

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE  
STATE OF CALIFORNIA

In the Matter of the Application of SOUTHERN )  
CALIFORNIA EDISON COMPANY (U 338-E) )  
for a Permit to Construct Electrical Facilities )  
With Voltages Between 50 kV and 200 kV: )  
Fogarty Substation Project )

Application No. \_\_\_\_\_  
(Filed April 30, 2007)

**APPLICATION OF SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) FOR A  
PERMIT TO CONSTRUCT ELECTRICAL FACILITIES WITH VOLTAGES  
BETWEEN 50 KV AND 200 KV: FOGARTY SUBSTATION PROJECT**

STEPHEN E. PICKETT  
RICHARD TOM  
DANIELLE R. PADULA

Attorneys for  
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue  
Post Office Box 800  
Rosemead, California 91770  
Telephone: (626) 302-6932  
Facsimile: (626) 302-1926  
E-mail: Danielle.Padula@SCE.com

Dated: April 30, 2007

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**I.**

**INTRODUCTION**

Pursuant to California Public Utilities Commission (Commission or CPUC), General Order 131D (GO 131D), Southern California Edison Company (SCE) respectfully submits this application (Application) for a permit to construct (PTC) authorizing SCE to construct the proposed project known as the Fogarty Substation Project (Project). The Project consists of: (i) construction of a new unmanned, automated, low-profile, 56 mega volt-ampere (MVA) 115/12 kilovolt (kV) substation (Fogarty Substation); (ii) installation of three tubular steel poles (TSPs) to support the two new 115 kV subtransmission line segments, approximately 200 feet each, connecting the Valley-Elsinore-Ivyglen 115 kV subtransmission line to Fogarty Substation; (iii) construction of six underground 12 kV distribution circuits; and (iv) installation of new fiber optic cable and communication equipment to connect Fogarty Substation to SCE's existing telecommunication system.

## II.

### BACKGROUND AND SUMMARY OF REQUEST

SCE proposes to construct the Project to maintain system reliability and serve projected electrical demand in the urbanized areas of the City of Lake Elsinore and adjacent areas of the southwestern portion of Riverside County (Electrical Needs Area, as discussed in Chapter 1 of the PEA and shown on Figure 1-1, Regional Map and Figure 1-2, Electrical Needs Area). The Electrical Needs Area is served by SCE's Centex 33/12 kV, Dryden 33/12 kV, and Elsinore 115/12 kV and 115/33 kV substations.

Currently, the amount of electrical power that can be delivered into the Electrical Needs Area is limited to the maximum amount of combined electrical power that the Centex, Dryden, and Elsinore substations can transmit before their operating capacity limits are exceeded. The Electrical Needs Area is a rapidly developing area. The Centex Substation exceeded its operating limits in 2005.<sup>1</sup> SCE projects that by 2009, the Dryden and Elsinore substations will exceed their operating capacity limits.

In addition, the distribution line lengths are increasing to the point of causing low voltage conditions in the Electrical Needs Area. The distribution lines that serve the Electrical Needs Area originate from the Centex, Dryden and Elsinore substations. These distribution lines range in length from 5 to 7 miles. Residential developments in the Electrical Needs Area have brought greater electrical demand, and to be able to accommodate the greater demand and future growth, the distribution lines need to be shortened to maintain adequate voltage levels at the end of the line and allow operational flexibility. The shorter distribution line lengths allow SCE to transfer load between distribution lines and between substations in response to variations in demand.

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<sup>1</sup> At the time, SCE knew that the land lease for Centex Substation was going to expire in 2007 and that the landowner did not want to re-new the lease. As a result, Dryden Substation was constructed as a temporary facility to assist in serving existing load, and to accommodate the load that will be transferred from Centex Substation in 2007. Once the permanent facilities proposed by the Project are constructed, however, SCE plans to remove the temporary Dryden Substation.

Construction of the Project will ensure that safe and reliable electric service is provided to meet customer electrical demand without overloading the existing electric facilities that supply the Electrical Needs Area by: (1) serving projected electrical demand requirements in the Electrical Needs Area beginning in 2009; (2) maintaining system reliability within the Electrical Needs Area; and (3) improving operational flexibility by providing the ability to transfer load between distribution lines and substations within the Electrical Needs Area.

The PEA will be referenced in this Application, where appropriate, as the source of the information required in an Application for a PTC<sup>2</sup> pursuant to GO 131D, Section IX.B. A statement of purpose and need is located in Chapter 1 of the PEA. A complete project description is located in Chapter 3 of the PEA. Construction of the Project is scheduled to begin in the third quarter of 2008. The Project is expected to be operational by June 2009. A schedule for the Project is included in this Application as Appendix C.

SCE has reviewed the rules and regulations of the federal, state and local agencies that have responsibility for the environmental resources of concern. Where potentially adverse environmental impacts as a result of the Project may occur, SCE has set forth feasible mitigation measures to minimize environmental impacts to less than significant levels (as discussed in Chapter 4 of the PEA and summarized in the Executive Summary Table ES-1 Potential Impacts and Mitigation Measures).

Upon completion of its review of this Application and preparation of the initial study, SCE expects the Commission will find that there is no substantial evidence, in light of the entire record before the Commission, that the Project, which incorporates the Applicant Proposed Measures and the Mitigation Measures described in the PEA, will significantly impact the environment. Thus, SCE requests that the Commission issue a PTC authorizing SCE to construct the Project set forth in this Application and the attached PEA within the timelines set forth in Section III.H. of this Application.

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<sup>2</sup> Other required information for a PTC application (e.g. Balance Sheet, Articles of Incorporation, etc. . . .) is contained in this Application or its appendices.

### III.

#### STATUTORY AND PROCEDURAL REQUIREMENTS

##### A. Applicant

The applicant is Southern California Edison Company (SCE), 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:

Danielle R. Padula  
Attorney  
Southern California Edison Company  
2244 Walnut Grove Avenue  
Post Office Box 800  
Rosemead, California 91770  
Phone: (626) 302-6932  
Fax: (626) 302-1926

With a copy to:

Case Administration  
Southern California Edison Company  
2244 Walnut Grove Avenue  
Post Office Box 800  
Rosemead, California 91770  
Phone: (626) 302-3101  
Fax: (626) 302-3119

##### 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. 93-06-0222<sup>3</sup> and is incorporated herein by reference pursuant to Rule 16 of the Commission's Rules of Practice and Procedure.

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<sup>3</sup> Application No. 93-06-022, filed June 15, 1993, regarding approval of a Self-Generation Deferral Agreement between Mobil Oil Corporation Torrance Refinery and Southern California Edison.

**C. Balance Sheet And Statement Of Income**

Appendix A to this Application contains copies of SCE's balance sheet as of December 31, 2006, and the statement of income for the period ending December 31, 2006. 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 Reform 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 fifteen 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,<sup>4</sup> 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.

**F. Location of Items Required In A Permit To Construct Pursuant To GO 131D**

**Section IX.B**

The information required to be included in a PTC application pursuant to GO 131D, Section IX.B is found in the PEA.

Required PTC application information has been cross-referenced to the PEA in the following text. The PTC application requirements of GO 131D, Section IX.B are in italics, and the PEA references follow in plain text.

- 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.*
- Descriptions of the Project are found in the Executive Summary; Chapter 1, Section 1.1; Chapter 2, Section 2.2.1 (System Alternative 1), Section 2.4.1 (Site Alternative A); and Chapter 3.

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<sup>4</sup> SCE provides electric service to a small number of customer accounts in Tuolumne County and is not subject to franchise requirements.



- The substation site is described and illustrated in Chapter 3, Section 3.1 and Figure 3-1. The subtransmission line modifications are described in Chapter 3, Section 3.2 and Figure 3-2.
  - The physical characteristics of the Project are described and illustrated in Chapter 3.
  - 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.*
- A Project Area map is provided in Chapter 2, Figure 2-1.
  - Maps of current land use showing populated areas, parks, recreational areas, and scenic areas within 300 feet of the proposed substation are provided in Chapter 4, Figures 4.9-1, 4.9-2, 4.9-3, and 4.1-3.
  - Map of existing electrical transmission or power lines within 300 feet of the proposed substation is provided as Figure 3.3 in Chapter 3.
- 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.*
- Reasons for adoption of the proposed substation site are discussed in Chapter 2.
- 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. In the absence of a written agency position statement, the utility may submit a statement of its understanding of the position of such agencies.*
- The City of Lake Elsinore has no adverse comments on the Proposed Project. A written statement from the City of Lake Elsinore, dated February 22, 2007, is included in Appendix E of the PEA.
  - Notice of the Project filing was sent to the Native American Heritage Commission (NAHC) on September 22, 2006. The NAHC responded on September 27, 2006, stating that a search of the Sacred Lands File failed to indicate the presence of Native American cultural resources in the immediate Project area. A list of Native American individuals and

organizations that may have knowledge of cultural resources in the Project area was enclosed in the response from NAHC. SCE will contact these individuals and organizations if, during archaeological monitoring, human remains are encountered. The response letter from the NAHC is included in Appendix E of the PEA.

- 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 17.1 and 17.3. If a PEA is filed, it may include the data described in Items a. through d. above.*
- A PEA is attached to this Application.

**G. Compliance With GO 131D Section X**

GO 131D, 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 attached as Appendix F to the Application.

**H. Compliance with Rule 6(a)(1)**

In compliance with Rule 6(a)(1) of the Commission's Rules of Practice and Procedure (California Code of Regulations, Title 20), SCE is required to state in this Application "the 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 hearings will not be necessary. This proceeding involves the Commission's (i) environmental review of the proposed Project in compliance with the California Environmental Quality Act (CEQA) (Public Resources Code § 21000 *et seq.*) and the Commission's GO 131D, and (ii) issuance of a PTC authorizing SCE to construct the Project.

SCE suggests the following proposed schedule for this Application. The schedule assumes the Commission will approve the final CEQA document at the first Commission Meeting following the expiration of the statutorily prescribed time limits and following the Commission's acceptance of a complete application as required by Public Resources Code § 21100.2.

April 30, 2007	Application filed
May 30, 2007	Application found complete
June 29, 2007	Energy Division issues Initial Study
August 31, 2007	Draft CEQA document issued
November 5, 2007	Draft Decision issued
January 14, 2008	Final Decision and CEQA document issued

**I. Statutory Authority**

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

**J. Public Notice**

Pursuant to GO 131D, 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 right-of-way as determined by the most recent local assessor's parcel roll available to the utility at the time notice is sent; (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 131D. A copy of the Notice of Application for a Permit to Construct and a list of newspapers which will publish the notice are contained in Appendix D. A copy of the Notice of Application for a Permit to Construct and a service list are contained in Appendix E.

**K. Supporting Appendices And Attachment**

Appendices A through F and the attached PEA listed below are made a part of this Application:

Appendix A: Balance Sheet and Statement of Income as of December 31, 2006.

Appendix B: List of Counties and Municipalities Served by SCE.

Appendix C: Fogarty Substation Project Schedule.

Appendix D: Notice of Application for a Permit to Construct.

Appendix E: Proof of Service and Notice of Application for a Permit to Construct.

Appendix F: Field Management Plan.

Attachment: Proponent's Environmental Assessment: Fogarty Substation Project.

**L. Compliance with Rule 17.1**

In accordance with Rule 17.1 of the Commission's Rules of Practice and Procedure, SCE is enclosing a deposit to be applied to the costs the Commission incurs to prepare a negative declaration or an environmental impact report for this Project.

**M. Request For Ex Parte Relief**

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

Moreover, as addressed in the same subsection of GO 131D, SCE requests that the Commission refrain from assigning an ALJ to this proceeding, unless a valid protest is received by the Commission, and in the absence of any valid protests allow the Energy Division to process this Application.<sup>5</sup>

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<sup>5</sup> D.95-08-038, Appendix A, p. 25.

IV.

CONCLUSION

SCE respectfully requests the Commission to issue a PTC authorizing SCE to construct the Fogarty Substation Project described in this Application and the attached PEA. 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/

By: James A. Kelly  
Vice President

/s/

By: Danielle R. Padula

Attorney for  
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue  
Post Office Box 800  
Rosemead, California 91770  
Telephone: (626) 302-6932  
Facsimile: (626) 302-1926  
E-mail: Danielle.Padula@SCE.com

Dated: April 30, 2007

**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 30th day of April, 2007, at Rosemead, California.

/s/  
By: James A. Kelly  
Vice President  
SOUTHERN CALIFORNIA EDISON COMPANY  
  
2244 Walnut Grove Avenue  
Post Office Box 800  
Rosemead, California 91770

**APPENDIX A**

**Balance Sheet and Statement of Income**

**as of December 31, 2006**

SOUTHERN CALIFORNIA EDISON COMPANY

BALANCE SHEET

DECEMBER 31, 2006

A S S E T S

(Millions of Dollars)

UTILITY PLANT:

Utility plant, at original cost	\$19,071
Less - Accumulated depreciation and decommissioning	<u>(4,821)</u>
	14,250
Construction work in progress	1,486
Nuclear fuel, at amortized cost	<u>177</u>
	<u>15,913</u>

OTHER PROPERTY AND INVESTMENTS:

Nonutility property - less accumulated provision for depreciation of \$633	1,046
Nuclear decommissioning trusts	3,184
Other Investments	<u>62</u>
	<u>4,292</u>

CURRENT ASSETS:

Cash and equivalents	83
Restricted cash	56
Margin and collateral deposits	55
Receivables, including unbilled revenues, less reserves of \$29 for uncollectible accounts	939
Accrued unbilled revenue	303
Inventory	232
Accumulated deferred income taxes - net	250
Derivative assets	56
Regulatory assets	554
Other current assets	<u>54</u>
	<u>2,582</u>

DEFERRED CHARGES:

Regulatory assets	2,818
Derivative assets	17
Other long-term assets	<u>488</u>
	<u>3,323</u>
	<u>\$26,110</u>



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

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

5/18/2004

**APPENDIX C**

**Fogarty Substation Project Schedule**

## Fogarty Substation Project Schedule

### DATE:

### EVENT:

April 30, 2007

Application filed

May 30, 2007

Application found complete

June 29, 2007

Energy Division issues Initial Study

August 31, 2007

Draft CEQA document issued

November 5, 2007

Draft Decision issued

January 14, 2008

Final Decision and CEQA document issued

Third Quarter 2008

Construction commences

June 2009

Construction Complete, commence operation

**APPENDIX D**

**Notice of Application for a Permit to Construct**

# NOTICE OF APPLICATION FOR A PERMIT TO CONSTRUCT

## FOGARTY SUBSTATION PROJECT

Date: April 30, 2007

**Proposed Project:** Southern California Edison Company (SCE) has filed an application with the California Public Utilities Commission (CPUC) for a permit to construct (PTC) the Fogarty Substation Project (Proposed Project). The Proposed Project includes the following elements:

- Construction of a new 115/12 kilovolt (kV) substation (Fogarty Substation). The Fogarty Substation would be an unmanned, automated, low-profile, 56 mega volt-ampere (MVA) 115/12 kV substation.
- Installation of three tubular steel poles to support two new 115 kV subtransmission line segments, each approximately 200 feet long, connecting the Valley-Elsinore-Ivyglen 115 kV subtransmission line to the Fogarty Substation.
- Construction of six underground 12 kV distribution circuits.
- Installation of new fiber optic cable and communication equipment to connect the Fogarty Substation to SCE's existing telecommunication system.

The Proposed Project would be located on a 6.6 acre parcel of SCE owned land located east of Terra Cotta Road, west of Dobler Street, south of Kings highway and north of Hoff Avenue within the City of Lake Elsinore.

The purpose of the Proposed Project is to maintain system reliability and to serve projected electrical demand in the City of Lake Elsinore and adjacent areas of the southwestern portion of Riverside County.

Construction is scheduled to begin in the third quarter of 2008. The Proposed Project is planned to be operational by June 2009.

**Environmental Assessment:** SCE has prepared a Proponent's Environmental Assessment (PEA), which includes an analysis of potential environmental impacts created by the construction and operation of the Proposed Project. The PEA concludes that the Proposed Project would not result in any significant environmental impacts.

**EMF Compliance:** The California Public Utilities Commission (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:

- Use of setbacks from the Fogarty Substation property line for the 115 kV electrical substation components (such as transformers, switch-racks, capacitor banks and buses).
- Configure the 115 kV rated transfer and operating buses with the transfer bus facing the nearest property line.
- Optimally phase the 115 kV subtransmission lines looped into the Fogarty Substation.

**Public Review Process:** SCE has filed an application with the CPUC for a PTC for the Proposed Project. Pursuant to General Order 131-D, Section XII, any affected party may, within 30 days of the date on this notice, (i.e., no later than May 30, 2007), file a protest with the CPUC, and request that the CPUC hold hearings on the application. If the CPUC as a result of its investigation determines that public hearings should be held, notice shall be sent to each person or entity who is entitled to notice or who has requested a hearing.

All protests must be mailed to the CPUC and SCE concurrently and should include the following:

1. Your name, mailing address, and daytime telephone number
2. Reference to the Project Name identified above
3. A clear and concise description of the reason for the protest

Protest for this Application must be mailed WITHIN 30 CALENDAR DAYS to:

California Public Utilities  
Commission  
Docket Office, Room 2001  
505 Van Ness Avenue  
San Francisco, CA 94102

**AND**

Southern California Edison Co.  
Law Dept. - Exception Mail  
2244 Walnut Grove Avenue  
Rosemead, CA 91770  
Attention: Catalina Jauregui

**AND**

California Public Utilities  
Commission  
Director, Energy Division  
505 Van Ness Avenue, 4<sup>th</sup> Floor  
San Francisco, CA 94102

For assistance in filing a protest, please call the CPUC's Public Advisor in San Francisco at (415) 703-2074 or in Los Angeles at (213) 576-7055.

To review a copy of SCE's Application, or to request further information, please contact:

**Louis Barron Davis**

SCE San Jacinto Valley Service Center  
26100 Menifee Rd., Romoland CA. 92585  
Phone: (951) 928-8208  
Fax: (951) 928-8308  
[Louis.Davis@sce.com](mailto:Louis.Davis@sce.com)

**List of Newspapers Publishing the Notice of Application for a Permit to Construct**

Riverside Press Enterprise  
3512 Fourteenth Street  
Riverside, CA 92501  
(951) 368-9001

The Californian  
28765 Single Oak Drive, Suite 100  
Temecula, CA 92590  
(951) 676-4315

**APPENDIX E**

**Proof of Service and Notice of Application for a Permit to Construct**



# NOTICE OF APPLICATION FOR A PERMIT TO CONSTRUCT

## FOGARTY SUBSTATION PROJECT

Date: April 30, 2007

**Proposed Project:** Southern California Edison Company (SCE) has filed an application with the California Public Utilities Commission (CPUC) for a permit to construct (PTC) the Fogarty Substation Project (Proposed Project). The Proposed Project includes the following elements:

- Construction of a new 115/12 kilovolt (kV) substation (Fogarty Substation). The Fogarty Substation would be an unmanned, automated, low-profile, 56 mega volt-ampere (MVA) 115/12 kV substation.
- Installation of three tubular steel poles to support two new 115 kV subtransmission line segments, each approximately 200 feet long, connecting the Valley-Elsinore-Ivyglen 115 kV subtransmission line to the Fogarty Substation.
- Construction of six underground 12 kV distribution circuits.
- Installation of new fiber optic cable and communication equipment to connect the Fogarty Substation to SCE's existing telecommunication system.

The Proposed Project would be located on a 6.6 acre parcel of SCE owned land located east of Terra Cotta Road, west of Dobler Street, south of Kings highway and north of Hoff Avenue within the City of Lake Elsinore.

The purpose of the Proposed Project is to maintain system reliability and to serve projected electrical demand in the City of Lake Elsinore and adjacent areas of the southwestern portion of Riverside County.

Construction is scheduled to begin in the third quarter of 2008. The Proposed Project is planned to be operational by June 2009.

**Environmental Assessment:** SCE has prepared a Proponent's Environmental Assessment (PEA), which includes an analysis of potential environmental impacts created by the construction and operation of the Proposed Project. The PEA concludes that the Proposed Project would not result in any significant environmental impacts.

**EMF Compliance:** The California Public Utilities Commission (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:

- Use of setbacks from the Fogarty Substation property line for the 115 kV electrical substation components (such as transformers, switch-racks, capacitor banks and buses).
- Configure the 115 kV rated transfer and operating buses with the transfer bus facing the nearest property line.
- Optimally phase the 115 kV subtransmission lines looped into the Fogarty Substation.

**Public Review Process:** SCE has filed an application with the CPUC for a PTC for the Proposed Project. Pursuant to General Order 131-D, Section XII, any affected party may, within 30 days of the date on this notice, (i.e., no later than May 30, 2007), file a protest with the CPUC, and request that the CPUC hold hearings on the application. If the CPUC as a result of its investigation determines that public hearings should be held, notice shall be sent to each person or entity who is entitled to notice or who has requested a hearing.

All protests must be mailed to the CPUC and SCE concurrently and should include the following:

1. Your name, mailing address, and daytime telephone number
2. Reference to the Project Name identified above
3. A clear and concise description of the reason for the protest

Protest for this Application must be mailed WITHIN 30 CALENDAR DAYS to:

California Public Utilities  
Commission  
Docket Office, Room 2001  
505 Van Ness Avenue  
San Francisco, CA 94102

**AND**

Southern California Edison Co.  
Law Dept. - Exception Mail  
2244 Walnut Grove Avenue  
Rosemead, CA 91770  
Attention: Catalina Jauregui

**AND**

California Public Utilities  
Commission  
Director, Energy Division  
505 Van Ness Avenue, 4<sup>th</sup> Floor  
San Francisco, CA 94102

For assistance in filing a protest, please call the CPUC's Public Advisor in San Francisco at (415) 703-2074 or in Los Angeles at (213) 576-7055.

To review a copy of SCE's Application, or to request further information, please contact:

**Louis Barron Davis**

SCE San Jacinto Valley Service Center  
26100 Menifee Rd., Romoland CA. 92585  
Phone: (951) 928-8208  
Fax: (951) 928-8308  
[Louis.Davis@sce.com](mailto:Louis.Davis@sce.com)

**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 **Southern California Edison Company's (U-338-E) Notice of Application for a Permit to Construct** 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 30th day of April, 2007, at Rosemead, California.



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CHRISTINA SANCHEZ  
Project Analyst  
SOUTHERN CALIFORNIA EDISON COMPANY

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

# Fogarty Substation Project

<p>Mr. Rolfe Preisendanz          Planning Director          City of Lake Elsinore          130 South Main Street          Lake Elsinore, CA 92530</p>	<p>Mr. Michael O'Neal          Chairman, Planning Commission          City of Lake Elsinore          130 South Main Street          Lake Elsinore, CA 92530</p>	<p>Mr. Robert Magee          Mayor          City of Lake Elsinore          130 South Main Street          Lake Elsinore, CA 92530</p>
<p>Mr. Robert Brady          City Manager          City of Lake Elsinore          130 South Main Street          Lake Elsinore, CA 92530</p>	<p>Angela Minkin, Chief ALJ          California Public Utilities Commission          505 Van Ness Avenue          San Francisco, CA 94102</p>	<p>Docket Clerk          California Public Utilities Commission          505 Van Ness Avenue          San Francisco, CA 94102</p>
<p>California Energy Commission          B. B. Blevins, Executive Director          1516 Ninth Street          Sacramento, CA 95814-5512</p>	<p>California Department of Transportation          Will Kempton, Director          PO Box 942873          Sacramento, CA 94273-0001</p>	<p>California Department of Transportation          Division of Aeronautics, MS # 40          Mary Frederick, Division of Aeronautics Acting Chief          PO Box 942874          Sacramento, CA 94274-0001</p>
<p>Secretary of the Resources Agency          Mike Chrisman, Secretary          1416 Ninth St., Suite 1311          Sacramento, CA 95814</p>	<p>Department of Fish and Game Headquarters          Ryan Brodrick, Director          1416 Ninth Street          Sacramento, CA 95814</p>	<p>Department of Health Services          Sandra Shewry, Director          1501 Capitol Ave., Suite 6001          Sacramento, CA 94234-7320</p>
<p>State Water Resources Control Board          Celeste Cantu, Director          1001 "I" Street          Sacramento, CA 95814</p>	<p>Air Resources Board          California Air Resources Board          Attn: Stationary Source          1001 "I" Street          PO Box 2815          Sacramento, CA 95812</p>	<p>South Coast Air Quality Management District          21865 Copley Drive          Diamond Bar, CA 91765-4182</p>
<p>California Department of Transportation          District 8          464 West 4<sup>th</sup> Street          San Bernardino, CA 92401-1400</p>	<p>Santa Ana Regional Water Quality Control Board          Region 8          California Tower          3737 Main Street, Suite 500          Riverside, CA 92501-3348</p>	

**List of Affected Property Owners (300')**

Fogarty 300 Foot List

<p>AT &amp; SF RR 740 CARNEGIE DR SAN BERNARDINO, CA 92408</p>	<p>LEWIS DAVID W PO BOX 911 LAKE ELSINORE, CA 92531</p>	<p>EDWARDS SARAH 22482 WALNUT DR WILDOMAR, CA 92595</p>
<p>CASTLE &amp; COOKE ALBERHILL RANCH 17600 COLLIER AVE STE C120 LAKE ELSINORE, CA 92530</p>	<p>SOUTHERN CALIFORNIA EDISON CO P.O. BOX 800 ROSEMEAD, CA 91770</p>	<p>RODRIGUEZ AMELIA &amp; ISAAC 19273 CONSUL AVE CORONA, CA 92881</p>
<p>BOUCHER DONALD EDMOND 7200 MCLODY LN NO 56 LA MESA, CA 91942</p>	<p>MALETTA PAMELA A 1707 PINYON CIR CORONA, CA 92882</p>	<p>VELARDE LUPE 9369 PALM LN FONTANA, CA 92335</p>
<p>GODINA MANUEL J &amp; DONNA L 28809 TERRA COTTA RD LAKE ELSINORE, CA 92530</p>	<p>LEVENSON NORMAN &amp; DOROTHY A 4120 ANDROS WAY OCEANSIDE, CA 92056</p>	<p>REED YOKO 22610 PIN TAIL DR CANYON LAKE, CA 92587</p>
<p>CENTEX HOMES 2280 WARDLOW CIR STE 150 CORONA, CA 92880</p>		

**APPENDIX F**

**Field Management Plan**

**APPENDIX F**  
**FIELD MANAGEMENT PLAN**  
**FOR**  
**FOGARTY SUBSTATION PROJECT**

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## I. EXECUTIVE SUMMARY

This document is Southern California Edison Company's (SCE) Field Management Plan (FMP) for the Fogarty Substation Project (Proposed Project). SCE proposes to construct the Fogarty Substation Project to maintain system reliability and serve projected electrical demand in the urbanized areas of the City of Lake Elsinore and adjacent areas of the southwestern portion of Riverside County. The Fogarty Substation Project would include construction of a new 115/12 kilovolt (kV) substation (Fogarty Substation), installation of three tubular steel poles (TSPs) to support the two new 115 kV subtransmission line segments, approximately 200 feet each, connecting the Valley-Elsinore-Ivyglen 115 kV subtransmission line to Fogarty Substation, construction of six underground 12 kV distribution circuits and installation of new fiber optic cable and communication equipment to connect the proposed Fogarty Substation to SCE's existing telecommunication system. The Proposed Project would be located adjacent to Alberhill Ranch and Lakeside Palms residential developments in the City of Lake Elsinore. The Proposed Substation will be served by the existing Valley-Elsinore-Ivyglen 115 kV subtransmission line by forming a subtransmission line loop into the Proposed Substation.

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

- Phasing the looped 115 kV transmission lines into the Proposed Substation.
- Placing major substation electric equipment (such as transformers, capacitor banks, switchracks, etc.) away from the substation property lines.

SCE's plan for applying the above no-cost and low-cost magnetic field reduction measures uniformly and equitably 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<sup>1</sup>, and with applicable national and state safety standards for new electric facilities.

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<sup>1</sup> EMF Design Guidelines. August 2006.

## II. BACKGROUND REGARDING EMF AND PUBLIC HEALTH RESEARCH ON

### EMF

There are many sources of power frequency<sup>2</sup> 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.<sup>3</sup>

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<sup>4</sup>, the National Radiation Protection Board (NRPB) 2001<sup>5</sup>, the International Commission on non-Ionizing Radiation Protection (ICNIRP) 2001, the California Department of Health Services (CDHS) 2002<sup>6</sup>, and the International Agency for Research on Cancer (IARC) 2002<sup>7</sup>.

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<sup>2</sup> In U.S., it is 60 Hertz (Hz).

<sup>3</sup> CPUC Decision 06-01-042, p. 6, footnote 10

<sup>4</sup> 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.

<sup>5</sup> National Radiological Protection Board, Electromagnetic Fields and the Risk of Cancer. Report of an Advisory Group on Non-ionizing Radiation, Chilton, U.K. 2001

<sup>6</sup> 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.

<sup>7</sup> 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-frequency (ELF) electric and magnetic fields, IARC Press, Lyon, France: International Agency for Research on Cancer, Monograph, vol. 80, p. 338, 2002

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.”<sup>8</sup>
- “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.”<sup>9</sup>
- “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.”<sup>10</sup>

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.”<sup>11</sup>

In 2002, three scientists for CDHS concluded:

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<sup>8</sup> 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

<sup>9</sup> *ibid.*, p. iii

<sup>10</sup> *ibid.*, p. 37 - 38

<sup>11</sup> NRPB, NRPB Advisory Group on Non-ionizing Radiation Power Frequency Electromagnetic Fields and the Risk of Cancer, NRPB Press Release May 2001

“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.”<sup>12</sup>

Also in 2002, the World Health Organization’s IARC concluded:

“ELF magnetic fields are possibly carcinogenic to humans”<sup>13</sup>, 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.”<sup>14</sup>

### **III. 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

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<sup>12</sup> 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

<sup>13</sup> IARC, Monographs, Part I, Vol. 80, p. 338

<sup>14</sup> *ibid.*, p. 332 - 334

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 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,<sup>15</sup> and the policy direction that (1) use of numeric exposure limits was not appropriate in setting utility design guidelines to address EMF,<sup>16</sup> 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 substation facilities should be limited to the utility's compliance with the CPUC's low-cost/no-cost policies.<sup>17</sup>

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 substation projects. SCE filed its revised EMF Design Guidelines with the CPUC on July 26, 2006.

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<sup>15</sup> 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.").

<sup>16</sup> 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.").

<sup>17</sup> 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.").

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 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 substations 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, would:
    - Cost in the range of 4 percent of the total project cost.
    - For low cost mitigation, the "EMF reductions will be 15% or greater at the utility ROW [right-of-way]..."<sup>18</sup>

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

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<sup>18</sup> CPUC Decision 06-01-042, p. 10

arbitrarily eliminate a potential measure that might be available but costs more than the 4 percent figure. Conversely, the utilities are encouraged to use effective measures that cost less than 4 percent.”<sup>19</sup>

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.”<sup>20</sup> 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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<sup>19</sup> CPUC Decision 93-11-013, § 3.3.2, p.10.

<sup>20</sup> 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.”<sup>21</sup>

#### **IV. PROJECT DESCRIPTION**

SCE proposes to construct the Fogarty Substation Project to maintain system reliability and serve projected electrical demand in the urbanized areas of the City of Lake Elsinore and adjacent areas of the southwestern portion of Riverside County. The Proposed Project would be located adjacent to Alberhill Ranch and Lakeside Palms residential developments in the City of Lake Elsinore (Figure 1).

The Proposed Project includes the following elements:

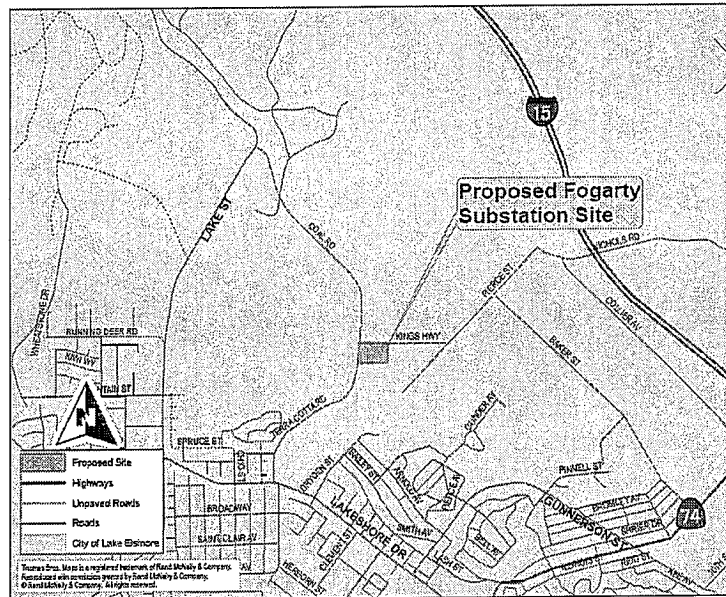
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<sup>21</sup> CPUC Decision 06-01-042, p. 11

- Construction of a new 115/12 kV substation (Fogarty Substation). The Fogarty Substation would be an unmanned, automated, low-profile, 56 mega volt-ampere (MVA) 115/12 kV substation.
- Installation of three tubular steel poles (TSPs) to support the two new 115 kV subtransmission line segments, approximately 200 feet each, connecting the Valley-Elsinore-Ivyglen 115 kV subtransmission line to Fogarty Substation.
- Construction of six underground 12 kV distribution circuits.
- Installation of new fiber optic cable and communication equipment to connect the proposed Fogarty Substation to SCE's existing telecommunication system.

The total cost of this project is approximately \$11.2 million. Four percent of the Proposed Project cost is \$446,960. SCE engineers added magnetic field reduction measures early in the design phase for this project. The total project cost, therefore, includes "low-cost" magnetic field reduction measures in the proposed designs.

**Figure 1. Proposed Substation Site**



The Proposed Substation will be located within a residential area where scattered homes exist. The nearest home is approximately 100 feet away from the nearest substation property line. There are no schools within the California Department of Education's setback distances<sup>22</sup> of 100 feet from the overhead 115 kV subtransmission line.

## **V. EVALUATION OF NO-COST AND LOW-COST MAGNETIC FIELD REDUCTION MEASURES FOR PROPOSED SUBSTATION**

Generally, magnetic field values along the substation perimeter are low compared to the substation interior because of the distance from the perimeter to the energized equipment. Normally, the highest magnetic field values around the perimeter of a substation result from overhead power lines and underground duct banks entering and leaving the substation, and are

<sup>22</sup> Power Line Setback Exemption Guidance - May 2006, California Department of Education.

not caused by substation equipment. Therefore, the magnetic field reduction measures generally applicable to a substation project are as follows:

- Site selection for a new substation;
- Setback of substation structures and major substation equipment (such as bus, transformers, and underground cable duct banks, etc.) from perimeter;
- Subtransmission lines and distribution lines entering and exiting the substation.

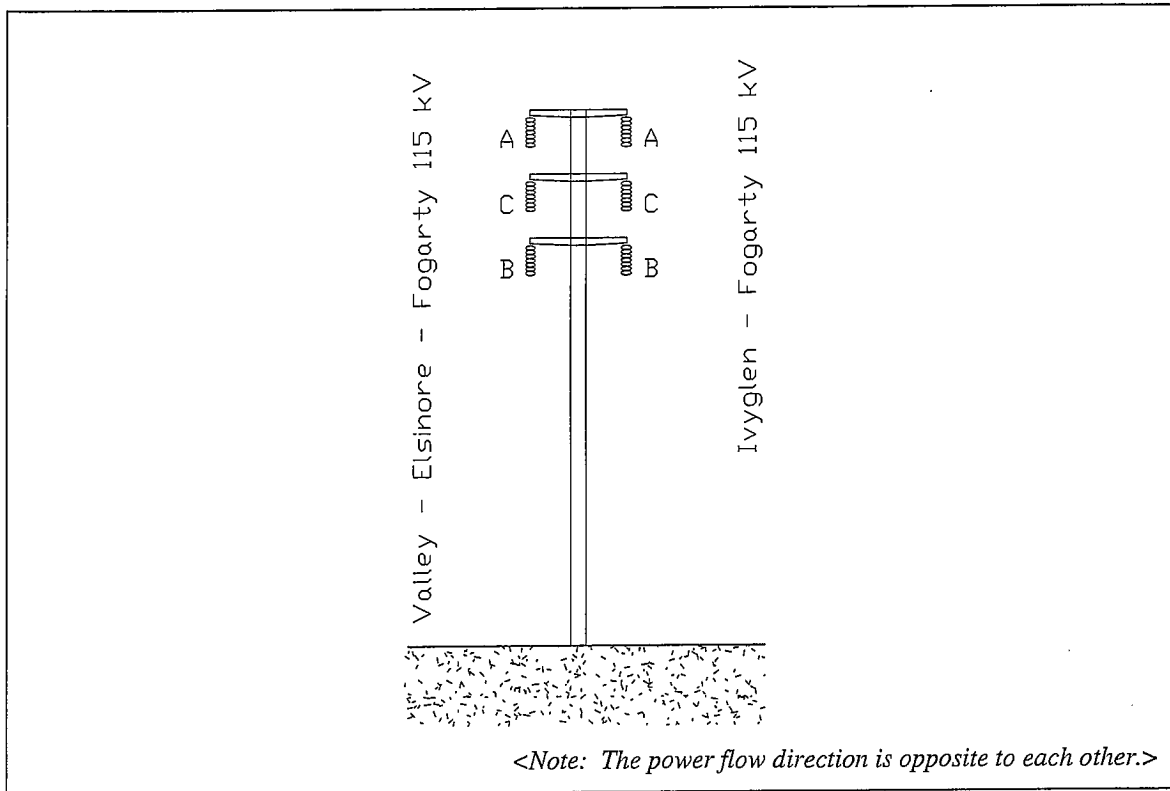
The Substation Checklist, as shown on Table 1, is used for evaluating the no-cost and low-cost measures considered for the substation project, the measures adopted, and reasons that certain measures were not adopted.

<b>No.</b>	<b>No-Cost and Low-Cost Magnetic Field Reduction Measures Evaluated for a Substation Project</b>	<b>Measures Adopted? (Yes/No)</b>	<b>Reason(s) if not Adopted</b>
1	Are 115 kV rated transformer(s) 15 feet from the substation property line?	Yes	
2	Are 115 kV rated switch-racks, capacitor banks & bus 8 feet (or more) from the substation property line?	Yes	
3	Are 12 kV distribution underground cable duct banks 12 feet (or more) from the side property line?	Yes	
4	Are 115 kV rated transfer & operating buses configured with the transfer bus facing the nearest property line?	Yes	

The following phasing arrangements will be implemented for the Proposed Subtransmission Lines:

- Ivyglen-Fogarty and Valley-Elsinore-Fogarty 115 kV Subtransmission Lines: A-C-B and A-C-B (or equivalent): top-to-bottom at the getaway pole (Figure 2).

Figure 2. Proposed 115 kV Phasing at the Getaway Pole



This document includes only no-cost and low-cost magnetic field reduction measures for SCE's Proposed Project, which would be located on Site Alternative A. SCE's Proponent's Environmental Assessment (PEA) contains various project alternatives, including various alternative substation sites. If an alternative substation site is chosen for this project, a supplemental FMP will be prepared, along with more detailed engineering design(s).

**VI. FINAL RECOMMENDATIONS FOR IMPLEMENTING NO-COST AND LOW-COST MAGNETIC FIELD REDUCTION MEASURES**

In accordance with the “EMF Design Guidelines”, filed with the CPUC in compliance with CPUC Decisions 93-11-013 and 06-01-042, SCE will implement the following no-cost and low-cost magnetic field reduction measures for this project. These recommended magnetic field reduction measures will be uniformly and equitably applied to the entire project:

- Placing major substation electric equipment (such as transformers, capacitor banks, switchracks, etc) away from the substation property lines as shown on Table 1 on page 14.
- Optimally phasing Ivyglen-Fogarty and Valley-Elsinore-Fogarty 115 kV Subtransmission Lines: A-C-B and A-C-B (or equivalent): top-to bottom at the getaway pole as shown on Figure 2 on page 14.

SCE’s plan for applying the above no-cost and low-cost magnetic field reduction measures uniformly and equitably 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, and with applicable national and state safety standards for new electric facilities.

**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-E) FOR A PERMIT TO CONSTRUCT ELECTRICAL FACILITIES WITH VOLTAGES BETWEEN 50 KV AND 200 KV: FOGARTY SUBSTATION PROJECT on the Chief Administrative Law Judge, by placing the copy in a sealed envelope and causing such envelope to be delivered by hand or by overnight courier to the offices of the Commission or other addressee(s).

Executed this 30th day of April, 2007, at Rosemead, California.



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CHRISTINA A. SANCHEZ  
Project Analyst  
SOUTHERN CALIFORNIA EDISON COMPANY

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