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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE

STATE OF CALIFORNIA

A1105006

In the Matter of the Application of SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) for a Permit to Construct Electrical Facilities: Lockhart Substation Project	)))))	Application No. 11-_____

APPLICATION OF SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) FOR A PERMIT TO CONSTRUCT ELECTRICAL FACILITIES: LOCKHART SUBSTATION PROJECT

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Dated: May 5, 2011

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I.

INTRODUCTION

Pursuant to California Public Utilities Commission (Commission or CPUC) General Order 131-D (GO 131-D), Southern California Edison Company (SCE) respectfully submits this application for a permit to construct (PTC) authorizing SCE to construct the proposed project known as the Lockhart Substation Project (Project). The proposed Project will facilitate the interconnection of renewable generation development projects in the Mohave Desert to SCE's existing Coolwater-Kramer No.1 220 kilovolt (kV) transmission line. The Project consists of:

1. **Lockhart Substation**[1]**:** Construct a new 220 kV Substation to loop-in the existing Coolwater-Kramer No. 1 220 kV transmission line and to provide two 220 kV line positions to terminate two new 220 kV generation tie lines (gen-ties) owned by the Abengoa Mojave Solar Project (AMSP).

[1] The Lockhart facility is actually a switching station because it is only one voltage (220kV) and does not contain transformation. This distinction was not made early on and therefore it is referenced as the "Lockhart Substation" herein and in the environmental documents.

2. **Transmission Lines:** Loop the existing Coolwater-Kramer No. 1 220 kV transmission line into the new Lockhart Substation. The transmission loop would require construction of approximately 3,000 feet of new transmission line segments (comprised of two line segments of approximately 1,500 feet each) creating the new Lockhart-Kramer and Coolwater-Lockhart 220 kV transmission lines.

3. **Generation Tie Line Connections:** Connect the two AMSP built gen-ties into the SCE-owned Lockhart Substation. This work involves construction of two single spans of conductors between the Lockhart switchrack and the last AMSP-owned tower(s).

4. **Distribution Facilities:** Connect the existing Hutt 12 kV distribution circuit out of the Hutt Poletop Substation to the 12 kV rack inside the new Lockhart Substation. A range of approximately 200 - 400 feet of two 5 inch underground conduits (along with conduits for telecom) would be installed from the proposed riser pole west of the proposed Lockhart Substation to the 12 kV rack to provide a path for the required station light and power. Provide temporary power for the construction of both the proposed Lockhart Substation and the AMSP facilities.

5. **Telecommunications Facilities:** Install fiber optic communication cables, associated poles, conduits, and other telecommunication facilities, including construction of a telecommunications room at Tortilla Substation, to provide diverse path routing of communications required for the AMSP interconnection, and to provide communications redundancy at the two AMSP power blocks. Work would also include installing communication paths between the Victor, Roadway, Tortilla, Kramer, Lockhart, and Coolwater Substations by means of stringing cable on existing transmission line poles and on seven replacement poles, constructing new interset poles, placing segments of cable in existing underground conduit, and placing cable in new underground conduit. Approximately 85 miles of fiber-optic cable is proposed.

Construction of the proposed Project is expected to start in the fourth quarter of 2011 and would continue for approximately two years. The projected Project operating date is fourth quarter of 2013.

II.

BACKGROUND AND SUMMARY OF REQUEST

Mojave Solar, LLC (Mojave Solar), solely owned by Abengoa Solar, Inc., proposes to construct, own, and operate a 250 megawatt (MW) gross output solar power plant, which will implement parabolic trough technology to solar heat a heat transfer fluid (HTF), in San Bernardino County, California. The solar power plant is to be located entirely on private land and is referred to as the AMSP. Additional facilities are required to distribute the solar power to the electric grid, including new substation facilities to interconnect the power to the adjacent transmission lines, and a fiber optic telecommunications line linking various substations in the region. AMSP has requested interconnection to the California Independent System Operator (CAISO)-controlled grid at the proposed Project.

The estimated cost of this Project is approximately $73.4 million, expressed in nominal dollars.[2] The Large Generator Interconnection Agreement (LGIA) was executed by the CAISO, Abengoa Solar, Inc., and SCE in November 2010.

The proposed AMSP would assist the State of California in meeting the California's Renewables Portfolio Standards and Greenhouse Gas emissions reduction requirements, including the requirements set forth in Senate Bill (SB) 1078 (California Renewables Portfolio Standard Program), Assembly Bill (AB) 32 (California Global Warming Solutions Act of 2006), and Senate Bill (SB) X1-2 signed into law on Tuesday, April 12, 2011 raising California's renewables portfolio standard to 33 percent. The Governor's office also established a California Renewable Energy Action Team (REAT) focused on facilitating agency coordination to achieve timely approvals of renewable projects in compliance with federal and state environmental laws. The California Renewable Energy Transmission Initiative (RETI) is a statewide planning process that has been underway for over two years to identify the transmission projects needed to accommodate California's renewable energy goals. Stakeholders have actively participated in

[2] This is a conceptual estimate, prepared in advance of final engineering and prior to CPUC approval. Pension and benefits, administrative and general expenses are included in the estimate; however, allowance for funds used during construction are not included in this estimate.

the planning process. The Governor's office, REAT, and other federal and state efforts have lent support for projects such as AMSP that are striving for timely regulatory approvals to qualify for stimulus funds available through the American Recovery and Reinvestment Act (ARRA).

III.

ENVIRONMENTAL REVIEW

In order to construct the Project, SCE must first obtain a PTC from the CPUC. Typically an application for a PTC would be accompanied by a Proponent's Environmental Assessment (PEA). However, this Project relies on the PEA-equivalent information provided in the documents listed below to satisfy the requirements under GO131-D[3]. These documents will be referenced, where appropriate, as the source of information required in an application for a PTC pursuant to GO 131-D, Section IX.B.

1. Pursuant to the California Environmental Quality Act (CEQA) (Public Resources Code § 21000 et. seq.), the following environmental documents will be used in evaluating the Project components:
    A. Mojave Solar submitted an Application for Certification (AFC) for the AMSP to the California Energy Commission (CEC) on August 10, 2009. The CEC issued the final Commission Decision (Commission Decision) on September 8, 2010 (Abengoa Mojave Solar Project Commission Decision, September 2010, 800-2010-008-CMF, Docket Number 09-AFC-5) for the construction, ownership, and operation of a new solar electric generating facility. The Commission Decision was made in compliance with Title 20 of the California Code of Regulations and CEQA. The AFC evaluated and provided environmental analysis to determine potential impacts associated with the construction and operation of SCE's Project components, including the Lockhart Substation, transmission lines, gen-tie

[3] GO 131-D.Section IX.B.1.e. Also, please see Appendix H regarding Energy Division confirmation of PEA-equivalent information for the Lockhart Substation Project.

connections, and distribution lines. Listed below are the relevant CEC documents that make up a portion of SCE's PEA-equivalent information:

i. Commission Decision (CEC-800-2010-008 - CMF), September 8, 2010,
ii. Supplemental Staff Assessment - Part A (CEC-700-2010-003 - SUPA), May 2010,
iii. Supplemental Staff Assessment - Part B (CEC-700-2010-003 - SUPB), May 2010,
iv. Supplemental Staff Assessment - Part C (CEC-700-2010-003 - SUPC), June 2010, and the
v. Staff Assessment (CEC-700-2010-003), March 2010.

2. Pursuant to the National Environmental Policy Act (NEPA) of 1969, the U.S. Department of Energy (DOE), Loan Guarantee Program Office, issued a Draft Environmental Assessment (EA) for the AMSP on April 4, 2011. In preparation of the EA, the Commission Decision, including the Conditions of Certification, was taken into account. The EA analyzes and evaluates potential construction and operation impacts associated with the proposed Project including AMSP and SCE components. The EA has been prepared in accordance with NEPA (United States Code [U.S.C.] 4321 et seq.), the Council on Environmental Quality (CEQ) regulations (40 Code of Federal Regulations [CFR] Parts 1500−1508), and DOE NEPA implementing procedures (10 CFR 1021). The EA (1) describes the affected environment relevant to potential impacts of the Proposed Action and No Action Alternative; (2) analyzes potential environmental impacts that could result from the Proposed Action; (3) identifies and characterizes cumulative impacts that could result from the Proposed Action in relation to other ongoing or proposed activities in the surrounding area; and (4) provides DOE and BLM with environmental information for use in decision-making to protect, preserve, and enhance the human environment and natural ecosystems.

As described in the EA, Section 2.1, the DOE Proposed Action is to issue Mojave Solar a loan guarantee that would be used for the construction and operation of the AMSP, including necessary supporting infrastructure. The BLM Proposed Action is

issuance of ROWs to support the AMSP. BLM is a cooperating agency for the EA, in accordance with a Memorandum of Understanding between DOE and BLM, signed in January 2010.

The Proposed Action as described in the EA would result in development of the AMSP, as well as SCE owned facilities including a proposed switching station, interconnection to an existing transmission line, distribution facilities, and fiber-optic telecommunication lines linking the plant to various substations in the region. It would also involve movement of desert tortoise from the AMSP and ancillary sites to receptor sites outside of the plant site boundary.

BLM's role in the Proposed Action is to permit transmission and other ancillary facilities such as fiber optic communication facilities on public lands in support of renewable energy projects, consistent with the Energy Policy Act and subsequent renewable energy policies, other laws and regulations, and the California Desert Conservation Area Plan. Approximately 17 miles of the 85-mile proposed fiber-optic telecommunication network crosses lands managed by BLM, Barstow Field Office, as described more fully in the EA, Section 2.1.2. BLM has the authority to issue ROW grants sought by SCE, including modifications to three existing grants (CACA 021596, CALA 030913, and CARI 001280) as well as two new grants (CACA 052096 and CACA 52616).

IV.

STATUTORY AND PROCEDURAL REQUIREMENTS

A. Applicant

The applicant is Southern California Edison Company, an electric public utility company organized and existing under the laws of the State of California. SCE's principal place of business is 2244 Walnut Grove Avenue, Post Office Box 800, Rosemead, California 91770. Please address correspondence or communications in regard to this Application to:

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Angela Whatley

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B. Articles Of Incorporation

A copy of SCE's Restated Articles of Incorporation, as amended through June 1, 1993, and as presently in effect, certified by the California Secretary of State, was filed with the Commission on June 15, 1993, in connection with Application No. 93-06-022[4] and is incorporated herein by reference, pursuant to Rule 2.2 of the Commission's Rules of Practice and Procedure.

C. Balance Sheet And Statement Of Income

Appendix A to this Application contains copies of SCE's balance sheet and statement of income as of March 31, 2011. The balance sheet reflects SCE's utility plant at original cost, less accumulated depreciation.

Since 1954, pursuant to Commission Decision No. 49665, dated February 16, 1954, in Application No. 33952, as modified by Decision No. 91799 in 1980, SCE has utilized straight-line remaining life depreciation for computing depreciation expense for accounting and ratemaking purposes in connection with its operations.

Pursuant to Commission Decision No. 59926, dated April 12, 1960, SCE uses accelerated depreciation for income tax purposes and "flows through" reductions in income tax to customers within the Commission's jurisdiction for property placed in service prior to 1981. Pursuant to Decision No. 93848 in OII-24, SCE uses the Accelerated Cost Recovery System (ACRS) for federal income tax purposes and "normalizes" reductions in income tax to customers for property placed in service after 1980 in compliance with the Economic Recovery Tax Act of 1981, and also in compliance with the Tax Reform Act of 1986. Pursuant to Decision No. 88-01-061, dated January 28, 1988, SCE uses a gross of tax interest rate in calculating the AFUDC Rate, and income tax normalization to account for the increased income tax expense occasioned by the Tax

[4] Application No. 93-06-22, filed June 15, 1993, regarding approval of a Self-Generation Deferral Agreement between Mobil Oil Corporation's Torrance Refinery and SCE.

Relief Act of 1986 provisions requiring capitalization of interest during construction for income tax purposes.

D. Description Of Southern California Edison Company

SCE is an investor-owned public utility engaged in the business of generating, transmitting, and distributing electric energy in portions of central and southern California. In addition to its properties in California, it owns, in some cases jointly with others, facilities in Nevada, Arizona, and New Mexico, its share of which produces power and energy for the use of its customers in California. In conducting such business, SCE operates an interconnected and integrated electric utility system.

E. Service Territory

SCE's service territory is located in 15 counties in central and southern California, consisting of Fresno, Imperial, Inyo, Kern, Kings, Los Angeles, Madera, Mono, Orange, Riverside, San Bernardino, Santa Barbara, Tulare, Tuolumne[5], and Ventura Counties, and includes approximately 179 incorporated communities as well as outlying rural territories. A list of the counties and municipalities served by SCE is attached hereto as Appendix B. SCE also supplies electricity to certain customers for resale under tariffs filed with the Federal Energy Regulatory Commission.

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[5] SCE provides electric service to a small number of customer accounts in Tuolumne County and is not subject to franchise requirements.

F. Location Of Items Required In A Permit To Construct Pursuant To GO 131-D, Section IX.B

Much of the information required to be included in a PTC application pursuant to GO 131-D, Section IX.B is found in the: 1) Commission Decision, and 2) the DOE's Draft EA. Additionally, the CPUC is in process of preparing an Initial Study (IS) / Mitigated Negative Declaration (MND), that will provide a CEQA analysis for the SCE telecommunications routes.

a. A description of the proposed power line or substation facilities, including the proposed power line route; proposed power line equipment, such as tower design and appearance, heights, conductor sizes, voltages, capacities, substations, switchyards, etc., and a proposed schedule for authorization, construction, and commencement of operation of the facilities.

The Project includes the proposed switching station, proposed interconnection to an existing transmission line, proposed distribution facilities, and proposed fiber optic lines linking the project to other existing substations in the region.

The Commission Decision document provides a description of the substation facilities for the Project. Proposed SCE facilities included in the CEC document are described in the sections listed below:

- Section I, Project Description and Purpose, Summary and Discussion of the Evidence, (page 9). A description of proposed SCE facilities (referred to as Associated Facilities) begins on Page 15 of the Commission Decision document.
- Section IV, Engineering Assessment, Subsection D, Transmission System Engineering, (page 89) provides detailed description of the SCE facilities. Findings of Fact associated with these facilities begin on page 95 of the Commission Decision document.
- Section IV, Engineering Assessment, Subsection E, Transmission Line Safety and Nuisance, (page 103) provides additional project information including tower heights, EMF information, etc.

The Draft EA provides a description of the Project components, including the proposed Lockhart Substation, proposed transmission interconnection facilities, distribution facilities and telecommunication facilities. The proposed SCE facilities are described in detail in two areas:

- Section 2.1.1.3, (page 2-17) describes the switching station facilities, transmission lines, generation tie line connections, and distribution line for station power and light;
- Section 2.1.2 (page 2-23) describes the telecommunication system.

SCE components of the project are illustrated in the Draft EA in Figures 2-9 (Lockhart Substation Details), 2-10 (Typical Pole [Onsite]), 2-11 (Fiber-Optic Line – Lockhart to Tortilla Substation), 2-12 (Fiber –Optic Line – Lockhart to Kramer Substation), and 2-13 (Fiber-Optic Line – Kramer to Victor Substation).

The Project schedule is attached to this Application as Appendix C.

b. A map of the proposed power line routing or substation location showing populated areas, parks, recreational areas, scenic areas, and existing electrical transmission or power lines within 300 feet of the proposed route or substation.

The Commission Decision provides several figures depicting the Project features overlaying populated areas, parks, recreation areas, and scenic areas.

- Overall project location figures can be found at Figure 1 (page 10), Figure 2 (page 11), and cumulative impacts Figure 2 (page 182)
- Populated areas (cities and towns) can be seen on Figure 1 (page 10)
- Scenic areas can be seen on the following.
    - Visual Resources Figure 1 (page 484)
    - Visual Resources Figure 2 (page 491)
    - Visual Resources Figure 3 (page 492)
    - Photographs (from Figure 4 on page 494 to Figure 21 on page 516)

The Draft EA provides figures that illustrate Project components in relation to populated areas, parks, recreation areas, and scenic areas.

- Overall Project location and populated areas (cities and towns) can be found in the EA at:
    - Figure S-1 (cities and towns are included), page xvi
    - Land Use Figure 3.1-1, page 3.1-3
    - Figure 3.1-8, Existing Homes in the Study Area, page 3.1-18
    - Figure 3.4-1, Noise Measurement Locations, page 3.4-7

- Figure 3.7-7, Residential and Production Wells, page 3.7-15
- Figure 3.10-1, Socioeconomic Study Area, page 3.10-2
- Figure 3.11-1, Percent Minority by Census Block Group, page 3.11-4
- Figure 3.13-1, Regional Transportation Network, page 3.13-2
- Figure 3.13-2, Local Transportation Network, page 3.13-4
- Figure 3.13-3, Existing Trafic Volumes, page 3.13-7
- Figure 4-1, Cumulative Projects, page 4-4

- Scenic areas can be seen in the EA at:
  - Figure 3.1-5 Planned Land Use – Lockhart to Tortilla, page 3.1-12
  - Figure 3.1-6 Planned Land Use – Lockhart to Kramer, page 3.1-13
  - Figure 3.1-7 Planned Land Use - Kramer to Victor, page 3.1-14
  - Figure 3.2-1, Key Observation Points, page 3.2-3
  - Figure 3.2-2, Photo Key Map 1, page 3.2-10
  - Figure 3.2-3, Photo Key Map 2, page 3.2-11
  - Figure 3.2-4, Photo Key Map 3, page 3.2-12
  - Figure 3.2-5 through Figure 3.2-24 (current and proposed [simulated] KOP views), beginning on page 3.2-13
- Existing and/or proposed electrical infrastructure can be found in the EA at:
  - Figure 2-1, AMSP/Lockhart Substation Site, page 2-4
  - Figure 2-2 AMSP Site Plan, page 2-5
  - Figure 2-6, Section View Looking West, page 2-10
  - Figure 2-7, Section View Looking South, page 2-11
  - Figure 2-9, Lockhart Substation Details, page 2-19
  - Figure 2-10, Typical Pole (Onsite), page 2-21
  - Figure 2-11, Fiber Optic Line- Lockhart to Tortilla Substation, page 2-24
  - Figure 2-12, Fiber Optic Line- Lockhart to Kramer Substation, page 2-26
  - Figure 2-13, Fiber Optic Line- Kramer to Victor Substation, page 2-28

A list of property owners within 300 feet of the proposed AMSP is provided in Appendix E of this application.

c. Reasons for adoption of the power line route or substation location selected, including comparison with alternative routes or locations, including the advantages and disadvantages of each.

The Commission Decision provides the rationale for the siting of the AMSP proper. It provides advantages and disadvantages of each of the sites considered as alternatives. It should be noted that the proposed SCE substation facilities would be located within the AMSP site.

- Section I, Project Description and Purpose, provides an overview (page 15) of the proponent's objectives for the AMSP project proper, which helps to clarify the rationale for the site selection process.
- Section II, Project Alternatives (page 21) provides a discussion of how the proponent selected the proposed AMSP site to satisfy the project objectives, and a detailed examination of six potential alternative sites for the AMSP. Table 1 (page 26) summarizes the six proponent-selected AMSP sites considered but dropped from further analysis. A thorough discussion of reasons for not selecting the two CEC Staff-identified AMSP sites can be found on page 27.
- Section IV, Engineering Assessment, Subsection D, Transmission System Engineering, (page 91) provides a brief overview of the potential impacts to the overall energy grid from implementation of the proposed SCE components of the project
- Section IV, Engineering Assessment, Subsection D, Transmission System Engineering, (page 94) provides a brief discussion of the alternative transmission routes and the rationale for interconnection to SCE.

The Draft EA provides the rationale for the siting of the AMSP proper, along with the accompanying switching station, and interconnection facilities, Alternatives for the AMSP are also discussed in detail in the EA.

- Chapter 2, Proposed Action and Alternatives (page 2-1) provides a complete overview of the AMSP or Project and alternatives.
- Chapter 2.3 (page 2-32) provides a description of the six criteria that Mojave Solar used to identify the appropriate location for the AMSP. Additionally, Chapter 2.3 describes eliminating sites based on these criteria that could potentially have supported the project, but were eliminated from further discussion.
- Chapter 2.4 (page 2-34) describes the No-Action Alternative.

d. *A listing of the governmental agencies with which proposed power line route or substation location reviews have been undertaken, including a written agency response to applicant's written request for a brief position statement by that agency. (Such listing shall include The Native American Heritage Commission, which shall constitute notice on California Indian Reservation Tribal governments.) In the absence of a written agency position statement, the utility may submit a statement of its understanding of the position of such agencies.*

- Native American Heritage Commission (NAHC):

  AECOM, the consultants for the AMSP, contacted NAHC on September 7, 2010, and received a response letter from NAHC on September 7, 2010. The NAHC response letter concludes that: "The NAHC [Sacred Lands File] SLF search did not indicate the presence of Native American cultural resources within one-half – mile [radius] of the proposed project site (APE). However, there are Native American cultural resources in close proximity to the following USGS 7.5 minute Quadrangles: Adelanto, Victorville NW, Kramer Junction, Red Buttes, The Buttes, and Kramer Hills." The letter goes on to say that: "Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway." A copy of the NAHC response may be found in Appendix F of this application.

  Further, please note the following references from the Draft EA in relation to the cultural resources:

  1. Section 3.9, Cultural Resources, p. 3.9-1
  2. Appendix N: Cultural Resources (confidential)

  Also, please note the following references from the Commission Decision in relation to the cultural resources:

  1. Section VI C, Cultural Resources, p. 401

- County of San Bernardino:

  The County of San Bernardino provided a position statement to SCE indicating that they are in support of the Lockhart Substation Project. A copy of the County's position statement is in Appendix F.

- City of Adelanto:

  The City of Adelanto provided a position statement to SCE indicating that they have no concerns with the Lockhart Substation Project. A copy of the City's position statement is in Appendix F.

- City of Barstow:

  The City of Barstow provided a position statement to SCE indicating that they have no concerns with the Lockhart Substation Project. A copy of the City's position statement is in Appendix F.

- City of Victorville:

  The City of Victorville provided a position statement to SCE indicating their support for the Lockhart Substation Project. A copy of the City's position statement is in Appendix F.

e. 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 Rule 2.4 [formerly 17.1 and 17.3]. If a PEA is filed, it may include the data described in Items a. through d. above.

The relevant documents are referenced above.

G. Compliance With GO 131-D, Section X

GO 131-D, Section X requires applications for a PTC to describe measures taken to reduce potential exposure to electric and magnetic fields (EMF) generated by the proposed facilities. A complete description of EMF-related issues is contained in SCE's EMF Field Management Plan for this Project, which is attached as Appendix G to this Application.

H. Compliance With Rule 2.1(c)

In compliance with Rule 2.1(c) of the Commission's Rules of Practice and Procedure (California Code of Regulations, Title 20), SCE is required to state in this Application "[t]he proposed category for the proceeding, the need for hearing, the issues to be considered, and a

proposed schedule." SCE proposes to categorize this application as a rate-setting proceeding. SCE anticipates that a hearing will not be necessary. This proceeding involves the Commission's: (1) environmental review of the Project in compliance with CEQA and the Commission's GO 131-D; and (2) issuance of a PTC authorizing SCE to construct the Project.

SCE proposes the following schedule for this application:

Date	Event
May 5, 2011	PTC Application filed
May 2011	PTC Application accepted as complete
May 2011	Public Notice and Draft MND Issued by CPUC for Comment
June 2011	Final MND Issued by CPUC
July 2011	ALJ Proposed Decision
August 2011	Commission Final Decision, PTC Issued

I. Statutory Authority

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

J. Public Notice

Pursuant to GO 131-D, Section XI.A, notice of this Application shall be given: (1) to certain public agencies and legislative bodies; (2) to owners of property located on or within 300 feet of the project area; (3) by advertisement in a newspaper or newspapers of general circulation; and (4) by posting a notice on-site and off-site at the project location.

SCE has given, or will give, proper notice within the time limits prescribed in GO 131-D. A copy of the Notice of Application for a Permit to Construct and the list of newspapers which will publish the notice are contained in Appendix D. A copy of the Certificate of Service of Notice of Application for a Permit to Construct, an agency service list, and the 300-foot property owners list are contained in Appendix E.

K. Supporting Appendices

Appendices A through G listed below are made a part of this application:

1. Appendix A: Balance Sheet and Statement of Income as of March 31, 2011
2. Appendix B: List of Counties and Municipalities Served by SCE
3. Appendix C: Lockhart Substation Project Schedule
4. Appendix D: Notice of Application for a Permit to Construct
   List of Newspapers publishing the Notice of Application for a Permit to Construct
5. Appendix E: Certificate of Service of Notice of Application for a Permit to Construct
   Agency Service List
   300-foot Property Owners list
6. Appendix F: Agency Communications
7. Appendix G: Field Management Plan
8. Appendix H: Energy Division PEA-equivalent Information Requirements

L. Compliance With Rule 2.5

In accordance with Rule 2.5 of the Commission's Rules of Practice and Procedure, SCE is enclosing a deposit to be applied to the costs the Commission incurs to complete the required environmental review pursuant to CEQA.

M. Request For Ex Parte Relief

SCE requests that the relief requested in this Application be provided ex parte as provided for in GO 131-D, Section IX.B.6.

N. Request For Timely Relief

SCE requests the Commission to issue a decision within the time limits prescribed by Government Code Section 65920 et seq. (the Permit Streamlining Act), as provided for in GO 131-D, Section IX.B.6.

V.

CONCLUSION

SCE respectfully requests the Commission to issue a PTC authorizing SCE to construct the Project set forth in this application and the referenced AFC and EA documents. SCE further requests that the relief be provided ex parte and within the time limits prescribed by the Permit Streamlining Act.

Respectfully submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

/s/James Kelly

By: James Kelly
Senior Vice President

/s/Angela Whatley

By: Angela Whatley
Attorney for
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Telephone: (626) 302-3618
Facsimile: (626) 302-1926

Dated: May 5, 2011

VERIFICATION

I am an officer of the applicant corporation herein, and am authorized to make this verification on its behalf. I am informed and believe that the matters stated in the foregoing document are true.

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

Executed this 5th day of May, 2011, at Rosemead, California.

/s/ James Kelly
James Kelly
Senior Vice President
SOUTHERN CALIFORNIA EDISON COMPANY
Telephone: (626) 302-4883

Appendix A

BALANCE SHEET AND STATEMENT OF INCOME

AS OF MARCH 31, 2011

SOUTHERN CALIFORNIA EDISON COMPANY

BALANCE SHEET

MARCH 31, 2011

A S S E T S

(Unaudited)

(Millions of Dollars)

UTILITY PLANT:	
Utility plant, at original cost	$28,127
Less - Accumulated depreciation	(6,488)
	21,639
Construction work in progress	3,267
Nuclear fuel, at amortized cost	370
	25,276
OTHER PROPERTY AND INVESTMENTS:	
Nonutility property - less accumulated depreciation of $101	75
Nuclear decommissioning trusts	3,619
Other investments	76
	3,770
CURRENT ASSETS:	
Cash and cash equivalents	53
Receivables, less allowances of $37 for uncollectible accounts	625
Accrued unbilled revenue	410
Inventory	328
Prepaid taxes	225
Derivative assets	77
Regulatory assets	407
Other current assets	101
	2,226
DEFERRED CHARGES:	
Regulatory assets	4,450
Derivative assets	289
Other long-term assets	333
	5,072
	$36,344

Appendix B

LIST OF COUNTIES AND MUNICIPALITIES SERVED BY SCE

SOUTHERN CALIFORNIA EDISON COMPANY

Citizens or some of the citizens of the following counties and municipal corporations will or may be affected by the changes in rates proposed herein.

COUNTIES

Fresno	Kings	Orange	Tuolumne*
Imperial	Los Angeles	Riverside	Tulare
Inyo	Madera	San Bernardino	Ventura
Kern	Mono	Santa Barbara	

MUNICIPAL CORPORATIONS

Adelanto	Cudahy	Irwindale	Newport Beach	Santa Barbara
Agoura Hills	Culver City	La Canada Flintridge	Norco	Santa Clarita
Alhambra	Cypress	La Habra	Norwalk	Santa Fe Springs
Aliso Viejo	Delano	La Habra Heights	Ojai	Santa Monica
Apple Valley	Desert Hot Springs	La Mirada	Ontario	Santa Paula
Arcadia	Diamond Bar	La Palma	Orange	Seal Beach
Artesia	Downey	La Puente	Oxnard	Sierra Madre
Avalon	Duarte	La Verne	Palm Desert	Signal Hill
Baldwin Park	Eastvale	Laguna Beach	Palm Springs	Simi Valley
Barstow	El Centro	Laguna Hills	Palmdale	South El Monte
Beaumont	El Monte	Laguna Niguel	Palos Verdes Estates	South Gate
Bell	El Segundo	Laguna Woods	Paramount	South Pasadena
Bell Gardens	Exeter	Lake Elsinore	Perris	Stanton
Bellflower	Farmersville	Lake Forest	Pico Rivera	Tehachapi
Beverly Hills	Fillmore	Lakewood	Placentia	Temecula
Bishop	Fontana	Lancaster	Pomona	Temple City
Blythe	Fountain Valley	Lawndale	Port Hueneme	Thousand Oaks
Bradbury	Fullerton	Lindsay	Porterville	Torrance
Brea	Garden Grove	Loma Linda	Rancho Cucamonga	Tulare
Buena Park	Gardena	Lomita	Rancho Mirage	Tustin
Calabasas	Glendora	Long Beach	Rancho Palos Verdes	Twentynine Palms
California City	Goleta	Los Alamitos	Rancho Santa Margarita	Upland
Calimesa	Grand Terrace	Lynwood	Redlands	Vernon
Camarillo	Hanford	Malibu	Redondo Beach	Victorville
Canyon Lake	Hawaiian Gardens	Mammoth Lakes	Rialto	Villa Park
Carpinteria	Hawthorne	Manhattan Beach	Ridgecrest	Visalia
Carson	Hemet	Maywood	Rolling Hills	Walnut
Cathedral City	Hermosa Beach	McFarland	Rolling Hills Estates	West Covina
Cerritos	Hesperia	Menifee	Rosemead	West Hollywood
Chino	Hidden Hills	Mission Viejo	San Bernardino	Westlake Village
Chino Hills	Highland	Monrovia	San Buenaventura	Westminster
Claremont	Huntington Beach	Montclair	San Dimas	Whittier
Commerce	Huntington Park	Montebello	San Fernando	Wildomar
Compton	Indian Wells	Monterey Park	San Gabriel	Woodlake
Corona	Industry	Moorpark	San Jacinto	Yorba Linda
Costa Mesa	Inglewood	Moreno Valley	San Marino	Yucaipa
Covina	Irvine	Murrieta	Santa Ana	Yucca Valley

***SCE provides electric service to a small number of customer accounts in Tuolumne County and is not subject to franchise requirements.**

Appendix C

LOCKHART SUBSTATION PROJECT SCHEDULE

Proposed Lockhart Substation Project Schedule

Date	**Event**
May 5, 2011	*PTC Application filed*
May 2011	*PTC Application accepted as complete*
May 2011	*Public Notice and Draft MND issued by CPUC for comments*
June 2011	*Final MND issued by CPUC*
July 2011	*ALJ Proposed Decision*
August 2011	*Commission Final Decision, PTC issued*
Third Quarter 2012	*Pre-Construction activities requiring ground disturbance*
Fourth Quarter 2012	*Commence construction*
Fourth Quarter 2013	*Construction complete*
Fourth Quarter 2013	*Commence operation*

Appendix D

NOTICE OF APPLICATION FOR A PERMIT TO CONSTRUCT

LIST OF NEWSPAPERS PUBLISHING THE NOTICE OF APPLICATION FOR A PERMIT TO CONSTRUCT

NOTICE OF APPLICATION FOR A PERMIT TO CONSTRUCT

LOCKHART SUBSTATION PROJECT
Date: May 5, 2011

Proposed Project: Southern California Edison Company (SCE) has filed an application with the California Public Utilities Commission (CPUC) for a Permit to Construct (PTC) for the proposed Lockhart Substation Project (Project). The proposed Project will facilitate the interconnection of renewable generation development projects in the Mohave Desert to SCE's existing Coolwater-Kramer No.1 220 kV transmission line. The Project consists of:

1. **Lockhart Substation:** Construct a new 220 kV switching station to loop-in the existing Coolwater-Kramer No. 1 220 kV transmission line and to provide two 220 kV line positions to terminate two new 220 kV generation tie lines (gen-ties) owned by the Abengoa Mojave Solar Project (AMSP).
2. **Transmission Lines:** Loop the existing Coolwater-Kramer No. 1 220 kV transmission line into the new Lockhart Substation. The transmission loop would require construction of approximately 3,000 feet of new transmission line segments (comprised of two line segments of approximately 1,500 feet each) creating the new Lockhart-Kramer and Coolwater-Lockhart 220 kV transmission lines.
3. **Generation Tie Line Connections:** Connect the two AMSP built gen-ties into the SCE-owned Lockhart Substation. This work involves construction of two single spans of conductors between the Lockhart switchrack and the last AMSP-owned tower(s).
4. **Distribution Facilities:** Connect the existing Hutt 12 kV distribution circuit out of the Hutt Poletop Substation to the 12 kV rack inside the new Lockhart Substation. A range of approximately 200 - 400 feet of two 5 inch underground conduits (along with conduits for telecom) would be installed from the proposed riser pole west of the proposed Lockhart Substation to the 12 kV rack to provide a path for the required station light and power. Provide temporary power for the construction of both the proposed Lockhart Substation and the AMSP facilities.
5. **Telecommunications Facilities:** Install fiber optic communication cables, associated poles, conduits, and other telecommunication facilities, including a telecommunications room at Tortilla Substation, to provide diverse path routing of communications required for the AMSP interconnection, and to provide communications redundancy at the two AMSP power blocks. Work would also include installing communication paths between the Victor, Roadway, Tortilla, Kramer, Lockhart, and Coolwater Substations by means of stringing cable on existing transmission line poles and on seven replacement poles, constructing new interset poles, placing segments of cable in existing underground conduit, and placing cable in new underground conduit. Approximately 85 miles of fiber-optic cable is proposed for these three routes.

Construction of the proposed Project is expected to start in the fourth quarter of 2011 and would continue for approximately two years. The projected Project operating date is in the fourth quarter of 2013.

Environmental Analysis: The following environmental analyses prepared by the California Energy Commission (CEC) and the U.S. Department of Energy (DOE) describe the Project components and will accompany SCE's PTC application:

- Environmental components of Mojave Solar's Application for Certification (AFC) filed with the CEC in compliance with the California Environmental Quality Act (CEQA).
- Environmental components of Mojave Solar's Environmental Assessment (EA) prepared by the DOE, as the lead agency, and the BLM, as the cooperating agency, in compliance with the National Environmental Policy Act.

These documents include analysis of potential environmental impacts that could be created by the construction and operation of the Project.

The CPUC will be also preparing an Initial Study (IS) / Mitigated Negative Declaration (MND), primarily to further evaluate SCE's fiber optic communications facilities.

EMF Compliance: The CPUC requires utilities to employ "no cost" and "low cost" measures to reduce public exposure to electric and magnetic fields (EMF). In accordance with "EMF Design Guidelines" filed with the CPUC in compliance with CPUC Decisions 93-11-013 and 06-01-042, SCE would implement the following measure(s) for the proposed Project:

1. Placing major switching station electrical equipment (such as switchracks, buses and underground duct banks) away from the switching station property lines.

Public Participation: Persons wishing to present testimony in evidentiary hearings and/or legal briefing on issues related to the proposed Project require party status. Persons may obtain party status by filing a protest to the application within 30 days after the notice was mailed or published, **June 6, 2011**, in compliance with Rule 2.6 of the CPUC's Rules of Practice and Procedure (posted at www.cpuc.ca.gov) and with Section XII of CPUC General Order 131-D. Parties may also seek party status at any time by filing a motion in compliance with Rule 1.4 of the CPUC's Rules of Practice and Procedure.

The public may communicate their views regarding the application by writing to the CPUC at 505 Van Ness Avenue, San Francisco, CA 94102, or by emailing the Public Advisor at public.advisor@cpuc.ca.gov. In addition, the CPUC may, at its discretion, hold a public participation hearing in order to take oral public comment.

Document Subscription Service: The CPUC's free online subscription service sends subscribers an email notification when any document meeting their subscription criteria is published on the CPUC's website, such as documents filed in a CPUC proceeding (e.g., notices of hearings, rulings, briefs and decisions). To sign up to receive notification of documents filed in this proceeding (or other CPUC matters), visit www.cpuc.ca.gov/subscription.

Contacts:
For assistance from the CPUC, please contact the Public Advisor in San Francisco at (415)703-2074 (public.advisor@cpuc.ca.gov) or in Los Angeles at (213)567-7055 (Public.Advisor.LA@cpuc.ca.gov).

To review a copy of SCE's Application, or to request further information, please visit SCE's project website at **www.sce.com/lockhart** or contact:

Nancy Jackson
Region Manager
Southern California Edison
12353 Hesperia Rd.
Victorville, CA 92392
(760) 951-3237
Nancy.Jackson@sce.com

LIST OF NEWSPAPERS
PUBLISHING THE NOTICE FOR A
PERMIT TO CONSTRUCT

Victorville Daily Press
13891 Park Avenue
Victorville, CA 92392

Barstow Desert Dispatch
130 Coolwater Lane
Barstow, CA 92311

Appendix E

CERTIFICATE OF SERVICE OF NOTICE OF APPLICATION FOR A PERMIT TO CONSTRUCT

AGENCY SERVICE LIST

300-FOOT PROPERTY OWNERS LIST

CERTIFICATE OF SERVICE

I hereby certify that, pursuant to the Commission's Rules of Practice and Procedure, I have this day served a true copy of the **NOTICE OF APPLICATION OF SOUTHERN CALIFORNIA EDISON COMPANY (U-338-3) FOR A PERMIT TO CONSTRUCT ELECTRICAL FACILITIES: LOCKHART SUBSTATION PROJECT** on all parties identified on the attached service list(s). Service was effected by one or more means indicated below:

Placing copies in properly addressed sealed envelopes and depositing such copies in the United States mail with first-class postage prepaid to all parties.

Executed this 5th day of May 2011, at Rosemead, California.

_/s/Veronica Flores_____
Veronica Flores, Project Analyst
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770

LOCKHART SWITCHING STATION PROJECT AGENCY SERVICE LIST		
Supervisor Josie Gonzales Chairman, Board of Supervisors San Bernardino County 385 N. Arrowhead Avenue, 5th Floor San Bernardino, CA 92415-0110	Gregory C. Devereaux County Administrative Officer San Bernardino County 385 N. Arrowhead Avenue San Bernardino, CA 92415-0120	Christine Kelly Director, Land Use Services Department San Bernardino County 385 N. Arrowhead Avenue, 1st Floor San Bernardino, California 92415-0182
Wendy Luntz Planning Commission Secretary San Bernardino County 385 N. Arrowhead Avenue, 1st Floor San Bernardino, CA 92415-	Karen Miller, CPUC Public Advisor California Public Utilities Commission 505 Van Ness Avenue San Francisco, CA 94102	Julie Fitch, Energy Division Director California Public Utilities Commission 505 Van Ness Avenue San Francisco, CA 94102
Melissa Jones, Executive Director California Energy Commission 1516 Ninth Street Sacramento, CA 95814-5512	Department of Transportation Division of Aeronautics, MS # 40 Gary Cathey, Chief P. O. Box 942874 Sacramento, CA 94274-0001	California Natural Resources Agency John Laird, Secretary 1416 Ninth St., Suite 1311 Sacramento, CA 95814
California Department of Transportation Cindy McKim, Director PO Box 942873 Sacramento, CA 94273-0001	California Department of Health Care Services Toby Douglas, Director 1501 Capitol Ave. Sacramento, CA 94234-7320	State Water Resources Control Board Tom Howard, Executive Director 1001 “I” Street Sacramento, CA 95814
California Department of Fish and Game John McCamman, Director 1416 Ninth Street, 12th Floor Sacramento, CA 95814	Eldon Heaston Executive Director Mojave Desert Air Quality Management District 14306 Park Ave Victorville, CA 92392	California Department of Transportation District 8 Dr. Raymond W. Wolfe, Director 464 W. 4th Street San Bernardino, CA 92401
California Air Resources Board Attn: Stationary Source 1001 “I” Street PO Box 2815 Sacramento, CA 95812	California Regional Water Quality Control Board Lahontan Region 6 14440 Civic Drive, Suite 200 Victorville, CA 92392	

PROPOSED LOCKHART SUBSTATION

300-Foot Property Owners Information

APN	MAILING ADDRESS	MAILING CITY	MAILING STATE	MAILING ZIP	SITUS CITY	SITUS STATE	SITUS ZIP	SITUS COUNTY
49014215	10050 TOLUCA LAKE AVE	NORTH HOLLYWOOD	CA	91602	HINKLEY	CA	92347	San Bernardino
49016112	11500 W 13TH AVE	LAKEWOOD	CO	80215	HINKLEY	CA	92347	San Bernardino
49016113	11500 W 13TH AVE	LAKEWOOD	CO	80215	HINKLEY	CA	92347	San Bernardino
49602218	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	HINKLEY	CA	92347	San Bernardino
49602223	PO BOX 51111	LOS ANGELES	CA	90051	HINKLEY	CA	92347	San Bernardino

Appendix F

AGENCY COMMUNICATIONS

Jow, Stephanie

From: Jow, Stephanie
Sent: Tuesday, September 07, 2010 3:15 PM
To: 'Dave Singleton'
Subject: Lockhart Substation project - 08080191.12
Attachments: Overview Map.pdf; Locational Info Table.pdf

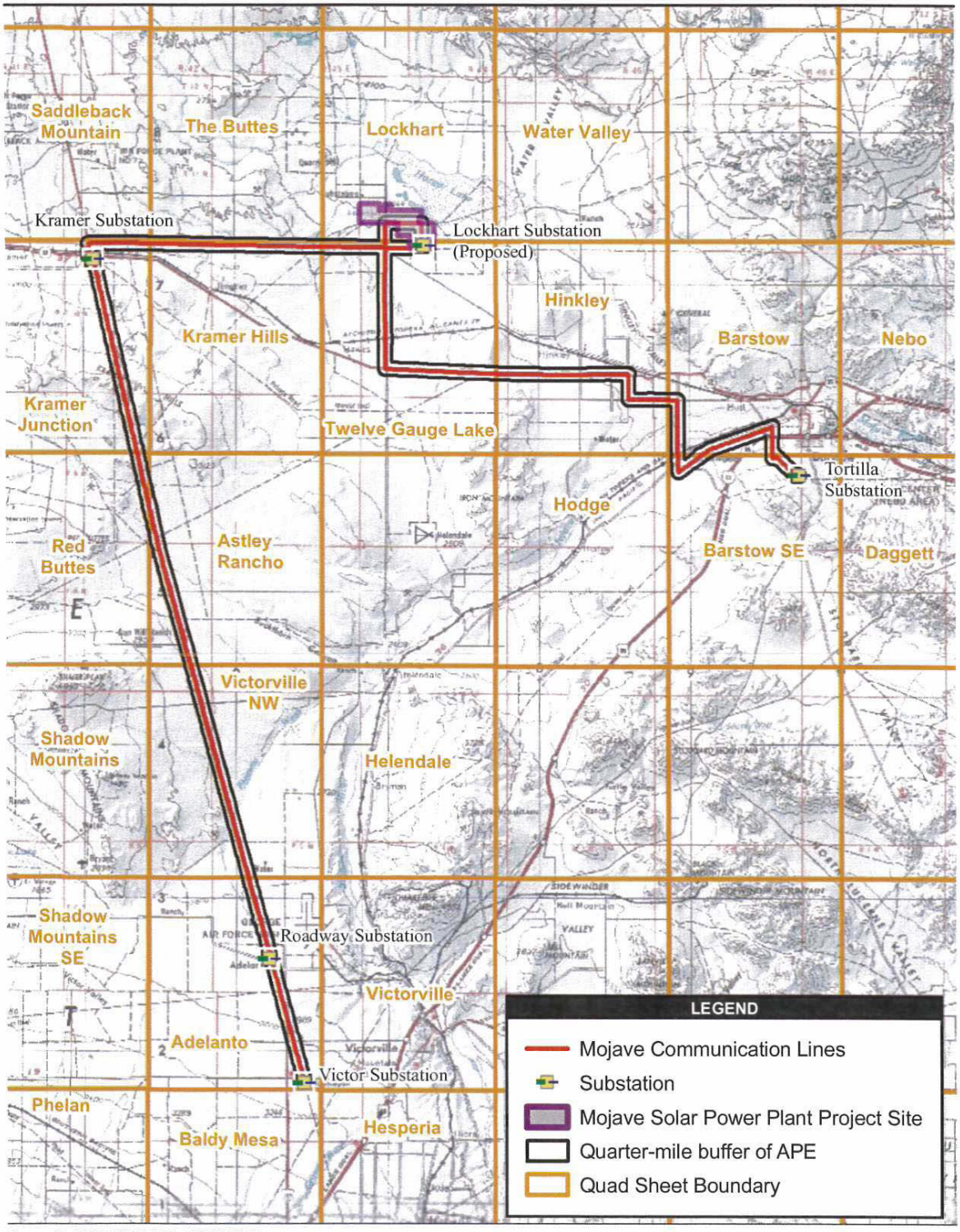
Mr. Singleton,

I am contacting you to request a sacred lands file check for the Lockhart Substation Connection and Communication Facilities, Mojave Solar Power Plant project. The proposed project is located in San Bernardino County, California near the cities of Barstow, Kramer Junction, and Victorville. Attached is an overview map showing the project area as well as a ¼-mile buffer from the project centerline. Also provided is a table listing the quadrangle, township, range, and section information needed to conduct your record search.

If you have any questions, please do not hesitate to call me at (619) 233-1454. Thank you.

Stephanie Jow
Archaeologist
D +1 619.684.6942
stephanie.jow@aecom.com

AECOM
1420 Kettner Boulevard, Suite 500
San Diego CA 92101 USA
T +1 619.233.1454 F +1 619.233.0952
www.aecom.com



Source: Casil 2007; ESRI 2010; AECOM 2010

6 3 0 6 Miles

Scale: 1 = 380,000; 1 inch = 6 mile(s)

Project Overview

Lockhart Substation Connection & Communication Facilities, Mojave Solar Power Plant

Path: P:\2008\08080191 Harper Lake Abengoa AFC\6.0 GIS\6.2 Project Directory\6.2.5 Layout\CULTURAL\T_LINE_Survey_July10\T-Line_NAHC_OverviewMap.mxd, 08/20/10, wilsons5

Quad	Township/Range	Section
Adelanto	50N 50W	003
Adelanto	50N 50W	004
Adelanto	50N 50W	009
Adelanto	50N 50W	010
Adelanto	50N 50W	015
Adelanto	50N 50W	016
Adelanto	50N 50W	022
Victorville NW	60N 50W	005
Victorville NW	60N 50W	006
Victorville NW, Adelanto	60N 50W	008
Adelanto	60N 50W	016
Adelanto	60N 50W	017
Adelanto	60N 50W	020
Adelanto	60N 50W	021
Adelanto	60N 50W	028
Adelanto	60N 50W	029
Adelanto	60N 50W	033
Adelanto	60N 50W	034
Victorville NW	70N 50W	007
Victorville NW	70N 50W	018
Victorville NW	70N 50W	019
Victorville NW	70N 50W	029
Victorville NW	70N 50W	030
Victorville NW	70N 50W	031
Victorville NW	70N 50W	032
Victorville NW	70N 60W	001
Victorville NW	70N 60W	012
Victorville NW	70N 60W	013
Victorville NW	70N 60W	024
Astley Rancho	80N 60W	002
Red Buttes, Astley Rancho	80N 60W	003
Red Buttes, Astley Rancho	80N 60W	010
Astley Rancho	80N 60W	011
Astley Rancho	80N 60W	014
Astley Rancho	80N 60W	023
Astley Rancho	80N 60W	024
Astley Rancho	80N 60W	025
Astley Rancho	80N 60W	026
Victorville NW	80N 60W	035
Victorville NW	80N 60W	036
Barstow	90N 20W	001
Barstow	90N 20W	002
Barstow	90N 20W	005
Barstow, Hinkley	90N 20W	006
Barstow, Hinkley	90N 20W	007
Barstow	90N 20W	008
Barstow	90N 20W	009
Barstow	90N 20W	010
Barstow	90N 20W	011
Barstow	90N 20W	012
Barstow, Barstow SE	90N 20W	013
Barstow, Barstow SE	90N 20W	014
Barstow, Barstow SE	90N 20W	015
Barstow, Barstow SE	90N 20W	016

Quad	Township/Range	Section
Barstow, Barstow SE	90N 20W	017
Barstow, Barstow SE, Hiknley, Hodge	90N 20W	018
Barstow SE, Hodge	90N 20W	019
Barstow SE	90N 20W	020
Barstow SE	90N 20W	024
Hinkley	90N 30W	001
Hinkley	90N 30W	002
Kramer Junction	90N 60W	004
Kramer Junction	90N 60W	009
Kramer Junction, Kramer Hills	90N 60W	010
Kramer Junction, Kramer Hills, Astley Rancho, Red buttes	90N 60W	015
Kramer Junction, Red buttes	90N 60W	016
Red buttes	90N 60W	021
Red Buttes, Astley Rancho	90N 60W	022
Red Buttes, Astley Rancho	90N 60W	027
Red Buttes, Astley Rancho	90N 60W	034
Astley Rancho	90N 60W	035
Barstow, Hinkley	100N 20W	031
Barstow	100N 20W	032
Hinkley	100N 30W	025
Hinkley	100N 30W	026
Hinkley	100N 30W	027
Hinkley	100N 30W	028
Hinkley	100N 30W	029
Hinkley	100N 30W	030
Hinkley	100N 30W	031
Hinkley	100N 30W	032
Hinkley	100N 30W	033
Hinkley	100N 30W	034
Hinkley	100N 30W	035
Hinkley	100N 30W	036
Twelve Gauge lake	100N 40W	004
Twelve Gauge lake	100N 40W	005
Twelve Gauge lake	100N 40W	006
Twelve Gauge lake	100N 40W	007
Twelve Gauge lake	100N 40W	008
Twelve Gauge lake	100N 40W	017
Twelve Gauge lake	100N 40W	018
Twelve Gauge lake	100N 40W	019
Twelve Gauge lake	100N 40W	020
Twelve Gauge lake, Hinkley	100N 40W	025
Twelve Gauge lake	100N 40W	026
Twelve Gauge lake	100N 40W	027
Twelve Gauge lake	100N 40W	028
Twelve Gauge lake	100N 40W	029
Twelve Gauge lake	100N 40W	030
Twelve Gauge lake	100N 40W	031
Twelve Gauge lake	100N 40W	032
Twelve Gauge lake	100N 40W	033
Twelve Gauge lake	100N 40W	034
Twelve Gauge lake	100N 40W	035
Twelve Gauge lake, Hinkley	100N 40W	036
Twelve Gauge lake	100N 50W	001
Twelve Gauge lake, Kramer Hills	100N 50W	002

Quad	Township/Range	Section
Kramer Hills	100N 50W	003
Kramer Hills	100N 50W	004
Kramer Hills	100N 50W	005
Kramer Hills	100N 50W	006
Kramer Hills	100N 60W	001
Kramer Hills	100N 60W	002
Kramer Hills, Kramer Junction	100N 60W	003
Kramer Junction	100N 60W	004
Kramer Junction	100N 60W	005
Kramer Junction	100N 60W	006
Kramer Junction	100N 60W	007
Kramer Junction	100N 60W	008
Kramer Junction	100N 60W	017
Kramer Junction	100N 60W	020
Kramer Junction	100N 60W	021
Kramer Junction	100N 60W	028
Kramer Junction	100N 60W	029
Kramer Junction	100N 60W	032
Kramer Junction	100N 60W	033
Lockhart	110N 40W	028
Lockhart	110N 40W	029
Lockhart	110N 40W	030
Lockhart	110N 40W	031
Lockhart, Twelve Gauge Lake	110N 40W	032
Lockhart, Twelve Gauge Lake	110N 40W	033
The Buttes, Kramer Hills	110N 50W	031
The Buttes, Kramer Hills	110N 50W	032
The Buttes, Kramer Hills	110N 50W	033
The Buttes, Kramer Hills	110N 50W	034
The Buttes, Kramer Hills, Twelve gauge Lake, Lockhart	110N 50W	035
Lockhart, Twelve Gauge Lake	110N 50W	036
Saddleback Mtn., Kramer Junction	110N 60W	031
Saddleback Mtn., Kramer Junction	110N 60W	032
Saddleback Mtn., Kramer Junction	110N 60W	033
Saddleback Mtn., Kramer Junction, The buttes, Kramer Hills	110N 60W	034
The buttes, Kramer Hills	110N 60W	035
The buttes, Kramer Hills	110N 60W	036

STATE OF CALIFORNIA Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net

September 7, 2010

Ms. Stephanie Jow, Archaeologist
AECOM
1420 Kettner Boulevard, Suite 500
San Diego, CA 92101

Sent by FAX to: 619-233-0952
No. of Pages: 4

Re: Request for a Sacred Lands File Search and Native American Contacts list for the **"Lockhart Substation Connection and Communication Facilities for the Mojave Solar Power Plant Projects of Southern California Edison Company;"** located near the cities of Barstow, Kramer Junction and Victorville; San Bernardino County, California

Dear Ms. Jow:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources. The NAHC SLF search, **did not Indicate** the presence of Native American cultural resources within one-half mile of the proposed project site (APE). However, there were Native American cultural resources in close proximity to the following USGS 7.5 minute Quadrangles: Adelanto, Victorville NW, Kramer Junction, Red Buttes, The Buttes and Kramer Hills.

Also, this letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect.

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Culturally-affiliated tribes and individuals may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We strongly recommend that you contact persons on the attached list of Native American contacts to see if there are any updated contacts and to determine if the proposed project may harm a cultural resource.

Furthermore we suggest that you contact the California Historic Resources Information System (CHRIS) for pertinent archaeological data within or near the APE, at the Office of Historic Preservation Coordinator's office (at 916-653-7278, for referral to the nearest Information Center of which there are 10.

Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA (42 U.S.C 4321-43351) and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2), the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes.

Also, Public Resources Code Section 5097.98 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects. Also, the 2006 SB 1059 the state enabling legislation to the Federal Energy Policy Act of 2005, does mandate tribal consultation for the 'electric transmission corridors. This is codified in the California Public Resources Code, Chapter 4.3, and §25330 to Division 15, requires consultation with California Native American tribes, and identifies both federally recognized and non-federally recognized on a list maintained by the NAHC. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e).

The response to this search for Native American cultural resources is conducted in the NAHC Sacred Lands Inventory, established by the California Legislature (CA Public Resources Code 5097.94(a) and is exempt from the CA Public Records Act (c.f. California Government Code 6254.10) although Native Americans on the attached contact list may wish to reveal the nature of identified cultural resources/historic properties. Confidentiality of "historic properties of religious and cultural significance" may also be protected under Section 304 of he NHA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APE and possibility threatened by proposed project activity.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Attachment: Native American Contact List

Native American Contacts
San Bernardino County
September 7, 2010

Ramona Band of Cahuilla Mission Indians
Joseph Hamilton, Chairman
P.O. Box 391670 Cahuilla
Anza , CA 92539
admin@ramonatribe.com
(951) 763-4105
(951) 763-4325 Fax

Tehachapi Indian Tribe
Attn: Charlie Cooke
32835 Santiago Road Kawaiisu
Acton , CA 93510
suscol@intox.net
(661) 733-1812

San Manuel Band of Mission Indians
James Ramos, Chairperson
26569 Community Center Drive Serrano
Highland , CA 92346
(909) 864-8933
(909) 864-3724 - FAX
(909) 864-3370 Fax

San Fernando Band of Mission Indians
John Valenzuela, Chairperson
P.O. Box 221838 Fernandeño
Newhall , CA 91322 Tataviam
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This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code. Also, federal National Environmental Policy Act (NEPA), National Historic Preservation Act, Section 106 and fed eral NAGPRA. And 36 CFR Part 800.

This list is only applicable for contacting local Native Americans for consultation purposes with regard to cultural resources impact by the proposed Lockhart Substation Connection and Communication Facilities of the Southern California Edison Mojave Solar Pwer Plant Projects; located in the Moja Desert; San Bernardino County, California for which Sacred Lands File searches and Native American Contacts lists were requested.

Native American Contacts
San Bernardino County
September 7, 2010

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Ernest H. Siva
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Fort Mojave Indian Tribe
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Serrano Nation of Indians
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Patton , CA 92369

(909) 862-9883

Kern Valley Indian Council
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Weldon , CA 93283 Kawaiisu
brobinson@iwvisp.com Koso
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This list is current only as of the date of this document.

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GREGORY C. DEVEREAUX
Chief Executive Officer

COUNTY OF
SAN BERNARDINO

Board of Supervisors

County Government Center
385 North Arrowhead Avenue
San Bernardino, CA 92415-0110
(909) 387-4811

BOARD OF SUPERVISORS

Brad Mitzelfelt, Vice Chair ..... *First District*
Janice Rutherford ..... *Second District*
Neil Derry ..... *Third District*
Gary C. Ovitt ..... *Fourth District*
Josie Gonzales, Chair ..... *Fifth District*

Laura H. Welch
Clerk of the Board of Supervisors

May 2, 2011

To: California Public Utilities Commission

Dear Commission members and staff:

This letter is to express the Board of Supervisor's support for the proposed Lockhart Substation Project in San Bernardino County, pending full environmental and regulatory review.

The Lockhart Substation Project is needed to facilitate the interconnection of renewable generation projects such as the Abengoa Mojave Solar Project to SCE's electric transmission system as well as assist SCE in meeting the state's renewable goals.

Renewable energy is an important emerging industry for San Bernardino County and the supporting infrastructure to bring that energy to market is critical to the success of these projects.

Thank you for your consideration.

Sincerely,

Josie Gonzales
Chair

Brad Mitzelfelt
Vice Chairman

The mission of the government of the County of San Bernardino is to satisfy its customers by providing service that promotes the health, safety, well being, and quality of life of its residents according to the County Charter, general laws, and the will of the people it serves.

THE CITY OF
BARSTOW
CROSSROADS OF OPPORTUNITY

April 14, 2011

Ms. Nancy Jackson
Region Manager
Southern California Edison
12353 Hesperia Rd.
Victorville, CA 92392

Dear Ms. Jackson:

We appreciate you providing the City of Barstow with a briefing on Southern California Edison's (SCE) proposed Lockhart Substation Project. As outlined in your briefing, these new electrical facilities will allow solar projects in the Harper Lake area to connect to SCE's transmission system and deliver renewable generation to the power grid.

Per your briefing, SCE will be filing a project application with the California Public Utilities Commission (CPUC) for approval to construct the project. We understand that a portion of the telecommunications path needed to connect the new substation will be located in the City of Barstow and that the telecommunications cable will be installed primarily on existing overhead poles or in existing underground conduits. Currently, the City has not identified any specific issues or concerns with this project.

We would appreciate you keeping us informed of the project's status. Thank you again for the briefing.

Sincerely,

Charles C. Mitchell

Charles C. Mitchell
City Manager
City of Barstow

220 East Mountain View Street, Suite A • Barstow, California 92311-2888
Ph: 760.256-3531 • Fax: 760.256-1750 • www.barstowca.org

City of ADELANTO

March 31, 2011

Ms. Jennifer Menjivar
Region Manager
Southern California Edison
12353 Hesperia Road
Victorville, CA 92395

Re: Statement of Position on Lockhart Substation Fiber Optic Cable

Dear Jennifer:

I have reviewed the information provided by Southern California Edison regarding the plan to pull fiber optic cable through the City of Adelanto to the new Lockhart Substation at Harper's Dry Lake.

Based on this review, the City has no concerns regarding the recommendation.

If you have any questions, please feel free to contact me.

Sincerely,

D. James Hart, Ph.D.
City Manager

cc: Mayor and City Council
City Attorney

CITY OF
VICTORVILLE

760.955.5000
FAX 760.245.7243
vville@ci.victorville.ca.us
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14343 Civic Drive
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Victorville, California 92393-5001

April 12, 2011

Ms. Nancy S. Jackson
Region Manager
Local Public Affairs
Southern California Edison
12353 Hesperia Road
Victorville, CA 92395

Re: Position Statement – Lockhart Substation Project

Dear Ms. Jackson:

The purpose of this letter is to formally file a written position statement on behalf of the City of Victorville regarding the above-referenced project. It is my understanding that SCE is proposing to build the Lockhart Substation Project near Harper Lake in San Bernardino County, California in an effort to help meet its goal of delivering electricity from renewable sources to the region's power grid. In addition, I understand that SCE is also proposing to install new fiber optic communication cables to connect this project to SCE's existing telecommunications system, a portion of which will be located in the City of Victorville.

After reviewing all of the information concerning this project, I am pleased to inform you that the City of Victorville supports this project and requests that you include this position statement in the application to be filed with the California Public Utilities Commission on April 15, 2011.

Should you need any additional information or have any questions in this regard, please contact me at 760-955-5026.

Sincerely,

Ryan McEachron
Mayor

RM/cb
Cc: Victorville City Council

Appendix G

FIELD MANAGEMENT PLAN

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List of Terms

AMSP	Abengoa Mohave Solar Project
CDHS	California Department of Health Services
CPCN	Certificate of Public Convenience and Necessity
CPUC	California Public Utilities Commission
DPV	Devers to Palo Verde
ELF	Extremely Low Frequency
EMF	electric and magnetic fields
FMP	field management plan
Gen-ties	generation tie lines
GO	General Order
IARC	International Agency for Research on Cancer
kV	Kilovolt
mG	milliGauss
MW	Megawatt
NIEHS	National Institute of Environmental Health Sciences
NRPB	National Radiation Protection Board
RAPID	Research and Public Information Dissemination
ROW	right-of-way
SCE	Southern California Edison
T/L	transmission line
TSP	tubular steel pole
WHO	World Health Organization

EXECUTIVE SUMMARY

This document is Southern California Edison Company's (SCE) Field Management Plan (FMP) for the proposed Lockhart Substation Project (Proposed Project). SCE proposes to construct a new 220 kV switching station called Lockhart Substation (Proposed Substation). SCE proposes to construct the Lockhart Substation and associated facilities to interconnect the 250 megawatt (MW) Abengoa Mohave Solar Project (AMSP) to SCE's existing Coolwater-Kramer No.1 220 kV transmission line (Proposed Project). Major electric components of the Proposed Project are summarized below:

1. **Lockhart Substation:** Construct a new 220 kV switching station to loop-in the existing Coolwater-Kramer No. 1 220 kV transmission line and to provide two 220 kV line positions to terminate two new 220 kV generation tie lines (gen-ties) owned by the Abengoa Mojave Solar Project (AMSP).
2. **Transmission Lines:** Loop the existing Coolwater-Kramer No. 1 220 kV transmission line into the new Lockhart Substation. The transmission loop would require construction of approximately 3,000 feet of new transmission line segments (comprised of two line segments of approximately 1,500 feet each) creating the new Lockhart-Kramer and Coolwater-Lockhart 220 kV transmission lines.
3. **Generation Tie Line Connections:** Connect the two AMSP built gen-ties into the SCE-owned Lockhart Substation. This work involves construction of two single spans of conductors between the Lockhart switchrack and the last AMSP-owned tower(s).
4. **Distribution Systems:** Connect the existing Hutt 12 kV distribution circuit out of the Hutt Poletop Substation to the 12 kV rack inside the new Lockhart Substation. A range

of approximately 200 - 400 feet of two 5 inch underground conduits (along with conduits for telecom) would be installed from the proposed riser pole west of the proposed Lockhart Substation to the 12 kV rack to provide a path for the required station light and power. Provide temporary power for the construction of both the proposed Lockhart Substation and the AMSP facilities.

This project description is based on planning level assumptions. Exact details would be determined following completion of preliminary and final engineering, identification of field conditions, availability of labor, material, and equipment, and compliance with applicable environmental and permitting requirements.

SCE provides this FMP in order to inform the public, the California Public Utilities Commission (CPUC), and other interested parties of its evaluation of "no-cost and low-cost" magnetic field reduction design options for this project, and SCE's proposed plan to apply these design options to this project. This FMP has been prepared in accordance with CPUC Decision No. 93-11-013 and Decision No. 06-01-042 relating to extremely low frequency (ELF)[6] electric and magnetic fields (EMF). This FMP also provides background on the current status of scientific research related to possible health effects of EMF, and a description of the CPUC's EMF policy.

The "no-cost and low-cost" magnetic field reduction design options that are incorporated into the design of the Proposed Project are as follows:

- Placing major switching station electrical equipment (such as transformers, switchracks, buses and underground duct banks) away from the switching station property lines

---

[6] The extremely low frequency is defined as the frequency range from 3 Hz to 3,000 Hz.

Table 1 summarizes "no-cost and low-cost" magnetic field reduction design options that SCE considered for the Proposed Project.

SCE's plan for applying the above "no-cost and low-cost" magnetic field reduction design options for the Proposed Project is consistent with CPUC's EMF policy and with the direction of leading national and international health agencies. Furthermore, the plan complies with SCE's EMF Design Guidelines,[7] and with applicable national and state safety standards for new electrical facilities.

---

[7] EMF Design Guidelines, August 2006.

Table 1. Summary of "No-cost and Low-cost" Magnetic Field Reduction Design Options

Area No.	Location[8]	Adjacent Land Use[9]	MF Reduction Design Options Considered	Estimated Cost to Adopt	Design Option(s) Adopted? (Yes/No)	Reason(s) if not adopted
Lockhart Substation	The Lockhart Substation would be located on private land within the boundaries of the new AMSP solar generation facility, approximately 5.5 miles north-east of the intersection of California State Highway 58 and Harper Lake Road in the County of San Bernardino	6	• Placing major switching station electrical equipment (such as transformers, switchracks, buses and underground duct banks) away from the switching station property lines	• No-Cost	• Yes	

[8] This column shows the major cross streets, existing subtransmission lines, or substation name as reference points.

[9] Land usage codes are as follows: 1) schools, licensed day-cares, and hospitals, 2) residential, 3) commercial/industrial, 4) recreational, 5) agricultural, and 6) undeveloped land.

Area No.	Location[8]	Adjacent Land Use[9]	MF Reduction Design Options Considered	Estimated Cost to Adopt	Design Option(s) Adopted? (Yes/No)	Reason(s) if not adopted
Lockhart Loop-In Transmission Line Segment: Section 1 – Coolwater-Lockhart 220 kV T/L Segment	T/L of about 1,500 feet in length connecting Lockhart Substation to a T/L corridor to the south of the proposed switching station	6	• None	• N/A	• N/A	Due to the limited scope of the T/L work, no no-cost field reduction measures such as arranging phases for field reduction were available. Additionally, CPUC Decision 06-01-042 stated that CPUC"…will not require utility design guidelines to include low cost EMF mitigation for undeveloped land". Therefore, no low-cost reduction measures were considered.
Lockhart Loop-In Transmission Line Segment: Section 2 - Kramer-Lockhart 220 kV T/L Segment	T/L of about 1,500 feet in length connecting Lockhart Substation to a T/L corridor to the south of the proposed switching station	6	• None	• N/A	• N/A	Due to the limited scope of the T/L work, no no-cost field reduction measures such as arranging phases for field reduction were available. Additionally, CPUC Decision 06-01-042 stated that CPUC "…will not require utility design guidelines to include low cost EMF mitigation for undeveloped land". Therefore, no low-cost reduction measures were considered.

BACKGROUND REGARDING EMF AND PUBLIC HEALTH RESEARCH ON EMF

There are many sources of power frequency[10] electric and magnetic fields, including internal household and building wiring, electrical appliances, and electric power transmission and distribution lines. There have been numerous scientific studies about the potential health effects of EMF. After many years of research, the scientific community has been unable to determine if exposures to EMF cause health hazards. State and federal public health regulatory agencies have determined that setting numeric exposure limits is not appropriate.[11]

Many of the questions about possible connections between EMF exposures and specific diseases have been successfully resolved due to an aggressive international research program. However, potentially important public health questions remain about whether there is a link between EMF exposures and certain diseases, including childhood leukemia and a variety of adult diseases (e.g., adult cancers and miscarriages). As a result, some health authorities have identified magnetic field exposures as a possible human carcinogen. As summarized in greater detail below, these conclusions are consistent with the following published reports: the National Institute of Environmental Health Sciences (NIEHS) 1999[12], the National Radiation Protection Board (NRPB) 2001[13], the International Commission on non-Ionizing Radiation Protection (ICNIRP) 2001, the California Department of Health Services (CDHS) 2002[14], and the International Agency for Research on Cancer (IARC) 2002[15] and the World Health Organization (WHO) 2007[16].

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10 In U.S., it is 60 Hertz (Hz).

11 CPUC Decision 06-01-042, p. 6, footnote 10

12 National Institute of Environmental Health Sciences' Report on Health Effects from Exposures to Power-Line frequency Electric and Magnetic Fields, NIH Publication No. 99-4493, June 1999.

13 National Radiological Protection Board, Electromagnetic Fields and the Risk of Cancer, Report of an Advisory Group on Non-ionizing Radiation, Chilton, U.K. 2001

14 California Department of Health Services, An Evaluation of the Possible Risks from Electric and Magnetic Fields from Power Lines, Internal Wiring, Electrical Occupations, and Appliances, June 2002.

15 World Health Organization / International Agency for Research on Cancer, IARC Monographs on the evaluation of carcinogenic risks to humans (2002), Non-ionizing radiation, Part 1: Static and extremely low-

Continued on the next page

The federal government conducted EMF research as a part of a $45-million research program managed by the NIEHS. This program, known as the EMF RAPID (Research and Public Information Dissemination), submitted its final report to the U.S. Congress on June 15, 1999. The report concluded that:

- "The scientific evidence suggesting that ELF-EMF exposures pose any health risk is weak."[17]

- "The NIEHS concludes that ELF-EMF exposure cannot be recognized as entirely safe because of weak scientific evidence that exposure may pose a leukemia hazard."[18]

- "The NIEHS suggests that the level and strength of evidence supporting ELF-EMF exposure as a human health hazard are insufficient to warrant aggressive regulatory actions; thus, we do not recommend actions such as stringent standards on electric appliances and a national program to bury all transmission and distribution lines. Instead, the evidence suggests passive measures such as a continued emphasis on educating both the public and the regulated community on means aimed at reducing exposures. NIEHS suggests that the power industry continue its current practice of siting power lines to reduce exposures and continue to explore ways to reduce the creation of magnetic fields around transmission and distribution lines without creating new hazards."[19]

In 2001, Britain's NRPB arrived at a similar conclusion:

> "After a wide-ranging and thorough review of scientific research, an independent Advisory Group to the Board of NRPB has concluded that the power frequency electromagnetic fields that exist in the vast majority of homes are not a cause of cancer in general. However, some epidemiological studies do indicate a possible small risk of childhood leukemia associated with exposures to unusually high levels of power frequency magnetic fields."[20]

Continued from the previous page

frequency (ELF) electric and magnetic fields, IARCPress, Lyon, France: International Agency for Research on Cancer, Monograph, vol. 80, p. 338, 2002

16 WHO, Environmental Health Criteria 238, EXTREMELY LOW FREQUENCY FIELDS, p. 11 - 13, 2007

17 National Institute of Environmental Health Sciences, NIEHS Report on Health Effects from Exposures to Power-Frequency Electric and Magnetic Fields, p. ii, NIH Publication No. 99-4493, 1999

18 *ibid.*, p. iii

19 *ibid.*, p. 37 - 38

20 NRPB, NRPB Advisory Group on Non-ionizing Radiation Power Frequency Electromagnetic Fields and the Risk of Cancer, NRPB Press Release May 2001

In 2002, three scientists for CDHS concluded:

> "To one degree or another, all three of the [C] DHS scientists are inclined to believe that EMFs can cause some degree of increased risk of childhood leukemia, adult brain cancer, Lou Gehrig's Disease, and miscarriage.
>
> They [CDHS] strongly believe that EMFs do not increase the risk of birth defects, or low birth weight.
>
> They [CDHS] strongly believe that EMFs are not universal carcinogens, since there are a number of cancer types that are not associated with EMF exposure.
>
> To one degree or another they [CDHS] are inclined to believe that EMFs do not cause an increased risk of breast cancer, heart disease, Alzheimer's disease, depression, or symptoms attributed by some to a sensitivity to EMFs. However, all three scientists had judgments that were "close to the dividing line between believing and not believing" that EMFs cause some degree of increased risk of suicide, or
>
> For adult leukemia, two of the scientists are 'close to the dividing line between believing or not believing' and one was 'prone to believe' that EMFs cause some degree of increased risk."[21]

Also in 2002, the World Health Organization's (WHO) IARC concluded:

> "ELF magnetic fields are possibly carcinogenic to humans"[22], based on consistent statistical associations of high-level residential magnetic fields with a doubling of risk of childhood leukemia...Children who are exposed to residential ELF magnetic fields less than 0.4 microTesla (4.0 milliGauss) have no increased risk for leukemia…. In contrast, "no consistent relationship has been seen in studies of childhood brain tumors or cancers at other sites and residential ELF electric and magnetic fields."[23]

In June of 2007, the WHO issued a report on their multi-year investigation of EMF and the possible health effects. After reviewing scientific data from numerous EMF and human health studies, they concluded:

> "Scientific evidence suggesting that everyday, chronic low-intensity (above 0.3-0.4 μT [3-4 mG]) power-frequency magnetic field exposure poses a health risk is based on epidemiological

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21 CDHS, An Evaluation of the Possible Risks From Electric and Magnetic Fields (EMFs) From Power Lines, Internal Wiring, Electrical Occupations and Appliances, p. 3, 2002

22 IARC, Monographs, Part I, Vol. 80, p. 338

23 *ibid.*, p. 332 - 334

studies demonstrating a consistent pattern of increased risk for childhood leukaemia."[24]

"In addition, virtually all of the laboratory evidence and the mechanistic evidence fail to support a relationship between low-level ELF magnetic fields and changes in biological function or disease status. Thus, on balance, the evidence is not strong enough to be considered causal, but sufficiently strong to remain a concern."[25]

"A number of other diseases have been investigated for possible association with ELF magnetic field exposure. These include cancers in both children and adults, depression, suicide, reproductive dysfunction, developmental disorders, immunological modifications and neurological disease. The scientific evidence supporting a linkage between ELF magnetic fields and any of these diseases is much weaker than for childhood leukemia and in some cases (for example, for cardiovascular disease or breast cancer) the evidence is sufficient to give confidence that magnetic fields do not cause the disease"[26]

"Furthermore, given both the weakness of the evidence for a link between exposure to ELF magnetic fields and childhood leukemia, and the limited impact on public health if there is a link, the benefits of exposure reduction on health are unclear. Thus the costs of precautionary measures should be very low."[27]

APPLICATION OF THE CPUC'S "NO-COST AND LOW-COST" EMF POLICY TO THIS PROJECT

Recognizing the scientific uncertainty over the connection between EMF exposures and health effects, the CPUC adopted a policy that addresses public concern over EMF with a combination of education, information, and precaution-based approaches. Specifically, Decision 93-11-013 established a precautionary based "no-cost and low-cost" EMF policy for California's regulated electric utilities based on recognition that scientific research had not demonstrated that

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[24] WHO, Environmental Health Criteria 238, EXTREMELY LOW FREQUENCY FIELDS, p. 11 - 13, 2007
[25] *ibid.*, p. 12
[26] *ibid.*, p. 12
[27] *ibid.*, p. 13

exposures to EMF cause health hazards and that it was inappropriate to set numeric standards that would limit exposure.

In 2006, the CPUC completed its review and update of its EMF Policy in Decision 06-01-042. This decision reaffirmed the finding that state and federal public health regulatory agencies have not established a direct link between exposure to EMF and human health effects,[28] and the policy direction that (1) use of numeric exposure limits was not appropriate in setting utility design guidelines to address EMF,[29] and (2) existing "no-cost and low-cost" precautionary-based EMF policy should be continued for proposed electrical facilities. The decision also reaffirmed that EMF concerns brought up during Certificate of Public Convenience and Necessity (CPCN) and Permit to Construct (PTC) proceedings for electric and transmission and switching station facilities should be limited to the utility's compliance with the CPUC's "no-cost and low-cost" policies.[30]

The decision directed regulated utilities to hold a workshop to develop standard approaches for EMF Design Guidelines and such a workshop was held on February 21, 2006. Consistent design guidelines have been developed that describe the routine magnetic field reduction measures that regulated California electric utilities consider for new and upgraded transmission line and transmission switching station projects. SCE filed its revised EMF Design Guidelines with the CPUC on July 26, 2006.

"No-cost and low-cost" measures to reduce magnetic fields would be implemented for this project in accordance with SCE's EMF Design Guidelines. In summary, the process of

---

28 CPUC Decision 06-01-042, Conclusion of Law No. 5, mimeo. p. 19 ("As discussed in the rulemaking, a direct link between exposure to EMF and human health effects has yet to be proven despite numerous studies including a study ordered by this Commission and conducted by DHS.").

29 CPUC Decision 06-01-042, mimeo. p. 17 - 18 ("Furthermore, we do not request that utilities include non-routine mitigation measures, or other mitigation measures that are based on numeric values of EMF exposure, in revised design guidelines or apply mitigation measures to reconfigurations or relocations of less than 2,000 feet, the distance under which exemptions apply under GO 131-D. Non-routine mitigation measures should only be considered under unique circumstances.").

30 CPUC Decision 06-01-042, Conclusion of Law No. 2, ("EMF concerns in future CPCN and PTC proceedings for electric and transmission and substation facilities should be limited to the utility's compliance with the Commission's low-cost/no-cost policies.").

evaluating "no-cost and low-cost" magnetic field reduction measures and prioritizing within and between land usage classes considers the following:

1. SCE's priority in the design of any electrical facility is public and employee safety. Without exception, design and construction of an electric power system must comply with all applicable federal, state, and local regulations, applicable safety codes, and each electric utility's construction standards. Furthermore, transmission and subtransmission lines and switching stations must be constructed so that they can operate reliably at their design capacity. Their design must be compatible with other facilities in the area and the cost to operate and maintain the facilities must be reasonable.

2. As a supplement to Step 1, SCE follows the CPUC's direction to undertake "no-cost and low-cost" magnetic field reduction measures for new and upgraded electrical facilities. Any proposed "no-cost and low-cost" magnetic field measures, must, however, meet the requirements described in Step 1 above. The CPUC defines "no-cost and low-cost" measures as follows:

   - Low-cost measures, in aggregate, should:
     - Cost in the range of 4 percent of the total project cost.
     - Result in magnetic field reductions of "15% or greater at the utility ROW [right-of-way]…"[31]

   The CPUC Decision stated,

   > "We direct the utilities to use 4 percent as a benchmark in developing their EMF mitigation guidelines. We will not establish 4 percent as an absolute cap at this time because we do not want to arbitrarily eliminate a potential measure that might be available but costs

[31] CPUC Decision 06-01-042, p. 10

more than the 4 percent figure. Conversely, the utilities are encouraged to use effective measures that cost less than 4 percent."[32]

3. The CPUC provided further policy direction in Decision 06-01-042, stating that, "[a]lthough equal mitigation for an entire class is a desirable goal, we will not limit the spending of EMF mitigation to zero on the basis that not all class members can benefit."[33] While Decision 06-01-042 directs the utilities to favor schools, day-care facilities and hospitals over residential areas when applying low-cost magnetic field reduction measures, prioritization within a class can be difficult on a project case-by-case basis because schools, day-care facilities, and hospitals are often integrated into residential areas, and many licensed day-care facilities are housed in private homes, and can be easily moved from one location to another. Therefore, it may be practical for public schools, licensed day-care centers, hospitals, and residential land uses to be grouped together to receive highest prioritization for low-cost magnetic field reduction measures. Commercial and industrial areas may be grouped as a second priority group, followed by recreational and agricultural areas as the third group. Low-cost magnetic field reduction measures will not be considered for undeveloped land, such as open space, state and national parks, and Bureau of Land Management and U.S. Forest Service lands. When spending for low-cost measures would otherwise disallow equitable magnetic field reduction for all areas within a single land-use class, prioritization can be achieved by considering location and/or density of permanently occupied structures on lands adjacent to the projects, as appropriate.

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[32] CPUC Decision 93-11-013, § 3.3.2, p.10.
[33] CPUC Decision 06-01-042, p. 10

This FMP contains descriptions of various magnetic field models and the calculated results of magnetic field levels based on those models. These calculated results are provided only for purposes of identifying the relative differences in magnetic field levels among various transmission or subtransmission line design alternatives under a specific set of modeling assumptions and determining whether particular design alternatives can achieve magnetic field level reductions of 15 percent or more. The calculated results are not intended to be predictors of the actual magnetic field levels at any given time or at any specific location if and when the project is constructed. This is because magnetic field levels depend upon a variety of variables, including load growth, customer electricity usage, and other factors beyond SCE's control. The CPUC affirmed this in D. 06-01-042 stating:

> "Our [CPUC] review of the modeling methodology provided in the utility [EMF] design guidelines indicates that it accomplishes its purpose, which is to measure the relative differences between alternative mitigation measures. Thus, the modeling indicates relative differences in magnetic field reductions between different transmission line construction methods, but does not measure actual environmental magnetic fields."[34]

PROJECT DESCRIPTION

Southern California Edison Company (SCE) proposes to construct a new 220 kV switching station called Lockhart Substation (Proposed Substation). The Lockhart Substation would be located on private land within the boundaries of the new Abengoa Mohave Solar Project (AMSP) generation facility, approximately 5.5 miles north-east of the intersection of California State Highway 58 and Harper Lake Road in the County of San Bernardino. SCE proposes to construct the Lockhart Substation and associated facilities to interconnect the 250 MW AMSP to SCE's existing Coolwater-Kramer No.1 220 kV transmission line (T/L)

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[34] CPUC Decision 06-01-042, p. 11

(Proposed Project). The project area is shown in Figure 1 below. Major components of the Lockhart Project are summarized below:

Lockhart Substation

The Lockhart Substation would be a 220 kV switching station with internal measurements of approximately 450 feet by 550 feet. Lockhart Substation would be an unattended collector station (no power transformation) surrounded by a wall or chain-link fence with two gates. The Proposed Substation details are shown in Figure 2.

SCE would engineer, design, construct, and test the proposed Lockhart Substation. The switching station would consist of a six-bay 220 kV switchrack. One bay position would be utilized to loop the SCE Coolwater-Kramer No. 1 220 kV T/L. Two of the bays would be used to terminate the two AMSP gen-ties. The three remaining positions would be available for future use.

Lockhart Substation would be initially equipped with:

- Two (2) overhead 220 kV buses
- Seven (7) 220 kV circuit breakers
- Fourteen (14) 220 kV disconnect switches
- One (1) Mechanical Electrical Equipment Room (MEER)
- Station Light and power transformers

T/L Components

SCE's T/L requirements for the Lockhart Substation interconnection to the Coolwater-Kramer No. 1 220 kV T/L would consist of the following components: 1) 220 kV T/L loop-in, 2) existing 220 kV T/L structure modification/replacement, and 3) 220 kV Gen-tie extension. Each of these components is described below.

220 kV T/L Loop-In Design

The proposed Lockhart Substation would be connected to the Coolwater-Kramer No. 1 220 kV T/L via loop-in transmission segments. The two loop-in line segments would create two new separate T/Ls: the Coolwater-Lockhart 220 kV T/L; and the Kramer-Lockhart 220 kV T/L. Each T/L segment into the Lockhart Substation would be approximately 1,500 feet long. The proposed loop-in of the existing Coolwater-Kramer No. 1 220 kV T/L would require approximately four double circuit transmission structures to enter the Lockhart Substation. The exact combination of new tubular steel poles (TSP) and/or lattice steel towers (LSTs) needed for the loop-in would be determined during detailed engineering. Two of the 220 kV double circuit structures would be constructed just outside of the switching station fence or wall. The other two structures would be used to re-route the Coolwater-Kramer No. 1 220 kV T/L into Lockhart Substation.

The conductor utilized would be a single 1590 kcmil "Lapwing" ACSR conductor per phase. The section of line connecting the existing Coolwater-Kramer No. 1 220 kV T/L to the first structure outside of Lockhart Substation would require a new right of way, as shown in between SCE's existing ROW and the new Lockhart Substation facilities.

220 kV Generation Tie Line Extension Design

The proposed Lockhart Substation design would involve bringing two 220 kV Gen-tie segments each into 220 kV bus positions. SCE understands that there would be one customer-owned double circuit structure outside the SCE-owned Lockhart Substation facilities to support connection of the two customer Gen-ties. The 220 kV Gen-tie segments were not evaluated for field reduction measures because they are not SCE-owned T/Ls.

Figure 1. Project Area and Lockhart Substation Location

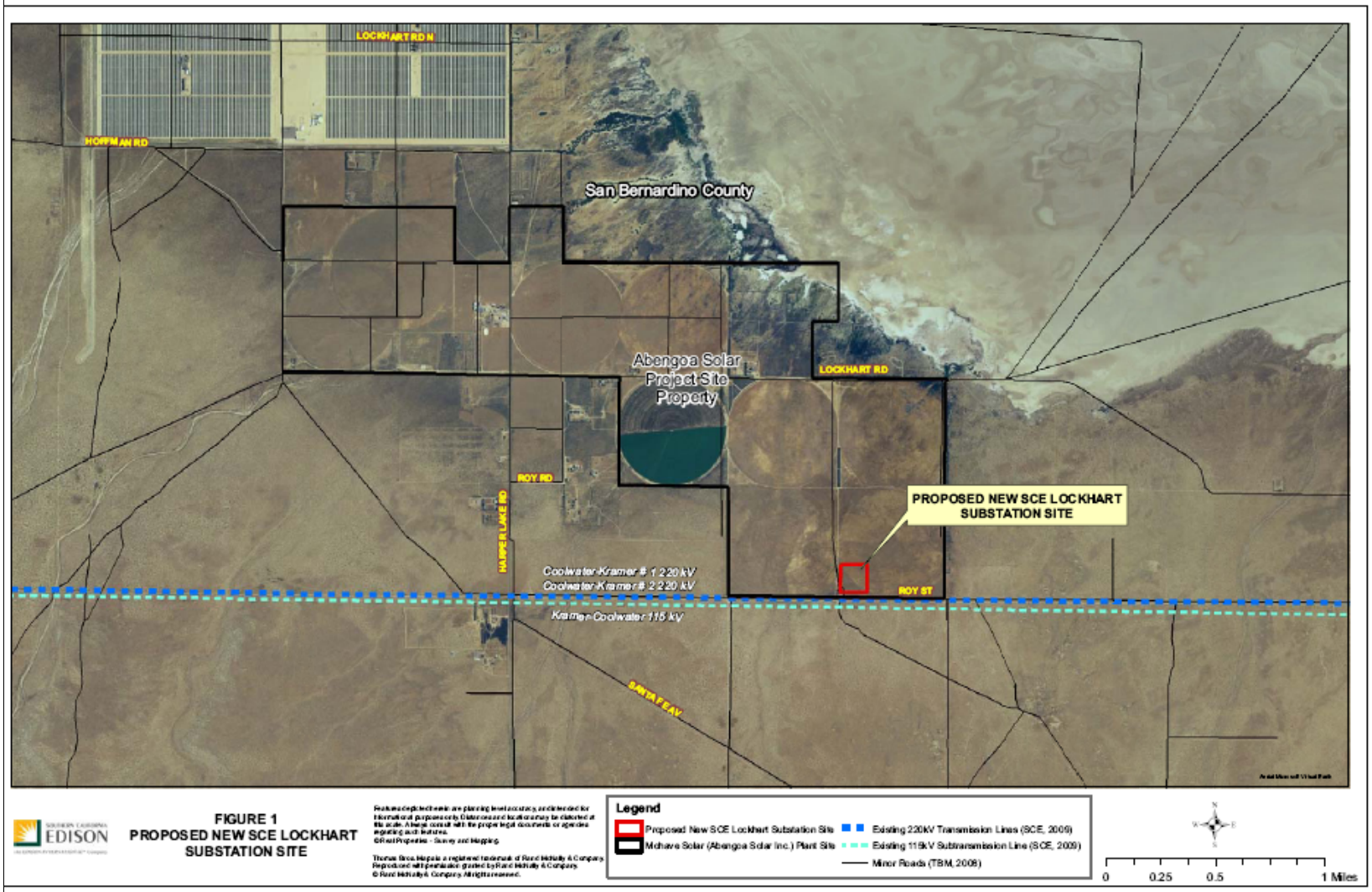

Figure 2. Lockhart Substation Detail

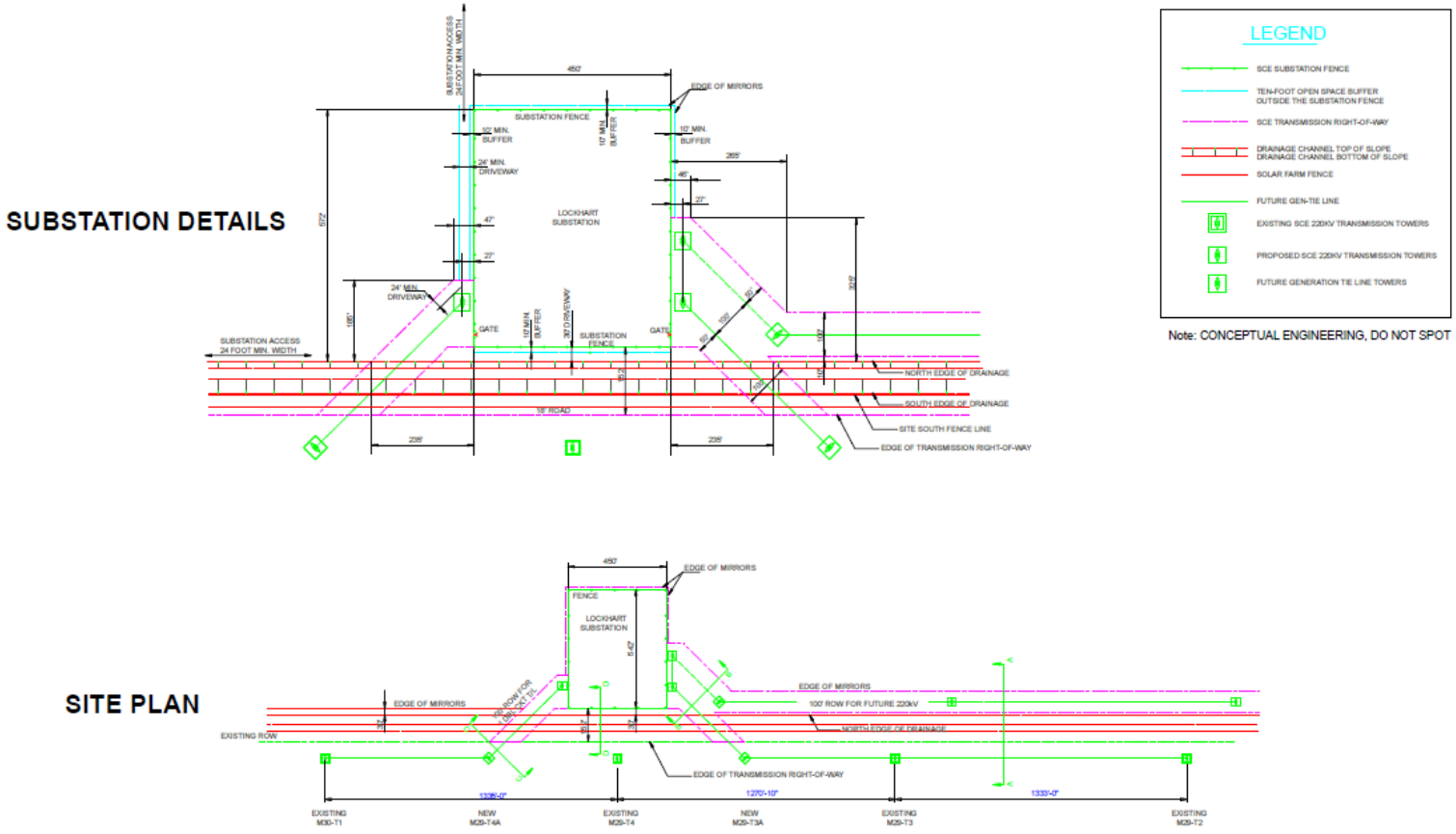

FIGURE 2
PROPOSED NEW SCE LOCKHART SUBSTATION AND ASSOCIATED ELECTRICAL LINES

Features depicted herein are planning level accuracy, and intended for informational purposes only. Distances and locations may be distorted at this scale. Always consult with the proper legal documents or agencies regarding such features.
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EVALUATION OF "NO-COST AND LOW-COST" MAGNETIC FIELD REDUCTION DESIGN OPTIONS

Please note that following magnetic field models and the calculated results of magnetic field levels are intended only for purposes of identifying the relative differences in magnetic field levels among various subtransmission line and subtransmission line design alternatives under a specific set of modeling assumptions (see §VII-Appendix A for more detailed information about the calculation assumptions and loading conditions) and determining whether particular design alternatives can achieve magnetic field level reductions of 15 percent or more. The T/L designs utilized for modeling are based on conceptual engineering, which could vary during final engineering. The calculated results are not intended to be predictors of the actual magnetic field levels at any given time or at any specific location when the Proposed Project is constructed.

For the purpose of evaluating "no-cost and low-cost" magnetic field reduction design options, the Proposed Project is divided into two parts:

- Part 1: Proposed Lockhart Loop-In 220 kV T/L Segments
- Part 2: Proposed Lockhart 220 kV switching station

Part 1: Proposed Lockhart Loop-In 220 kV T/L Segments

For the purpose of identifying possible EMF reduction opportunities and measures, the proposed Lockhart Loop-In 220 kV T/L segments were broken into two sections. These sections are as follows:

- **Section 1:** The Proposed Coolwater-Lockhart 220 kV T/L Segment
- **Section 2:** The Proposed Kramer-Lockhart 220 kV T/L Segment

Section 1: Proposed Coolwater-Lockhart 220 kV T/L Segment

A possible structure design that may be used for the proposed Coolwater-Lockhart 220 kV T/L into Lockhart Substation is shown in Figure 3. The T/L segment will be located in undeveloped areas.

No-Cost Field Reduction Measures: No no-cost field reduction measures such as arranging conductors to reduce magnetic fields were incorporated into the design of the proposed Coolwater-Lockhart 220 kV T/L into Lockhart Substation. This is because of the limited scope of this project and because the proposed Coolwater-Lockhart 220 kV T/L will intersect at an approximately 45 degree angle to existing SCE T/Ls, which will reduce magnetic field interactions between the T/Ls.

Low-Cost Field Reduction Options: The proposed loop-in T/L segment will be located in undeveloped areas. CPUC Decision 06-01-042 required that low-cost measures only be implemented in developed areas. Therefore, low-cost reduction measures, such as arranging conductors for field reduction or using taller structures, were not considered for this segment of the Proposed Project.

Magnetic Field Calculations: Figure 4 and Table 2 show the calculated magnetic field levels for proposed design. These calculations were made using SCE's WY type towers identified during conceptual engineering as a possible tower that may be used for the proposed 220 kV T/L loop-in segment. A structure height of 102 feet was utilized for the magnetic field models.

Figure 3. Proposed Coolwater-Lockhart 220 kV T/L Segment (Facing Lockhart Substation/ Looking Northwest)

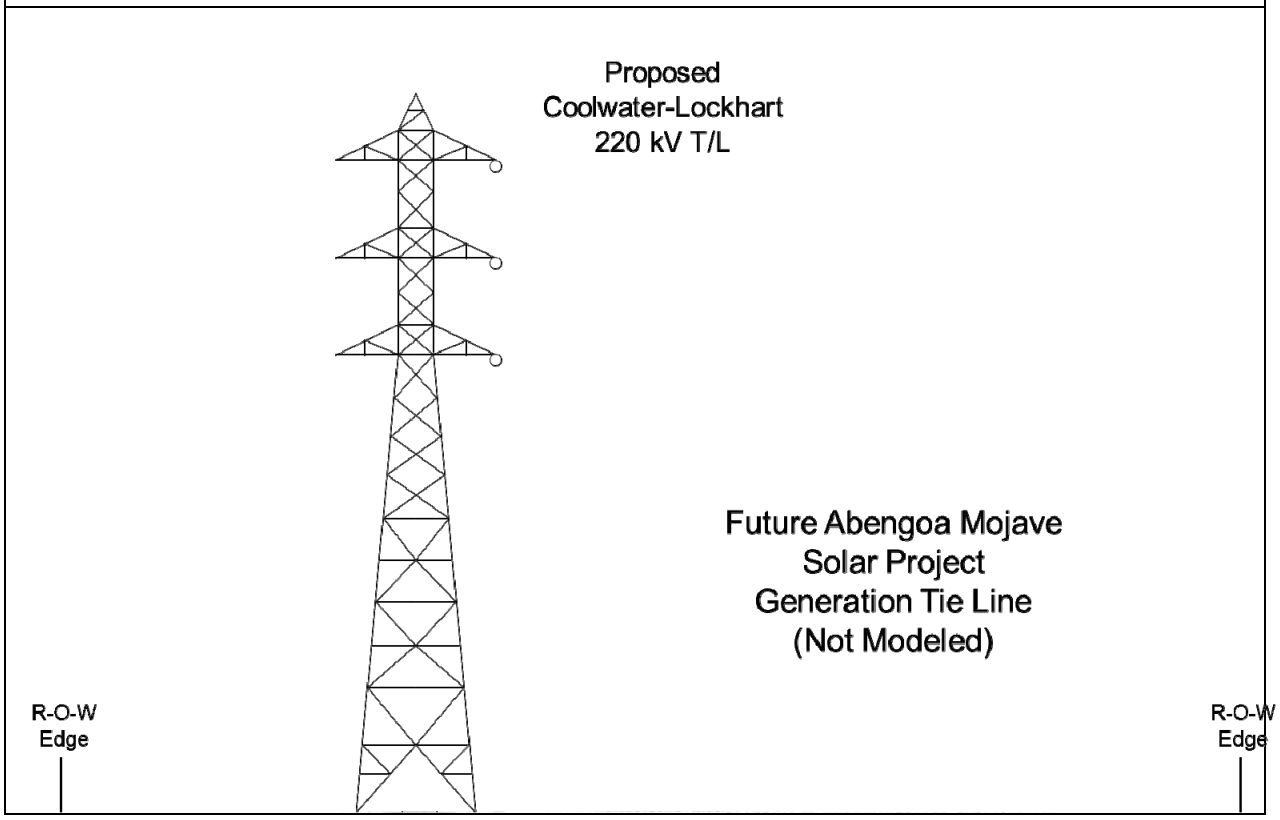

Figure 4. Calculated Magnetic Field Levels[35] for the Proposed Coolwater-Lockhart 220 kV T/L Segment (Looking Northwest)

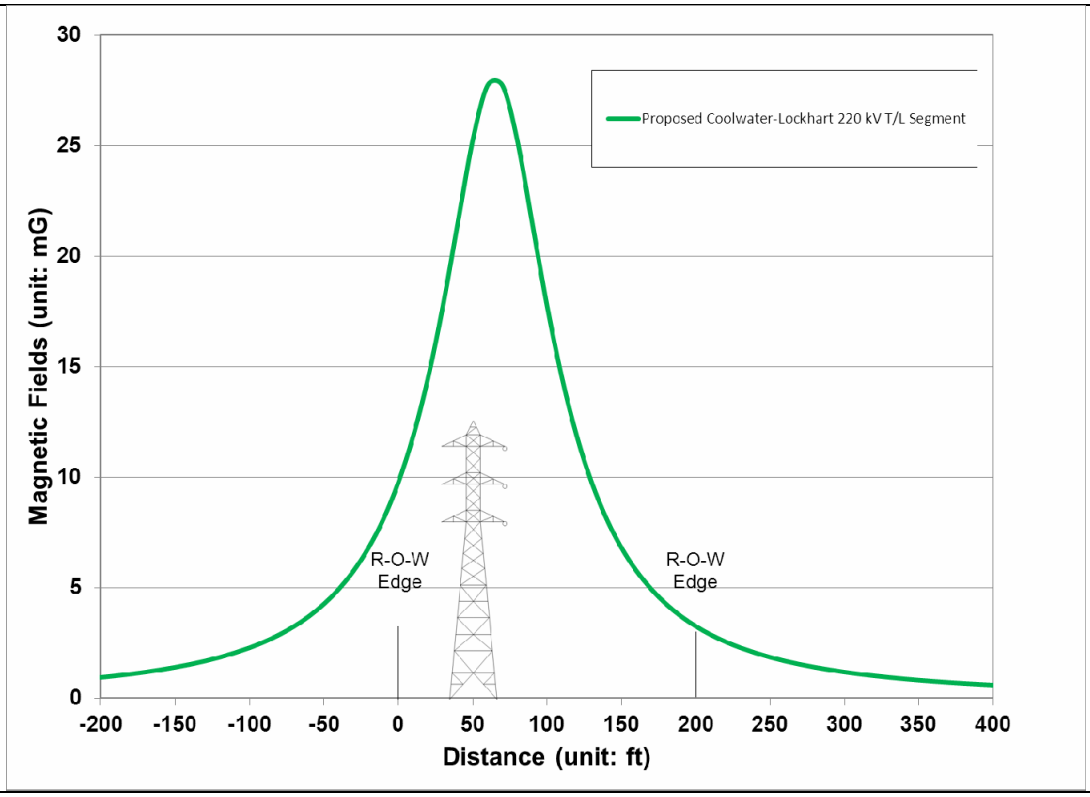

Table 2. Calculated Magnetic Field Levels[36] for Coolwater-Lockhart 220 kV T/L Segment				
Design Options	Left ROW Edge (mG)	% Reduction	Right ROW Edge (mG)	% Reduction
Proposed Coolwater-Lockhart 220 kV T/L Segment	9.8	N/A	3.3	N/A

Recommendations for proposed loop-in T/L Segment: *Because the proposed T/L segment will be located in undeveloped areas, no low-cost reduction measures such as utilizing taller structures are recommended.*

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35 This table lists calculated magnetic field levels for design comparison only and is not meant to predict actual magnetic field levels.

36 This table lists calculated magnetic field levels for design comparison only and is not meant to predict actual magnetic field levels.

Section 2: Proposed Kramer-Lockhart 220 kV T/L Segment

A possible structure design that may be used for the proposed Kramer-Lockhart 220 kV T/L into Lockhart Substation is shown in Figure 5. The T/L segment will be located in undeveloped areas.

No-Cost Field Reduction Measures: No no-cost field reduction measures such as arranging conductors to reduce magnetic fields were incorporated into the design of the proposed Kramer-Lockhart 220 kV T/L into Lockhart Substation. This is because of the limited scope of this project and because the proposed Kramer-Lockhart 220 kV T/L will intersect at an approximately 45 degree angle to existing SCE T/Ls, which will reduce magnetic field interactions between the T/Ls.

Low-Cost Field Reduction Options: The proposed loop-in T/L segment will be located in undeveloped areas. CPUC Decision 06-01-042 required that low-cost measures only be implemented in developed areas. Therefore, low-cost reduction measures, such as arranging conductors for field reduction or using taller structures, were not considered for this segment of the Proposed Project.

Magnetic Field Calculations: Figure 6 and Table 3 show the calculated magnetic field levels for proposed design. These calculations were made using SCE's WY type towers identified during conceptual engineering as a possible tower that may be used for the proposed 220 kV T/L loop-in segments. A structure height of 102 feet was utilized for the magnetic field models.

Figure 5. Proposed Kramer-Lockhart 220 T/L Segment (Facing away from Lockhart Substation/ Looking Southwest)

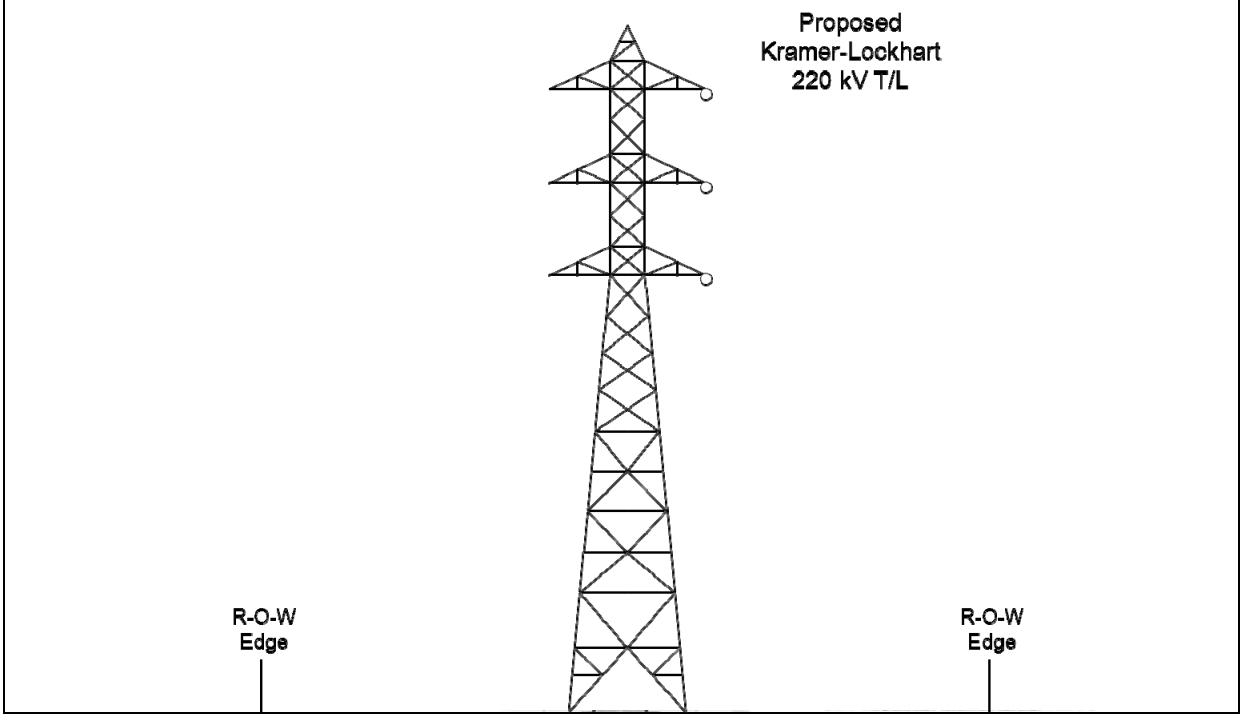

Figure 6. Calculated Magnetic Field Levels[37] for the Proposed Kramer-Lockhart T/L Segment (Looking Southwest)

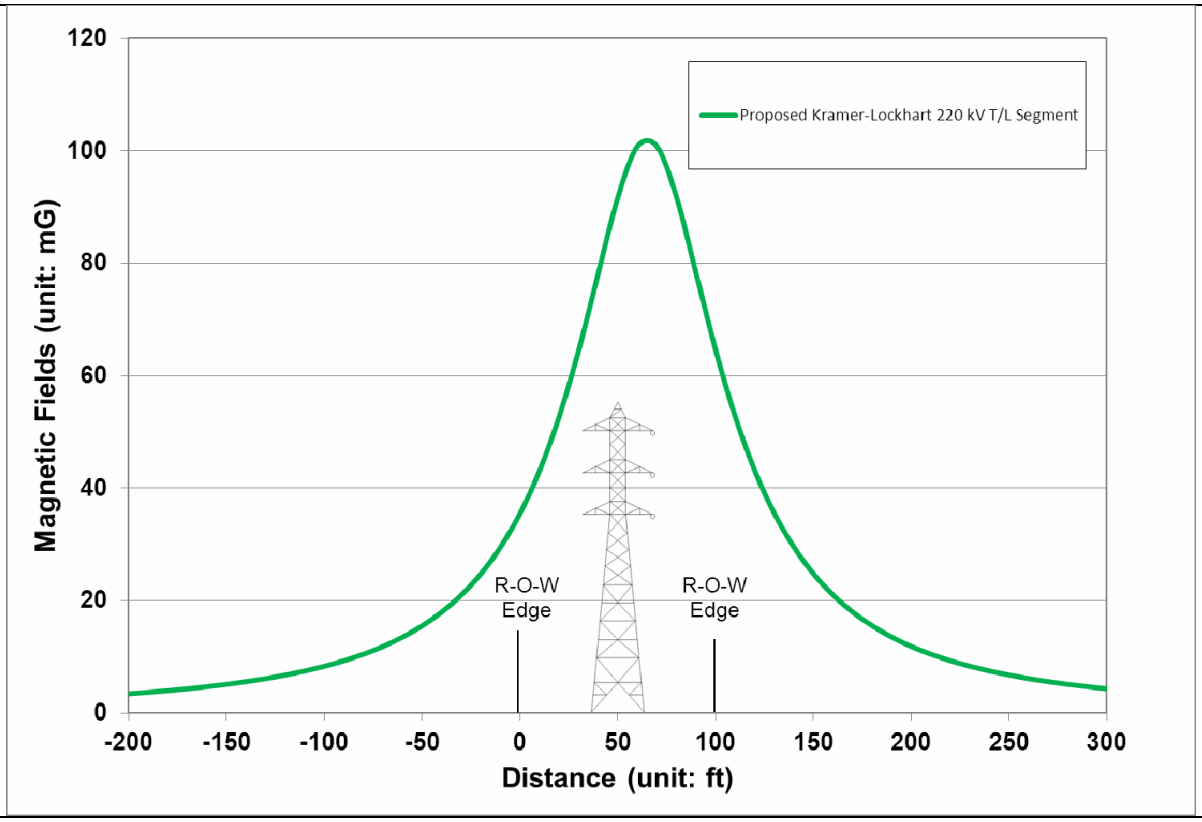

Table 3. Calculated Magnetic Field Levels[38] for Kramer-Lockhart 220 kV T/L Segment				
Design Options	Left ROW Edge (mG)	% Reduction	Right ROW Edge (mG)	% Reduction
Proposed Kramer-Lockhart 220 kV T/L Segment	35.5	N/A	64.6	N/A

Recommendations for proposed loop-in T/L Segment: *Because the proposed T/L segment will be located in undeveloped areas, no low-cost reduction measures such as utilizing taller structures are recommended.*

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37 This table lists calculated magnetic field levels for design comparison only and is not meant to predict actual magnetic field levels.

38 This table lists calculated magnetic field levels for design comparison only and is not meant to predict actual magnetic field levels.

Part 2: Proposed Lockhart 220 kV Switching Station

Generally, magnetic field values along the switching station perimeter are low compared to the switching station interior because of the distance from the perimeter to the energized equipment. Normally, the highest magnetic field values around the perimeter of a switching station result from overhead power lines and underground duct banks entering and leaving the switching station, and are not caused by switching station equipment. Therefore, the magnetic field reduction design options generally applicable to a switching station project are as follows:

- Site selection for a new switching station;
- Setback of switching station structures and major switching station equipment (such as bus, transformers, and underground cable duct banks, etc.) from perimeter;
- Field reduction for T/Ls and subtransmission lines entering and exiting the switching station.

The Switching Station Checklist, as shown in Table 4, is used for evaluating the no-cost and low-cost design options considered for the switching station project, the design options adopted, and reasons that certain design options were not adopted if applicable.

Table 4. Switching Station Checklist for Examining No-cost and Low-cost Magnetic Field Reduction Design Options

No.	No-Cost and Low-Cost Magnetic Field Reduction Design Options Evaluated for a Switching Station Project	Design Options Adopted? (Yes/No)	Reason(s) if not Adopted
1	Are 220 kV rated transformer(s) 50 feet or more from the switching station property line?	N/A	
2	Are 220 kV rated switch-racks, capacitor banks & bus 40 feet or more from the switching station property line?	Yes	

FINAL RECOMMENDATIONS FOR IMPLEMENTING "NO-COST AND LOW-COST" MAGNETIC FIELD REDUCTION DESIGN OPTIONS

In accordance with the "EMF Design Guidelines", filed with the CPUC in compliance with CPUC Decisions 93-11-013 and 06-01-042, SCE would implement the following "no-cost and low-cost" magnetic field reduction design options for Proposed Project:

For Proposed Lockhart 220 kV Loop-In T/Ls:

- Due to the limited scope of work, no field reduction measures were included in the design of the proposed 220 kV Loop-in T/Ls.

For Proposed Lockhart 220 kV Switching Station:

- Placing major switching station electrical equipment (such as switchracks, buses and underground duct banks) away from the switching station property lines

The recommended "no-cost and low-cost" magnetic field reduction design options listed above are based upon preliminary engineering designs, and therefore, they are subject to change during the final engineering designs. If the final engineering designs are different than preliminary engineering designs, SCE would implement comparable "no-cost and low-cost" magnetic field reduction design options. If the final engineering designs are significantly different (in the context of evaluating and implementing CPUC's "no-cost and low-cost" EMF Policy) than the preliminary designs, a Final FMP will be prepared.

SCE's plan for applying the above "no-cost and low-cost" magnetic field reduction design options uniformly for the Proposed Project is consistent with the CPUC's EMF Decisions No. 93-11-013 and No. 06-01-042, and also with recommendations made by the U.S. NIEHS. Furthermore, the recommendations above meet the CPUC approved EMF Design Guidelines as well as all applicable national and state safety standards for new electrical facilities.

APPENDIX A: TWO-DIMENTIONAL MODEL ASSUMPTIONS AND YEAR 2013 FORECASTED LOADING CONDITIONS

Magnetic Field Assumptions:

SCE uses a computer program titled "MFields"[39] to model the magnetic field characteristics of various transmission designs options. All magnetic field models and the calculated results of magnetic field levels presented in this document are intended only for purposes of identifying the relative differences in magnetic field levels among various subtransmission line and subtransmission line design alternatives under a specific set of modeling assumptions and determining whether particular design alternatives can achieve magnetic field level reductions of 15 percent or more. The calculated results are not intended to be predictors of the actual magnetic field levels at any given time or at any specific location if and when the project is constructed.

Typical two-dimensional magnetic field modeling assumptions include:

- All transmission lines were modeled using forecasted peak loads (see Table 4 below)
- All conductors were assumed to be straight and infinitely long
- Average conductor heights accounted for line sag used in the calculation for the 220 kV loop-in T/L segments
- Magnetic field strength was calculated at a height of three feet above ground
- Resultant magnetic fields values were presented in this FMP
- All line currents were assumed to be balanced (i.e. neutral or ground currents are not considered)
- Terrain was assumed to be flat
- Project dominant power flow directions were used.

39 SCE, MFields for Excel, Version 2.0, 2007.

Table 5. Year 2013 Forecasted Loading Conditions for Proposed Lockhart Substation Loop-In T/Ls

Circuit Name	Current (Amp)
Coolwater-Lockhart 220 kV T/L	530 (Towards Lockhart)
Kramer-Lockhart 220 kV T/L	1200 (Away from Lockhart)

Notes:

1. Forecasted loading data is based upon scenarios representing load forecasts for the third quarter of 2013. The forecasting data is subject to change depending upon availability of generations, load increase, changes in load demand, and by many other factors.
2. All existing line loading data is derived from historical data.
3. Load flows for Table 5 are assumed in the opposite directions

Appendix H

Energy Division PEA-Equivalent Information Requirements

RE: Lockhart Substation - PEA-equivalent information
Fisher, Iain to: Ryan.Stevenson 04/27/2011 02:53 PM
Cc: Thomas.Burhenn, Jack.Horne, "Borak, Mary Jo"

History: This message has been replied to and forwarded.

Mr. Stevenson,

This is confirm that the below listed documents are adequate to supply the PEA equivalent information necessary for the Energy Division to fulfill the CEQA process for the Lockhart substation PTC.

Kind Regards

Iain Fisher

CEQA Project Manager

CPUC
Energy Division
Transmission & Environmental Permitting
505 Van Ness Avenue, Room 4a
San Francisco
CA
94102-3298

Tel: 415 355 5580
Fax: 415 703 2200

From: Ryan.Stevenson@sce.com [mailto:Ryan.Stevenson@sce.com]
Sent: Wednesday, April 27, 2011 2:16 PM
To: Fisher, Iain
Cc: Thomas.Burhenn@sce.com; Jack.Horne@sce.com; Borak, Mary Jo
Subject: Lockhart Substation - PEA-equivalent information

Mr. Fisher,

To confirm our outstanding regarding the Energy Division's PEA-equivalent information requirements for our Lockhart Substation PTC filing (targeted for May 3), SCE will be referencing the following documents:

CEC Documents

- Commission Decision (CEC-800-2010-008 - CMF), September 8, 2010,
- Supplemental Staff Assessment - Part A (CEC-700-2010-003 - SUPA), May 2010,
- Supplemental Staff Assessment - Part B (CEC-700-2010-003 - SUPB), May 2010,
- Supplemental Staff Assessment - Part C (CEC-700-2010-003 - SUPC), June 2010, and the
- Staff Assessment (CEC-700-2010-003), March 2010.

DOE Document

- Draft Environmental Assessment, April 4, 2011.

These documents will be referenced in our Lockhart Substation PTC Application, Section III as being

responsive to the required PEA-equivalent information. Additional project-related references to descriptions, maps, and the like will be included within Appendix F.

Please confirm that by including references to the documents listed above, SCE will meet the Energy Division's PEA-equivalent information requirements for the Lockhart Substation PTC filing.

Thank you,

Ryan Stevenson
Project Manager
Regulatory Policy & Affairs Dept.
Southern California Edison
2244 Walnut Grove Avenue, Quad 3D, 388K
Rosemead, CA 91770
Office (626) 302-3613 (PAX 23613)
Cell (626) 602-5194
Fax (626) 302-4332 (FAX 24332)

CERTIFICATE OF SERVICE

I hereby certify that, pursuant to the Commission's Rules of Practice and Procedure, I have this day served a true copy of the **APPLICATION OF SOUTHERN CALIFORNIA EDISON COMPANY (U-338-3) FOR A PERMIT TO CONSTRUCT ELECTRICAL FACILITIES: LOCKHART SUBSTATION PROJECT** on all parties identified on the attached service list(s). Service was effected by one or more means indicated below:

Placing copies in properly addressed sealed envelopes and depositing such copies in the United States mail with first-class postage prepaid to all parties.

Melissa Jones
Executive Director
California Energy Commissions
1516 9th St. MS3039
Sacramento, CA 95814-5512

Karen Clopton
Chief ALJ
505 Van Ness Avenue
San Francisco, CA 94102

Executed this 5th day of May 2011, at Rosemead, California.

_/s/Veronica Flores_____
Veronica Flores, Project Analyst
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770