

TABLE OF CONTENTS

1.0 INTRODUCTION..... 1-1
1.1 PROJECT COMPONENTS 1-1
1.2 PROJECT LOCATION 1-1
1.3 PROJECT NEED AND ALTERNATIVES..... 1-1
1.4 AGENCY COORDINATION..... 1-2
 1.4.0 Bureau of Land Management..... 1-2
 1.4.1 U.S. Fish and Wildlife Service 1-2
 1.4.2 Native American Heritage Commission 1-2
1.5 PEA CONTENTS..... 1-3
1.6 PEA CONCLUSIONS 1-5
1.7 PUBLIC OUTREACH EFFORTS..... 1-6
 1.7.0 Regional Benefits..... 1-6
 1.7.2 Communication Activities 1-7
 1.7.3 Proposed Project Support..... 1-8
 1.7.4 Community Enhancement Program..... 1-8

LIST OF TABLES

Table 1-1: PEA Checklist Key..... 1-10

LIST OF ATTACHMENTS

- Attachment 1-A: Letters of Support
- Attachment 1-B: Stakeholder List

CHAPTER 1 – PEA SUMMARY

1.0 INTRODUCTION

In accordance with California Public Utilities Commission (CPUC) General Order 131-D, San Diego Gas & Electric Company (SDG&E) is submitting this Proponent's Environmental Assessment (PEA) as part of its application for a Permit to Construct the East County (ECO) Substation Project (Proposed Project).

1.1 PROJECT COMPONENTS

The Proposed Project is divided into the following five components:

- Construction of a 500/230/138 kilovolt (kV) East County (ECO) Substation
- Loop-in of the existing 500 kV Southwest Powerlink (SWPL) transmission line into the new ECO Substation, which will require installation of transmission structures outside of the fenced substation, but within the newly acquired SDG&E property
- Construction of a new, approximately 13.3-mile-long 138 kV transmission line from the ECO Substation to the rebuilt Boulevard Substation, including the placement of an optical ground wire to provide critical communication services and lightning protection
- Rebuild of the Boulevard Substation to operate at 138/69/12 kV on a new parcel adjacent to the existing substation to accommodate switch racks, air-insulated buses, transformers, circuit breakers, disconnect switches, communication equipment and protective relays
- Construction of a microwave communication relay system comprised of a new tower and control building at the ECO Substation, rebuild of the existing SDG&E Communication Facility at White Star, and the leasing of existing T1 lines from San Diego County

1.2 PROJECT LOCATION

The Proposed Project is located in the southeastern portion of San Diego County, California. It is situated approximately 0.5 mile north of the United States (U.S.)-Mexico border, 0.5 mile west of the Imperial County border, and 70 miles east of downtown San Diego.

1.3 PROJECT NEED AND ALTERNATIVES

The Proposed Project will interconnect the planned renewable wind energy generation in southeastern San Diego County and Mexico in accordance with the California Independent System Operator (CAISO) Open Access Transmission Tariff. The ultimate configuration of the ECO Substation has been designed to accommodate renewable generation beyond what is currently listed in the CAISO generator interconnection queue with a proposed interconnection point on the Imperial Valley - Miguel 500 kV transmission line. Additionally, the 138 kV line will improve the reliability of electric service to the communities of Bankhead Springs,

Boulevard, Jacumba, and Mazanita, as well as the Campo, La Posta, and Manzanita Indian Reservations, which experience relatively frequent outages.

Although various substation site alternatives, transmission route alternatives, and system alternatives were considered during the development of the Proposed Project, the Proposed Project was ultimately selected because it best meets all of the project objectives, will minimize environmental impacts and is more cost effective than the alternatives.

1.4 AGENCY COORDINATION

1.4.0 Bureau of Land Management

The Proposed Project will cross approximately 1.5 miles of land managed by the Bureau of Land Management (BLM) between approximate Mileposts 0.3 and 1.8. Therefore, SDG&E is required to obtain a Right-of-Way (ROW) Grant from the BLM for activities related to the Proposed Project on its land. SDG&E attended a formal meeting with BLM staff on July 10, 2008 to discuss the Proposed Project. During the meeting, the BLM staff disclosed that they prefer to prepare a joint environmental document with the CPUC. While the CPUC will evaluate the environmental impacts of the Proposed Project in accordance with California Environmental Quality Act (CEQA), the BLM will evaluate the Proposed Project in accordance with the National Environmental Policy Act. The BLM will also be responsible for Section 7 consultation under the federal Endangered Species Act for potential impacts to federally listed species and Section 106 consultation under the National Historic Preservation Act for potential impacts to cultural resources.

1.4.1 U.S. Fish and Wildlife Service

SDG&E has been engaged in informal discussions with the U.S. Fish and Wildlife Service (USFWS) regarding the potential for sensitive species in the Proposed Project area. On June 11, 2008, the Year 2008 45-Day Report for Quino Checkerspot Butterfly Surveys at the Proposed SDG&E Substation Project Site in Jacumba, California was submitted to the USFWS. Additionally, Jeffry Coward, Insignia Environmental Biologist, corresponded with Peter Sorenson, Wildlife Biologist from the Carlsbad USFWS Field Office, regarding the Proposed Project on several occasions throughout June and August 2008. In accordance with the USFWS's request, the Draft Project Description for the Proposed Project and a draft of the Existing Conditions section of the Biological Resources section (Section 4.4.2) were submitted to the USFWS on September 18, 2008. Upon follow up, the USFWS had no conflicts with the document's findings and agreed to discuss and evaluate the Proposed Project further once the Section 7 consultation under the federal Endangered Species Act has been initiated.

1.4.2 Native American Heritage Commission

On July 29, 2008, the SDG&E cultural resources consultant, engineering-environmental Management (e²M), contacted seven Native American representatives to coordinate Proposed Project activities with the Native American tribes and ensure avoidance of any sacred lands. On August 20, 2008, Monique LaChappa, Chairperson of the Campo Band of Mission Indians, responded to SDG&E's notification and expressed their conditional support of the Proposed

Project¹. On June 24, 2009, seven additional letters were sent by e²M to various tribal offices to follow up on the initial SDG&E Native American consultation letters. Neither e²M nor SDG&E has received any other responses from Native American representatives to date. All correspondence is contained within Attachment 4.5-B: NAHC Correspondence.

1.5 PEA CONTENTS

This PEA, which was prepared in accordance with the PEA Checklist issued by the CPUC on November 24, 2008, is divided into five sections. Chapter 2 – Project Purpose and Need outlines the Proposed Project’s six objectives, specifically:

1. Provide an interconnection hub for renewable generation that eliminates the need for multiple generator-owned or -operated switching stations along SDG&E’s existing SWPL 500 kV transmission line.
2. Expand the interconnection capability of the southeastern transmission system to accommodate all of the region’s planned renewable generation (based on data in the CAISO Generator Interconnection Queue as of June 2009) and provide for future as-yet-unplanned generation, thus increasing opportunities for California investor-owned utilities to meet or exceed the goals of Executive Order S-14-08 issued on November 17, 2008.²
3. Facilitate interconnection of renewable generation sources in the Boulevard area.
4. Create a Supervisory Control and Data Acquisition-controlled, normally open loop in the southeastern transmission system to improve control, increase operational flexibility, and enhance the reliability of the regional transmission system.
5. Provide a second source for the southeastern transmission system that avoids the vulnerability of common structure outages, thus increasing the reliability of electrical service for Boulevard, Jacumba, and the surrounding communities.
6. Maximize the use of existing utility ROWs and access roads and follow Garamendi Principles³ for the transmission component of the Proposed Project.

¹ Support from the Campo Band of Mission Indians is conditional on the appropriate reviews and mitigations as part of the environmental review process.

² Executive Order S-14-08 established a target for retail sellers of electricity to serve 33 percent of their load from renewable energy sources by 2020. SDG&E was the first utility in the state to voluntarily and publicly commit to the 33 percent target.

³ California Senate Bill 2431, Chapter 1457, declared that it is in the best interest of the state to conduct transmission siting according to the following principles (“Garamendi Principles”):

1. Encourage the use of existing ROW by upgrading existing transmission facilities where technically and economically justifiable.
2. When construction of new transmission line is required, encourage expansion of existing ROW, when technically and economically feasible.
3. Provide for the creation of new ROW when justified by environmental, technical, or economic reasons as determined by the appropriate licensing agency.

A detailed project description is provided in Chapter 3 – Project Description. This discussion includes specifics regarding the Proposed Project location, the existing system, the Proposed 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 Proposed Project, and a summary of all of the applicant-proposed measures (APMs) to be implemented as part of the Proposed 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 Proposed Project for each of the following resource areas:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology, Soils, and Mineral Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- 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. SDG&E 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 Proposed Project area and the Proposed Project’s potential to contribute a significant cumulative effect.

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

Throughout the PEA, SDG&E has addressed all 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

4. Where there is a need to construct additional transmission capacity, seek agreement among all interested utilities on the efficient use of that capacity.

identifies the section in which each checklist item is addressed, has been included at the end of this section.

1.6 PEA CONCLUSIONS

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

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

Although the Proposed Project will result in potentially significant impacts to the eight remaining resource areas, these impacts will be reduced to a less-than-significant level with the implementation of APMs. These impacts are summarized below by resource area.

- Aesthetics – Temporary visual impacts from construction of the Proposed Project and permanent visual impacts from the substations
- Air Quality – Temporary impacts to air quality associated with construction activities and permanent impacts from potential greenhouse gas (GHG) emissions
- 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, resulting from construction of the ECO Substation, SWPL loop-in, and 138 kV transmission line
- Geology, Soils, and Mineral Resources – Permanent impacts associated with expansive soils
- Hazards and Hazardous Materials – Temporary and permanent impacts associated with the transport and use of hazardous materials, the potential release of hazardous materials resulting from the demolition of the existing Boulevard Substation and operation of the ECO and rebuilt Boulevard substations, and the potential to start a wildfire during construction
- Hydrology and Water Quality – Permanent impacts to waters of the U.S. as a result of construction of the ECO Substation and potential impacts to water wells in the vicinity
- Noise – Temporary generation of excessive noise during construction activities near sensitive noise receptors

The APMs that will be implemented to reduce impacts to a less-than-significant level are discussed in detail in their relevant sections, as well as summarized in Table 3-8: Applicant-Proposed Measures in Chapter 3 – Project Description. These APMs have been identified by

applicability to each Proposed Project component in this table. Justification for each APM is presented Table 5-1: APM Justification in Chapter 5 – Detailed Discussion of Significant Impacts.

1.7 PUBLIC OUTREACH EFFORTS

1.7.0 Regional Benefits

It is imperative that SDG&E effectively communicate the regional benefits of implementing the Proposed Project to the community. The ECO Substation and its associated elements will improve reliability, facilitate the development of renewable energy, enhance the electric transmission grid, and help achieve local, state, and federal clean energy and GHG emission reduction goals.

The proposed outreach strategy will utilize a diverse range of activities and technologies to ensure that the community and affected stakeholders receive accurate and timely information. Furthermore, the outreach plan will provide valuable information to explain how the Proposed Project will benefit the region. In addition to details on the process and construction impacts, the public outreach effort will communicate information to the public regarding the following:

- Upgrades to the transmission facilities and how they will directly improve system reliability for Jacumba, Boulevard, Campo, and other east San Diego County communities
- The new ECO Substation, Boulevard Substation expansion, and transmission upgrades will provide critical electric infrastructure to facilitate the development of new sources of renewable energy and corresponding jobs in east San Diego County
- The potential wind energy and solar energy projects proposed for the region could generate hundreds of megawatts of clean, zero-emission electricity, which will improve the environment and air quality, and reduce GHG emissions
- The Proposed Project is consistent with local, state, and federal policies for clean energy, and supports SDG&E's voluntary commitment to acquire 33 percent of its energy supply from renewable resources by 2020⁴
- The entire region's electric transmission system will be enhanced, allowing for greater renewable energy development throughout San Diego County, Imperial County, and northern Baja California, Mexico

1.7.1 Community Awareness

SDG&E developed a public education and community outreach program in 2007 to educate local agencies, key stakeholders, and residents in the Proposed Project area about the Proposed

⁴ Executive Order S-14-08 established a target for retail sellers of electricity to serve 33 percent of their load from renewable energy sources by 2020. SDG&E was the first utility in the state to voluntarily and publicly commit to the 33 percent target.

Project. SDG&E initiated the program by presenting the Proposed Project to the Jacumba Sponsor Group, the Boulevard Community Planning Group, and the Campo Community Planning Group, which are the communities most impacted by the Proposed Project. In addition, SDG&E has presented the Proposed Project during subsequent meetings with area planning groups, property owners, and other interested stakeholders.

SDG&E has continued to conduct extensive outreach during 2008 and 2009 to keep the community informed of changes to the plans and to provide periodic updates. Numerous briefings have been conducted with elected officials, government agencies, Native American tribes, property owners, renewable energy developers, and those requesting information about the Proposed Project. Furthermore, the Sunrise Powerlink approval process has resulted in additional community updates that include the ECO Substation Project.

SDG&E has placed a high priority on seeking feedback from local residents on the Proposed Project. Since 2007, SDG&E has interacted with impacted communities regarding the location of the ECO Substation, transmission infrastructure placement, plans for the Boulevard Substation upgrades, and proposed wind energy development. Through this process, SDG&E has worked directly with property owners to mitigate the impacts of the Proposed Project by making minor adjustments to the alignment of the transmission lines and pole locations after seeking feedback on the initial design. This proactive approach to community engagement and collaboration has helped SDG&E identify issues early-on, which will result in fewer disruptions to local communities and property owners.

Throughout the approval process, SDG&E will continue to inform area residents and property owners, government officials, Native American tribes, and interested parties about the scope of the Proposed Project through its website, printed materials, one-on-one meetings, and presentations to local organizations. A toll-free phone number and dedicated e-mail address will also be established to allow residents and property owners to make direct contact with the Proposed Project team.

During construction, SDG&E will work hard to minimize disruptions from construction traffic, and limit dust and noise. SDG&E will establish a community outreach program to continuously communicate with government agencies, including the CPUC, County of San Diego, U.S. Border Patrol, BLM, local Native American tribes, and other government officials regarding construction impacts. Additional activities will be implemented to keep property owners and the public informed of construction activities to minimize disruptions and address any concerns.

1.7.2 Communication Activities

Personalized contacts and the latest technology will be utilized to allow immediate communications with the public and affected stakeholders when necessary. Individual e-mail messages, door-to-door contacts, community meetings, advertisements, direct mail, signage, Web sites, social media communication, and other activities will be incorporated into the outreach strategy to ensure consistent and up-to-date information. SDG&E will strive to ensure that the local community and property owners receive information to minimize disruptions to their daily lives. Furthermore, efforts to keep all affected agencies and interested parties informed will be aggressively pursued. Finally, public policy makers and other interested parties

will be apprised of the progress to develop the Proposed Project and renewable resources in the region.

SDG&E will also continue to work closely with the local media to ensure that current information and revisions regarding the Proposed Project are provided on a timely basis.

1.7.3 Proposed Project Support

SDG&E has received numerous letters and public comments in support of the Proposed Project. The diverse support includes property owners, Native American tribes, renewable energy developers and advocates, elected officials, civic organizations, and community leaders.

Proposed Project supporters include the Hamann Companies, which owns approximately 2,000 acres of land in the Boulevard area. In addition, the Executive Committee of the Campo Kumeyaay Nation, San Diego-Imperial Counties Labor Council, San Diego Regional Chamber of Commerce, San Diego Regional Economic Development Corporation, California Wind Energy Association, World Wind Energy Association, Carrizo George Railway, San Diego CONNECT, and the life science organization BIOCUM have submitted letters of support.

1.7.4 Community Enhancement Program

SDG&E recognizes that transmission infrastructure such as the Proposed Project results in impacts on the surrounding communities. While the Proposed Project will provide an interconnection hub for renewable generation in east San Diego County and northern Baja California, Mexico, and improve reliability for the San Diego region, some local residents have expressed concern about the impacts of the proposed infrastructure.

To help mitigate these impacts, SDG&E proposes the ECO Community Enhancement Program (CEP). The goal of the CEP is to provide communities most directly impacted by the Proposed Project with community enhancements.

The PEA describes in detail the environmental setting and the potential impacts associated with the construction and operation of the ECO Substation. The CEP will consider a number of other factors, including social, economic, historical, and cultural values of the community, and determine what additional benefits may be provided.

SDG&E has not developed the scope or structure for the CEP, nor identified any specific community enhancements. Instead, SDG&E seeks to partner with local residents to jointly develop the CEP in an open, transparent, and inclusive manner. SDG&E anticipates that the CEP will include a broad assessment of community needs and extensive public participation. Public participation from a wide range of stakeholders, including residents, businesses, community planning group members, educational institutions, government, and Native American tribes will be needed to identify potential community enhancements and implement the program.

SDG&E proposes the following timeline and key milestones for the CEP:

- During PEA approval process – Initiate discussions with a wide range of stakeholders about the CEP and begin the assessment of community needs.
- During project construction – Develop the scope of the CEP and identify specific community enhancements.
- Proposed Project in-service – Implement the CEP.

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 Proposed Project 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 have not resulted in any major issues.	
Chapter 2: Project Purpose and Need			
2.1 Overview	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	
	Explain the objective(s) and/or purpose and need for implementing the Proposed Project.	Section 2.0 Overview Section 2.1 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	

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
Chapter 3: Project Description	Identify geographical location: County, City (provide Proposed Project location map[s]).	Section 3.0 Project Location Section 3.0.0 ECO Substation Section 3.0.1 SWPL Loop-In Section 3.0.2 138 kV Transmission Line Section 3.0.3 Boulevard Substation Rebuild Section 3.0.4 White Star Communication Facility Rebuild Figure 3-1: Project Location Map
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 3.0.0 ECO Substation Section 3.0.1 SWPL Loop-In Section 3.0.2 138 kV Transmission Line Section 3.0.3 Boulevard Substation Rebuild Section 3.0.4 White Star Communication Facility Rebuild
3.2 Existing System	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 3.0.0 ECO Substation Section 3.0.1 SWPL Loop-In Section 3.0.2 138 kV Transmission Line Section 3.0.3 Boulevard Substation Rebuild Section 3.0.4 White Star Communication Facility Rebuild Section 3.6 Permanent Land/Right-of-way Requirements
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 3.1 Existing System

Location in CPUC Checklist		Checklist Item	Location in PEA and Any Associated Notes
3.2 Existing System (cont.)		Provide a schematic diagram and map of the existing system.	Figure 3-2: Schematic Diagram of the Existing and Proposed System (provided under separate cover)
		Provide a schematic diagram that illustrates the system as it would be configured with the implementation of the Proposed Project.	Figure 3-2: Schematic Diagram of the Existing and Proposed System (provided under separate cover)
		Describe the whole of the Proposed Project. Is it an upgrade, a new line, new substations, etc.?	Section 3.3 Proposed Project Section 3.5 Project Components
3.4 Proposed Project		Describe how the Proposed Project fits into the regional system. Does it create a loop for reliability, etc.?	Section 3.2 Project Objectives
		Describe all reasonably foreseeable future phases or other reasonably foreseeable consequences of the Proposed Project.	Section 3.2 Project Objectives
		Provide the capacity increase in megawatts (MW). If the Proposed Project does not increase capacity, state that.	Section 3.2 Project Objectives Chapter 2 – Project Purpose and Need The Proposed Project does not specifically increase MW capacity, but provides renewable generators an interconnection to the existing SWPL transmission line through the new ECO Substation.
3.5 Project Components	3.5.1 Transmission Line	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.	A CD containing the relevant GIS data for the Proposed Project has been submitted as part of this PEA package.
		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).	Section 3.5.1 SWPL Loop-In Section 3.5.2 138 kV Transmission Line
		Identify the length of the upgraded alignment, the new alignment, etc.	Section 3.5.1 SWPL Loop-In Section 3.5.2 138 kV Transmission Line

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.5 Project Components 3.5.1 Transmission Line (cont.)</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>Section 3.5.1 SWPL Loop-In Section 3.5.2 138 kV Transmission Line Section 3.5.4 White Star Communication Facility Rebuild</p> <p>Section 3.5.2 138 kV Transmission Line</p>
<p>3.5.2 Poles/Towers</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>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>Section 3.5.0 ECO Substation Section 3.5.1 SWPL Loop-In Section 3.5.2 138 kV Transmission Line Section 3.5.4 White Star Communication Facility Rebuild</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>Section 3.5.0 ECO Substation Section 3.5.1 SWPL Loop-In Section 3.5.2 138 kV Transmission Line Section 3.5.4 White Star Communication Facility Rebuild Figure 3-5: ECO Substation Layout Figure 3-8: Communication Tower Typical Drawing Figure 3-9: SWPL Loop-In Structure Typical Drawing Figure 3-10: 138 kV Steel Pole Typical Drawing Figure 3-11: 138 kV Angle Structure Typical Drawing</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.5.2 Poles/Towers (cont.)</p>	<p>Provide the type of pole (e.g., wood, steel, etc.) or tower (e.g., self-supporting, lattice, etc.).</p>	<p>Figure 3-12: 138 kV Steel Pole With Distribution Under-Build Typical Drawing Figure 3-13: Steel Cable Riser Pole Typical Drawing Figure 3-14: Wooden Distribution Pole Typical Drawing Section 4.4.3 Impacts</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 ECO Substation Section 3.5.1 SWPL Loop-In Section 3.5.2 138 kV Transmission Line Section 3.5.4 White Star Communication Facility Rebuild</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 ECO Substation Section 3.5.4 White Star Communication Facility Rebuild No guy wires will be required.</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 3.5.4 White Star Communication Facility Rebuild</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 ECO Substation Section 3.5.4 White Star Communication Facility Rebuild</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</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>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>Provide the size and type of conductor (e.g., aluminum conductor, steel reinforced, non-specular, etc.) and insulator configuration.</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>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 3.5.1 SWPL Loop-In Section 3.5.2 138 kV Transmission Line</p> <p>Section 3.5.1 SWPL Loop-In Section 3.5.2 138 kV Transmission Line</p> <p>Section 3.5.1 SWPL Loop-In Section 3.5.2 138 kV Transmission Line</p> <p>Section 3.5.2 138 kV Transmission Line</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>Section 3.3 Proposed Project Section 3.5.2 138 kV Transmission Line</p> <p>3.5.2 138 kV Transmission Line</p> <p>3.5.2 138 kV Transmission Line</p> <p>Figure 3–15: Underground 138 kV Duct Bank Typical Drawing</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.5.4 Substations</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>Figure 3–4: ECO Substation Temporary and Permanent Impact Areas Figure 3–5: ECO Substation Ultimate Layout Figure 3–16: Existing Boulevard Substation Layout and Profile Drawing Figure 3–18: Boulevard Substation Rebuild Layout Figure 3–19: Boulevard Substation Rebuild Profile Drawing</p>
	<p>Provide the approximate or “typical” dimensions (width and height) of new structures including engineering and design standards that apply.</p>	<p>Section 3.5.0 ECO Substation Section 3.5.3 Boulevard Substation Rebuild</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>Section 3.5.0 ECO Substation Section 3.5.3 Boulevard Substation Rebuild</p>
	<p>Describe the electrical need area served by the distribution substation.</p>	<p>Section 3.2 Project Objectives Chapter 2 – Project Purpose and Need</p>
	<p>Describe the ROW location, ownership, and width. Would the existing ROW be used or would new ROW be required?</p>	<p>Section 3.6.0 SWPL Loop-In Section 3.6.1 138 kV Transmission Line Table 3-1: New Permanent Land Requirements Figure 3–22: Proposed and Existing Transmission Line ROWs Typical Drawing</p>
<p>3.6 Right-of-Way Requirements</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>Section 3.6.1 138 kV Transmission Line Table 3-1: New Permanent Land Requirements</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
3.6 Right-of-Way Requirements (cont.)	List the properties likely to require acquisition.	A list of properties to be acquired has been submitted under separate cover.
	Where would the main staging area(s) likely be located?	Section 3.7.1 Workspace Attachment 3-A: 138 kV Transmission Line Route East County Substation Project
	Approximately how large would the main staging area(s) be?	Section 3.7.1 Workspace Table 3-3: Temporary Workspace Requirements
3.7 Construction	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 3.7.1 Workspace Section 3.7.2 Methods Table 3-3: Temporary Workspace Requirements
3.7.1 For All Projects	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.).	Section 3.7.1 Workspace
	Describe how the staging area would be secured; would a fence be installed? If so, describe the type and extent of the fencing.	Section 3.7.1 Workspace
	Describe how power to the site would be provided if required (i.e., tap into existing distribution, use of diesel generators, etc.).	Section 3.7.1 Workspace
	Describe any grading activities and/or slope stabilization issues.	Section 3.7.1 Workspace Section 3.7.2 Methods
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 Workspace

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 Workspace Table 3-3: Temporary Workspace Requirements</p>
	<p>Identify the approximate location of known work areas in the GIS database.</p>	<p>Attachment 3-A: 138 kV Transmission Line Route Map A CD containing the relevant GIS data for the work areas has been provided as part of this PEA package.</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 Workspace</p>
	<p>If any site preparation is likely required, generally describe what and how it would be accomplished.</p>	<p>Section 3.7.2 Methods</p>
	<p>Describe any grading activities and/or slope stabilization issues.</p>	<p>Section 3.7.2 Methods</p>
<p>Based on the information provided, describe how the site would be restored.</p>	<p>Section 3.7.2 Methods</p>	
<p>3.7.1.3 Access Roads and/or Spur Roads</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 3.7.0 Access Table 3-2: Project Access Roads</p>
	<p>For road types that require preparation, describe the methods and equipment that would be used.</p>	<p>Section 3.7.2 Methods Section 3.7.3 Equipment Table 3-5: Typical Construction Equipment by Activity</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>A CD containing the relevant GIS data for the Proposed Project has been submitted as part of this PEA package.</p> <p>Section 3.7.2 Methods</p>
<p>3.7.1.4 Helicopter Access</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>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>Section 3.7.2 Methods</p> <p>Section 3.7.2 Methods</p> <p>Section 3.7.2 Methods</p> <p>Section 3.8 Operation and Maintenance</p> <p>Section 3.7.1 Workspace</p> <p>Section 3.7.2 Methods</p> <p>Section 3.8 Operation and Maintenance</p> <p>Section 3.7.2 Methods</p> <p>Table 3-9: Applicant-Proposed Measures</p>
<p>3.7.1.5 Vegetation Clearance</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>Identify the preliminary location and provide an approximate area of disturbance in the GIS database for each type of vegetation removal.</p> <p>Describe how each type of vegetation removal would be accomplished.</p>	<p>Table 3-5: Typical Construction Equipment by Activity</p> <p>Section 3.7.2 Methods</p> <p>Section 3.7.2 Methods</p> <p>Section 3.7.2 Methods</p> <p>A CD containing the relevant GIS data for the Proposed Project has been submitted as part of this PEA package.</p> <p>Section 3.7.2 Methods</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
3.7.1.5 Vegetation Clearance (cont.)	For removal of trees, distinguish between tree trimming as required under GO-95 and tree removal.	3.7.2 Methods
	Describe the types and approximate number and size of trees that may need to be removed.	3.7.2 Methods
Describe the type of equipment typically used.	Section 3.7.2 Methods Section 3.7.3 Equipment Table 3-5: Typical Construction Equipment by Activity	
3.7.1.6 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.	Section 3.7.2 Methods Table 3-9: Applicant-Proposed Measures Section 3.9 Anticipated Permits and Approvals Table 3-8: Anticipated Permits and Approvals
	Describe any grading activities and/or slope stabilization issues.	Section 3.7.2 Methods
	Describe how construction waste (i.e., refuse, spoils, trash, oil, fuels, poles, pole structures, etc.) would be disposed.	Section 3.7.2 Methods
3.7.1.7 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 3.7.2 Methods
3.7.2 Transmission Line Construction (Above Ground) 3.7.2.1 Pull and Tension Sites	Provide the general or average distance between pull and tension sites.	Section 3.7.1 Workspace

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 (cont.)</p>	<p>Provide the area of pull and tension sites including the estimated length and width.</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>Describe the type of equipment that would be required at these sites.</p> <p>If conductor is being replaced, describe how it would be removed from the site.</p>	<p>Section 3.7.1 Workspace</p> <p>Section 3.7.1 Workspace Attachment 3-A: 138 kV Transmission Line Route Map A CD containing the relevant GIS data for the Proposed Project has been submitted as part of this PEA package.</p> <p>Section 3.7.2 Methods Section 3.7.3 Equipment Table 3-5: Typical Construction Equipment by Activity</p> <p>3.7.2 Methods</p>
<p>3.7.2.2 Pole Installation and Removal</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>Describe the process of removing the poles and foundations.</p> <p>Describe what happens to the holes that the poles were in (i.e., reused or backfilled)?</p> <p>If the holes are to be backfilled, what type of fill would be used and where would it come from?</p> <p>Describe any surface restoration that would occur at the pole sites.</p>	<p>Section 3.7.0 Access Section 3.7.2 Methods Section 3.7.3 Equipment Table 3-4: Access Road Construction Equipment Table 3-5: Typical Construction Equipment by Activity</p> <p>Section 3.7.2 Methods Section 3.7.2 Methods Section 3.7.2 Methods Section 3.7.2 Methods</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
	<p>Describe how the poles would be removed from the sites.</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 3.7.2 Methods</p> <p>No topping of transmission poles is proposed for this Project.</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 3.7.2 Methods</p>
	<p>Describe the types of equipment and their use as related to pole/tower installation.</p>	<p>Section 3.7.2 Methods Table 3-5: Typical Construction Equipment by Activity Section 3.7.3 Equipment</p>
<p>3.7.2.2 Pole Installation and Removal (cont.)</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 3.5.0 ECO Substation Section 3.7.0 Access Section 3.7.1 Workspace Section 3.7.2 Methods</p>
	<p>Describe what would be done with soil that is removed from a hole/foundation site.</p>	<p>Section 3.7.2 Methods</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 3.7.2 Methods</p>
	<p>Describe briefly how poles/towers and associated hardware are assembled.</p>	<p>Section 3.7.2 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>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>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 3.7.2 Methods</p> <p>Section 3.7.2 Methods Table 3-3: Temporary Workspace Requirements Section 3.8.1 SWPL Loop-In Section 3.8.2 138 kV Transmission Line</p>
<p>3.7.2.3 Conductor/Cable Installation</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>Generally describe the conductor/cable splicing process.</p> <p>If vaults are required, provide their dimensions and approximate location/spacing along the alignment.</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 3.7.2 Methods</p> <p>Section 3.7.2 Methods</p> <p>Section 3.7.1 Workspace Attachment 3-A: 138 kV Transmission Line Route Map</p> <p>Section 3.7.2 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>Section 3.7.2 Methods</p> <p>Section 3.7.2 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 methodology of making the trench (e.g., saw cutter to cut the pavement, backhoe to remove, etc.).</p>	<p>Section 3.7.2 Methods Figure 3-24: Underground Conductor Installation Procedure Typical Drawing</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>Section 3.7.2 Methods</p>
	<p>Provide off-site disposal location, if known, or describe possible option(s).</p>	<p>Section 3.7.2 Methods</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>Section 3.7.2 Methods</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>Section 3.7.2 Methods</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>Section 3.7.2 Methods</p>	
<p>If pre-existing hazardous waste was encountered, describe the process of removal and disposal.</p>	<p>Section 3.7.2 Methods Section 4.7.3 Impacts</p>	
<p>Describe any standard BMPs that would be implemented.</p>	<p>Section 3.7.2 Methods</p>	
<p>Provide the approximate location of the sending and receiving pits.</p>	<p>No trenchless construction is planned for the Proposed Project.</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>3.7.3.2 Trenchless Techniques: Microtunnel, Bore and Jack, Horizontal Directional Drilling</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>	Describe the methodology of the trenchless technique.	<p>No trenchless construction is planned for the Proposed Project.</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.	
	Describe the process for safe handling of drilling mud and bore lubricants.	
	Describe the process for detecting and avoiding “fracturing-out” during horizontal directional drilling operations.	
	Describe the process for avoiding contact between drilling mud/lubricants and stream beds.	
	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).	
	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.	
	Describe the process for testing excavated soil or groundwater for the presence of pre-existing environmental contaminants.	
	If a pre-existing hazardous waste was encountered, describe the process of removal and disposal.	
	Describe any grading activities and/or slope stabilization issues.	
Describe any standard BMPs that would be implemented.		

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
	<p>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.</p>	<p>Section 3.7.2 Methods</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>Section 3.7.2 Methods Section 4.1 Aesthetics Figure 4.1-3: East County Substation Landscape Concept Plan Figure 4.1-4: Boulevard Substation Landscape Concept Plan In-person consultation with the Landscape Architect David Kahler at the County of San Diego was conducted on August 6, 2009. During this meeting, David indicated preliminary approval of the landscape plans for the substations and did not request any modifications or further information.</p>
	<p>Describe any grading activities and/or slope stabilization issues.</p>	<p>Section 3.7.2 Methods</p>
	<p>Describe possible relocation of commercial or residential property, if any.</p>	<p>Section 3.0.3 Boulevard Substation Rebuild</p>
	<p>Provide the estimated number of construction crew members.</p>	<p>Section 3.7.5 Personnel Table 3-7: Peak Construction Personnel</p>
<p>3.7.5 Construction Workforce and Equipment</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>Section 3.7.5 Personnel Table 3-6: Proposed Construction Schedule</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>3.7.5 Construction Workforce and Equipment (cont.)</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>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 Construction Table 3-5: Typical Construction Equipment by Activity</p> <p>Section 3.7.2 Methods Table 3-4: Access Road Construction Equipment Section 3.7.3 Equipment Table 3-5: Typical Construction Equipment by Activity</p>
<p>3.7.6 Construction Schedule</p>	<p>Provide a preliminary project construction schedule; include contingencies for weather, wildlife closure periods, etc.</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 3.7.4 Schedule Table 3-6: Proposed Construction Schedule</p> <p>Section 3.8 Operation and Maintenance</p>
<p>3.8 Operation and Maintenance</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</p> <p>Section 3.8 Operation and Maintenance</p> <p>Section 3.8 Operation and Maintenance No new full time staff will be required for operation and/or maintenance of the Proposed Project.</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
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 3.10 Applicant-Proposed Measures Table 3-9: Applicant-Proposed Measures
Chapter 4: Environmental Setting		
	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.	Section X.X.2 under each resource area provides a discussion of both the physical environment in the vicinity of the Proposed Project and the regulatory environment.
	For each resource area discussion within the PEA, include a description of the regulatory environment/context (federal, state, and local).	Section X.X.2 under each resource area provides a discussion of both the physical environment in the vicinity of the Proposed Project and the regulatory environment.
	Limit detailed descriptions to those resource areas which may be subject to a potentially significant impact.	Chapter 5 – Detailed Discussion of Significant Impacts
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.	Attachment 4.1-B: Visual Simulations
5.2 Agriculture Resources	Identify the types of agricultural resources affected.	Section 4.2.3 Impacts
	Provide supporting calculations/spreadsheets/technical reports that support emission estimates in the PEA.	Attachment 4.3-A: Air Quality Emissions 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 is dependent on type of construction activity.	Section 4.3.2 Existing Conditions Section 4.3.3 Impacts

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>5.3 Air Quality (cont.)</p>	<p>Identify Proposed Project GHG emissions.</p>	<p>Section 4.3.3 Impacts Table 4.3-8: Annual GHG Emissions from the ECO and Boulevard Substations Table 4.3.9: GHG Emissions from Construction Table 4.3-10: GHG Emissions for Operation and Maintenance</p>
	<p>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.</p>	<p>Section 4.3.3 Impacts</p>
	<p>Quantify GHG emission reductions from every APM that is implemented. The quantifications will be itemized and placed in tabular format.</p>	<p>Proposed 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>Identify the net emissions of the Proposed Project after mitigation have been applied.</p>	<p>Section 4.3.3 Impacts</p>
	<p>Calculate and quantify GHG emissions (CO₂ equivalent) for the Proposed Project, including construction and operation.</p>	<p>Section 4.3.3 Impacts</p>
	<p>Calculate and quantify the GHG reduction based on reduction measures proposed for the Proposed Project.</p>	<p>Proposed 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 4.3.4 Applicant-Proposed Measures</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>5.3 Air Quality (cont.)</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 4.3.2 Existing Conditions Section 4.3.4 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 Emissions 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 were not required for the Proposed Project because no wetlands will be impacted by the Project.</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-C: Rare Plant Survey Report Attachment 4.4-D: Quino Checkerspot Butterfly Survey Reports A CD containing the relevant GIS data for the Proposed Project has been submitted as part of this PEA package.</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>Attachment 4.5-A: Cultural Resources Technical Report Attachment 4.5-B: NAHC Correspondence</p>
<p>5.5 Cultural Resources</p>	<p>Provide a copy of the records found in the literature search.</p>	<p>The cultural records found during the literature search have been submitted under separate cover due to their confidential nature.</p>
	<p>Provide a copy of all letters and documentation of Native American consultation.</p>	<p>Attachment 4.5-B: NAHC Correspondence</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
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.	Attachment 4.6-A: Interim Geotechnical Investigation
5.7 Hazards and Hazardous Materials	Include an Environmental Data Resources report.	Section 4.7.3 Impacts Table 4.7-1: Hazardous Materials Sites Records Review Attachment 4.7-A: Phase I ESAs
	Include a Hazardous Substance Control and Emergency Response Plan, if required.	Due to the size and nature of the Proposed Project, it was determined that a Hazardous Substance Control and Emergency Response Plan is not required.
	Include a Health and Safety Plan, if required.	Due to the size and nature of the Proposed Project, it was determined that a Health and Safety Plan is not required.
	Describe the Worker Environmental Awareness Program.	Section 4.7.4 Applicant-Proposed Measures
5.8 Hydrology and Water Quality	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.	Section 4.7-2: Chemicals Typically Used for Construction
	Describe impacts to groundwater quality including increased runoff due to construction of impermeable surfaces, etc.	Section 4.8.3 Impacts
5.9 Land Use and Planning	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
5.10 Mineral Resources	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. Data needs already specified under Chapter 3 would generally meet the data needs for this resource area.	The property owner information has been submitted under separate cover due to its confidential nature. Not Applicable

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
5.11 Noise	Provide long-term noise estimates for operational noise (e.g., corona discharge noise, and station sources such as substations, etc.).	Section 4.10.3 Impacts Figure 4.10-7: ECO Substation Operation Noise Contour – 80 dBA Rating Figure 4.10-8: ECO Substation Operation Noise Contour – 74 dBA Rating Figure 4.10-9: Boulevard Substation Operation Noise Contour
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 4.14.3 Impacts
	Provide a preliminary description of the traffic management plan that would be implemented during construction of the Proposed Project.	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.
5.16 Utilities and Services Systems	Describe how treated wood poles would be disposed of after removal, if applicable.	Section 4.15.3 Impacts
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.	Table 4.16-1: Foreseeable Projects

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>5.17 Cumulative Analysis (cont.)</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>Table 4.16-1: Foreseeable Projects</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>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.</p>	<p>The Proposed Project will not result in any significant growth-inducing impacts.</p>
<p>Chapter 6: Detailed Discussion of Significant Impacts</p>		
<p>6.1 Mitigation Measures Proposed to Minimize Significant Effects</p>	<p>Discuss each mitigation measure and the basis for selecting a particular mitigation measure should be stated.</p>	<p>Table 5-1: APM Justification</p>

Location in CPUC Checklist	Checklist Item	Location in PEA and Any Associated Notes
<p>6.2 Description of Project Alternatives and Impact Analysis</p>	<p>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.</p>	<p>Section 5.2 Description of Project Alternatives and Impact Analysis Table 5-2: Alternatives Considered Section 5.2.4 System Alternatives Section 5.2.5 Substation Alternatives Section 5.2.6 Transmission Route Alternatives</p>
	<p>Alternatives considered and described by the Applicant should include, as appropriate, system or facility alternatives, route alternatives, route variations, and alternative locations.</p>	<p>Section 5.2.4 System Alternatives Section 5.2.5 Substation Alternatives Section 5.2.6 Transmission Route Alternatives</p>
	<p>Include a description of a “No Project Alternative” should be included.</p>	<p>Section 5.2.3 No Project Alternative</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>No significant environmental effects are anticipated after implementation of the APMs.</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>Section 5.3 Growth-Inducing Impacts</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>Section 5.3 Growth-Inducing Impacts</p>
	<p>Discuss if the Proposed Project would remove obstacles to population growth.</p>	<p>Section 5.3 Growth-Inducing Impacts</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 5.3 Growth-Inducing Impacts</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</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 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. 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>Section 4.3.4 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"> 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). 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. 	<p>Section 4.3.4 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>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> <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 4.3.4 Applicant-Proposed Measures</p> <p>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>

