dimensions and approximate location/spacing along the alignment.	Section 3.7.2.3 Conductor/Cable Installation
	Describe in what areas conductor/cable stringing/installation activities would occur.	Section 3.7.2.3 Conductor/Cable Installation
	Describe any safety precautions or areas where special methodology would be required (e.g., crossing roadways, stream crossing, etc.).	Section 3.7 Construction
3.7.3 Transmission Line Construction (Below Ground)	Describe the approximate dimensions of the trench (e.g., depth, width).	Section 3.7.3 Subtransmission Line Construction (Below Ground)
	Describe the methodology of making the trench (e.g., saw cutter to cut the pavement, backhoe to remove, etc.).	Section 3.7.3 Subtransmission Line Construction (Below Ground)
3.7.3.1 Trenching	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.	No trenching for subtransmission is planned for the Proposed Project as stated in Section 3.7.3.1 Trenching
	Provide off-site disposal location, if known, or describe possible option(s).	Not applicable
	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).	Not applicable
	Describe if dewatering would be anticipated and, 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 of.	Not applicable
	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.	Not applicable
	If pre-existing hazardous waste was encountered, describe the process of removal and disposal.	Not applicable
	Describe any standard BMPs that would be implemented.	Not applicable

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
3.7.3.2 Trenchless Techniques: Microtunnel, Bore and Jack, Horizontal Directional Drilling	Provide the approximate location of the sending and receiving pits.	No trenchless construction is planned for the Proposed Project as stated in Section 3.7.3.2 Trenchless Techniques: Microtunnel, Bore and Jack, Horizontal Directional Drilling
	Provide the length, width and depth of the sending and receiving pits.	Not applicable
	Describe the methodology of excavating and shoring the pits.	Not applicable
	Describe the methodology of the trenchless technique.	Not applicable
	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.	Not applicable
	Describe the process for safe handling of drilling mud and bore lubricants.	Not applicable
	Describe the process for detecting and avoiding "fracturing- out" during horizontal directional drilling operations.	Not applicable
	Describe the process for avoiding contact between drilling mud/lubricants and streambeds.	Not applicable
	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).	Not applicable
	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 of.	Not applicable
	Describe the process for testing excavated soil or groundwater for the presence of pre-existing environmental contaminants.	Not applicable
	If a pre-existing hazardous waste was encountered, describe the process of removal and disposal.	Not applicable
	Describe any grading activities and/or slope stabilization issues.	Not applicable
	Describe any standard BMPs that would be implemented.	Not applicable
3.7.4 Substation Construction	Describe any earth-moving activities that would be required; what type of activity and, if applicable, estimate cubic yards of materials to be reused and/or removed from the site for both site grading and foundation excavation.	Section 3.7.4 Substation Construction

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
	Provide a conceptual landscape plan in consultation with the municipality in which the substation is located.	Section 3.7.4 Substation Construction
	Describe any grading activities and/or slope stabilization issues.	Section 3.7.4 Substation Construction
	Describe possible relocation of commercial or residential property, if any.	Not applicable
3.7.5 Construction Workforce and Equipment	Provide the estimated number of construction crew members.	Section 3.7.5 Construction Workforce and Equipment
	Describe the crew deployment, whether crews would work concurrently (i.e., multiple crews at different sites), if they would be phased, etc.	Section 3.7.5 Construction Workforce and Equipment
	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.	Section 3.7.5 Construction Workforce and Equipment
	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.	Section 3.7.5 Construction Workforce and Equipment
3.7.6 Construction Schedule	Provide a preliminary project construction schedule; include contingencies for weather, wildlife closure periods, etc.	Section 3.7.6 Construction Schedule
3.8 Operation and Maintenance	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.).	Section 3.8 Operation and Maintenance
	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.).	Section 3.8 Operation and Maintenance
	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.	Section 3.8 Operation and Maintenance
3.9 Applicant- Proposed Measures	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.	Section 3.9 Applicant Proposed Measures
Chapter 4: Environ	mental Setting	I

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
	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.	Chapter 4
	For each resource area discussion within the PEA, include a description of the regulatory environment/context (federal, state, and local).	Chapter 4
	Limit detailed descriptions to those resource areas which may be subject to a potentially significant impact.	See Chapter 4
Chapter 5: Environ	mental 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.	Section 4.1 Aesthetics
5.2 Agriculture Resources	Identify the types of agricultural resources affected.	Section 4.2 Agriculture and Forestry Resources
5.3 Air Quality	Provide supporting calculations/ spreadsheets/technical reports that support emission estimates in the PEA.	Appendix C Air Quality Technical Report and 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 Air Quality
	Identify Proposed Project GHG emissions.	Appendix C Air Quality Technical Report and Calculations and Section 4.7 Greenhouse Gas Emissions
	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.	Appendix C Air Quality Technical Report and Calculations and Section 4.7 Greenhouse Gas Emissions
	Quantify GHG emission reductions from every APM that is implemented. The quantifications will be itemized and placed in tabular format.	Appendix C Air Quality Technical Report and Calculations and Section 4.7 Greenhouse Gas Emissions

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
	Identify the net emissions of the Proposed Project after mitigation has been applied.	Appendix C Air Quality Technical Report and Calculations and Section 4.7 Greenhouse Gas Emissions
	Calculate and quantify GHG emissions (CO2 equivalent) for the Proposed Project, including construction and operation.	Appendix C Air Quality Technical Report and Calculations and Section 4.7 Greenhouse Gas Emissions
	Calculate and quantify the GHG reduction based on reduction measures proposed for the Proposed Project.	Appendix C Air Quality Technical Report and Calculations and Section 4.7 Greenhouse Gas Emissions
	Propose APMs to implement and follow to maximize GHG reductions. If sufficient, CPUC will accept them without adding further mitigation measures.	See project components described in Chapter 3 Project Description and Section 4.7 Greenhouse Gas Emissions
	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, etc.	See project components described in Chapter 3 Project Description and Section 4.7 Greenhouse Gas Emissions
	Ensure that the assessment of air quality impacts is consistent with PEA Section 3.7.5, as well as with the PEA's analysis of impacts during construction, including traffic and all other emissions.	Section 4.3 Air Quality
5.4 Biological Resources	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.	As referenced in Section 4.4 Biological Resources
	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.	Appendix D Biological Resources Technical Report. GIS provided under separate, confidential cover.
5.5 Cultural Resources	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.	As referenced in Section 4.5 Cultural Resources, provided under separate, confidential cover.

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
	Provide a copy of the records found in the literature search.	Provided under separate, confidential cover.
	Provide a copy of all letters and documentation of Native American consultation.	Appendix F Agency Consultation
5.6 Geology, Soils, and Seismic Potential	Provide a copy of the geotechnical investigation if completed, including known and potential geologic hazards such as ground shaking, subsidence, liquefaction, etc.	4.6 Geology and Soils
5.7 Hazards and Hazardous	Include an Environmental Data Resources report.	Provided under separate cover
Materials	Include a Hazardous Substance Control and Emergency Response Plan, if required.	Not applicable
	Include a Health and Safety Plan, if required.	Not applicable
	Describe the Worker Environmental Awareness Program.	Section 3.10.3 Worker Environmental Awareness Training and Section 4.8 Hazards and Hazardous Materials
	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.	Chapter 3 Project Description Section 4.8 Hazards and Hazardous Materials
5.8 Hydrology and Water	Describe impacts to groundwater quality including increased runoff due to construction of impermeable surfaces, etc.	4.9 Hydrology and Water
	Describe impacts to surface water quality including the potential for accelerated soil erosion, downstream sedimentation, and reduced surface water quality.	4.9 Hydrology and Water
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.	4.10 Land Use and Planning
5.10 Mineral Resources	Data needs already specified under Chapter 3 would generally meet the data needs for this resource area.	4.11 Mineral Resources
5.11 Noise	Provide long-term noise estimates for operational noise (e.g., corona discharge noise, and station sources such as substations, etc.).	4.12 Noise
5.12 Population and Housing	Data needs already specified under Chapter 3 would generally meet the data needs for this resource area.	4.13 Population and Housing
5.13 Public Services	Data needs already specified under Chapter 3 would generally meet the data needs for this resource area.	4.14 Public Services

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
5.14 Recreation	Data needs already specified under Chapter 3 would generally meet the data needs for this resource area.	4.15 Recreation
5.15 Transportation and Traffic	Discuss traffic impacts resulting from construction of the Proposed Project including ongoing maintenance operations.	4.16 Transportation and Traffic
	Provide a preliminary description of the traffic management plan that would be implemented during construction of the Proposed Project.	4.16 Transportation and Traffic
5.16 Utilities and Services Systems	Describe how treated wood poles would be disposed of after removal, if applicable.	4.17 Utilities and Services Systems
5.17 Cumulative Analysis	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.	Section 4.18 Cumulative Analysis
	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.	Section 4.18 Cumulative Analysis
5.18 Growth- Inducing Impacts, If Significant	Provide information on the Proposed Project's growth- inducing impacts, if any.	Section 4.19 Growth- Inducing Impacts and Section 5.3 Growth- Inducing Impacts
	Provide information on any economic or population growth in the surrounding environment that will, directly or indirectly, result from the Proposed Project.	Section 4.19 Growth- Inducing Impacts and Section 5.3 Growth- Inducing Impacts
	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.	Section 4.19 Growth- Inducing Impacts and Section 5.3 Growth- Inducing Impacts
	Provide information on any obstacles to population growth that the Proposed Project would remove.	Section 4.19 Growth- Inducing Impacts and Section 5.3 Growth- Inducing Impacts
	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.	Section 4.19 Growth- Inducing Impacts and Section 5.3 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.	Section 5.1 Applicant Proposed Measures to Minimize Significant Effects

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
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
	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 Description of Project Alternatives and Impact Analysis
	A description of a "No Project Alternative" should be included.	Section 5.2 Description of Project Alternatives and Impact Analysis
	If significant environmental effects are assessed, the discussion of alternatives shall include alternatives capable of substantially reducing or eliminating any said significant environmental effects,	Section 5.2 Description of Project Alternatives and Impact Analysis
	even if the alternative(s) substantially impede the attainment of the Proposed Project objectives and are more costly.	
6.3 Growth- Inducing Impacts	Discuss if the Proposed Project would foster economic or population growth, either directly or indirectly, in the surrounding environment.	Section 5.3 Growth- Inducing Impacts
	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.).	Section 5.3 Growth- Inducing Impacts
	Discuss if the Proposed Project would remove obstacles to population growth.	Section 5.3 Growth- Inducing Impacts
	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.	Section 5.3 Growth- Inducing Impacts
6.4 Suggested Applicant-Proposed Measures to address GHG Emissions	Include a menu of suggested APMs that applicants can consider to address GHG emissions. Suggested APMs include, but are not limited to:	Section 5.4 Suggested Applicant Proposed Measures to Address
	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 facilities to the job site,	Greenhouse Gas Emissions

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
	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.	
	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.	
	3. Use low-emission construction equipment. Maintain construction equipment per manufacturing specifications and use low emission equipment described here. All off-road 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).	
	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).	

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
	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.	
	<ul> <li>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.</li> <li>16. Quantify what comes into the system and track programmatically SF6.</li> <li>17. Applicant can propose other GHG reducing mitigations.</li> </ul>	
Chapter 7: Other Pr	rocess-Related Data Needs	
Noticing	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.	Provided under separate, confidential cover as stated in Chapter 6: Other Process-Related Data Needs

## 1.8 References

Morgan, K. M. (2011). Letter Re: Proposed Banducci Substation Project. August 17, 2011.

Morgan, K. M. (2012). Letter Re: Proposed Banducci Substation Project. April 13, 2012. Singleton, D. (2011). Sacred Lands File Search and Native American Contacts List for the "Proposed Banducci Substation Project;" Located in Tehachapi, Kern County, California.