BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

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In The Matter of the Application of SAN DIEGO GAS & ELECTRIC COMPANY (U 902 E) for a Permit to Construct Electrical Facilities With Voltages Between 50 kV and 200 kV and New Substations With High Side Voltages Exceeding 50kV: The East County Substation Project	A0908003 Application 09-08-____ (Filed August 10, 2009)

APPLICATION OF SAN DIEGO GAS & ELECTRIC COMPANY (U 902 E) FOR A PERMIT TO CONSTRUCT THE EAST COUNTY SUBSTATION PROJECT

(VOLUME I OF II)

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APPLICATION OF SAN DIEGO GAS & ELECTRIC COMPANY (U 902 E) FOR A PERMIT TO CONSTRUCT THE EAST COUNTY SUBSTATION PROJECT

I. INTRODUCTION

Pursuant to General Order (GO) 131-D, the California Environmental Quality Act (CEQA), the California Public Utilities Code, and the Rules of Practice and Procedure of the California Public Utilities Commission (Commission), San Diego Gas & Electric Company (SDG&E) files this Application (Application) for a Permit to Construct (PTC) the East County (ECO) Substation Project (Proposed Project). As set forth in the accompanying Proponent's Environmental Assessment (PEA), the Proposed Project is needed to interconnect proposed renewable wind energy generation in southeastern San Diego County and Mexico in accordance with the California Independent System Operator (CAISO) Open Access Transmission Tariff. Additionally, several components of the Proposed Project will improve the reliability of electric service to the communities of Bankhead Springs, Boulevard, Jacumba, and Manzanita, as well as the Campo, La Posta, and Manzanita Indian Reservations, which experience relatively frequent outages.

The proposed in-service date for the new substation is June 2012. A complete project description is included in the PEA, which is Volume II of this application. The PEA will be referenced in this Application pursuant to GO 131-D, Section IX.B.1.e.[1]

II. SUMMARY OF REQUEST

SDG&E submits this Application requesting that the California Public Utilities Commission, upon completion of its review of this Application, issue and certify an appropriate environmental document and issue an expedited *ex parte* decision granting SDG&E a PTC authorizing SDG&E to construct the Proposed Project set forth in this Application, PEA and the accompanying documents within the proposed timelines set forth in Section IV.A.4.d of this Application.

III. PROJECT BACKGROUND

A. Purpose

The purpose of the Proposed Project is to provide an economical interconnection platform for renewable generation sources in southeastern San Diego County and Mexico in accordance with the California Independent System Operator Open Access Transmission Tariff. This Proposed Project will also 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. For a more detailed discussion of the purpose for the Proposed Project, see the PEA.

B. Description

The Proposed Project is broken into the following five components:

[1] Other required information for a PTC application under the Commission's Rules of Practice and Procedure are contained in this Application or its appendices.

1. Construction of a new 500/230/138 Kilovolt (kV) electric substation (ECO Substation);

2. 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;

3. 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;

4. 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; and

5. 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.

ECO Substation

The new ECO Substation will occupy approximately 58 acres, which will be enclosed by a chain-link fence around the perimeter of the substation. In addition, a 20-foot buffer around the perimeter of the substation pads will be maintained. Construction will require permanent cut and fill slopes in the area surrounding the substation that may occupy an additional 25 acres. In addition, a new access road, drainage facilities for the site, and a design/construction buffer of approximately 100 to 150 feet around the substation will be included in the Proposed Project design. The substation will be split into two separate yards consisting of one 500 kV yard and one 230/138 kV yard. The fenced area of the 500 kV yard will occupy roughly 32 acres (approximately 1,290 feet by 1,080 feet). The fenced area of the 230/138 kV yard will occupy roughly 26 acres (approximately 1,060 feet by 1,080 feet).

The electrical facilities to be installed include 500 kV, 230 kV, and 138 kV air-insulated electrical buses, steel support structures, transformers, capacitors, reactors, circuit breakers, disconnect switches, communication equipment, control equipment, and protective relays. More specifically, the initial arrangement of the substation will consist of:

- Two 500 kV bays in a ring bus configuration
- One 500/230 kV transformer bank (three single-phase units with one operational spare)
- Three 230 kV bays in a breaker-and-a-half bus configuration
- One 230 kV shunt capacitor
- One 230/138 kV transformer bank
- Two 138 kV bays in a double-bus/double-breaker bus configuration
- One 12 kV, 180 megavolt ampere reactive (MVAR) shunt reactor bank
- One microwave communication tower

Other facilities will include metering, SCADA, security, and communications equipment. In addition, two single-story relay/control buildings, a single-story storage building, and a fire-suppression system with associated hydrants and an approximately 120,000-gallon water tank will be installed. The water tank will be approximately 15 feet in height and 30 feet in diameter and will also be utilized for landscape irrigation. A stationary standby generator, to be used as a backup to the station lights and power transformers, will also be installed. The anticipated substation equipment will be fully contained within the fenced area of the ECO Substation. In addition, a retention basin will be constructed near the northwestern corner of the 230/138 kV yard, adjacent to the northern side of the substation. After construction, the basin will be used for the 500 kV yard stormwater retention. A second retention basin will be constructed along the western side of the ECO Substation for collection of drainage from the 230/138 kV yard. The retention basins are anticipated to be approximately 1.2 and 1.9 acres in size,

respectively; however, the final design of the retention basins will be determined after consultation with San Diego County to ensure adequate sizing to accommodate stormwater flows.

The substation will be designed so that it will ultimately be expanded to include the following components:

- Five 500 kV bays in a breaker-and-a-half bus configuration
- Nine 230 kV bays in a breaker-and-a-half bus configuration
- Nine 138 kV bays in a double-bus/double-breaker configuration
- Four 500/230 kV, 1,100 megavolt ampere (MVA) transformer banks with two single-phase operational spares
- Three 230/138 kV, 224 MVA transformer banks
- One or more 500 kV series capacitors
- Two 230 kV, 63 MVAR shunt capacitors
- Four 12 kV, 180 MVAR shunt reactor banks
- One 230 kV static VAR compensator

The maximum amount of oil required for the transformers at the ECO Substation will be approximately 569,800 gallons.

The tallest structures in the substation will be the 500 kV line and transformer dead-end structures, and the new communication tower. The maximum height for the 500 kV structures and communication tower will be approximately 135 feet. Substation lighting will be provided by approximately fifty 300-watt tungsten-quartz lamps placed near major electrical equipment. The yard lights will normally be turned off and will only be used during nighttime for security and safety reasons. Approximately ten 100-watt yellow floodlights will be mounted near the substation gates and building entrances to allow for nighttime emergency repair and routine maintenance access. The lights will be oriented downward to minimize glare onto surrounding property and habitat.

To offset the auxiliary power use at the ECO Substation, SDG&E is currently evaluating the installation of solar panels on the two control structures and storage structure. The installation of these solar panels would generate approximately 111,000 kilowatt hours (kwhrs) of electricity annually. Since they have not yet been fully evaluated or designed, impacts associated with their installation (although anticipated to be minor) have not been evaluated throughout the resource sections (Chapter 4) of the Proponent's Environmental Assessment.

A 10-foot tall chain-link fence topped with barbed wire will enclose the entire substation, which includes the 500 kV yard and 230/138 kV yard. All entrance gates will be locked and monitored remotely to limit access to only qualified personnel. Warning signs, in English and Spanish, will be posted on the substation fence in accordance with federal, state, and local safety regulations. A substation ground grid will also be installed in accordance with applicable safety guidelines.

An approximately 2,900-foot long asphalt paved access road will be constructed from Old U.S. Highway 80 to the ECO Substation. The access road will extend southeast off of Old U.S. Highway 80 before turning east and running along the north side of the pads. Four asphalt-paved driveways, approximately 100 feet in length, will be constructed off of the access road into the four gated entrances of the substation. The access road will be approximately 30 feet wide; requiring approximately 2.2 acres of land. In addition, 20-foot wide asphalt-paved interior access roads will be constructed within the substation to access the equipment.

Substation communication will be facilitated via a microwave and T1 system that will include the construction of a new communication tower at the ECO Substation. A

135-foot tall microwave tower with a six-foot diameter microwave antenna, associated ground systems, control structure, and cable bridge from the communication tower to the control structure will be installed within the ECO Substation fence. The microwave dish will be attached to the tower approximately 50 feet off the ground.

SWPL Loop-In

The existing 500 kV transmission line will be looped in and out of the 500 kV bus within the ECO Substation in conjunction with the substation construction. This installation will require the removal of one existing 125-foot tall tower and the installation of four new steel towers east of the ECO Substation fence. Depending on the final design, the anticipated maximum height of these structures will be approximately 125 feet.

A bundled 2,156 kcmil[2] aluminum-clad steel reinforced (ACSR)/Alumoweld (ACSR/AW) conductor will be installed on the SWPL loop-in with horizontal configuration (one phase on each side of the structures and one phase in the middle of the structures). The distance from the ground to the lowest conductor will be at least 35 feet. The approximate distance between phases will be 35 feet horizontally. The span lengths between the transmission structures will be approximately 1,200 feet.

138 kV Transmission Line

SDG&E is proposing to construct a new 138 kV transmission line from the ECO Substation to the rebuilt Boulevard Substation. The structure configuration for the transmission line will be designed as a twin circuit (two conductors per phase).

[2] kcmil (1,000 cmils) is a quantity of measure for the size of a conductor; kcmil wire size is the equivalent cross-sectional area in thousands of circular mils. A circular mil (cmil) is the area of a circle with a 0.001-inch-diameter.

The new transmission line will be approximately 13.3 miles long and will include approximately 98 steel transmission poles. In addition, nine wooden distribution poles will be installed to replace the existing distribution Circuit 445 poles. This distribution line will be collocated on the new 138 kV transmission line structures near the intersection of Jewel Valley Road and Tule Jim Lane in Boulevard. Some service lines may need to be extended to the relocated distribution line.

The final approximately 440 feet of the 138 kV transmission line will be installed underground in a concrete duct bank, terminating at the rebuilt Boulevard Substation. The duct bank will measure approximately 38 inches wide, 36 inches tall, and will contain nine six-inch diameter conduits. One steel cable riser pole, which will be approximately 140 feet tall, will be installed at the end of the overhead segment to connect the overhead conductors to the underground substation getaways.

Access roads will be constructed to most steel pole locations to facilitate installation and to allow for inspection and maintenance. All access roads to be built will be spur roads off of existing dirt roads. The spur roads will vary in length from 20 feet to 250 feet and will be approximately 15 feet wide. A total of approximately 2.6 miles of spur roads will be constructed, requiring approximately 5.3 acres of land.

All of the 138 kV steel poles will have six cross arms and an extended pole top to accommodate a fiber optic ground wire attachment for lightning protection and critical communication. A 900 kcmil aluminum steel supported/Alumoweld conductor will be installed on each arm of the 138 kV line. The majority of the structures will be tangent structures with an I-string configuration. The distance from the ground to the lowest conductor will be at least 30 feet. The approximate distance between the conductors will

be 18 feet horizontally and 12 feet vertically. The span lengths between poles will vary with terrain, but will generally be between 400 and 800 feet. The proposed conductor for use within the underground concrete duct bank between the cable riser pole and the rebuilt Boulevard Substation is 2,500 kcmil copper cross-linked polyethylene cable. The underground concrete duct bank will also accommodate the fiber optic ground wire attachment.

Boulevard Substation Rebuild

SDG&E plans to rebuild the existing 69/12 kV Boulevard Substation on a newly acquired 8.5-acre parcel of land adjacent to the eastern property line of the existing substation. One residential home and eight associated structures located on this parcel will be demolished prior to constructing the substation. A new, 25-foot wide, asphalt-paved access road, approximately 190 feet in length, will be constructed off of Old Highway 80 to the rebuilt substation site. Secondary access into the substation will be provided by a paved spur road off the main access road, approximately 210 feet in length. The rebuilt substation will include 138 kV, 69 kV, and 12 kV facilities to accommodate the proposed transmission and gen-tie interconnections and provide 12 kV service to the surrounding area.

Currently, the fenced area of the existing Boulevard Substation is approximately 70 feet by 100 feet and encloses one 69 kV line, one 7.5-MVA transformer, and two 12 kV circuits. The existing Boulevard Substation will be removed from service and demolished once the rebuilt substation is placed in service. The Boulevard Substation will be rebuilt directly east of the existing substation. The fenced area of the new substation will be approximately two acres (277 feet by 319 feet), allowing for the

installation of new 138 kV, 69 kV, and 12 kV facilities to accommodate connection of the new 138 kV transmission line, as well as the potential for up to four generation tie-lines (gen-ties). In order to connect the existing TL 6931, 69 kV transmission line to the rebuilt Boulevard Substation, two new direct embedded steel poles, approximately 85 feet tall, will be installed southwest of the rebuilt Boulevard Substation.

The electrical facilities will include 138 kV, 69 kV and 12 kV air-insulated buses, transformers, circuit breakers, disconnect switches, communication equipment and protective relays. More specifically, the initial arrangement of the substation will consist of:

- One 138 kV low-profile radial bus with three line positions, two transformer positions, one bus-tie position and one future capacitor position
- One 138 kV tie-line to the ECO Substation
- Two ISO proposed 138 kV generator ties
- One 138/69 kV transformer
- One 138/12 kV transformer
- Two bays of 69 kV standard-profile switch racks with four line positions and one transformer position
- One 69 kV tie-line to the SDG&E Crestwood Substation
- One quarter section 12 kV switchgear
- One 12 kV capacitor
- One control shelter

The substation ultimate configuration will include:

- Two sections of 138 kV low-profile radial buses with six line positions, three transformer positions, one capacitor position, and a bus-tie
- One 138/69 kV transformer
- Two 138/12 kV transformers
- Two bays of 69 kV standard-profile switch racks with four line positions and one transformer position
- Two quarter section 12 kV switchgears
- Four 12 kV capacitors
- One control shelter

Prior to demolition of the existing substation, the soil, conduit, equipment, and steel structures will be tested for environmental hazards, such as oil, lead-based paint, and asbestos. All hazardous materials will be abated prior to or as part of the demolition process. Demolition will include disconnecting and removing all of the equipment including the transformer, breakers, regulators, disconnect switches, fuses, the station light and power transformer, control cabinets, and the DC cabinet. In addition, all of the structural steel that includes the 69 kV and 12 kV switch racks, equipment support structures, and the fence and gates will be removed and recycled. Once all above-ground structures have been removed, all below-grade facilities, including the foundation pads, piers, and direct-buried control cable, will be demolished and removed. The oil-containing equipment, such as the transformers, 12 kV breakers and 12 kV regulators, will be drained and processed in accordance with SDG&E standard procedures. During demolition of the substation, all substation equipment to be dismantled will be tested per federal, state, and local standards to determine appropriate recycle, reuse, or disposal alternatives. If contaminated soil is encountered, it will be remediated, after which, the pad will be graded to match the existing surrounding topography.

White Star Communication Facility Rebuild

SDG&E owns and operates a communications facility at White Star in an easement that is adjacent to an existing communication facility owned by San Diego County. At this site, SDG&E will replace two wooden poles with one 75-foot-tall steel tubular pole. The new equipment to be installed will include a six-foot diameter microwave antenna, waveguide, and grounding attached to the steel pole. The microwave dish will be attached to the tower approximately 50 feet from the ground. In

addition, voice radio antennas may be attached to the tower to support electrical crews' fieldwork and operation safety. SDG&E will remove an existing equipment control shelter and install a small, pre-fabricated control building, 12 feet by 16 feet in size, adjacent to the new steel pole, which will house the microwave radio system and other telecommunication equipment. SDG&E will also be required to install a 48-VDC DC battery, including a rectifier, and one backup generator. The new facility will be approximately 30 feet by 30 feet and enclosed within a six-foot high chain-link fence.

C. Site

The Proposed Project is located in the southeastern portion of San Diego County, California. The proposed ECO Substation, which is the primary component of the Proposed Project, 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. The location of each of the Proposed Project components is described in more detail as follows:

ECO Substation

The proposed ECO Substation site is located on the south side of Interstate 8 (I-8), east of the town of Jacumba, on the west side of the Jacumba Mountain range (an extension of the Sierra de Juárez range) within the In-Ko-Pah Gorge U.S. Geological Survey quadrangle. Old U.S. Highway 80 is located just north of the site and the U.S.-Mexico border is located to the south. Privately owned, undeveloped land borders the western and southern sides of the site, and undeveloped land managed by the Bureau of Land Management (BLM) is located to the east. The site can be accessed by traveling

east from San Diego on I-8, exiting at In-Ko-Pah Park Road, and heading west on Old U.S. Highway 80 until it intersects the SWPL.

The ECO Substation will be located entirely on privately owned, undeveloped land. SDG&E will acquire up to six parcels to construct the ECO Substation, totaling approximately 498 acres of land, of which the fenced portion of the ECO Substation will encompass approximately 58 acres.

SWPL Loop-In

The SWPL loop-in will be constructed in the same general location as the ECO Substation. A short loop to connect the existing 500 kV SWPL transmission line into the new substation will begin along the existing SWPL right-of-way (ROW), traverse south for approximately 1,200 feet, then will turn west for 250 feet, and enter at the east side of the new substation. Structures associated with this loop will be located on land acquired for the new substation and within SDG&E's existing SWPL ROW.

138 kV Transmission Line

An approximately 13.3-mile long 138 kV transmission line will be constructed from the ECO Substation to the rebuilt Boulevard Substation (located within the unincorporated community of Boulevard in southeastern San Diego County). The line will travel west out of the ECO Substation for approximately 300 feet and then turn north until reaching the SWPL. The 138 kV line will then continue parallel to the south side of the SWPL for approximately 5.7 miles. At this point, the line will cross under the SWPL and continue parallel for approximately 3.2 miles along its north side until it intersects with an existing dirt access road. At this point, the line will turn to the northwest for approximately 750 feet before turning and continuing generally north for approximately

1.5 miles. The line will then turn east for approximately 0.6 mile, north for approximately 0.3 mile, and northwest for approximately 0.3 mile until it crosses over Tule Jim Lane. The line will then run north along the west side of Tule Jim Lane for approximately 1.3 miles until it crosses Eady Lane. At this point, the line will change from an above-ground line to an under-ground line and turn northeast for approximately 0.1 mile until it enters the rebuilt Boulevard Substation.

The new 138 kV transmission line will require an approximately 100-foot wide permanent ROW (50 feet on either side of the centerline). Approximately nine miles of the new transmission line that parallels the SWPL will be adjacent to SDG&E's existing easements. This area is predominantly privately owned, undeveloped open space.

Boulevard Substation Rebuild

The existing Boulevard Substation and its rebuild site are located approximately 12 miles northwest of the proposed ECO Substation site. SDG&E has acquired one 8.5-acre parcel immediately east of the existing Boulevard Substation to rebuild the substation. Nine existing structures located on this property will be removed prior to substation construction. In addition, the existing Boulevard Substation will be dismantled and removed after the rebuilt substation is placed in service. Single-family residences on large lots surround the existing and rebuilt substation sites. The site can be accessed by traveling east from San Diego on I-8, heading south on Highway 94 (Jewel Valley Road), and then heading west on Old U.S. Highway 80.

White Star Communication Facility Rebuild

The communication path for the Proposed Project will be from the ECO Substation to the existing White Star Communication Facility on Tierra Del Sol Road, at

which point SDG&E will lease two existing T1 lines from White Star to Monument Peak. SDG&E will then intercept the leased circuits into SDG&E's network at Monument Peak for transmission back to existing SDG&E communication facilities located in the City of San Diego. The communication facilities at the ECO Substation will be constructed within the fenced area of the substation and are discussed as part of the ECO Substation project component throughout this document.

The existing White Star Communication Facility and its rebuild site are located approximately 14 miles northwest of the proposed ECO Substation. The scope of work at the White Star Communication Facility includes the removal of an existing equipment enclosure, removal of two wood poles, height reduction of an existing pole, installation of a new steel monopole, and installation of a new equipment enclosure. No new land rights will be required for the installation or reconstruction of these facilities; however, because the new White Star Communication Facility will be connected to existing facilities owned by San Diego County, the existing lease agreement will be modified.

IV. STATUTORY AND PROCEDURAL REQUIREMENTS

GO 131-D, Section IX.B. requires an applicant for a PTC to comply with the Commission's Rules of Practice and Procedure, Rule 2. Pursuant to this requirement, SDG&E responds as follows:[3]

A. Rule 2.1(a) – (c)

In accordance with Rule 2.1(a) – (c) of the Commission's Rules of Practice and Procedure, SDG&E provides the following information.

[3] Although not specifically discussed herein, SDG&E's Application also complies as necessary to Rule 1.5 ("Form and Size of Tendered Documents"), Rule 1.13 ("Tendering and Review of Document for Filing"), Rule 7.1 ("Categorization, Need for Hearing"), Rule 8.1 ("Definitions"), Rule 8.2 ("Ex Parte Requirements"), Rule 13.3 ("Assigned Commissioner Presence"), and Rule 13.13 ("Oral Argument before Commission").

1. Statutory Authority

This Application is made pursuant to the CEQA, GO 131-D, the Commission's Rules of Practice and Procedure, and prior decisions, orders and resolutions of this Commission.

2. Rule 2.1(a) - Legal Name and Address

The applicant is San Diego Gas & Electric Company, a corporation organized and existing under the laws of the State of California, and an investor-owned public utility as defined by Section 216 (a) and 218 (a), respectively, of the California Public Utilities Code, and engaged in the business of purchasing, generating, transmitting, distributing, and selling electric and gas energy to approximately 3.4 million consumers through 1.4 million electric meters and more than 840,000 natural gas meters throughout San Diego County and in a portion of southern Orange County, California. The activities of SDG&E are regulated by this Commission and by the Federal Energy Regulatory Commission. SDG&E is a wholly-owned, indirect subsidiary of Sempra Energy, whose shares are publicly traded. SDG&E's principal place of business is 8330 Century Park Court, San Diego, California 92123.

3. Rule 2.1(b) - Correspondence

Correspondence or communications regarding this Application should be addressed to:

LINDA WRAZEN
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4. Rule 2.1(c)

a. Proposed Category of Proceeding

In accordance with Rule 7.1, SDG&E requests that this Application be categorized as ratesetting because the costs for the new substation project will be recovered by SDG&E through its retail rates, and because this Application neither raises questions of policy or rules of general applicability, nor adjudicates any allegations of violations of law. In addition, because this Application raises ancillary issues that do not fall clearly into a single category, Rule 7.1(e)(2) requires that it be categorized as a ratesetting proceeding.

b. Need for Hearings

SDG&E does not believe that approval of this Application will require hearings. SDG&E has provided ample information, analysis and documentation that provide the Commission with a sufficient record upon which to grant the relief requested on an *ex parte* basis. SDG&E respectfully requests that the relief requested in this Application be provided on an *ex parte* basis as provided for in G.O. 131-D, Section IX.B.6.

c. Issues to be Considered

The issues to be considered are described in this Application, PEA and the accompanying documents. Based on the PEA, SDG&E believes the ECO Substation Project will not have a significant adverse impact on the environment. Therefore, SDG&E requests that the Commission issue a decision within the time limits prescribed by Cal. Gov. Code § 65920 et seq. (Permit Streamlining Act) as provided for in G.O. 131-D, Section IX, Subsection B.6.

d. Proposed Schedule

This proceeding involves Commission's: (1) environmental review of the Proposed Project in compliance with the CEQA (Public Resources Code Section 21100 *et seq.*) and GO 131-D; and (2) issuance of a PTC authorizing SDG&E to construct the Proposed Project. In this regard, SDG&E proposes the following schedule:

ACTION	DATE
Application filed	August 10, 2009
Provide Notice of Filing of Application by direct mail, advertisement and on-site posting	August 20, 2009 (Within 10 days after filing)
File a Declaration of Mailing and Posting	August 25, 2009 (Within 5 days of completion)
Application Completeness Determination	September 9, 2009 (30 days after Application filed)
End of Protest Period	September 21, 2009 (30 days after notice)
Draft CEQA Document Issued for Public Comment	December 2009
Close of Public Comment Period	February 2010 (45 days after notice of availability)

Draft Decision Issued	March 2010
Ex Parte Decision Issued. Final CEQA Document Certified.	May 2010

B. Rule 2.2 – Articles of Incorporation

A copy of SDG&E's Restated Articles of Incorporation as last amended, presently in effect and certified by the California Secretary of State, was filed with the Commission on December 4, 1997 in connection with SDG&E's Application No. 97-12-012, and is incorporated herein by reference.

C. Rule 2.3 – Financial Statement

SDG&E's financial statement, balance sheet and income statement are included with this Application as Appendix G.

D. Rule 2.4 - CEQA Compliance

GO 131-D, Section IX.B.1.e. requires an applicant for a PTC to include in its application "[a] PEA or equivalent information on the environmental impact of the project in accordance with the provisions of CEQA and this Commission's Rules of Practice and Procedure". SDG&E has prepared a PEA describing in detail the environmental setting and the potential impacts associated with the construction and operation of the ECO Substation Project. SDG&E is submitting the PEA simultaneously with this application as Volume II.

E. Rule 2.5 – Fees for Recovery of Cost in Preparing EIR

SDG&E is submitting a deposit to be applied to the cost the Commission incurs to prepare a negative declaration or an environmental impact report for the Proposed Project.

F. Rule 3.1(a) – (i) – Construction or Extension of Facilities

Rule 2.1(d) requires all applications to comply with "[s]uch additional information as may be required by the Commission in a particular proceeding." Commission Rule 3.1 contains some additional requirements for applicants for PTCs. Some of the requirements of Rule 3.1 are duplicative of the requirements of GO 131-D, which are more precisely identified and discussed in Section V *infra*. In accordance with Rule 3.1(a) – (i) of the Commission's Rules of Practice and Procedure, SDG&E provides the following information.

1. Rule 3.1(a) – Description of the Proposed Project

Commission Rule 3.1(a) requires applicants for a PTC to include in their applications "A full description of the proposed construction or extension, and the manner in which the same will be constructed."

Please refer to SDG&E's response in Section III-B *supra* of this application.

2. Rule 3.1(b) – Competing Utilities

Commission Rule 3.1(b) requires applicants for a PTC to include in their applications "The names and addresses of all utilities, corporations, persons or other entities, whether publicly or privately operated, with which the proposed construction is likely to compete, and of the cities or counties within which service will be rendered in the exercise of the requested certificate."

The Proposed Project will be built entirely within the service territory of SDG&E, and is not intended to compete with the projects of any other entity. The requested certification is to enhance electric service within SDG&E's service territory (which consists of San Diego County and a portion of southern Orange County, including the

Cities of Carlsbad, Chula Vista, Coronado, Dana Point, Del Mar, El Cajon, Encinitas, Escondido, Imperial Beach, Laguna Beach, Laguna Hills, Laguna Niguel, La Mesa, Lemon Grove, Mission Viejo, National City, Oceanside, Poway, San Clemente, San Diego, San Juan Capistrano, San Marcos, Santee, Solana Beach and Vista) and in the area served by the CAISO.

3. Rule 3.1(c) – Project Maps

Commission Rule 3.1(c) requires an applicant for a PTC to include in its application "A map of suitable scale showing the location or route of the proposed construction or extension, and its relation to other public utilities, corporations, persons, or entities with which the same is likely to compete."

As stated in the previous response, the Proposed Project is not intended to compete with the projects of any other entity. Maps showing the locations under consideration for the project are included in the PEA, Volume II of this Application.

4. Rule 3.1(d) – Required Permits

Commission Rule 3.1(d) requires an applicant for a PTC to include in its application "A statement identifying the franchises and such health and safety permits as the appropriate public authorities have required or may require for the proposed construction or extension."

A list of the franchises and anticipated health and safety permits required for the Proposed Project is found in the PEA, Volume II of this application.

5. Rule 3.1(e) – Public Convenience and Necessity

Commission Rule 3.1(e) requires an applicant for a PTC to include in its application "Facts showing that public convenience and necessity require, or will require,

the proposed construction or extension, and its operation."

The above requirements not withstanding, pursuant to GO 131-D, Section IX.B.1.f., an application for a PTC need not include a detailed analysis of purpose and necessity beyond that required for CEQA compliance. Please refer to the PEA, Volume II of this application.

Rule 3.1(f) – Estimated Cost

Commission Rule 3.1(f) requires an applicant for a PTC to include in its application "A statement detailing the estimated cost of the proposed construction or extension and the estimated annual costs, both fixed and operating associated therewith."

The above requirements not withstanding, pursuant to GO 131-D, Section IX.B.1.f., an application for a PTC need not include a detailed estimate of cost beyond that required for CEQA compliance. SDG&E provides an estimated cost range for the proposed scope of the project in the PEA, Volume II of this application.

Rule 3.1(g) – Financial Ability

Commission Rule 3.1(g) requires an applicant for a PTC to include in its application "Statements or exhibits showing the financial ability of the applicant to render the proposed service together with information regarding the manner in which applicant proposes to finance the cost of the proposed construction or extension."

The above requirements not withstanding, pursuant to GO 131-D, Section IX.B.1.f., an application for a PTC need not include a detailed economic analysis beyond that required for CEQA compliance. In any event, SDG&E plans to own 100 percent of the assets that will comprise the Project and those assets will be added to SDG&E's utility rate base. At present, SDG&E intends to finance the Project cost with the same

proportions of debt and equity with which all other rate base asserts are financed, in keeping with the capital structure approved by the Commission for SDG&E. Financing would be in the form of retained earnings, available cash and debt, as necessary.

6. Rule 3.1(h) – Proposed Rates

Commission Rule 3.1(h) requires an application for a PTC to include "A statement of the proposed rates to be charged for service to be rendered by means of such construction or extension."

SDG&E's retail rates are found in its currently-effective tariffs approved by this Commission. SDG&E's transmission rates are formula rates subject to annual adjustment, as approved by the Federal Energy Regulatory Commission (FERC). SDG&E is not proposing to increase rates as a result of this Project.

The costs associated with the Proposed Project are predominantly for transmission-related services. When the project is placed in service, SDG&E will seek to recover the costs through the CAISO's FERC-jurisdictional rates. This would occur as part of a FERC rate case covering the test period in which the project will become operative. Costs not approved by FERC for recovery in general transmission rates may be recovered through CPUC-jurisdictional retail rates.

7. Rule 3.1(i) – Proxy Statement

Commission Rule 3.1(i) requires an applicant for a PTC to include in its application "a copy of the latest proxy statement sent to stockholders by it or its parent company containing the information required by the rules of the SEC if not previously filed with the Commission."

A copy of SDG&E's most recent proxy statement, dated April 17, 2009 was mailed to the Commission on April 24, 2009, and is incorporated herein by reference.

V. INFORMATION REQUIRED BY GENERAL ORDER 131-D

GO 131-D, Sections IX., X. and XI., adopted by the Commission in D.94-06-014 as modified by D.95-08-038, requires an applicant for a PTC to include in its application a variety of information. This information follows in the order in which it is listed in GO 131-D.

A. Section IX.A.B.

In accordance with Section IX.A.B.1.(a) – (f) of the Commission's GO 131-D, SDG&E provides the following information.

1. Section IX.B.1.a. - Description of the Proposed Project facilities

See the PEA, Volume II of this application.

2. Section IX.B.1.b. - Map of Proposed substation location

See the PEA, Volume II of this application.

3. Section IX.B.1.c. - Reasons for adoption of the power line route or substation locations selected

See the PEA, Volume II of this application.

4. Section IX.B.1.d. - Listing of governmental agencies consulted and statements of position

See the PEA, Volume II of this application.

5. Section IX.B.1.e. – Proponent's Environmental Assessment

The PEA attached to this application as Volume II includes the information described in Section IV(a)-(d) above and concludes that the substation and associated

improvements will have no significant unmitigable impact on the environment.

B. Section X.A.

GO 131-D, Section X.A. requires an applicant for a PTC to "describe the measures taken or proposed by the utility to reduce the potential exposure to electric and magnetic fields generated by the proposed facilities, in compliance with Commission order."

A copy of SDG&E's Magnetic Field Management Plan is attached to this application as Appendix F.

C. Section XI.A.

GO 131-D, Section XI.A. requires an applicant for a PTC to notify the public of its filing "within ten days of filing the application" in several different ways, by direct mail, by advertisement and by posting.

A copy of SDG&E's Draft Notice of Application is attached to this application as Appendix B.

VI. LIST OF APPENDICES AND ATTACHMENTS

Appendix A Proposed Construction Schedule

Appendix B Draft Notice of Application

Appendix C Service List and Public Review Locations for Notice of Application

Appendix D List of Newspaper(s) Publishing the Notice of Application

Appendix E Draft Declaration of Posting of Notice

Appendix F Magnetic Field Management Plan

Appendix G Financial Statements

Volume II Proponent's Environmental Assessment

VII. CONCLUSION

Wherefore, SDG&E requests that the Commission (1) accept its application as complete; (2) prepare a Mitigated Negative Declaration regarding the potential environmental impacts of the Proposed Project; and (3) issue an expedited *ex parte* decision granting SDG&E a Permit to Construct the East County Substation Project, as described in this application and the supporting documents.

DATED this 10th day of August 2009 at San Diego, California.

Respectfully submitted,

SAN DIEGO GAS & ELECTRIC COMPANY

By: _____
MICHAEL R. NIGGLI
Chief Operating Officer

SAN DIEGO GAS & ELECTRIC COMPANY

By: /s/ Allen K. Trial
ALLEN K. TRIAL

ALLEN K. TRIAL
Attorney for:

SAN DIEGO GAS & ELECTRIC COMPANY
101 Ash Street, HQ12B
San Diego, CA 92112
Tel: (619) 699-5162
Fax: (619) 699-5027
E-Mail: Atrial@sempra.com

VIII. VERIFICATION

Michael R. Niggli declares the following:

I am an officer of San Diego Gas & Electric Company and am authorized to make this Verification on its behalf. I am informed and believe that the matters stated in the foregoing **APPLICATION OF SAN DIEGO GAS & ELECTRIC COMPANY (U 902 E) FOR A PERMIT TO CONSTRUCT THE EAST COUNTY SUBSTATION PROJECT** are true to my own knowledge, except as to matters which are therein stated on information and belief, and as to those matters I believe them to be true.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 10th day of August 2009, at San Diego, California.

MICHAEL R. NIGGLI
Chief Operating Officer

SAN DIEGO GAS & ELECTRIC COMPANY

CERTIFICATE OF SERVICE

I hereby certify that, pursuant to the Commission's Rules of Practice and Procedure and General Order 131-D, Section XI.3.,[4] I have this day served a true copy of the **NOTICE OF APPLICATION OF SAN DIEGO GAS & ELECTRIC FOR A PERMIT TO CONSTRUCT THE EAST COUNTY SUBSTATION PROJECT** on Karen Miller, Public Advisor of the California Public Utilities Commission, and Julie Fitch, Director of the Energy Division of the California Public Utilities Commission. Service was effected by placing copies in properly addressed, sealed envelopes and depositing such envelopes in the United States mail with first-class postage prepaid.

Executed this 10th day of August 2009 at San Diego, California.

By: /s/ Susan A. Long
Susan A. Long

[4] GO 131-D, Section XI.3. references the "CACD" for the Commission's Advisory and Compliance Division, which is now identified by the Commission's individual industry Divisions, (e.g., Energy Division).

APPENDIX A
Proposed Construction Schedule

ECO Substation Project

Proposed Construction Schedule

Project Component	Activity	Approximate Number of Months	Anticipated Start Date
ECO Substation	Site Development	10	June 2010
	Below Grade Construction	10	Sept 2010
	Above Grade Construction	12	March 2011
	Communication Equipment Installation	1	March 2011
	Testing and Commissioning	2	April 2012
	Energization	0.5	June 2012
SWPL Loop-In	Access Roads	1	March 2011
	Install Foundations	1	November 2011
	Tower Installation and Conductor Stringing	1	May 2012
138 kV Transmission Line	Access Roads	3	June 2010
	Pole Foundation Installation	4	October 2010
	Pole Installation	3	March 2011
	Underground Conduit and Conductor Installation	4	July 2011
	Overhead Conductor Stringing and Sagging	3	August 2011
Boulevard Substation Rebuild	Site Development	4	June 2010
	Below Grade Construction	3	September 2010
	Above Grade Construction	5	January 2011
	Testing and Commissioning	2	September 2011
	Energization	0.5	November 2011
	Existing Substation Demolition	2	November 2011
White Star Communication Facility Rebuild	Site Development and Foundations Installation	2	June 2010
	Tower and Building Installation	2	September 2010

* All Start Dates Dependent On Application Approval Date

APPENDIX B
Draft Notice of Application

NOTICE OF APPLICATION FOR A PERMIT TO CONSTRUCT

East County Substation Project

Date: August __, 2009 **CPUC Application No.: 09-08-_____**

Proposed Project: San Diego Gas & Electric Company (SDG&E) has filed an application with the California Public Utilities Commission (CPUC) for a permit to construct (PTC) the East County (ECO) Substation Project (Proposed Project). As proposed by SDG&E, and further described in the Proponent's Environmental Assessment (PEA), the Proposed Project includes the following elements:

- Construction of a new 500/230/138 Kilovolt (kV) substation (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 area, but within the existing SWPL right-of-way (ROW) and ECO Substation property;
- Construction of a new, approximately 13.3-mile-long, 138 kV transmission line from the ECO Substation to the Boulevard Substation, including the placement of an optical ground wire to provide critical communication services and lightning protection;
- Rebuild the existing Boulevard Substation to 138/69/12 kV on a new parcel of land adjacent to the existing substation to accommodate switch racks, air-insulated buses, transformers, circuit breakers, disconnect switches, a control shelter, protective relays, and communication equipment. The existing 69/12kV substation will be dismantled and removed after the new substation is placed in service;
- 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.

The Proposed Project is needed to facilitate interconnection of renewable generation in southeastern San Diego County and to improve reliability for the existing electric transmission system in the Mountain Empire region of San Diego County.

Environmental Assessment: SDG&E has prepared a PEA that includes the analysis of potential environmental impacts created by the construction and operation of the proposed substation and associated facilities. The PEA concludes there are no unmitigable environmental impacts to the area as a result of the Proposed Project.

Electric Magnetic Field (EMF) Management: SDG&E will employ measures to reduce public exposure to EMF in accordance with CPUC Decisions 93-11-013 and 06-01-042 and SDG&E's "EMF Design Guidelines for Transmission, Distribution, and Substation Facilities." SDG&E has filed copies of its Magnetic Field Management Plan for this Proposed Project as part of its Application.

Public Review Process: SDG&E has applied to the California Public Utilities Commission (CPUC) for a Permit to Construct and has asked for approval without hearings. Pursuant to the CPUC's Rules of Practice and Procedure, within 30 calendar days of the date of notice that this Application appears in the CPUC calendar, you may protest and request that the CPUC hold hearings on this Application. If the CPUC, as a result of its investigation, determines that public hearings should be held, notice shall be sent to each person or entity who is entitled to notice or who has requested a hearing. Please contact the following people should you require any information regarding this project.

Allen K. Trial AND Attorney for SDG&E 101 Ash Street, HQ12 San Diego, CA 92101	Linda Wrazen AND SDG&E Regulatory Affairs 8330 Century Park Court, CP 32D San Diego, CA 92123	Director, Energy Division California Public Utilities Commission 505 Van Ness Avenue San Francisco, CA 94102

CPUC PROCESS

If you would like additional information on the CPUC process or would like to attend hearings (if held) and need assistance, you can contact the Public Advisor's Office (PAO). You may also send your comments to the PAO at the following address: Public Advisor's Office, 320 West 4th St., Ste. 500, Los Angeles CA 90013 or send an e-mail to: public.advisor.la@cpuc.ca.gov. Any letters received from you will be circulated to each Commissioner and will become part of the formal correspondence file in the application. In your letter, state that your comments are regarding Application No. A.09-08-XXX.

FOR FURTHER INFORMATION

You may request additional information or obtain a copy of the application and related exhibits by writing to: Linda Wrazen, Regulatory Case Administrator for SDG&E, 8330 Century Park Court, San Diego, CA 92123. SDG&E will provide a copy of the application, including the public testimony, upon request. SDG&E's application and attachments may be inspected at the CPUC's Central Files Office, 505 Van Ness Ave., San Francisco, CA 94102. A copy of the application and any amendments may be inspected at the SDG&E business offices listed below:

436 H St.
Chula Vista, CA 91910

104 North Johnson Ave.
El Cajon, CA 92020

320 W. Mission Ave.
Escondido, CA 92025

2405 Plaza Blvd.
National City, CA 91950

336 Euclid Ave., Suite 502
San Diego, CA 92102

440 Beech St.
San Diego, CA 92101

2604 El Camino Real, Ste. B
Carlsbad, CA 92008

Copies of this application are available on the SDG&E Web site at: www.sdge.com/regulatory/cpuc.shtml.

Copies of this notice will be available for viewing and printing on the SDG&E Web site at: www.sdge.com/billinserts/regulatory.shtml.

APPENDIX C
Service List and Public Review Locations for Notice of Application

PUBLIC NOTICE LIST

The following is a list of parties required to be noticed under G.O. 131-D, Section XI. Land owners and other interested parties required to be noticed pursuant to G.O. 131-D, Section XI, A., are listed in the PEA, Section 1-B: Stakeholder List, and are incorporated herein by reference.

COUNTY OF SAN DIEGO
GARY PRYOR
DIRECTOR, DEPARTMENT OF PLANNING AND LAND USE
5201 RUFFIN ROAD, SUITE B
SAN DIEGO, CA 92123

MR. JAMES GOLDSTENE, EXECUTIVE DIRECTOR
CALIFORNIA STATE AIR RESOURCES CONTROL BOARD
1001 "I" STREET
P. O. BOX 2815
SACRAMENTO CA 95814

COUNTY OF SAN DIEGO PLANNING COMMISSION
LEON BROOKS, CHAIR
5201 RUFFIN ROAD, SUITE B
SAN DIEGO, CA 92123

MR. ROBERT KARD, EXECUTIVE DIRECTOR
COUNTY OF SAN DIEGO
AIR POLLUTION CONTROL DISTRICT
10124 OLD GROVE RD
SAN DIEGO CA 92131

CALIFORNIA ENERGY COMMISSION
MS. MELISSA JONES EXECUTIVE DIRECTOR
1516 NINTH STREET, MAIL STOP 39
SACRAMENTO CA 95814

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
MR. JOHN H. ROBERTUS, EXECUTIVE OFFICER
SAN DIEGO REGION
9174 SKY PARK COURT, SUITE 100
SAN DIEGO CA 92123-4340

CALIFORNIA DEPARTMENT OF TRANSPORTATION
DIVISION OF AERONAUTICS
GARY CATHEY, CHIEF
1120 N STREET, ROOM 3300
SACRAMENTO, CA 95814

CALIFORNIA DEPARTMENT OF TRANSPORTATION
MR. PEDRO ORSO-DELGADO, DISTRICT DIRECTOR
4050 TAYLOR ST.
SAN DIEGO CA 92110

CALIFORNIA RESOURCES AGENCY
MIKE CHRISMAN, SECRETARY
1416 9TH STREET, SUITE 1311
SACRAMENTO CA 95814

FEDERAL AVIATION ADMINISTRATION
MR. WILLIAM WITHYCOMBE
WESTERN PACIFIC DIVISION ADMINISTRATOR
P.O. BOX 92007 WPC
LOS ANGELES CA 90009

CALIFORNIA DEPARTMENT OF FISH & GAME
MR. WILLIAM TIPPETS
NCCP FIELD SUPERVISOR
4949 VIEWRIDGE AVENUE
SAN DIEGO CA 92123

DEPARTMENT OF PUBLIC HEALTH
DR. MARK HORTON, DIRECTOR
1501 CAPITOL AVENUE
SACRAMENTO, CA 95814

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD
MS. DOROTHY RICE, EXECUTIVE DIRECTOR
1001 "I" STREET
SACRAMENTO, CA 95814

US FISH AND WILDLIFE SERVICE,
CARLSBAD FIELD OFFICE
FELICIA M. SIRCHIA
FISH & WILDLIFE BIOLOGIST
6010 HIDDEN VALLEY ROAD
CARLSBAD, CA 92011-4213

US ARMY CORP OF ENGINEERS
LAURIE A. MONARRES
REGULATORY PROJECT MANAGER SAN DIEGO FIELD OFFICE
6010 HIDDEN VALLEY RD, SUITE 105
CARLSBAD, CA 92011-4213

DOCKET CLERK
CALIFORNIA PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102

BUREAU OF LAND MANAGEMENT
VICKI WOOD
EL CENTRO FIELD OFFICE
1661 S. 4TH STREET
EL CENTRO CA 92243

BUREAU OF LAND MANAGEMENT
MR. TOM ZAYLE
EL CENTRO FIELD OFFICE
1661 S. 4TH STREET
EL CENTRO CA 92243

US ARMY CORP OF ENGINEERS
ROBERT REVO SMITH JR., P.E.
ENVIRONMENTAL ENGINEER/CIVIL ENGINEER
REGULATORY PROJECT MANAGER
SAN DIEGO FIELD OFFICE
6010 HIDDEN VALLEY RD, SUITE 105
CARLSBAD, CA 92011-4213

LIST OF PROPERTY OWNERS

ROSADO MOISES
1690 TIERRA DEL SOL RD
BOULEVARD CA 91905

NAVA CARLOS J&CLOTILDE TRS
404 E MCCABE RD
HEBER CA 92249

KNUDSEN BONNIE C
P O BOX 1465
BOULEVARD CA 91905

STUART FAMILY TRUST 10-06-02
P O BOX 1291
BOULEVARD CA 91905

ROZENDAL JEFF
9640 OAK GROVE DR
DESCANSO CA 91916

PEREZ ANGELICA
1603 JEWEL VALLEY RD
BOULEVARD CA 91905

GORDON LUKE
3773 CHERRY CREEK NORTH DR #801
DENVER CO 80209

VENABLE KENNETH W&WENDY S
1588 JEWEL VALLEY RD
BOULEVARD CA 91905

LITTELMAN KENNETH L&VIRGINIA G
1518 JEWEL VALLEY RD
BOULEVARD CA 91905

TECATE DIVIDE L L C
5 LAKESHORE DR
AVERILL PARK NY 12018

ERICKSON EARL J
7560 UNIVERSITY AVE #C
LA MESA CA 91941

VILLARO JOHN JR&JOSEPHINE O
207 KILANI PL
WAHIAWA HI 96786

TROY MICHAEL P
P O BOX 1347
BOULEVARD CA 91905

MORRIS EDGAR A&LINDA L
1592 JEWEL VALLEY RD
BOULEVARD CA 91905

NEVADOMSKY JAMES D&JERI L
1590 JEWEL VALLEY RD
BOULEVARD CA 91905

SHECORA JOSEPH J&HELEN TRUST 02-05-01
7947 SAN CARLOS DR
SAN DIEGO CA 92119

LANSING INDUSTRIES INC PROFIT SHARING
PLAN&TRUST
12770 HIGH BLUFF DR #160
SAN DIEGO CA 92130

LANSING INDUSTRIES INC PROFIT SHARING
PLAN&TRUST
12770 HIGH BLUFF DR #160
SAN DIEGO CA 92130

SEMPSROTT DAVID LIVING TRUST 12-19-00
6607 BROADWAY
SAN DIEGO CA 92114

LANSING INDUSTRIES INC PROFIT SHARING
PLAN&TRUST
12770 HIGH BLUFF DR #160
SAN DIEGO CA 92130

JONES HOWARD M
1741 ORANGE AVE
RAMONA CA 92065

LANSING INDUSTRIES INC PROFIT SHARING
PLAN&TRUST
12770 HIGH BLUFF DR #160
SAN DIEGO CA 92130

GORDON LUKE
2974 ADELINE ST
BERKELEY CA 94703

MATTAR FAMILY TRUST OF 1990
4395 ALTA MIRA DR
LA MESA CA 91941

DOMINGO LAKE ESTATES L L C
124 N RIVERSIDE AVE
RIALTO CA 92376

DOMINGO LAKE ESTATES L L C
124 N RIVERSIDE AVE
RIALTO CA 92376

DOMINGO LAKE ESTATES L L C
124 N RIVERSIDE AVE
RIALTO CA 92376

EASLEY CHARLES T LIVING TRUST 06-28-04
793 4TH AVE
CHULA VISTA CA 91910

LANSING INDUSTRIES INC PROFIT SHARING
PLAN&TRUST
12770 HIGH BLUFF DR #160
SAN DIEGO CA 92130

LANSING INDUSTRIES INC PROFIT SHARING
PLAN&TRUST
12770 HIGH BLUFF DR #160
SAN DIEGO CA 92130

SAN DIEGO&ARIZONA EASTERN RAILWAY CO
CALIFORNIA STATE ASSESSED
00000

DOMINGO LAKE ESTATES L L C
124 N RIVERSIDE AVE
RIALTO CA 92376

LANSING INDUSTRIES INC PROFIT SHARING
PLAN&TRUST
12770 HIGH BLUFF DR #160
SAN DIEGO CA 92130

DOMINGO LAKE ESTATES L L C
124 N RIVERSIDE AVE
RIALTO CA 92376

SAN DIEGO&ARIZONA EASTERN RAILWAY CO
CALIFORNIA STATE ASSESSED
00000

FISHER ROBERT W
FISHER ALLEN M
715 WILBUR AVE
SAN DIEGO CA 92109

CRONK MARTIN J&ROSEMARY
771 DELAWARE ST
IMPERIAL BEACH CA 91932

MARTIN LOUIS A III&ASUNCION REVOCABLE
2005 TRUST 07-25-05
5305 ROSWELL ST
SAN DIEGO CA 92114

HEAD FAMILY TRUST 09-15-93
5668 LAMAS ST
SAN DIEGO CA 92122

HEAD FAMILY TRUST 09-15-93
5668 LAMAS ST
SAN DIEGO CA 92122

SAN DIEGO&ARIZONA EASTERN RAILWAY CO
CALIFORNIA STATE ASSESSED
00000

ROMERO FAMILY TRUST 10-15-81
9100 SINGLE OAK DR #91
LAKESIDE CA 92040

ROMERO FAMILY TRUST 10-15-81
9100 SINGLE OAK DR #91
LAKESIDE CA 92040

ONEY DAVID L
FLANIKEN KATHRYN
P O BOX 276
JACUMBA CA 91934

ROMERO FAMILY TRUST 10-15-81
9100 SINGLE OAK DR #91
LAKESIDE CA 92040

LINDENMEYER THOMAS A&KATHLEEN E
43027 OLD HIGHWAY 80
JACUMBA CA 91934

MCCANNA DONNA J
MCCANNA-DAVALOS MARGARET C
P O BOX 353
JACUMBA CA 91934

RECHT WILLIAM LIVING TRUST 02-02-05
294 SKYLINE DR
HAMILTON MT 59840

390 JACUMBA L L C
12770 HIGH BLUFF DR #160
SAN DIEGO CA 92130

RECHT WILLIAM LIVING TRUST 02-02-05
294 SKYLINE DR
HAMILTON MT 59840

HALL KENNETH W
P O BOX 1065
BREWSTER WA 98812

JACUMBA VALLEY RANCH
C/O KARL TURECEK
2423 CAMINO DEL RIO S #212, SAN DIEGO CA
92108

JACUMBA VALLEY RANCH
2423 CAMINO DEL RIO S #212
SAN DIEGO CA 92108

M&W DEVELOPERS CORP
1032 BROADWAY
EL CAJON CA 92021

FISHER PATRICK J
FISHER MICHAEL J
4308 AZALEA DR
RALEIGH NC 27612

U S FINANCIAL L P
3770 HANCOCK ST #D
SAN DIEGO CA 92110

JACUMBA HOLDINGS L L C
C/O SPECIALTY RESTAURANT CORP
8191 E KAISER BLVD, ANAHEIM CA 92808

CZUBERNAT EUGENE&MARY FAMILY TRUST
07-24-97
6144 CHRISMARK AVE
SAN DIEGO CA 92120

PORT EVERGLADES RESTAURANT CORP
8191 E KAISER BLVD
ANAHEIM CA 92808

UNITED STATES OF AMERICA PUBLIC DOMAIN
PUBLIC AGENCY
00000

UNITED STATES OF AMERICA PUBLIC DOMAIN
PUBLIC AGENCY
00000

JACUMBA VALLEY RANCH
C/O KARL TURECEK
2423 CAMINO DEL RIO S #212, SAN DIEGO CA
92108

SAN DIEGO&ARIZONA EASTERN RAILWAY CO
CALIFORNIA STATE ASSESSED
00000

THE NATURE CONSERVANCY
201 MISSION ST
SAN FRANCISCO CA 94105

SAN DIEGO GAS&ELECTRIC CO
CALIFORNIA STATE ASSESSED
00000

SAN DIEGO GAS&ELECTRIC CO
C/O SEMPRA ENERGY
101 ASH ST, SAN DIEGO CA 92101

ST GERMAIN CAROL
SHOOP EDWARD
40751 OLD HIGHWAY 80
BOULEVARD CA 91905

MURPHY JOHN
P O BOX 193
JACUMBA CA 91934

STATE OF CALIFORNIA
PUBLIC AGENCY
00000

STATE OF CALIFORNIA
PUBLIC AGENCY
00000

POORE GLORIA J
923 ISLAND AVE
SAN DIEGO CA 92101

GEORGGIN NICHOLAS E&PATRICIA C
1324 NORTHVIEW DR
EL CAJON CA 92019

THE NATURE CONSERVANCY
201 MISSION ST
SAN FRANCISCO CA 94105

ISRAEL DONALD
ISRAEL RONALD
5066 67TH ST
SAN DIEGO CA 92115

COOPER SANDRA B
P O BOX 4283
YUMA AZ 85366

GARRIDO JOHN B&KAREN
2408 MANZANA WAY
SAN DIEGO CA 92139

GARRIDO JOHN B
2408 MANZANA WAY
SAN DIEGO CA 92139

SHAW CHESTER E
P O BOX 1274
BOULEVARD CA 91905

SEMPSROTT DAVID LIVING TRUST 12-19-00
6607 BROADWAY
SAN DIEGO CA 92114

JACUMBA VALLEY RANCH
C/O KARL TURECEK
2423 CAMINO DEL RIO S #212, SAN DIEGO CA
92108

PUBLIC REVIEW LOCATIONS

A copy of the application and any amendments may be inspected at the SDG&E business offices listed below:

426 H STREET
CHULA VISTA, CA 91910

104 NORTH JOHNSON AVENUE
EL CAJON, CA 92020

320 W. MISSION AVENUE
ESCONDIDO, CA 92025

2406 PLAZA BOULEVARD
NATIONAL CITY, CA 91950

336 EUCLID AVENUE, SUITE 502
SAN DIEGO, CA 92102

440 BEECH STREET
SAN DIEGO, CA 92101

2604 EL CAMINO REAL, SUITE B
CARLSBAD, CA 92008

APPENDIX D
List of Newspaper(s) Publishing the Notice of Application

LIST OF NEWSPAPER(S) PUBLISHING
THE NOTICE OF PERMIT TO CONSTRUCT

The San Diego Union-Tribune
350 Camino de la Reina
San Diego, CA 92122-0191

East County Gazette
201 S. Sunshine Avenue
El Cajon, CA 92020

The Alpine Sun
2144 Alpine Blvd.
Alpine, CA 91901

The East County Herald
9115 Sinsonte Lane
Lakeside, CA 92040

Imperial Valley Press
205 N. 8th Street
El Centro, CA 92243

APPENDIX E
Draft Declaration of Posting of Notice

DECLARATION OF POSTING (DRAFT)

I, Brian D. Swanson, am a Land Management Representative responsible for managing access, easements, rights of way and fee-owned land for San Diego Gas & Electric Company. On August_____, 2009, I posted the proposed site for the East County 500/230/138 kV (ECO) Substation Project, including the Boulevard Substation rebuild site, the route of the new 138 kV transmission line from the ECO Substation to the rebuilt Boulevard Substation, and the White Star Communication Facility rebuild site, with the Notice of Filing of an Application for a Permit to Construct with the California Public Utilities Commission in accordance with General Order 131-D, Section XI.A.3.

I declare under penalty of perjury that the foregoing statements are true and correct to the best of my knowledge.

Executed this __ day of August, 2009, at San Diego, California.

_____

Brian D. Swanson
Land Management Representative SDG&E

APPENDIX F
Magnetic Field Management Plan

Detailed Magnetic Field Management Plan
East County Substation Project

Project Engineer: **George Nelms** (Transmission Engineering)
Project Designer: **Black & Veatch** (Engineering Consultants)

Work Order No.: **BP 7139**
In-Service Date: **June 2012**

Transmission Lines: Portions of: **TL 50001, TL138xx**

Central File No.: **ELA 140.B.XX**

Prepared by: Gerald Bennett and Environmental Services Date: 08/06/2009

Table of Contents

I. Project Scope

The East County (ECO) Substation Project (Project) involves building a new substation in the southeastern portion of San Diego County, California approximately one-half (0.5) mile north of the United States (U.S.)-Mexico border, one-half (0.5) mile west of the Imperial County line, and seventy (70) miles east of downtown San Diego. The primary purpose of the ECO Substation is to facilitate interconnection of renewable generation in the vicinity.

The Project is divided into the following five components:

1. ECO Substation
2. Southwest Powerlink (SWPL) loop-in, a short loop-in of the existing SWPL transmission line to the proposed ECO Substation
3. Constructing a new 138 kilovolt (kV) transmission line, TL138xx, approximately 13.3 miles in length, running between the existing Boulevard Substation and the proposed ECO Substation.
4. Boulevard Substation rebuild
5. White Star Communication Facility rebuild

Component 3, the new 138 kV transmission line, will increase the reliability of the existing transmission system and promote the interconnection of renewable generation in the Boulevard area. This Detailed Magnetic Field Management Plan (FMP) is for analysis of the new 138 kV transmission line, TL138xx.

II. Magnetic Field Management Design Guidelines

The California Public Utilities Commission ("CPUC") requires SDG&E apply its *EMF*[1] *Design Guidelines for Electrical Facilities* ("Guidelines") to all new electric transmission projects to reduce public exposure to magnetic fields. SDG&E filed its Guidelines with the CPUC in accordance with CPUC Decision 93-11-013 and updated them in accordance with the 2006 CPUC Decision 06-01-042.

Consistent with SDG&E's Guidelines and with the CPUC order, magnetic fields and possible magnetic field management measures were evaluated along the existing, and proposed, transmission circuit locations associated with the Project. The results of this evaluation are contained in this FMP.

The FMP deals solely with magnetic fields. Moreover, reducing the magnetic field strength is but one of many factors to be considered in planning and designing a transmission system, along with other issues such as safety, environmental concerns, reliability, insulation and electrical clearance requirements, aesthetics, cost, operations and maintenance.

III. Methodology

In Decision 06-01-042, the CPUC notes that modeling is used to compare the relative effectiveness of field-reduction options and is not to be used to predict post-construction field levels. CPUC Decision 06-01-042, Finding of Fact 14: "Utility modeling methodology is

[1] EMF refers to electric and magnetic fields.

intended to compare differences between alternative EMF [Electromagnetic Field] mitigation measures and not determine actual EMF amounts."[2] The CPUC also notes that "modeling indicates relative differences in magnetic field reductions between different transmission line construction methods, but does not measure actual environmental magnetic fields."[3]

In accordance with its Guidelines, SDG&E will take the following measures for the Project:

- Apply SDG&E's EMF Guidelines for transmission circuit facilities to the Project design.
- Identify and implement appropriate "no-cost" measures, i.e., those that will not increase overall project costs but will reduce the magnetic field levels.
- Identify and implement appropriate "low-cost" measures, i.e., those measures costing in the range of 4% of the total budgeted project cost that will reduce the magnetic field levels by 15% or more at the edge of the right-of-way (ROW).
- When a sufficiency of "low-cost" measures is available to reduce magnetic field levels, such that it is difficult to stay within the 4% cost guideline, apply these "low-cost" measures by priority, per the Guidelines.

The 15% minimum reduction required for low-cost measures is in addition to any field reduction due to "no-cost" measures. It is not cumulative.

Since the Project requires permitting under General Order 131-D, a Detailed Field Management Plan ("FMP") will be used. The Detailed FMP consists of a project description, a checklist table showing evaluation of magnetic field reduction measures adopted or rejected per segment, evaluation of no-cost and low-cost magnetic field reduction techniques, magnetic field models, and a summary with recommendations, including tables showing resultant magnetic field reduction levels at the edge of the ROW.

Tables showing calculated resultant magnetic field levels at the edges of the ROW are included in "Section VIII- Summary of Calculated Magnetic Field Levels" in this report.

Field levels were calculated using the Resicalc program developed and maintained by the Electric Power Research Institute**.** As the proposed in-service date of the Project is June 2012, the projected high usage currents, "2012 heavy summer," were used in the calculations. For the purpose of evaluating the field management measures, magnetic field levels were calculated and compared at a height of one meter above ground.

To evaluate the effectiveness of various magnetic field reduction measures, calculated values for a given technique were compared to calculated values without the technique. Since all segments of the Project are within defined easements, magnetic field levels were calculated and compared at the adjacent parallel property lines, or edges of ROW.

The edges of the ROW are identified as "Left" or "Right" to distinguish between them with reference to the sketches included in "Appendix 1" and in the tables included in "Section VIII- Summary of Calculated Magnetic Field Levels" in this report.

[2] CPUC Decision D.06-01-042, Finding of Fact 14, p. 20.
[3] Ibid, p.11.

IV. Project Description

The primary purpose of the Project is to build the ECO Substation as an interconnection hub into which renewable generation can connect at three voltage levels—138 kV, 230 kV, and 500 kV—eliminating the need for a series of developer-owned switching stations along SWPL. It also includes looping the SWPL 500kV transmission line into it, and constructing approximately 13.3 miles of 138 kV transmission line between the new substation and existing Boulevard Substation to increase the reliability of the existing transmission system and promote the interconnection of renewable generation in the Boulevard area. This Detailed FMP is for analysis of this new 138 kV transmission line.

This 138 kV transmission line, TL138xx, will require a 100-foot-wide, permanent ROW within which it will be located on centerline, approximately 50 feet from either side. There is a nine (9) mile portion of new transmission line ROW that parallels the SWPL line, from the ECO Substation heading west. As shown in the attached "Appendix 1- Segment Map", the first Segment for this report starts at the Boulevard Substation and proceeds in a southerly direction for approximately four and one-half (4.5) miles to a point near SWPL pole "Z50147". There, it turns east on the north side, and adjacent to, the existing 200-foot-wide SWPL ROW for a distance of approximately three miles to a point near SWPL pole "Z50163". At that point, it crosses under the SWPL line to the south side, and continues east, adjacent to the existing 200-foot-wide SWPL ROW for approximately six (6) more miles to the new ECO Substation 138 kV yard. This area is predominantly privately owned undeveloped land.

The structure configuration for the new TL138xx transmission line will be designed as a twin circuit (two conductors per phase) configuration. It will include approximately 95 steel transmission poles and 8 wooden distribution poles. The tallest structure will stand approximately 140 feet above ground. The 138 kV transmission circuit will consist of 900 kcmil[4] aluminum conductor steel supported/alumoweld (ACSS/AW) conductor.

All of the steel poles will have six crossarms, and an extended pole top to accommodate optical ground wire (OPGW) attachment. The majority of the structures will be tangent structures with an I-string configuration. The distance from the ground to the lowest conductor will be at least 30 feet, and the approximate distance between the conductors will be 18 feet horizontally and 12 feet vertically. The span lengths between poles will vary with terrain, but will generally be between 400 and 800 feet.

For magnetic field reduction assessment of the new TL138xx transmission line, the Project was divided into three (3) Segments:

1. **Segment 1** starts at the Boulevard Substation and heads in a southerly direction for approximately four (4) miles to a location where the 138 kV line will meet the north side of the SWPL ROW near structure "Z50147". This segment consists solely of the twin circuit TL138xx transmission line located in the center of a 100-foot-wide ROW.

2. **Segment 2** includes a three (3) mile section heading east from SWPL pole "Z50147" toward the ECO Substation. It includes TL138xx in the center of a 100-foot-wide ROW,

[4] kcmil (1,000 cmils) is a quantity of measure for the size of a conductor; kcmil wire size is the equivalent cross-sectional area in thousands of circular mils. A circular mil (cmil) is the area of a circle with a 0.001-inch-diameter.

which is north of, and adjacent to, the existing SWPL 200-foot-wide ROW, making it 50 feet from the north ROW edge and 250 feet from the south ROW edge.

3. **Segment 3** starts where TL138xx will cross under the 500kV SWPL line near structure "Z50163" and continue an additional six miles east to the new ECO Substation 138 kV yard. The twin circuit tieline will reside in the center of a 100-foot-wide ROW, which is now south of, and adjacent to, the existing SWPL 200-foot-wide ROW, making it 50 feet from the south SWPL ROW edge and 250 feet from the north SWPL ROW edge. (See "Appendix 1 - Segment map")

The new TL138xx will traverse land that is primarily privately owned and/or undeveloped, however, it will cross approximately 1.5 miles of land managed by the Bureau of Land Management between approximate Milepost 0.1 and approximate Milepost 1.6. The closest school is Jacumba Elementary in Segment 2, approximately five-thousand (5,000) feet south of the proposed 138 kV ROW near Jacumba.

Drawings and descriptions showing a typical pole top configuration, tieline relative locations to each other and left and right ROW are included in Appendix 1. Figure 1 below shows the drawing symbols; the arrows on the drawings indicate the viewing direction for orienting each drawing and the direction of current flow.

Figure 1: Drawing Symbol Definitions

Symbol	Interpretation	Meaning
	Viewing Direction	The orientation as seen when looking toward the north
	Current flow into the page	Direction of current flow is same as viewing direction
	Current flow out of the page	Direction of current flow is opposite of viewing direction
	Underground Transmission Circuit	Location of underground transmission circuit
	Underground Transmission Circuit	Location of Underground Transmission in Bridge Cell

V. Field Management Measures Considered

Per the "EMF Design Guidelines for Electrical Facilities, Table 3-1", all Segments were reviewed for suitable application of magnetic field reduction measures, as listed in "*Table 1: Magnetic Field Reduction Measures Adopted or Rejected*" below. These techniques will be discussed under the "Section VI- Magnetic Field Reduction Measures Evaluated for the Project" that follows.

Table 1: Magnetic Field Reduction Measures Adopted or Rejected

Segment(s)	Location (Street, Area)	Adjacent Land Use	Reduction Measure Considered	Measure Adopted? (Yes/No)	Estimated Cost to Adopt
All	Entire Project Corridor	Undeveloped Land	**Locate power lines closer to center of the utility corridor to extent possible.**	**No**	**N/A**
	Reason not adopted: The alignment of the new 138 kV transmission line for the Project is in the center of the 100-foot ROW by design so realignment was not considered.				
All	Entire Project Corridor	Undeveloped Land	**Increase structure height.**	**No**	**N/A**
	Reason not adopted: Increasing pole height of the 138 kV transmission line for the Project would not be a "no-cost" option but instead a "low-cost" mitigation. Per SDG&E's Guidelines, "low-cost" EMF mitigation is not necessary when the installation of the tieline is within agricultural and undeveloped land.				
All	Entire Project Corridor	Undeveloped Land	**Reduce conductor (phase) spacing.**	**No**	**N/A**
	Reason not adopted: The Project includes new steel poles configured per SDG&E Standards for the 138 kV circuit voltage level that will reside on them. Changes in pole head conductor spacing was not considered since it would be a "low-cost" reduction measure and per SDG&E's Guidelines, when the zoning for a new tieline is within agricultural and undeveloped land, no "low-cost" options need to be considered.				
All	Entire Project Corridor	Undeveloped Land	**Increase trench depth**.	**No**	**N/A**
	Reason not adopted: This Project does not include undergrounding of the 138 kV transmission line. Undergrounding consideration for any part of the 138 kV alignment would not be a "no-cost" option but instead a "low-cost" option. Per SDG&E's Guidelines, "low-cost" EMF mitigation is not necessary when the installation of the tieline is within agricultural and undeveloped land.				
Segments 2 & 3	Project Corridor	Undeveloped Land	**Phasing circuits to reduce magnetic fields.**	**Yes**	**No-Cost**
	Segment 1 consists of only the 138 kV twin circuit, which must be phased the same on both sides of the pole for safety reasons so changing phase on one side was not considered. Also, to avoid an additional phase change between substations, Segment 1 should be phased the same as that required for Segment 2. Changing the phasing of the 500kV line was not considered due to an extended outage on this very critical resource to do so. Changing the 138 kV twin circuit phasing in Segments 2 and 3 was considered since it parallels the 500kV SWPL line.				

VI. Magnetic Field Reduction Measures Evaluated for the Project

Per SDG&E EMF Design Guidelines for Electrical Facilities, this FMP is limited to an assessment of phase arrangement as a field reduction technique. Other techniques such as locating the power line closer to the center of the corridor, increasing structure height, reducing conductor (phase) spacing, and undergrounding, were not implemented.

Reduction of magnetic field values through phasing techniques was modeled and analyzed as a method to reduce magnetic fields at the ROW for the Project. (See "no-cost" and "low-cost" options below.)

Initial design of the Project and review of existing phasing of the new 138 kV, twin circuit, transmission line within the 100-foot easement was modeled. Phasing for an overhead twin circuit must be the same on both sides of the pole for safety compliance. Since Segment 1 consists solely of the 138 kV circuit, TL138xx, on centerline of the 100-foot easement, changing phase would provide the same modeling results so this segment was not modeled. However, to avoid an additional phase change between Boulevard Substation and ECO Substation, Segment 1 should be the same phase configuration as Segment 2. In Segments 2 and 3, changing phasing of the 138 kV twin circuit was modeled since the 100-foot easement it resides in parallels, is adjacent to, and on either the north or south side of the 200-foot-wide SWPL 500 kV ROW. The "no-cost" technique that provided optimum reduction in magnetic field values at edge of the ROW for Segment 1 and Segment 2 requires changing the initial design, **A-B-C (t-b**), on both sides of the pole, to **C-A-B (t-b)**. Segment 3 of the Project should also be changed from **A-B-C (t-b)** on both sides of the structure, to **B-A-C (t-b)** to provide lowest magnetic field values at edge of the ROW. The percent reduction in magnetic field values (milligauss) can be found in the table located in "*Section VIII. - Summary of Calculated Magnetic Field Levels."*

VII. Magnetic Field Reduction Measures Recommended for the Project

Reduction of magnetic field values through phasing techniques was adopted as a viable method to reduce magnetic fields at the ROW for the Project. For the percentage of magnetic field reduction see tables located in *"Section VIII. - Summary of Calculated Magnetic Field Levels."* The recommended field reduction techniques are:

A. "No-Cost" Field Management Technique:

Change the phasing of the new 138 kV twin circuit transmission circuit, TL138xx, from **A-B-C (t-b)** on both sides to **C-A-B (t-b)** from the Boulevard Substation, south, to a point near SWPL pole "Z50147" (Segment 1). Also, change the phasing of the new 138 kV twin circuit to **C-A-B (t-b)** from that point heading east, to a point near SWPL pole "Z50163" where the new circuit transitions from the north side, to the south side, of the SWPL 200-foot-wide easement (Segment 2). Next, the phasing of the 138 kV twin circuit needs to change to **B-A-C (t-b)** from that point near SWPL pole "Z50163", continuing east to the new East County Substation (Segment 3).

B. "Low-Cost" Field Management Technique:

Per the "EMF Design Guidelines for Electric Facilities", 'low-cost' EMF mitigation is not required in areas zoned agricultural and undeveloped land.

VIII. Summary of Calculated Magnetic Field Levels

The following tables show the initial design and recommended ("no-cost") design magnetic field values (milligauss) and the percent change for Segments 2 and 3 of the Project. A positive percentage value shows a reduction in milligauss, while a negative value shows an increase in milligauss from the initial design. The magnetic field values were calculated at the edges of the ROWs for all segments. Since Segment 1 consists solely of the 138 kV circuit, TL138xx, on centerline of the 100-foot easement, changing phase would provide the same modeling results so this Segment was not modeled. The location of the Segments and their corresponding land uses are included in the attached "Appendix 1".

Table 2: Segment 2 – From SWPL pole "Z50147" east approximately three miles where TL138xx crosses under SWPL to the south side near pole "Z50163".

SEGMENT 2						
From near SWPL pole Z50147, east 3 miles toward new substation						
2012 Amps	INITIAL DESIGN		NO CHANGE			
	TL50001 (C-A-B) (lft-rt) 138 kV twin (A-B-C) (t-b)		TL50001 (C-A-B) (lft-rt) 138 kV twin (C-A-B) (t-b)		Percent(%) milligauss Reduction	Percent(%) milligauss Reduction
Segment						
	Left ROW	Right ROW	Left ROW	Right ROW	Left ROW	Right ROW
SEG2	66.24	62.43	45.00	60.78	32.1%	2.6%

- zoned privately-owned, undeveloped land
- Change phasing of twin circuit **TL138xx** to **C-A-B (t-b)** on both sides provided optimal magnetic field reduction.
- See "**Appendix 1 – Segment 2**" attached for further detail.

Table 3: Segment 3 – From near SWPL pole "Z50163" east to the new ECO Substation

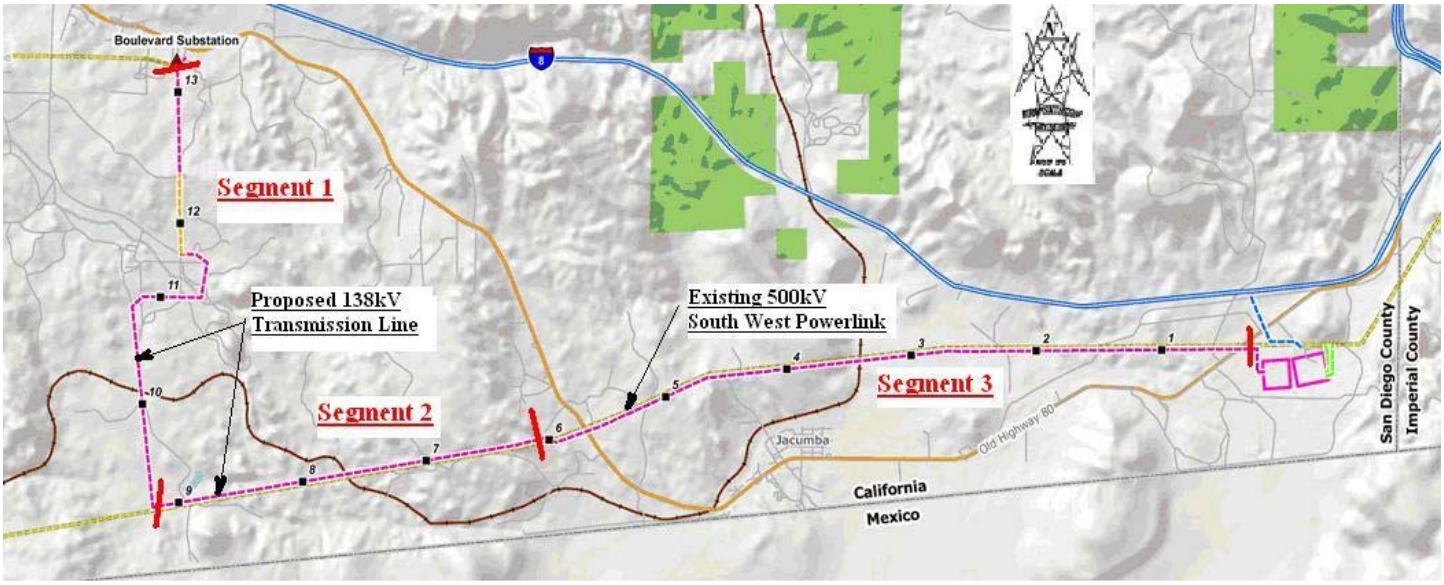
SEGMENT 3						
From near SWPL pole Z50163, east to new ECO Substation						
2012 Amps	INITIAL DESIGN		NO COST			
	TL50001 (C-A-B) (lft-rt) 138 kV twin (A-B-C) (t-b		TL50001 (C-A-B) (lft-rt) 138 kV twin (B-A-C) (t-b)		Percent(%) milligauss Reduction	Percent(%) milligauss Reduction
Segment						
	Left ROW	Right ROW	Left ROW	Right ROW	Left ROW	Right ROW
SEG3	61.00	53.40	60.78	45.00	0.4%	15.7%

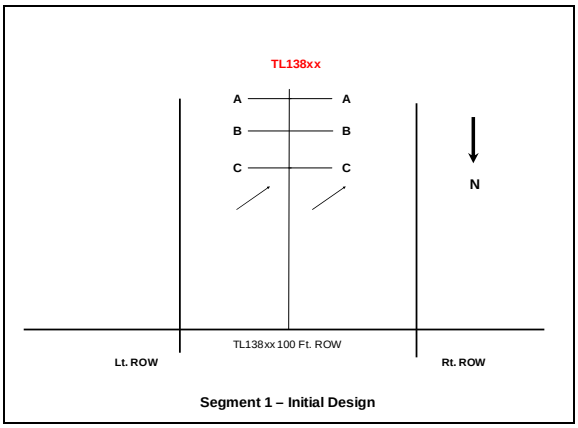
- zoned privately-owned, undeveloped land
- Changing phasing of twin circuit **TL138xx** to **B-A-C (t-b)** on both sides provided optimal magnetic field reduction as the "no-cost" option.
- See "**Appendix 1 – Segment 3**" attached for further detail.

Appendix 1

East County Substation Project

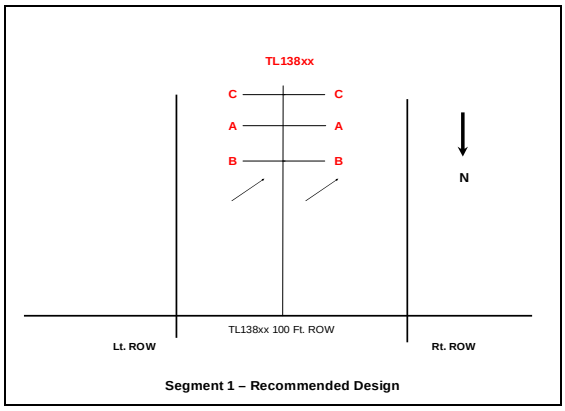
Segment Map





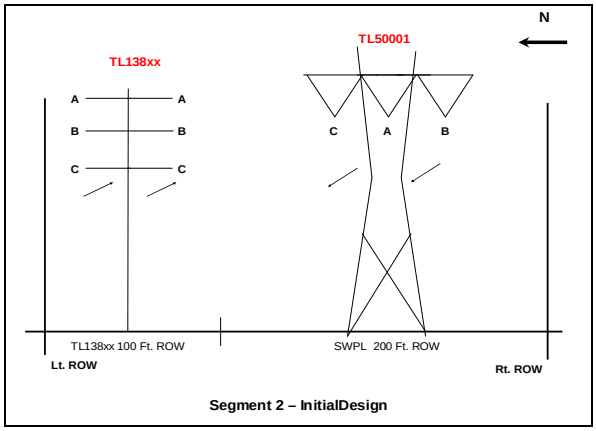
Segment 1 – Initial Design

Approximate Location:	From Boulevard Substation south to SWPL pole "Z50147" (Segment 1)
Transmission Circuits:	TL50001, TL138xx
Land Use:	Undeveloped Land
Length:	4.5 mi.
Right-of-Way Width:	100 ft.



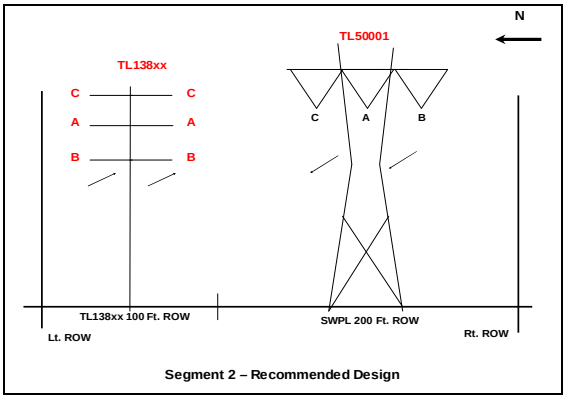
Segment 1 – Recommended Design

Approximate Location:	From Boulevard Substation south to SWPL pole "Z50147" (Segment 1)
Transmission Circuits:	TL50001, TL138xx
Land Use:	Undeveloped Land
Length:	4.5 mi.
Right-of-Way Width:	100 ft.



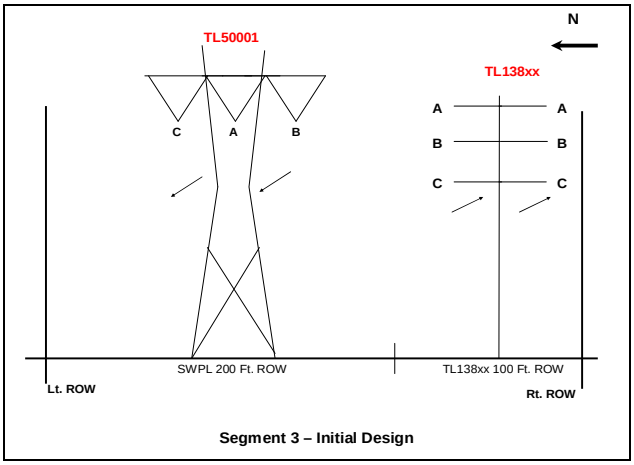
Approximate Location: From SWPL pole "Z50147" east approximately three miles where TL138xx crosses under the SWPL to the south side near pole "Z50163" (Segment 2)

Transmission Circuits: TL50001, TL138xx
Land Use: Undeveloped Land
Length: 3.0 mi.
Right-of-Way Width: 300 ft.



Approximate Location: From SWPL pole "Z50147" east approximately three miles where TL138xx crosses under the SWPL to the south side near pole "Z50163" (Segment 2)

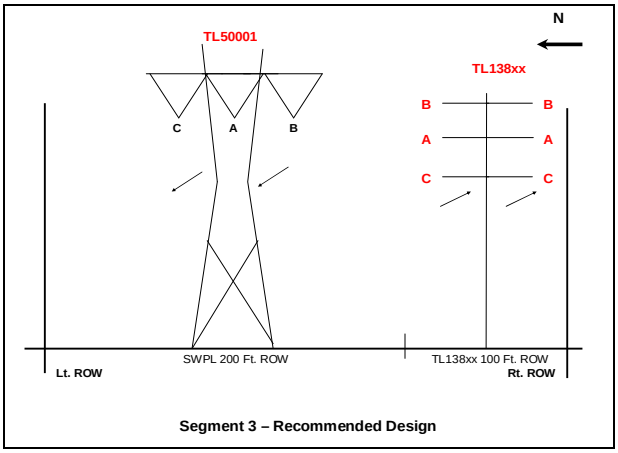
Transmission Circuits: TL50001, TL138xx
Land Use: Undeveloped Land
Length: 3.0 mi.
Right-of-Way Width: 300 ft.



Segment 3 – Initial Design

Approximate Location: From near SWPL pole "Z50163" east to the new ECO Substation (Segment 3)

Transmission Circuits: TL50001, TL138xx
Land Use: Undeveloped Land
Length: 6.0 mi.
Right-of-Way Width: 300 ft.



Segment 3 – Recommended Design

Approximate Location: From near SWPL pole "Z50163" east to the new ECO Substation (Segment 3)

Transmission Circuits: TL50001, TL138xx
Land Use: Undeveloped Land
Length: 6.0 mi.
Right-of-Way Width: 300 ft.

APPENDIX G
Financial Statements

SAN DIEGO GAS & ELECTRIC COMPANY
SUMMARY OF EARNINGS
SIX MONTHS ENDED JUNE 30, 2009
(DOLLARS IN MILLIONS)

Line No.	Item	Amount
1	Operating Revenue	$1,382
2	Operating Expenses	1,173
3	Net Operating Income	$209
4	Weighted Average Rate Base	$4,163
5	Rate of Return*	8.40%

*Authorized Cost of Capital

SAN DIEGO GAS & ELECTRIC COMPANY
BALANCE SHEET
ASSETS AND OTHER DEBITS
JUNE 30, 2009

	1. UTILITY PLANT	2009
101	UTILITY PLANT IN SERVICE	$8,994,195,135
102	UTILITY PLANT PURCHASED OR SOLD	-
105	PLANT HELD FOR FUTURE USE	2,973,017
106	COMPLETED CONSTRUCTION NOT CLASSIFIED	-
107	CONSTRUCTION WORK IN PROGRESS	462,148,650
108	ACCUMULATED PROVISION FOR DEPRECIATION OF UTILITY PLANT	(4,122,435,606)
111	ACCUMULATED PROVISION FOR AMORTIZATION OF UTILITY PLANT	(235,434,555)
118	OTHER UTILITY PLANT	616,341,061
119	ACCUMULATED PROVISION FOR DEPRECIATION AND AMORTIZATION OF OTHER UTILITY PLANT	(130,467,314)
120	NUCLEAR FUEL - NET	42,932,857
	TOTAL NET UTILITY PLANT	5,630,253,245

	2. OTHER PROPERTY AND INVESTMENTS	
121	NONUTILITY PROPERTY	5,897,686
122	ACCUMULATED PROVISION FOR DEPRECIATION AND AMORTIZATION OF NONUTILITY PROPERTY	(500,769)
123	INVESTMENTS IN SUBSIDIARY COMPANIES	-
124	OTHER INVESTMENTS	-
125	SINKING FUNDS	-
128	OTHER SPECIAL FUNDS	580,762,883
	TOTAL OTHER PROPERTY AND INVESTMENTS	586,159,800

Data from SPL as of July 30, 2009

SAN DIEGO GAS & ELECTRIC COMPANY
BALANCE SHEET
ASSETS AND OTHER DEBITS
JUNE 30, 2009

3. CURRENT AND ACCRUED ASSETS

		2009
131	CASH	20,887,169
132	INTEREST SPECIAL DEPOSITS	-
134	OTHER SPECIAL DEPOSITS	-
135	WORKING FUNDS	3,000
136	TEMPORARY CASH INVESTMENTS	159,800,000
141	NOTES RECEIVABLE	801,453
142	CUSTOMER ACCOUNTS RECEIVABLE	175,968,903
143	OTHER ACCOUNTS RECEIVABLE	62,435,675
144	ACCUMULATED PROVISION FOR UNCOLLECTIBLE ACCOUNTS	(3,534,500)
145	NOTES RECEIVABLE FROM ASSOCIATED COMPANIES	5,335,186
146	ACCOUNTS RECEIVABLE FROM ASSOCIATED COMPANIES	658,572
151	FUEL STOCK	2,720,956
152	FUEL STOCK EXPENSE UNDISTRIBUTED	-
154	PLANT MATERIALS AND OPERATING SUPPLIES	59,897,492
156	OTHER MATERIALS AND SUPPLIES	-
163	STORES EXPENSE UNDISTRIBUTED	-
164	GAS STORED	356,750
165	PREPAYMENTS	42,789,773
171	INTEREST AND DIVIDENDS RECEIVABLE	2,697,154
173	ACCRUED UTILITY REVENUES	48,834,000
174	MISCELLANEOUS CURRENT AND ACCRUED ASSETS	984,010,234
175	DERIVATIVE INSTRUMENT ASSETS	40,732,898
	TOTAL CURRENT AND ACCRUED ASSETS	1,604,394,715

4. DEFERRED DEBITS

181	UNAMORTIZED DEBT EXPENSE	24,541,564
182	UNRECOVERED PLANT AND OTHER REGULATORY ASSETS	1,415,438,992
183	PRELIMINARY SURVEY & INVESTIGATION CHARGES	645,141
184	CLEARING ACCOUNTS	137,955
185	TEMPORARY FACILITIES	-
186	MISCELLANEOUS DEFERRED DEBITS	3,558,935
188	RESEARCH AND DEVELOPMENT	-
189	UNAMORTIZED LOSS ON REACQUIRED DEBT	28,493,716
190	ACCUMULATED DEFERRED INCOME TAXES	273,225,435
	TOTAL DEFERRED DEBITS	1,746,041,738
	TOTAL ASSETS AND OTHER DEBITS	9,566,849,498

Data from SPL as of July 30, 2009

SAN DIEGO GAS & ELECTRIC COMPANY
BALANCE SHEET
LIABILITIES AND OTHER CREDITS
JUNE 30, 2009

5. PROPRIETARY CAPITAL

		2009
201	COMMON STOCK ISSUED	$291,458,395
204	PREFERRED STOCK ISSUED	78,475,400
207	PREMIUM ON CAPITAL STOCK	592,222,753
210	GAIN ON RETIRED CAPITAL STOCK	-
211	MISCELLANEOUS PAID-IN CAPITAL	279,618,042
214	CAPITAL STOCK EXPENSE	(25,688,571)
216	UNAPPROPRIATED RETAINED EARNINGS	1,436,819,621
219	ACCUMULATED OTHER COMPREHENSIVE INCOME	(10,352,524)
	TOTAL PROPRIETARY CAPITAL	2,642,553,116

6. LONG-TERM DEBT

221	BONDS	1,936,905,000
223	ADVANCES FROM ASSOCIATED COMPANIES	-
224	OTHER LONG-TERM DEBT	253,720,000
225	UNAMORTIZED PREMIUM ON LONG-TERM DEBT	-
226	UNAMORTIZED DISCOUNT ON LONG-TERM DEBT	(3,952,389)
	TOTAL LONG-TERM DEBT	2,186,672,611

7. OTHER NONCURRENT LIABILITIES

227	OBLIGATIONS UNDER CAPITAL LEASES - NONCURRENT	-

SAN DIEGO GAS & ELECTRIC COMPANY
BALANCE SHEET
LIABILITIES AND OTHER CREDITS
JUNE 30, 2009

8. CURRENT AND ACCRUED LIABILITES

		2009
231	NOTES PAYABLE	-
232	ACCOUNTS PAYABLE	200,261,723
233	NOTES PAYABLE TO ASSOCIATED COMPANIES	
234	ACCOUNTS PAYABLE TO ASSOCIATED COMPANIES	57,583,451
235	CUSTOMER DEPOSITS	53,562,609
236	TAXES ACCRUED	1,520,642
237	INTEREST ACCRUED	23,260,151
238	DIVIDENDS DECLARED	1,204,917
241	TAX COLLECTIONS PAYABLE	6,559,417
242	MISCELLANEOUS CURRENT AND ACCRUED LIABILITIES	1,107,329,298
243	OBLIGATIONS UNDER CAPITAL LEASES - CURRENT	-
244	DERIVATIVE INSTRUMENT LIABILITIES	299,356,131
245	DERIVATIVE INSTRUMENT LIABILITIES - HEDGES	-
	TOTAL CURRENT AND ACCRUED LIABILITIES	1,750,638,339

9. DEFERRED CREDITS

252	CUSTOMER ADVANCES FOR CONSTRUCTION	15,872,888
253	OTHER DEFERRED CREDITS	156,011,090
254	OTHER REGULATORY LIABILITIES	847,094,403
255	ACCUMULATED DEFERRED INVESTMENT TAX CREDITS	25,120,697
257	UNAMORTIZED GAIN ON REACQUIRED DEBT	-
281	ACCUMULATED DEFERRED INCOME TAXES - ACCELERATED	5,201,256
282	ACCUMULATED DEFERRED INCOME TAXES - PROPERTY	671,842,744
283	ACCUMULATED DEFERRED INCOME TAXES - OTHER	236,014,585

SAN DIEGO GAS & ELECTRIC COMPANY
STATEMENT OF INCOME AND RETAINED EARNINGS
SIX MONTHS ENDED JUNE 30, 2009

1. UTILITY OPERATING INCOME

400	OPERATING REVENUES		$1,381,792,565
401	OPERATING EXPENSES	$819,955,138	
402	MAINTENANCE EXPENSES	78,117,002	
403-7	DEPRECIATION AND AMORTIZATION EXPENSES	157,674,594	
408.1	TAXES OTHER THAN INCOME TAXES	35,722,605	
409.1	INCOME TAXES	70,794,702	
410.1	PROVISION FOR DEFERRED INCOME TAXES	18,739,140	
411.1	PROVISION FOR DEFERRED INCOME TAXES - CREDIT	(6,002,084)	
411.4	INVESTMENT TAX CREDIT ADJUSTMENTS	(1,236,812)	
411.6	GAIN FROM DISPOSITION OF UTILITY PLANT	(945,335)	
	TOTAL OPERATING REVENUE DEDUCTIONS		1,172,818,950
	NET OPERATING INCOME		208,973,615

2. OTHER INCOME AND DEDUCTIONS

415	REVENUE FROM MERCHANDISING, JOBBING AND CONTRACT WORK	-
417.1	EXPENSES OF NONUTILITY OPERATIONS	(30,891)
418	NONOPERATING RENTAL INCOME	210,819
418.1	EQUITY IN EARNINGS OF SUBSIDIARIES	-
419	INTEREST AND DIVIDEND INCOME	4,322,981
419.1	ALLOWANCE FOR OTHER FUNDS USED DURING CONSTRUCTION	13,057,679
421	MISCELLANEOUS NONOPERATING INCOME	520,733
421.1	GAIN ON DISPOSITION OF PROPERTY	-
	TOTAL OTHER INCOME	18,081,321
421.2	LOSS ON DISPOSITION OF PROPERTY	-
426	MISCELLANEOUS OTHER INCOME DEDUCTIONS	641,729
	TOTAL OTHER INCOME DEDUCTIONS	641,729
408.2	TAXES OTHER THAN INCOME TAXES	166,783
409.2	INCOME TAXES	4,618,274
410.2	PROVISION FOR DEFERRED INCOME TAXES	3,266,287
411.2	PROVISION FOR DEFERRED INCOME TAXES - CREDIT	-
	TOTAL TAXES ON OTHER INCOME AND DEDUCTIONS	8,051,344

SAN DIEGO GAS & ELECTRIC COMPANY
STATEMENT OF INCOME AND RETAINED EARNINGS
SIX MONTHS ENDED JUNE 30, 2009

3. RETAINED EARNINGS

RETAINED EARNINGS AT BEGINNING OF PERIOD, AS PREVIOUSLY REPORTED	$1,417,747,578
NET INCOME (FROM PRECEDING PAGE)	171,481,877
DIVIDEND TO PARENT COMPANY	-
DIVIDENDS DECLARED - PREFERRED STOCK	(2,409,834)
OTHER RETAINED EARNINGS ADJUSTMENTS	(150,000,000)
RETAINED EARNINGS AT END OF PERIOD	$1,436,819,621

SAN DIEGO GAS & ELECTRIC COMPANY
FINANCIAL STATEMENT
JUNE 30, 2009

(a) Amounts and Kinds of Stock Authorized:

Preferred Stock	1,375,000	shares	Par Value $27,500,000
Preferred Stock	10,000,000	shares	Without Par Value
Preferred Stock	Amount of shares not specifiec		$80,000,000
Common Stock	255,000,000	shares	Without Par Value

Amounts and Kinds of Stock Outstanding:

PREFERRED STOCK			
5.0%	375,000	shares	$7,500,000
4.50%	300,000	shares	6,000,000
4.40%	325,000	shares	6,500,000
4.60%	373,770	shares	7,475,400
$1.70	1,400,000	shares	35,000,000
$1.82	640,000	shares	16,000,000
COMMON STOCK	116,583,358	shares	291,458,395

(b) Terms of Preferred Stock:

Full information as to this item is given in connection with Application Nos. 93-09-069, 04-01-009 and 06-05-01
to which references are hereby made.

(c) Brief Description of Mortgage:

Full information as to this item is given in Application No. 06-05-015 and 08-07-029 to which reference is hereby mad

(d) Number and Amount of Bonds Authorized and Issued

First Mortgage Bonds:	Nominal Date of Issue	Par Value Authorized and Issued	Outstanding	Interest Paid in 2008
6.8% Series KK, due 2015	12-01-91	14,400,000	14,400,000	979,200
Var% Series OO, due 2027	12-01-92	250,000,000	150,000,000	7,612,500
5.85% Series RR, due 2021	06-29-93	60,000,000	60,000,000	3,510,000
2.539% Series VV, due 2034	06-17-04	43,615,000	43,615,000	1,107,385
2.539% Series WW, due 2034	06-17-04	40,000,000	40,000,000	1,015,600
2.516% Series XX, due 2034	06-17-04	35,000,000	35,000,000	880,600
2.832% Series YY, due 2034	06-17-04	24,000,000	24,000,000	679,680
2.832% Series ZZ, due 2034	06-17-04	33,650,000	33,650,000	952,968
2.8275% Series AAA, due 2039	06-17-04	75,000,000	75,000,000	2,120,625
5.35% Series BBB, due 2035	05-19-05	250,000,000	250,000,000	13,375,000
5.30% Series CCC, due 2015	11-17-05	250,000,000	250,000,000	13,250,000
6.00% Series DDD. due 2026	06-08-06	250,000,000	250,000,000	15,000,000
Var Series EEE, due 2018	09-21-06	161,240,000	161,240,000	7,919,707
6.125% Series FFF, due 2037	09-20-07	250,000,000	250,000,000	15,099,826
Unsecured Bonds:				
5.9% CPCFA96A, due 2014	06-01-96	129,820,000	129,820,000	7,659,380
5.3% CV96A, due 2021	08-02-96	38,900,000	38,900,000	2,061,700
5.5% CV96B, due 2021	11-21-96	60,000,000	60,000,000	3,300,000
4.9% CV97A, due 2023	10-31-97	25,000,000	25,000,000	1,225,000

SAN DIEGO GAS & ELECTRIC COMPANY
FINANCIAL STATEMENT
JUNE 30, 2009

Other Indebtedness:	Date of Issue	Date of Maturity	Interest Rate	Outstanding	Interest Paid 2008
Commercial Paper & ST Bank Loans	Various	Various	Various	0	$82,105

Amounts and Rates of Dividends Declared:
The amounts and rates of dividends during the past five fiscal years are as follows:

Preferred Stock	Shares Outstanding 12-31-08	Dividends Declared 2004	2005	2006	2007	2008	
5.0%	375,000	$375,000	$375,000	$375,000	$375,000	$375,000	
4.50%	300,000	270,000	270,000	270,000	270,000	270,000	
4.40%	325,000	286,000	286,000	286,000	286,000	286,000	
4.60%	373,770	343,868	343,868	343,868	343,868	343,868	
$ 1.7625	0	1,498,125	1,321,875	1,145,625	969,375	242,344	
$ 1.70	1,400,000	2,380,000	2,380,000	2,380,000	2,380,000	2,380,000	
$ 1.82	640,000	1,164,800	1,164,800	1,164,800	1,164,800	1,164,800	
	3,413,770	$6,317,793	$6,141,543	$5,965,293	$5,789,043	$5,062,012	[2]
Common Stock Amount		$200,000,000	$75,000,000	$0	$0	$0	[1]

A balance sheet and a statement of income and retained earnings of Applicant for the six months ended June 30, 2009, are attached hereto.

[1] San Diego Gas & Electric Company dividend to parent.
[2] Includes $242,344 of interest expense related to redeemable preferred stock.

ATTACHMENT C
San Diego Gas & Electric Company Total Regulatory Capitalization
June 30, 2009
($ Millions)

No.	Interest % 06/09	Bond	Maturity	Principal ($ millions)
1	6.800%	SERIES KK	6/01/15	14.4
2	5.000%	SERIES OO-2	12/01/27	60.0
3	5.250%	SERIES OO-3	12/01/27	45.0
4	5.000%	SERIES OO-4	12/01/27	45.0
5	5.850%	SERIES RR	6/01/21	60.0
6	5.875%	SERIES VV (CV2004A)	2/15/34	43.6
7	5.875%	SERIES WW (CV2004B)	2/15/34	40.0
8	5.875%	SERIES XX (CV2004C)	2/15/34	35.0
9	5.875%	SERIES YY (CV2004D)	1/01/34	24.0
10	5.875%	SERIES ZZ (CV2004E)	1/01/34	33.7
11	(V)	SERIES AAA (CV2004F)	5/01/39	75.0
12	5.3500%	SERIES BBB	5/15/35	250.0
13	5.3000%	SERIES CCC	11/15/15	250.0
14	6.0000%	SERIES DDD	6/1/26	250.0
15	Var	SERIES EEE	7/1/18	161.2
16	6.1250%	SERIES FFF	9/15/37	250.0
17	6.0000%	SERIES GGG	6/1/39	300.0
Total First Mortgage Bonds				1,936.9
Other Long-Term Debt				
18	5.900%	CPCFA96A	6/01/14	129.8
19	5.300%	CV96A	7/01/21	38.9
20	5.500%	CV96B	12/01/21	60.0
21	4.900%	CV97A	3/01/23	25.0
Total Other Long-Term Debt				253.7
Long-Term Debt before Unamortized premiums, issue expenses & loss on reacquired debt net of tax				**2,190.6**
		Unamortized discount less premium		(4.0)
		Unamortized issued expense		(24.5)
		Unamortized loss on reacquired debt net of tax		(16.5)
Long-Term Debt net of Unamortized premuims, issue expenses & loss on reacquired debt net of tax				**2,145.6**
Equity Capital				
Common Stock Equity				**2,564.1**
Preferred Stock Equity				**78.5**
Total Equity				**2,642.6**
Total Regulatory Capitalization				**4,788.2**

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