TABLE OF CONTENTS

LIST OF TABLES

THIS PAGE IS INTENDED TO BE LEFT BLANK

1.0 PEA SUMMARY

In accordance with the California Public Utilities Commission (CPUC) General Order (G.O.) 131-D, this Proponent's Environmental Assessment (PEA) has been prepared by San Diego Gas & Electric Company (SDG&E) to support SDG&E's application for a Certificate of Public Convenience and Necessity (CPCN) for the South Orange County Reliability Enhancement Project (Proposed Project).

As discussed in more detail below, the overall purpose of the Proposed Project is to ensure electric service reliability in South Orange County. The Proposed Project would replace or modify existing electric transmission, distribution, and substation facilities that SDG&E has operated and maintained for decades. The Proposed Project involves construction within two existing SDG&E substation properties and within an approximately eight-mile existing transmission line corridor. With the exception of approximately 1,200 linear feet of power line facilities, the entire Proposed Project would be located within existing SDG&E right-of-way (ROW). This PEA Summary briefly describes the location and primary components of the Proposed Project, the Proposed Project need and range of alternatives considered, the PEA contents, the major conclusions of the PEA, SDG&E's public outreach and consultation efforts, areas of controversy, and issues to be resolved.

1.1 PROJECT LOCATION

The Proposed Project is located almost entirely within an existing electric transmission corridor and two existing substation sites. The Proposed Project components are primarily located in portions of the cities of San Juan Capistrano and San Clemente as well as unincorporated Orange and San Diego counties. The Proposed Project location is discussed in more detail in Section 3.2, Proposed Project Location and Context.

1.2 PROPOSED PROJECT COMPONENTS

As discussed in Section 3, the Proposed Project comprises the replacement and upgrade of existing substation, transmission, and distribution facilities. The Proposed Project includes the following three main components:

- Complete re-build and expansion of the San Juan Capistrano Substation within the existing substation property footprint;
- Minor alterations to the Talega Substation within the existing substation footprint including the addition of one new 138 kilovolt (kV) connection and the removal of one 230kV connection; and
- Removal, installation, and relocation of multiple transmission lines within the existing, approximately eight-mile transmission corridor between the Capistrano and Talega Substations.

1.2.1 San Juan Capistrano Substation

The proposed rebuild and expansion of the existing 138/12kV Capistrano Substation would result in a 230/138/12kV substation to be re-named the San Juan Capistrano Substation. This substation would occupy the full 6.4 acre SDG&E property at the existing Capistrano Substation site (approximately 360 feet wide by 700 feet long at its widest points). Once complete, the San Juan Capistrano Substation would connect to six 138kV transmission lines, two 230kV transmission lines, and seven distribution lines.

1.2.2 Talega Substation

At the existing Talega Substation, one 138kV transmission line (TL13835) would be connected to the Talega Substation and one 230kV transmission line (TL23007) would be disconnected from the Talega Substation and instead connect directly to the new San Juan Capistrano Substation. In order to accommodate these changes, existing 138kV and 230kV structures within the Talega Substation would have to be re-arranged.

1.2.3 Transmission Lines

The Proposed Project includes the following transmission line activities:

- Within SDG&E's existing ROW, build approximately 7.5 miles of new overhead double-circuit 230kV transmission lines and remove existing 138kV;
- Within SDG&E's existing Vista Montana street easement position, replace 0.36 mile of existing 138kV underground transmission system with one new 230kV underground transmission line;
- Install 0.36 mile in franchise position within Vista Montana Street one 230kV underground transmission line;
- Relocate the three existing 138kV transmission lines from the Capistrano Substation into the new San Juan Capistrano Substation. Loop-in the two 138kV transmission lines that currently bypass the existing substation into the new San Juan Capistrano Substation. Underground all of the westbound 138kV transmission line getaways; and
- Realign existing 69kV and 138kV transmission lines near the Talega Substation.

For the purposes of this PEA, the transmission line work associated with the Proposed Project is divided into four segments, as described in Section 3.4.3:

- Segment 1 – San Juan Capistrano Substation to Rancho San Juan
- Segment 2 – Rancho San Juan
- Segment 3 – Rancho San Juan to the Talega Hub
- Segment 4 – Talega Hub to the Talega Substation

Detailed discussion for the proposed transmission line work for the Proposed Project is included within Section 3.4.3, Transmission Lines.

1.3 PROJECT NEED AND RANGE OF ALTERNATIVES CONSIDERED

The Proposed Project has been developed by SDG&E in order to achieve the following project objectives (refer to Section 2.0, Proposed Project Purpose and Need):

1. Provide transmission system reliability:
    a. Reduce the risk of an uncontrolled outage of all South Orange County load.
    b. Reduce the risk of a controlled interruption of a portion of the South Orange County load.
    c. Comply with mandatory North American Electric Reliability Corporation (NERC), Western Electric Coordinating Council (WECC) and California Independent System Operator (CAISO) transmission planning and operations standards.
2. Rebuild Capistrano Substation to replace aging equipment and increase capacity.
3. Improve transmission and distribution operating flexibility.
4. Accommodate customer load growth in the South Orange County area.
5. Locate proposed facilities within existing transmission corridors, SDG&E ROW and utility owned property.

Section 5.2, Description of Project Alternatives to Minimize Significant Effects, outlines 14 alternatives to the Proposed Project, including a no project alternative, alternative substation sites, system alternatives, facility alternatives, and alternative routes. Only one other alternative was identified that would meet or exceed the project objectives; however, this alternative (the Proposed Project with 230kV Connection to Escondido Substation) was rejected by the CAISO in favor of the Proposed Project due to cost considerations.

1.4 PROPONENTS ENVIRONMENTAL ASSESSMENT CONTENTS

1.4.1 PEA Part A

Part A of this PEA was prepared in accordance with the PEA Checklist issued by the CPUC and is divided into five sections.

Section 1-PEA Summary. Section 1 discusses the conclusions and content of the PEA sections, and contains information on SDG&E's coordination efforts.

Section 2-Project Purpose and Need. Section 2 outlines the purpose and need for the Proposed Project, including the Proposed Project objectives.

Section 3-Project Description. Section 3 describes the whole of the Proposed Project, including construction, operation, and maintenance. The Project Description includes a detailed description of construction methods, construction schedule, existing facilities, proposed facilities, and anticipated permit requirements.

Section 4-Environmental Impact Assessment. Section 4 includes a discussion of the existing conditions and potential and anticipated impacts for 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

Section 4 also includes an assessment of potential cumulative impacts that could occur as a result of impacts from the Proposed Project contributing to cumulatively considerable adverse effects when analyzed with respect to other foreseeable projects.

Section 5-Detailed Discussion of Significant Environmental Impacts. Section 5 includes a detailed discussion of significant impacts and discusses the Applicant Proposed Measures that would be implemented to reduce these impacts. This section also evaluates the alternatives to the Proposed Project.

Throughout the PEA sections and appendices, SDG&E has provided specific information to address the items outlined within the CPUC's PEA Checklist for Transmission Line and Substation Projects (PEA Checklist). Table 1-1, PEA Checklist Key Table, provides the specific location within the PEA and appendices of all data provided to meet the requirements of the PEA Checklist.

1.4.2 PEA Part B (Technical Appendices)

Part B of the PEA contains technical appendices in support of Part A as well as other items required by the CPUC PEA Checklist and G.O. 131-D. Specifically, Part B of the PEA includes the following documents (documents submitted as confidential are noted):

- Appendix 1-A: Letters of Support
- Appendix 1-B: Geographic Information System (GIS) Data (Confidential)
- Appendix 1-C: Parcel and Mailing Information for Properties within 300 Feet of the Proposed Project (Confidential)
- Appendix 1-D: Existing Transmission System Map
- Appendix 1-E: City of San Juan Capistrano Correspondence
- Appendix 3-A: Talega to Capistrano Existing Transmission Line Map (Confidential)
- Appendix 3-B: Typical Structure Diagrams and Photographs
- Appendix 3-C: Proposed Distribution Line Map (Confidential)
- Appendix 3-D: Detailed Construction Schedule and Vehicle Use Tables
- Appendix 3-E: South Orange County Reliability Enhancement Electric and Magnetic Fields Studies
- Appendix 4.3-A: Emissions Calculations
- Appendix 4.4-A: Biological Resources Assessment
- Appendix 4.5-A: Cultural Resources Assessment Report (Attachments A and C are Confidential)
- Appendix 4.5-B: Historic Property Evaluation (Appendix E is Confidential)
- Appendix 4.5-C: Paleontological Resources Record Search
- Appendix 4.7-A: EDR Corridor Study
- Appendix 4.7-B: Historic Aerial Photographs of the Capistrano Substation Site
- Appendix 4.7-C: MSDS for Sulfur Hexafluoride
- Appendix 4.10-A: Basics of Noise and Vibration
- Appendix 4.10-B: Ambient Noise Survey Report

1.4.3 Other PEA Requirements

The following items are included within the CPUC PEA Checklist and/or CPUC G.O. 131-D and have been provided as described below:

- Geographic Information System Data. GIS data for the Proposed Project has been provided as Appendix 1-B. Appendix 1-B is being submitted as Confidential.

- Parcel and Mailing information for parcels within 300 feet of the Proposed Project. This has been provided as Appendix 1-C. Appendix 1-C is being submitted as Confidential.
- Map showing all transmission lines within one mile of the Proposed Project. This map has been provided as Appendix 1-D.

1.5 MAJOR PEA CONCLUSIONS

As discussed throughout the PEA, the Proposed Project replaces existing electric transmission, distribution and substation facilities and is located almost entirely within existing SDG&E ROW. The existing electric transmission, distribution and substation facilities constitute the existing setting and baseline from which the potential impacts of the Proposed Project were analyzed.

1.5.1 Resource Areas with No Impact or Less than Significant Impacts

The PEA analyzes the potential environmental impacts associated with construction, operation and maintenance of the Proposed Project. Seven resource areas would not have environmental impacts or would experience only less than significant impacts due to the Proposed Project. The resource areas are:

- Agricultural Resources,
- Biological Resources,
- Hydrology and Water Quality,
- Land Use and Planning,
- Population and Housing,
- Recreation, and
- Utilities and Service Systems.

1.5.2 Resource Areas Requiring Applicant Proposed Measures

In addition, the following eight resource areas would result in potentially significant impacts that can be reduced to a level less than significant with the incorporation of Applicant Proposed Measures (APMs) (See Table 3-18, Applicant Proposed Measures):

- Aesthetics,
- Air Quality,
- Cultural Resources,
- Geology and Soils,
- Hazards and Hazardous Materials,
- Noise,
- Public Services, and
- Transportation and Traffic.

The impacts that would be less than significant with incorporation of APMs are discussed below, by resource area.

1.5.2.1 Aesthetics

Potential impacts to the overall visual character of the area from construction, operation, and maintenance of the Proposed Project would be reduced to a level less than significant through implementation of APMs AES-1 through AES-3.

1.5.2.2 Air Quality and Greenhouse Gases

While not anticipated to be significant, potential impacts related to emissions of sulfur hexafluoride would be minimized through implementation of APM AIR-1.

1.5.2.3 Cultural Resources

Potential impacts related to cultural and paleontological resources from construction of the Proposed Project would be reduced to a level less than significant through implementation of APMs CUL-1 through CUL-9.

1.5.2.4 Geology, Soils, and Mineral Resources

Potential impacts related to seismic-related ground failure, landslides, and unstable soils would be reduced to a level less than significant through implementation of APMs GEO-1 and GEO-2.

1.5.2.5 Hazards and Hazardous Materials

Potential impacts relating to the routine and potential upset conditions during construction of the San Juan Capistrano Substation would be reduced to a level less than significant through implementation of APM HAZ-1.

1.5.2.6 Noise

Potential impacts relating to limited construction activities occurring at night would be reduced to a level less than significant through implementation of APM NOISE-1.

1.5.2.7 Public Services

Potential impacts related to disruption of existing parks and recreational areas during construction of the proposed Project would be reduced to a level less than significant through implementation of APMs PS-1 and PS-2.

1.5.2.8 Transportation and Traffic

Potential impacts related to traffic congestion and deterioration of level of service (LOS) would be reduced to a level less than significant through implementation of APMs TR-1 and TR-2. Construction of Segment 2 of the Proposed Project could still result in significant impacts, as discussed in Section 1.6.3, Significant, Unavoidable Impacts, below.

Potential impacts related to inadequate emergency access during construction of the Proposed Project would be reduced to a level less than significant through implementation of APM TR-3.

1.5.3 Significant, Unavoidable Impacts

The following two significant, short-term impacts were identified for construction of the Proposed Project:

- Emissions of criteria pollutants in excess of South Coast Air Quality Management District (SCAQMD) California Environmental Quality Act (CEQA) Significance Thresholds, and
- Traffic congestion and deterioration of LOS during construction of Segment 2.

These impacts are further discussed in the following subsections.

1.5.3.1 Air Quality

Construction of the Proposed Project would result in exceedances of SCAQMD Significance Thresholds for criteria pollutants. This adverse effect could also contribute to cumulatively considerable significant effects where construction of the Proposed Project would occur simultaneously with other Project in the immediate vicinity (refer to Section 4.16, Cumulative Impacts). These significant effects would be minimized to the extent feasible through adherence to SCAQMD Rule 403 and construction emission best management practices (BMPs).

1.5.3.2 Transportation and Traffic

Construction of Transmission Line Segment 2 (Rancho San Juan) of the Proposed Project would result in temporary significant impacts relating to traffic congestion and deterioration of LOS. This significant effect could also contribute to cumulatively considerable significant effects where construction of the Proposed Project would occur simultaneously with other projects (refer to Section 4.16, Cumulative Impacts). APMs are proposed that would minimize these impacts to the extent feasible (See Section 4.14, Transportation and Traffic).

1.6 PUBLIC OUTREACH EFFORTS

1.6.1 Overview of Public Involvement

SDG&E continues to conduct public outreach to provide details about the Proposed Project and solicit input from stakeholders, including residential and commercial customers, community and business leaders, and elected officials. This outreach effort has three primary objectives:

1. Engage a broad array of stakeholders in the process to ensure that all interested parties have an opportunity to provide input on the Proposed Project;
2. Identify key issues and possible community impacts associated with the Proposed Project prior to making final design decisions; and
3. Maximize public awareness of the Proposed Project by visiting residences located along the Proposed Project ROW and also using direct mail, open houses, and public presentations.

SDG&E began its public outreach and education program for the Proposed Project in 2011 by meeting with customers and community leaders to inform them of the Proposed Project. These efforts were aimed at providing local communities and customers with multiple forums to express concerns and provide input on the Proposed Project and to provide feedback on key issues. The public outreach, consultation and education programs will continue until the Proposed Project is approved.

SDG&E plans to work closely with a city of San Juan Capistrano ad hoc committee that has been established and will consider suggestions regarding the design of the substation wall and landscaping.

1.6.2 Door-to-Door Outreach and Mailings

SDG&E conducted door-to-door visits to over 2,000 local residents along the Proposed Project route to inform them of the Proposed Project and invite them to upcoming Open House events. The residents were provided a flyer describing the Proposed Project as well as a contact phone number and email address for further information. For those residents not at home, the same flyer was left at their door. Bilingual team members were utilized during this outreach to assure that the Proposed Project was understood by Spanish-speaking residents. SDG&E collected mailing addresses and sent postcard invitations to four open house events.

1.6.3 Proposed Project Hotline

After the application is filed for the Proposed Project, a hotline will be initiated as a tool to provide concerned citizens with a representative available to answer questions about the Proposed Project during business hours.

1.6.4 Proposed Project Website

A Project website was established to provide easily accessible Proposed Project information to the public. The Proposed Project website address is www.sdge.com/southcounty. This website is included on all public outreach materials and the SDG&E website.

1.6.5 Public Open Houses

Residents along the Proposed Project route were invited to the Open House events listed below by door-to-door notices, a mailed notice to their home, an e-blast from the local Chambers of Commerce, through advertisements placed in the local newspapers and during Open Comment sessions of the cities of San Juan Capistrano and San Clemente council meetings. Open House events were held for the public to learn more about the Proposed Project. The Open Houses emphasized one-on-one exchanges of information at numerous "Key Topic Stations" located throughout the meeting rooms, where members of the public could spend as much or as little time discussing a particular aspect of the Proposed Project. The public was invited to attend at any time during the hosted timeframe to obtain project information and provide input.

Open Houses were held in both the city of San Juan Capistrano and the city of San Clemente in the vicinity of the Proposed Project. Bilingual Project team members were present to communicate with Spanish-speaking attendees. The Open Houses are listed by date, location, and attendance below.

1. San Juan Capistrano Open House
   San Juan Hills Golf Club
   November 16, 2011 -- 2:00 pm to 4:00 pm
   Attendance: 26

   San Juan Capistrano Open House
   San Juan Hills Golf Club
   November 16, 2011 -- 6:00 pm to 8:00 pm
   Attendance: 22

2. San Clemente Open House
   Bella Collina Towne & Golf Club
   November 17, 2011 -- 2:00 pm to 4:00 pm
   Attendance: 19

   San Clemente Open House
   Bella Collina Towne & Golf
   November 17, 2011 -- 6:00 pm to 8:00 pm
   Attendance: 24

3. San Juan Capistrano Open House
   Mission San Juan Capistrano
   February 8, 2012 -- 3:00 pm to 7:00 pm
   Attendance: 57

4. San Juan Capistrano Open House
   San Juan Hills Golf Club
   April 25, 2011 -- 3:00 pm to 7:00 pm
   Attendance: 45

Interactive GIS was utilized at two of the Open Houses to provide landowners and stakeholders with visual and photographic spatial media. Open House attendees, with the help of a GIS specialist, were able to ask questions about their residence location as it relates to the Proposed Project. Proposed Project information flyers that included information about the Proposed Project were provided at each Open House.

Key Topic Stations included:

- Check in Table,
- Transmission Planning,
- Transmission and Distribution,
- Project Overview Map,
- Substation Design,
- Geographic Information Systems and Land Services,
- Regulatory and Environmental Process, and
- Electric and Magnetic Fields.

In addition, at certain Open Houses, SDG&E also included the following Topic Stations:

- Community Relations,
- Clean Transportation,
- Customer Assistance,
- Customer Programs,
- Energy Resource Plan,
- Environmental Services,
- Fire Coordination and Preparedness,
- Smart Grid,
- Smart Meter/My Account,
- Vegetation Management, and
- Sustainable Communities.

1.6.6 San Juan Capistrano Substation Wall Design Charrette

On April 18, 2012 SDG&E hosted a Design Charrette at the San Juan Hills Golf Club from 7:00PM to 9:00PM to identify an architectural design theme for the San Juan Capistrano Substation wall. Approximately 50 attendees reviewed three initial substation wall design theme concepts that either emulated the existing setting of the Capistrano Substation and the former utility structure or mission styles that reflect the surrounding San Juan Capistrano community. The attendees included neighbors of the substation, the City Architectural Design Review Committee, city of San Juan Capistrano officials and other interested residents. Based on the three design concepts reviewed it was determined that the appropriate architectural style for the substation wall would be mission or Spanish style, which is demonstrated in general terms in the PEA Visual Resources discussion. This was the first step in the design of the substation wall. SDG&E will participate in subsequent meetings with the City's ad hoc committee to further refine the design.

1.7 INTER-AGENCY AND OTHER CONSULTATIONS

As part of its public outreach and involvement efforts, SDG&E made presentations to key stakeholders, community and civic organizations, elected officials, customers, government entities, and tribal representatives. To date, SDG&E has provided briefings or conducted presentations for more than 80 groups and individuals. Included in those briefings or presentations were several homeowners' associations that are near to the Proposed Project. The presentations have helped expand community awareness of the Proposed Project and have provided interested parties with project information. It has also provided the opportunity to contribute valuable input and feedback about the Proposed Project. The following is a list of organizations that were consulted:

- City of San Juan Capistrano (meetings with various staff as well as presentations to the City Council and to the Planning Commission),

- City of San Clemente (meetings with various staff as well as presentations to the City Council),
- Substation tours for various San Juan Capistrano city staff,
- Capistrano Unified School District,
- Office of Orange County Supervisor Pat Bates – Don Hughes (Chief of Staff),
- Association of California Cities – Orange County Division,
- Orange County Director of Public Works – Jess Carabajal,
- City of San Juan Capistrano Chamber of Commerce Legislative Committee,
- City of San Clemente Chamber of Commerce Legislative Committee, and
- Multiple homeowners associations along the Proposed Project alignment.

In addition to the agency coordination outlined above, a presentation was also made to representatives of the Gabrieliño Band of Mission Indians. On January 26, 2012, Ms. Joyce Perry of the Juaneño Band of Mission Indians Acjachemen Nation contacted TRC, stating that she and Mr. David Belardes (Chairperson for the tribe) would like to meet to review the maps for the Proposed Project and point out areas of sensitivity and concern. On March 19, 2012, Ms. Joyce Perry and Mr. David Belardes met with representatives from SDG&E and TRC. The meeting gave Ms. Perry and Mr. Belardes an opportunity to see larger scale maps of the Proposed Project, to ask questions and to provide comments and input on any sensitive areas or areas of concern. Input from Ms. Perry and Mr. Belardes has been included within Section 4.5, Cultural Resources.

1.7.1 Public Support for Proposed Project

To date, approximately 127 supporters, including government entities, elected officials, individual customers and other organizations have expressed their support for the Proposed Project. Proposed Project supporters include, but are not limited to, the following:

- Senator Mimi Walters
- Senator Mark Wyland
- Assemblywoman Diane Harkey
- Association of Orange County Cities
- San Juan Capistrano Chamber of Commerce
- San Clemente Chamber of Commerce
- Orange County Business Council
- South Orange County Regional Chamber of Commerce
- South Orange County Economic Coalition
- Orange County Taxpayers Association
- Rancho Mission Viejo

- Orange County Association of Realtors

Copies of support letters that have been received to date can be found within Appendix 1-A, Project Letters of Support.

1.7.2 Areas of Controversy

To date, SDG&E has identified the following areas of controversy regarding the Proposed Project.

1.7.2.1 Demolition of Former Utility Structure

The Proposed Project includes demolition of an existing former utility structure located at the Capistrano Substation site that was constructed 1918. City of San Juan Capistrano staff and officials have expressed to SDG&E representatives that the former utility structure should be preserved, relocated or otherwise treated as a historical resource. This concern was memorialized in an Agenda Report from the City Development Services Department to the City Cultural Heritage Commission dated February 28, 2012, as well as City Council resolution 12-02-21-02, which was passed on February 21, 2012. Resolution 12-02-21-02 states that the City Manager shall prepare a letter to SDG&E on behalf of the City and its residents expressing (refer to Appendix 1-E):

> *"…formal opposition to any upgrade or modification to the transmission lines that would have a measureable impact on nearby residences, schools, public open spaces, historic assets, and other public property unless corresponding mitigations are available to reduce the measureable impacts at or below corresponding levels of the existing transmission line…"*

In the letter referenced above dated April 18, 2012 from the City Manager to SDG&E (refer to Appendix 1-E), the City states that the former utility structure was constructed in 1918 and is listed on the city of San Juan Capistrano's Buildings of Distinction (BOD) list. A slightly different version of the same letter from the City Manager of San Juan Capistrano to the CPUC contains the additional claim that "San Diego Gas & Electric (SDG&E) Company currently operates an electrical substation located in the historic district of San Juan Capistrano." SDG&E has not been able to confirm this statement. As discussed in Section 4.5 of this PEA, there is no readily available evidence to support the claim that the substation or former utility structure is located within a historic district. Moreover, Section 4.5 of the PEA concludes that the former utility structure is not a "historical resource" as defined by CEQA.

These conclusions are based on a historic resource evaluation prepared by an expert in the field of historic preservation.

Even though the former utility structure is not historically significant, to address the concerns expressed by city staff and other representatives, SDG&E plans to take the following steps, which apply to structures that are historically significant according to city of San Juan Capistrano City Council Policy 602:

1. Advertise for a period of three months that the former utility structure may be available for relocation.

2. Prepare a photographic record of the former utility structure. Photographs will include 1) each elevation, 2) close-ups of any unusual or unique architectural features and 3) views of the structure from a distance. In addition, measured drawings or plans will be included.
3. If not relocated, allow the removal of any architectural elements of the former utility structure for a period of two weeks at the expense of any local historic interest group or organization removing the element**.**

1.7.2.2 Location of Proposed Substation and Aesthetics

Another area of controversy indentified in the April 18 letter from the city of San Juan Capistrano City Manager to the CPUC is the location of the proposed new San Juan Capistrano Substation. The City's letter identifies an existing electric corridor to the east as a better location to construct the new electric transmission and substation facilities included within the Proposed Project. Concerns for San Juan Capistrano carrying the regional burden of the Proposed Project have been expressed by both city representatives and residents. SDG&E developed the Proposed Project because it is located within the load center and almost exclusively utilizes existing SDG&E owned property and ROW. As outlined in Section 5.2, Description of Project Alternatives to Minimize Significant Effects, utilization of an alternative substation site would result in more adverse environmental effects than utilization of the existing Capistrano Substation site. SDG&E notes that at open houses held by SDG&E, residents expressed to SDG&E representatives favorable opinions regarding removal of the former utility structure and proposed improvements to the substation property including landscaping, wall design and undergrounding some of the 138kV and 12kV electric transmission and distribution lines.

1.7.2.3 Undergrounding

Elected officials and members of the community have requested the undergrounding of SDG&E's electric facilities. As noted above, some undergrounding of the 138kV transmission and 12kV distribution lines has been proposed around the substation location. In addition, SDG&E is proposing to underground a small portion of the 230kV transmission lines near Rancho San Juan where the existing 138kV transmission lines are currently underground.

1.8 ISSUES TO BE RESOLVED

1.8.1 Final Design of the La Pata Avenue Gap Closure and Camino Del Rio Extension Project

Design of the La Pata Avenue Gap Closure and Camino Del Rio Extension Project is currently being finalized which affects the location of Pole Nos. 26 and 27. The location of these poles will affect final grading and impact areas for the Proposed Project. It is anticipated that the design for the La Pata Avenue Gap Closure and Camino Del Rio Extension project will occur in the months following submittal of the application for the Proposed Project and that the final pole locations for the Proposed Project will be included within the CEQA compliance process completed by the CPUC. SDG&E's transmission engineering and land management is currently working with the County of Orange to minimize any future conflicts.

1.8.2 State Route 241 Extension

The Transportation Corridor Agency currently has plans to extend the State Route (SR) 241 toll road from its current terminus at Oso Parkway to the Interstate 5 (I-5) Freeway near the border of Orange and San Diego Counties. The proposed alignment of the SR-241 extension would place the toll road immediately adjacent to the SDG&E Talega Substation and through the proposed Project transmission line components. While SDG&E has attempted to incorporate the current proposed design for the SR-241 extension, additional coordination with the Transportation Corridor Agencies and possible refinement of the Proposed Project design may be required.

1.8.3 Final Design of the San Juan Capistrano Substation Perimeter Wall and Landscaping

SDG&E is working with city of San Juan Capistrano ad hoc committee which consists of city staff and local residences to refine the design of the San Juan Capistrano Substation perimeter wall and landscaping (refer to Section 1.6.6, San Juan Capistrano Substation Wall Design Charrette). Therefore, the final design of the substation perimeter wall and landscaping has not yet been fully defined. The information provided within the PEA includes preliminary design and parameters relating to these aspects of the proposed San Juan Capistrano Substation.

The remainder of this page is intentionally left blank.

Table 1-1: PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
Chapter 1: PEA Summary		
	Include major conclusions of the PEA.	Section 1.5 – Major PEA Conclusions
	List any areas of controversy.	Section 1.7.2 – Areas of Controversy
	Identify any major issues that must be resolved, including the choice among reasonably feasible alternatives and mitigation measures, if any.	Section 1.8 – Issues to be Resolved
	Include a description of inter-agency coordination if any.	Section 1.7 – Inter-Agency and Other Consultations
	Include a description of public outreach efforts, if any.	Section 1.6 – Public Outreach Efforts
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 – Proposed Project Purpose and Need
	Explain the objective(s) and/or purpose and need for implementing the Proposed Project.	Section 2.0 – Proposed Project Purpose and Need
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 2.0 – Proposed Project Purpose and Need

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
Chapter 3: Project Description		
3.1 Project Location	Identify geographical location: County, City (provide Proposed Project location map[s]).	Section 3.2 – Proposed Project Location and Regional Context Figure 3-1: Project Vicinity Map Figure 3-2: Project Overview 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 3.2 – Proposed Project Location and Regional Context Section 3.2.1 – Capistrano Substation Site Section 3.2.2 – Talega Substation Site Section 4.9 – Land Use and Planning Figure 4.9-1: Existing Land Uses in the Proposed Project Vicinity
	Determine whether the Proposed Project is located within an existing property owned by the Applicant, traverses existing ROWs, or requires new ROWs. 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 3.2 – Proposed Project Location and Regional Context Section 3.7 – Permanent Land and Right-of-Way Requirements
3.2 Existing System	Describe the local system to which the Proposed Project relates.	Section 2.0 – Proposed Project Purpose and Need Section 3.3 – Existing Regional Electric System
	Provide a schematic diagram and map of the existing system.	Figure 2-1: South Orange County 138kV Substation Interconnection Diagram Appendix 3-A: Talega to Capistrano Existing Transmission Line Map
	Provide a schematic diagram that illustrates the system as it would be configured with the implementation of the Proposed Project.	Figure 3-7: Proposed Transmission Line Route

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.4 Proposed Project	Describe the Proposed Project. Is it an upgrade, a new line, new substations, etc.?	Section 3.1 – Proposed Project Overview Section 3.4 – Proposed Project Facilities
	Describe how the Proposed Project fits into the regional system. Does it create a loop for reliability, etc.?	Section 2.0 – Proposed Project Purpose and Need Section 3.1 – Proposed Project Overview Section 3.4.3 – Transmission Lines
	Describe all reasonably foreseeable future phases, or other reasonably foreseeable consequences of the Proposed Project.	Section 3.4.1.1 – Capistrano Substation
	Provide the capacity increase in megawatts (MW). If the Proposed Project does not increase capacity, state that.	Section 3.4.1.1 – Capistrano Substation
	Provide 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.	Appendix 1-B
3.5 Project Components **3.5.1 Transmission Line**	Describe what type of line exists and what type of line is proposed.	Section 3.4.3 – Transmission Lines
	Identify the length of the upgraded alignment, the new alignment, etc.	Section 3.4.3 – Transmission Lines Table 3-2: Transmission Line Segments
	Describe whether construction would require one-for-one pole replacement, new poles, steel poles, etc.?	Section 3.4.3 – Transmission Lines
	Describe what would happen to other lines and utilities that may be collocated on the poles to be replaced (e.g., distribution, communication, etc.).	Section 3.4.3 – Transmission Lines

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
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 3.4.3 – Transmission Lines Table 3-3: Proposed New 230kV Poles Table 3-4: Proposed New 139kV Poles Table 3-5: Proposed New 69kV Poles Table 3-6: Transmission Structures/Poles to be Removed Appendix 3-B: Typical Structure Diagrams and Photographs
	Describe any specialty poles or towers; note where they would be used; make sure to note if any guying would likely be required across a road.	Section 3.4.3 – Transmission Lines Table 3-3: Proposed New 230kV Poles Table 3-4: Proposed New 139kV Poles Table 3-5: Proposed New 69kV Poles Table 3-6: Transmission Structures/Poles to be Removed
	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.	The Project does not included pole-for-pole replacement.
	Describe any special pole types and any special features.	Section 3.4.3 – Transmission Lines

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.5.3 Conductor/Cable 3.5.3.1 Above-Ground Installation	Describe the type of line to be installed on the poles/tower.	Section 3.4.3 – Transmission Lines
	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 3.4.3 – Transmission Lines
	Provide the size and type of conductor and insulator configuration.	Section 3.4.3 – Transmission Lines
	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 3.4.3 – Transmission Lines
	Provide the approximate span lengths between poles or towers, note where different if distribution is present or not if relevant.	Section 3.4.3 – Transmission Lines
	Determine whether other infrastructure would likely be collocated with the conductor; if so, provide conduit diameter of other infrastructure.	Section 3.4.3 – Transmission Lines
3.5.3.2 Below Ground Installation	Describe the type of line to be installed.	Section 3.4.3 – Transmission Lines
	Describe the type of casing the cable would be installed in; provide the dimensions of the casing.	Section 3.4.3 – Transmission Lines
	Provide an engineering 'typical' drawing of the duct bank and describe what types of infrastructure would likely be installed within the duct bank.	Appendix 3-B: Typical Structure Diagrams and Photographs

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.5.4 Substations	Provide "typical" plan and profile views of the proposed substation and the existing substation if applicable.	Figure 3-3: Existing Capistrano Substation Layout Figure 3-4: Existing Capistrano Site Overview Figure 3-6: Ultimate San Juan Capistrano Substation Layout Appendix 3-B: Typical Structure Diagrams and Photographs
	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.	Section 3.4.1 – Substations Section 3.4.1.1 – San Juan Capistrano Substation Section 3.4.1.2 – Talega Substation
	Provide the approximate or "typical" dimensions (width and height) of new structures including engineering and design standards that apply.	Section 3.4.1 – Substations Section 3.4.1.1 – San Juan Capistrano Substation Section 3.4.1.2 – Talega Substation
	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 3.4.1 – Substations Section 3.4.1.1 – San Juan Capistrano Substation Section 3.4.1.2 – Talega Substation
	Describe the electrical need area served by the distribution substation.	Section 2.0 – Proposed Project Purpose and Need
3.6 Right-of-Way Requirements	Describe the ROW location, ownership, and width. Would the existing ROW be used or would a new ROW be required?	Section 3.4.3 – Transmission Lines Section 3.7 – Permanent Land and Right-of-Way Requirements
	If a new ROW is required, describe how it would be acquired and approximately how much land would be required (length and width).	Section 3.7 – Permanent Land and Right-of-Way Requirements
3.6 Right-of-Way Requirements	List the properties likely to require acquisition.	Section 3.7 – Permanent Land and Right-of-Way Requirements

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7 Construction **3.7.1 For All Projects** **3.7.1.1 Staging Areas**	Where would the main staging area(s) likely be located?	Section 3.5.4 – Temporary Work Areas Figure 3-7: Proposed Transmission Line Route
	Approximately how large would the main staging area(s) be?	Section 3.5.4 – Temporary Work Areas Figure 3-7: Proposed Transmission Line Route
	Describe any site preparation required, if known, or generally describe what might be required.	Section 3.5.4 – Temporary Work Areas Figure 3-7: Proposed Transmission Line Route
	Describe what the staging area would be used for.	Section 3.5.4.1 – Materials Storage and Staging Areas
	Describe how the staging area would be secured, would a fence be installed? If so, describe the type and extent of the fencing.	Section 3.5.4.1 – Materials Storage and Staging Areas
	Describe how power to the site would be provided if required.	Section 3.5.4.1 – Materials Storage and Staging Areas
	Describe any grading activities and/or slope stabilization issues.	Section 3.5.4.1 – Materials Storage and Staging Areas
3.7.1.2 Work Areas	Describe known work areas that may be required for specific construction activities.	Section 3.5.4 – Temporary Work Areas Figure 3-7: Proposed Transmission Line Route
	For each known work area, provide the area required (include length and width) and describe the types of activities that would be performed.	Section 3.5.4 – Temporary Work Areas Figure 3-7: Proposed Transmission Line Route
	Identify the approximate location of known work areas in the GIS database.	Appendix 1-B: Geographic Information System Data (Compact Disc)
	Describe how the work areas would likely be accessed.	Section 3.5.4.7 – Access Roads

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7.1.2 Work Areas	If any site preparation is likely required, generally describe what and how it would be accomplished.	Section 3.5.4 – Temporary Work Areas
	Describe any grading activities and/or slope stabilization issues.	Section 3.5.4 – Temporary Work Areas
	Based on the information provided, describe how the site would be restored.	Section 3.5.4 – Temporary Work Areas Section 3.5.4.2 – Pull and Tension Sites Section 3.5.4.3 – Structure Sites Section 3.5.4.4 – Splice Sites Section 3.5.4.5 – Guard Structures
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.	Section 3.5.1.1 – Step 1 –Access Road Construction Section 3.5.4.7 – Access Roads
	For road types that require preparation, describe the methods and equipment that would be used.	Section 3.5.1.1 – Step 1 –Access Road Construction Section 3.5.4.7 – Access Roads
	Identify approximate location of all access roads (by type) in the GIS database.	Appendix 1-B: Geographic Information System Data (Compact Disc)
	Describe any grading activities and/or slope stabilization issues.	Section 3.5.1.1 – Step 1 –Access Road Construction Section 3.5.4.7 – Access Roads
3.7.1.4 Helicopter Access	Identify which proposed poles/towers would be removed and/or installed using a helicopter.	Section 3.5.6 – Helicopter Usage during Transmission Line Construction
	If different types of helicopters are to be used, describe each type and what activities they would be used for.	Section 3.5.6 – Helicopter Usage during Transmission Line Construction

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7.1.4 Helicopter Access	Provide information as to where the helicopters would be staged, where they would refuel, where they would land within the Proposed Project site.	Section 3.5.6 – Helicopter Usage during Transmission Line Construction
	Describe any BMPs that would be employed to avoid impacts caused by use of helicopters, for example: air quality and noise considerations.	Section 3.5.6 – Helicopter Usage during Transmission Line Construction
	Describe flight paths, payloads, hours of operations for known locations, and work types.	Section 3.5.6 – Helicopter Usage during Transmission Line Construction
3.7.1.5 Vegetation Clearance	Describe the types of vegetation clearing that may be required and why.	Section 3.5.4 – Temporary Work Areas
	Identify the preliminary location and provide an approximate area of disturbance in the GIS database for each type of vegetation removal.	Figure 3-7: Proposed Transmission Line Route Appendix 1-B: Geographic Information System Data (Compact Disc)
	Describe how each type of vegetation removal would be accomplished.	Section 3.8 – Operation and Maintenance (Existing and Proposed)
	For removal of trees, distinguish between tree trimming as required under GO-95D and tree removal.	Section 3.8 – Operation and Maintenance (Existing and Proposed)
	Describe the types and approximate number and size of trees that may need to be removed.	Section 3.8 – Operation and Maintenance (Existing and Proposed) Section 4.4 – Biological Resources Section 4.12 –Public Services
	Describe the type of equipment typically used.	Section 3.8 – Operation and Maintenance (Existing and Proposed)

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
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 1 acre, outline the BMPs that would be implemented to manage surface runoff.	Section 3.5 – Construction Methods Section 3.9 – Environmental Procedures and Protocols Table 3-12: Summary of Proposed Project Disturbance Areas Table 3-19: Anticipated Permit, Approval, and Consultation Requirements
	Describe any grading activities and/or slope stabilization issues.	Section 3.5.1.1 – Step 1 - Access Road Construction Section 3.5.1.2 – Step 2 - Installing the Support Structure Foundations Section 3.5.3.1 – Capistrano Substation Section 3.5.4.2 – Pull and Tension Sites Figure 3-8: San Juan Capistrano Preliminary Grading Plan Section 4.6 – Geology, Soils, and Mineral Resources
	Describe how construction waste would be disposed.	Section 3.5.7 – Retired Structures/Poles Materials, and Components Section 3.5.4.1 – Material Storage and Staging Areas Section 3.5.1.7 – Step 7 - Site Cleanup Section 4.15 – Utilities and Service Systems
3.7.1.7 Cleanup and Post-Construction Restoration	Describe how cleanup and post-construction restoration would be performed.	Section 3.5.1.7 – Step 7 - Site Cleanup Section 3.5.2.4 – Step 4 - Site Cleanup Section 3.5.4 – Temporary Work Areas

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
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 3.5.4.2 – Pull and Tension Sites
	Provide the area of pull and tension sites including the estimated length and width.	Section 3.5.4.2 – 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.	Section 3.5.4.2 – Pull and Tension Sites Figure 3-7: Proposed Transmission Line Route Appendix 1-B: Geographic Information System Data (Compact Disc)
	Describe the type of equipment that would be required at these sites.	Section 3.5.4.2 – Pull and Tension Sites Table 3-14: Standard Construction Equipment and Usage
	If conductor is being replaced, describe how it would be removed from the site.	Section 3.5.1.4 – Step 4 - Structure Removal Table 3-14: Standard Construction Equipment and Usage
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 3.5.1.3 – Step 3 – Structure Erection Table 3-14: Standard Construction Equipment and Usage Appendix 3-D: Detailed Construction Schedule and Equipment Use Tables
	Describe the process of removing the poles and foundations.	Section 3.5.1.4 – Step 4 - Structure Removal
	Describe what happens to the holes that the poles were in (i.e., reused or backfilled)?	Section 3.5.1.4 – Step 4 - Structure Removal
	If the holes are to be backfilled, what type of fill would be used and where would it come from?	Section 3.5.1.4 – Step 4 - Structure Removal

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7.2.2 Pole Installation and Removal	Describe any surface restoration that would occur at the pole sites.	Section 3.5.1.7 – Step 7 - Site Cleanup
	Describe how the poles would be removed from the sites.	Section 3.5.1.4 – Step 4 - Structure 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.	Not applicable – no topping is proposed as part of this project.
	Describe the process of how the new poles/towers would be installed; specifically identify any special construction methods for specific locations or for different types of poles/towers.	Section 3.5.1.3 – Step 3 – Structure Erection
3.7.2.2 Pole/Tower Installation	Describe the types of equipment and their use as related to pole/tower installation.	Section 3.5.1.3 – Step 3 – Structure Erection Table 3-13: Standard Construction Equipment and Usage
	Describe the actions taken to maintain a safe work environment during construction.	Section 3.5 – Construction Methods
	Describe what would be done with soil that is removed from a hole/foundation site.	Section 3.5.1.2 – Step 2 - Installing the Support Structure Foundations
	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 3.5.1.2 – Step 2 - Installing the Support Structure Foundations
	Describe briefly how poles/towers and associated hardware are assembled.	Section 3.5.1.3 – Step 3 – Structure Erection

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7.2.2 Pole/Tower Installation	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 3.5.1.3 – Step 3 – Structure Erection
	Provide the following information about pole/tower installation and associated disturbance area estimates; pole diameter, lattice tower base dimension, auger hole depth, permanent footprint per pole/tower, number of poles/towers, average work area around poles/towers, and total permanent footprint for poles/towers.	Section 3.5.1.2 – Step 2 - Installing the Support Structure Foundations Section 3.5.4.3 – Structure Sites Table 3-2: Proposed New 230kV Structures Table 3-6: Transmission Pole Diameters
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 3.5.1.6 – Step 6 - Conductor Stringing
	Generally describe the conductor/cable splicing process.	Section 3.5.2.3 – Step 3 – Cable Pulling, Splicing, and Termination
	If vaults are required, provide their dimensions and approximate location/spacing along the alignment.	Section 3.4.3.1 – Segment 1 - Capistrano to Interstate 5 Section 3.4.3.3 – Segment 3 – Rancho San Juan
	Describe in what areas conductor/cable stringing/installation activities would occur.	Section 3.5.4.2 – Pull and Tension Sits Section 3.5.4.4 – Splice Sites Figure 3-7: Proposed Transmission Line Route
	Describe any safety precautions or areas where special methodology would be required.	Section 3.5.5 – Road Crossings Section 3.5.6 – Helicopter Usage during Transmission Line Construction
3.7.3 Transmission Line Construction (Below Ground) **3.7.3.1 Trenching**	Describe the approximate dimensions of the trench (e.g., depth, width).	Section 3.5.3 – Transmission Lines

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7.3 Transmission Line Construction (Below Ground) **3.7.3.1 Trenching**	Describe the methodology of making the trench.	Section 3.5.2.1 – Trenching and Duct Bank Installation
	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.	Section 3.5.2.1 – Trenching and Duct Bank Installation
	Provide off-site disposal location, if known, or describe possible option(s).	Section 3.5.2.1 – Trenching and Duct Bank Installation Section 3.5.7 – Retired Structures/Poles, Materials, and Components Table 3-13: Common Destination of Retired Project Components
	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.	Section 3.5.2.1 – Trenching and Duct Bank Installation
	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.	Section 3.5.2.1 – Trenching and Duct Bank Installation
	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.	Section 4.7 – Hazards and Hazardous Materials
	If pre-existing hazardous waste was encountered, describe the process of removal and disposal.	Section 4.7 – Hazards and Hazardous Materials
	Describe any standard BMPs that would be implemented.	Section 4.7 – Hazards and Hazardous Materials

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7.3.2 Trenchless Techniques: Microtunnel, Bore and Jack, Horizontal Directional Drilling	Provide the approximate location of the bore pits.	Figure 3-7: Proposed Transmission Line Route
	Provide the length, width and depth of the sending and receiving pits.	Section 3.5.2.4 – Step 5-Jack-and-Bore
	Describe the methodology of excavating and shoring the pits.	Section 3.5 – Construction Methods Section 3.5.2.4 – Step 5-Jack-and-Bore
	Describe the methodology of the trenchless technique.	Section 3.5.2.4 – Step 5-Jack-and-Bore
	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.	Section 3.5.2.4 – Step 5-Jack-and-Bore
	Describe the process for safe handling of drilling mud and bore lubricants.	Not Applicable – no drilling mud is proposed.
	Describe the process for detecting and avoiding "fracturing-out" during horizontal directional drilling operations.	Not Applicable – no horizontal directional drilling is proposed.
	Describe the process for avoiding contact between drilling mud/lubricants and stream beds.	Not Applicable – no drilling mud is proposed.
	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.	Not Applicable – no engineered fill is anticipated.
	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.	Not applicable – dewatering is not anticipated.
	Describe the process for testing excavated soil or groundwater for the presence of pre-existing environmental contaminants.	Section 3.5.2.1 – Step 1 – Trenching and Duct Bank Installation
	If a pre-existing hazardous waste was encountered, describe the process of removal and disposal.	Not Applicable – no known contaminants existing near the jack-and-bore location.

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7.3.2 Trenchless Techniques: Microtunnel, Bore and Jack, Horizontal Directional Drilling	Describe any grading activities and/or slope stabilization issues.	Not Applicable – no grading or slope stabilization is anticipated at the jack-and-bore location.
	Describe any standard BMPs that would be implemented.	Section 3.5 – Construction Methods Section 3.8 – Operation and Maintenance (Existing and Proposed) Section 3.9 – Environmental Procedures and Protocols
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 3.5.3.1 – Capistrano Substation Section 3.5.3.2 – Talega Substation Figure 3-8: San Juan Capistrano Preliminary Grading Plan
	Provide a conceptual landscape plan in consultation with the municipality in which the substation is located.	Section 3.5.3.1 – Capistrano Substation Figure 3-9: San Juan Capistrano Conceptual Landscaping Plan
	Describe any grading activities and/or slope stabilization issues.	Section 3.5.3.1 – Capistrano Substation Section 3.5.3.2 – Talega Substation Figure 3-8: San Juan Capistrano Preliminary Grading Plan Section 4.6 – Geology, Soils, and Mineral Resources
	Describe possible relocation of commercial or residential property, if any.	Not applicable – no relocation of commercial or residential property is being proposed as part of this project.

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7.5 Construction Workforce and Equipment	Provide the estimated number of construction crew members.	Section 3.5.8 – Construction Equipment and Personnel
	Describe the crew deployment, whether crews would work concurrently, if they would be phased, etc.	Section 3.5.8 – Construction Equipment and Personnel
	Describe the different types of activities to be undertaken during construction, the number of crew members for each activity, and the number and types of equipment expected to be used for said activity. Include a written description of the activity.	Section 3.5.8 – Construction Equipment and Personnel
	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.	Table 3-14: Standard Construction Equipment and Usage Appendix 3-D: Detailed Construction Schedule and Vehicle Use Tables
3.7.6 Construction Schedule	Provide a preliminary project construction schedule; include contingencies for weather, wildlife closure periods, etc.	Section 3.7 – Construction Schedule
3.8 Operation and Maintenance	Describe the general system monitoring and control.	Section 3.8 – Operation and Maintenance (Existing and Proposed)
	Describe the general maintenance program of the Proposed Project include timing of inspections, type of inspection, and a description of how the inspection would be implemented.	Section 3.8 – Operation and Maintenance (Existing and Proposed)
	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 (Existing and Proposed) Section 3.5.8 – Construction Equipment and Personnel
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 Section 4.1 through Section 4.15

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.10 Electric and Magnetic Fields Summary	Electric and Magenetic Fields Summary	Section 3.11 – Electric and Magnetic Fields Summary Appendix 3-E: South Orange County Reliability Electric and Magnetic Fields Studies
Chapter 4: Environmental Setting		
	For each resource area discussion within the PEA, include the following: a description of the physical environment in the vicinity of the Proposed Project and a description of the regulatory environment/context.	Section 4.1 through Section 4.15
	Limit detailed descriptions to those resource areas which may be subject to a potentially significant impact.	Section 4.1 through Section 4.15
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.	Section 4.1 – Aesthetics Figures 4.1-5 through 4.1-17
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 4.3-A
	Provide documentation of the location and types of sensitive receptors that could be impacted by the project.	Section 4.3 – Air Quality and Greenhouse Gases
	Identify Proposed Project greenhouse gas (GHG) emissions.	Section 4.3 – Air Quality and Greenhouse Gases

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
5.3 Air Quality	Ensure that the assessment of air quality impacts are 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.	Section 4.3 – Air Quality and Greenhouse Gases
5.4 Biological Resources	Provide a copy of the Wetland Delineation and supporting documentation. If verified, provide supporting documentation.	Appendix 4.4-A: Biological Resources Assessment
	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 4.4-A: Biological Resources Assessment
5.5 Cultural Resources	Cultural Resources Report documenting a cultural resources investigation of the Proposed Project.	Appendix 4.5-A: Cultural Resources Survey Report
	Provide a copy of the records found in the literature search.	Appendix 4.5-A: Cultural Resources Survey Report
	Provide a copy of all letters and documentation of Native American consultation.	Appendix 4.5-A: Cultural Resources Survey Report
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.	To be provided once finalized.
5.7 Hazards and Hazardous Materials	Include the Environmental Data Resources report.	Appendix 4.7-A: EDR Corridor Study
	Include a Hazardous Substance Control and Emergency Response Plan, if required.	Not applicable.
	Include a Health and Safety Plan, if required.	If required, this will be prepared at a later date.
	Describe the Worker Environmental Awareness Program	Section 3.9 – Environmental Procedures and Protocols Section 4.7 – Hazards and hazardous Materials

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
5.7 Hazards and Hazardous Materials	Describe which chemicals would be used during construction and operation of the Proposed Project.	Section 4.7 – Hazards and hazardous Materials
5.8 Hydrology and Water Quality	Describe impacts to groundwater quality including increased runoff due to construction of impermeable surfaces, etc.	Section 4.8 – Hydrology and Water Quality
	Describe impacts to surface water quality including the potential for accelerated soil erosion, downstream sedimentation, and reduced surface water quality.	Section 4.8 – Hydrology and Water Quality
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.	Appendix 1-C
5.10 Mineral Resources	Data needs already specified under Chapter 3 would generally meet the data needs for this resource area.	Not applicable.
5.11 Noise	Provide long term noise estimates for operational noise.	Section 4.10 - Noise
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 – Transportation and Traffic
	Provide a preliminary description of the traffic management plan that would be implemented during construction of the Proposed Project.	Section 4.14 – Transportation and Traffic

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
5.16 Utilities and Services Systems	Describe how treated wood poles would be disposed of after removal, if applicable.	Section 3.5.7 – Retired Structures/Poles, Materials, and Components
5.17 Cumulative Analysis	Provide a list of projects within the Proposed Project area that the applicant is involved in.	Section 4.16 – Cumulative Impacts
	Provide a list of projects that have the potential to be proximate in space and time to the Proposed Project.	Section 4.16 – Cumulative Impacts
5.18 Growth-Inducing Impacts, If Significant	Provide information on the Proposed Project's growth-inducing impacts.	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.	Sections 4.1 through 4.15 Table 3-18 - Applicant Proposed Measures
6.2 Description of Project Alternatives and Impact Analysis	Provide a summary of the alternatives considered that would meet most of the objectives of the Proposed Project and an explanation as to why they were not chosen as the Proposed Project. Include system or facility alternatives, route alternatives, route variations, alternative locations.	Section 5.2 – Description of Project Alternatives to Minimize Significant Effects
	Include a description of a "No Project Alternative" should be included.	Section 5.2 – Description of Project Alternatives to Minimize Significant Effects
	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.	Section 5.2 – Description of Project Alternatives to Minimize Significant Effects

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
6.3 Growth-Inducing Impacts	Discussion should be fairly succinct and focus on if the Proposed Project will foster economic or population growth, cause an increase in population that could further tax existing community service facilities, or encourage and facilitate other activities that would cause population growth that could significantly affect the environment.	Section 5.3 - Growth-Inducing Impacts
6.4 Suggested Applicant Proposed Measures to address GHG Emissions	Include a menu of suggested APM's that applicants can consider.	Table 3-18: Applicant Proposed Measures Section 4.3.5 – Applicant Proposed Measures
Chapter 7: Other Process-Related Data Needs		
	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.	Appendix 1-C