#### 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: Valley-Ivyglen 115 kV Subtransmission Line Project

Application No. \_\_\_\_\_ (Filed January 16, 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: VALLEY-IVYGLEN 115 KV SUBTRANSMISSION LINE 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: January 16, 2007

## **TABLE OF CONTENTS**

Section Section	<u>n</u>	<u>Title</u>	<b>Page</b>
I.	INTRO	ODUCTION	1
II.	BACK	GROUND AND SUMMARY OF REQUEST	2
III.	STAT	UTORY AND PROCEDURAL REQUIREMENTS	4
	A.	Applicant	4
	B.	Articles of Incorporation	5
	C.	Balance Sheet And Statement Of Income	5
	D.	Description of Southern California Edison Company	6
	E.	Service Territory	6
	F.	Location of Items Required In A Permit To Construct Pursuant To GO 131D, Section IX.B	6
	G.	Compliance With GO 131D Section X	
	H.	Compliance with Rule 6(a)(1)	
	I.	Statutory Authority	9
	J.	Public Notice	9
	K.	Supporting Appendices And Attachment	10
	L.	Compliance with Rule 17.1	10
	M.	Request For Ex Parte Relief	
	N.	Request For Timely Relief	11
IV.	CONC	CLUSION	11
APPEN APPEN APPEN APPEN APPEN	NDIX E NDIX ( NDIX I NDIX E NDIX F	A:Balance Sheet and Statement of Income as of September B:List of Counties and Municipalities Server C:Valley-Ivyglen 115 kV Subtransmission Line Project D:Notice of Application for a Permit to C E:Proof of Service and Notice of Application for a Permit to C F:Field Manager NT:Proponent's Environmental As	d by SCE Schedule Construct Construct nent Plan

#### **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: Valley-Ivyglen 115 kV Subtransmission Line Project

Application No. \_\_\_\_\_ (Filed January 16, 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: VALLEY-IVYGLEN 115 KV SUBTRANSMISSION LINE PROJECT

#### 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 Valley-Ivyglen 115 kV Subtransmission Line Project (Project). The Project consists of: (i) a new 115 kV subtransmission line approximately 25 miles long that traverses between SCE's Valley 500/115 kV Substation and SCE's Ivyglen 115/12 kV Substation (Valley-Ivyglen 115 kV Subtransmission Line or Proposed Subtransmission Line); (ii) improvements at SCE's Valley 500/115 kV Substation and SCE's Ivyglen 115/12 kV Substation to accommodate the Proposed Subtransmission Line; and (iii) new fiber optic cable

and communication equipment to provide a new path for SCE's telecommunication system along the new subtransmission line route.

#### II.

#### **BACKGROUND AND SUMMARY OF REQUEST**

The southwestern area of Riverside County, the northern portion of the City of Lake Elsinore, and the community of Glen Ivy Hot Springs' (Electrical Needs Area) electrical needs are currently served by SCE's Valley 500 kV transmission system. SCE's Valley 500 kV transmission system includes 500/115 kV transformers, 115 kV subtransmission lines, 115/33 kV and 115/12 kV transformers, 33 kV and 12 kV distribution lines, and several substations including the Valley 500/115 kV Substation, the Elsinore 115/33 kV and 115/12 kV Substation, and the Ivyglen 115/12 kV Substation.

SCE's Valley 500/115 kV Substation is currently configured into two distinct 115 kV electrical subtransmission systems, Valley North and Valley South. These two systems are separate electrically and geographically. The Electrical Needs Area is served by the Valley South System. Within the Valley South network, voltage is transformed from 115 kV to 12 kV at the Ivyglen and Elsinore substations. The Elsinore Substation also transforms 115 kV to 33 kV, and provides 33 kV to the Centex, Dryden, and Glen Ivy substations. At the Centex, Dryden, and Glen Ivy substations 33 kV is transformed to 12 kV for distribution.

Both the Valley North system and the Valley South system consist of a network of 115 kV subtransmission lines that provide power to many distribution substations. The distinct and separate electrical networks of Valley North and Valley South do not allow operational flexibility between the two systems. Currently, only one 115 kV subtransmission line, the Valley-Elsinore-Ivyglen 115 kV line, serves the Ivyglen Substation.

The amount of electrical power that can be delivered to the Electrical Needs Area is limited to the maximum amount of electrical power that the Valley-Elsinore-Ivyglen line can transmit before its operating limits are exceeded. The capacity of this line is presently limited to 183 Mega-Volt-Amperes (MVA) under normal operating conditions. SCE's system power flow studies that model projected electrical demands indicate that in 2007, the existing Valley-Elsinore-Ivyglen 115 kV subtransmission line will exceed its designed operating limits under normal and abnormal operating conditions. As a result, electric system upgrades are required to reliably serve projected electrical demand within the Electrical Needs Area.

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) providing a direct connection between SCE's Valley 500/115 kV Substation and SCE's Ivyglen 115/12 kV Substation; (3) increasing system reliability by locating a second 115 kV subtransmission line within the Electrical Needs Area; and (4) improving operational and maintenance flexibility on subtransmission lines without interruption of service.

The PEA will be referenced in this Application, where appropriate, as the source of the information required in an Application for a PTC<sup>1</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 early 2008 and to be completed 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 proposed SCE Proposed Measures and/or Mitigation Measures to minimize environmental impacts to less than significant levels (SCE Proposed Measures and Mitigation Measures, as discussed in Chapter 4 of the PEA).

<sup>&</sup>lt;sup>1</sup> Other required information for a PTC application (e.g. Balance Sheet, Articles of Incorporation, etc. . . .) is contained in this Application or its appendices.

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 SCE 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.

#### III.

#### STATUTORY AND PROCEDURAL REQUIREMENTS

#### A. <u>Applicant</u>

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. <u>Articles of Incorporation</u>

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>2</sup> and is incorporated herein by reference pursuant to Rule 16 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 as of September 30, 2006, and the statement of income for the period ending September 30, 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 straightline 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.

<sup>&</sup>lt;sup>2</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.

#### D. <u>Description of Southern California Edison Company</u>

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. <u>Service Territory</u>

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>3</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.

<sup>&</sup>lt;sup>3</sup> SCE provides electric service to a small number of customer accounts in Tuolumne County and is not subject to franchise requirements.

- 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 2.2.2 (System Alternative 1), Section 2.2.3 (Southern Corridor Alternative), 2.4.5, 2.4.6; and Chapter 3.
- The Proposed Subtransmission Line Route is described and illustrated in Chapter 3 and in Figures 3.2-1 and 3.3-1 through 3.3-7. The location of SCE's existing Valley and Ivyglen substations is described in Chapter 1, Figure 1.3-1, in Chapter 3, and in Figure 3.2-1.
- The physical characteristics of the Project are described and illustrated in Chapter 3. A typical Light Duty Steel Pole and Tubular Steel Pole for a 115 kV line is described and illustrated in Chapter 3 and Figures 3.3-8 through 3.3-10.
- 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 map of the Project Study Area, the Electrical Needs Area and the Proposed Subtransmission Line Route (Figure 3.2-1) is provided in Chapter 3.
- Maps of current land use including designation of parks, recreational and scenic areas are provided as Figures 4.10-1, 4.10-2, 4.10-3 in the Land Use Section of Chapter 4.
- Maps of existing electrical transmission or power lines within 300 feet of the proposed route are provided as Figures 3.4-1 and 3.4-2 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 Subtransmission Line route 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.
- On August 25, 2006, a written agency position statement was requested by SCE from the City of Lake Elsinore, the City of Perris, and the County of Riverside. As of the date of this Application, SCE has not received any written agency position statements.
- Notice of the Project filing was sent to the Native American Heritage Commission (NAHC) on August 4, 2005. The Commission responded on August 12, 2005, 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. Copies of SCE's letter to the NAHC and the NAHC's response letter are attached in Appendix I to 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. <u>Compliance With GO 131D Section X</u>

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. <u>Compliance with Rule 6(a)(1)</u>

In compliance with Rule 6(a)(l) 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 <u>et seq</u>.) 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.

January 16, 2007	Application filed
February 15, 2007	Application found complete
March 15, 2007	Energy Division issues Initial Study
May 7, 2007	Draft CEQA document issued
July 16, 2007	Draft Decision issued
August 15, 2007	Final Decision and CEQA document issued

#### I. <u>Statutory Authority</u>

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. <u>Public Notice</u>

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 Proposed Subtransmission Line route; (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.

9

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. <u>Supporting Appendices And Attachment</u>

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 September 30, 2006.

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

Appendix C: Valley-Ivyglen 115 kV Subtransmission Line 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: Valley-Ivyglen 115 kV Subtransmission Line Project.

#### L. <u>Compliance with Rule 17.1</u>

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. <u>Request For Ex Parte Relief</u>

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

#### N. <u>Request For Timely Relief</u>

SCE requests the Commission to issue a decision within the time limits prescribed by Government Code Section 65920 <u>et seq</u>. (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>4</sup>

#### IV.

#### **CONCLUSION**

SCE respectfully requests the Commission to issue a PTC authorizing SCE to construct the Valley-Ivyglen 115 kV Subtransmission Line Project described in this Application and the ///

- ///
- /// ///
- ///
- ///
- ///
- ///
- ///
- ///
- ///

<sup>4</sup> D.95-08-038, Appendix A, p. 25.

attached PEA. SCE further requests that the relief be provided <u>ex parte</u> and within the time limits prescribed by the Permit Streamlining Act.

Respectfully submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

\_/s/\_

By: James A. Kelly Vice President

<u>/s</u>/

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: January 16, 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 16th day of January, 2007, at Rosemead, California.

#### <u>/s/</u>

 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 September 30, 2006

# SOUTHERN CALIFORNIA EDISON COMPANY

# BALANCE SHEET SEPTEMBER 30, 2006 A S S E T S (Unaudited)

## (Millions of Dollars)

#### UTILITY PLANT:

Utility plant, at original cost Less - Accumulated depreciation and decommissioning Construction work in progress Nuclear fuel, at amortized cost	\$18,670 (4,710) 13,960 1,331 <u>170</u> 15,461
OTHER PROPERTY AND INVESTMENTS: Nonutility property - less accumulated provision for depreciation of \$617 Nuclear decommissioning trusts Other Investments	1,055 3,061  4,191
CURRENT ASSETS:	

Cash and equivalents Restricted cash Margin and collateral deposits	158 60 66
Receivables, including unbilled revenues, less reserves of \$29 for uncollectible accounts Inventory Accumulated deferred income taxes - net Trading and price risk management assets Regulatory assets Prepayments and other current assets	1,725 230 292 67 556 71 3,225
DEFERRED CHARGES:	
Regulatory assets Trading and price risk management assets Other deferred charges	2,774 29 <u>338</u> 3,141
· · · ·	\$26,018

APPENDIX A

A-1

## 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.

Fresno	Kings	Orange	Tuolumne*	
Imperial	Los Angeles	Riverside	Tulare	
Inyo	Madera	San Bernardino	Ventura	
Kern	Mono	Santa Barbara		
				20 olivita da sector como compansione da Maria estado de como como de 2000 maio de 2000 de 2000 de 2000 de 2000
	<u>A</u>	IUNICIPAL CORPOR	ATIONS	
Adelanto	Cudahy	La Habra	Ojai	Santa Monica
Agoura Hills	Culver City	La Habra Heights	Ontario	Santa Paula
Ihambra	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.

۰.

5/18/2004

## APPENDIX C

Valley-Ivyglen 115 kV Subtransmission Line Project Schedule

# Valley-Ivyglen 115 kV Subtransmission Line Project Schedule

## DATE:

## EVENT:

January 16, 2007	Application filed
February 15, 2007	Application found complete
March 15, 2007	Energy division issues Initial Study
May 7, 2007	Draft CEQA document issued
July 16, 2007	Draft Decision Issued
August 15, 2007	Final Decision and CEQA document issued
Early 2008	Construction commences
Mid-2009	Construction complete, commence operation

## APPENDIX D

Notice of Application for a Permit to Construct

1

### NOTICE OF APPLICATION FOR A PERMIT TO CONSTRUCT

VALLEY–IVYGLEN 115 KV SUBTRANSMISSION LINE PROJECT Date: January 16, 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 Valley–Ivyglen 115kV Subtransmission Line Project. SCE proposes to construct, operate, and maintain a new 115 kV subtransmission line to connect the existing SCE Valley Substation and the Ivyglen Substation. The proposed project also includes constructing improvements at both substations to accommodate the proposed subtransmission line and the installation of a telecommunication line along the proposed subtransmission line route. The proposed project would be located in Riverside County.

Construction is expected to commence in early 2008 and would be completed 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:

- 1. Using taller poles.
- 2. Using a "triangle" type pole-head configuration for single-circuit segments and a double-circuit pole-head configuration for double-circuit segments.
- 3. Phasing the proposed 115 kV subtransmission line with respect to the adjacent existing transmission and subtransmission lines.

**Public Review Process:** SCE has filed an application with the CPUC for a PTC for the proposed project. Pursuant to the CPUC Rules of Practice and Procedure, any affected party may, within 30 days of the date on this notice, (i.e., no later than February 15, 2007), protest, 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 <u>AN</u> 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 Rošemead, CA 91770 Attention: Catalina Jaurequi 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.

AND

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 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

#### VALLEY–IVYGLEN 115 KV SUBTRANSMISSION LINE PROJECT Date: January 16, 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 Valley–Ivyglen 115kV Subtransmission Line Project. SCE proposes to construct, operate, and maintain a new 115 kV subtransmission line to connect the existing SCE Valley Substation and the Ivyglen Substation. The proposed project also includes constructing improvements at both substations to accommodate the proposed subtransmission line and the installation of a telecommunication line along the proposed subtransmission line route. The proposed project would be located in Riverside County.

Construction is expected to commence in early 2008 and would be completed by June 2009.

<u>Environmental Assessment</u>: 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.

<u>EMF Compliance</u>: 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:

- 1. Using taller poles.
- 2. Using a "triangle" type pole-head configuration for single-circuit segments and a double-circuit pole-head configuration for double-circuit segments.
- 3. Phasing the proposed 115 kV subtransmission line with respect to the adjacent existing transmission and subtransmission lines.

**Public Review Process:** SCE has filed an application with the CPUC for a PTC for the proposed project. Pursuant to the CPUC Rules of Practice and Procedure, any affected party may, within 30 days of the date on this notice, (i.e., no later than February 15, 2007), protest, 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 Southern California Edison Co. <u>AND</u> Law Dept. - Exception Mail 2244 Walnut Grove Avenue \* Rosemead, CA 91770 Attention: Catalina Jauregui 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.

AND

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

#### **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 16th day of January, 2007, at Rosemead, California.

RÁQUÉL IPPOLÍTI Project Analyst SOUTHERN CALIFORNIA EDISON COMPANY

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

# Valley - Ivyglen 115 kV Subtransmission Project

Valley - Ivyglen 115 kv Subtransmis		
Mr. Rolfe Preisendanz Planning Director City of Lake Elsinore 130 South Main Street Lake Elsinore, CA 92530	Mr. Michael O'Neal Chairman, Planning Commission City of Lake Elsinore 130 South Main Street Lake Elsinore, CA 92530	Mr. Robert Magee Major City of Lake Elsinore 130 South Main Street Lake Elsinore, CA 92530
Mr. Robert Brady City Manager City of Lake Elsinore 130 South Main Street Lake Elsinore, CA 92530	Mr. Hector Apodaca City Manager City of Perris 101 North "D" Street Perris, CA 92570-1998	Mr. Daryl Busch Mayor City of Perris 101 North "D" Street Perris, CA 92570-1998
Mr. Richard Belmudez Director of Development Services City of Perris 101 North "D" Street Perris, CA 92570-1998	Ms. Judy Haughney City Clerk City of Perris 101 North "D" Street Perris, CA 92570-1998	Darci Kuenzi Legislative Assistant Supervisor Marion Ashley County of Riverside 4080 Lemmon Street, 5 <sup>th</sup> Floor Riverside, CA 92501
Mr. David Stahovich Chief of Staff Supervisor Bob Buster County of Riverside 4080 Lemmon Street, 5 <sup>th</sup> Floor Riverside, CA 92501	Mr. Robert C. Johnson Planning Director County of Riverside 4080 Lemon St., 9 <sup>th</sup> Floor Riverside, CA 92502	Mr. Ron Goldman Assistant Planning Director County of Riverside 4080 Lemon St., 9 <sup>th</sup> Floor Riverside, CA 92502
Docket Clerk California Public Utilities Commission 505 Van Ness Avenue San Francisco, CA 94102	California Energy Commission Executive Director 1516 Ninth Street Sacramento, CA 95814-5512	Santa Ana Regional Water Quality Control Board Region 8 California Tower 3737 Main Street, Suite 500t Riverside, CA 92501-3348
California Department of Transportation Will Kempton, Director PO Box 942873 Sacramento, CA 94273-0001	California Department of Transportation Division of Aeronautics, MS # 40 Mary Frederick, Division of Aeronautics Acting Chief PO Box 942874 Sacramento, CA 94274-0001	Secretary of the Resources Agency Mike Chrisman, Secretary 1416 Ninth St., Suite 1311 Sacramento, CA 95814
Department of Fish and Game Headquarters Ryan Broddrick, Director 1416 Ninth Street Sacramento, CA 95814	Department of Health Services Sandra Shewry, Director 1501 Capitol Ave., Suite 6001 Sacramento, CA 94234-7320	State Water Resources Control Board Director 1001 "I" Street Sacramento, CA 95814
Air Resources Board California Air Resources Board Attn: Stationary Source 1001 "I" Street PO Box 2815 Sacramento, CA 95812	South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765-4182	California Department of Transportation District 8 464 West 4 <sup>th</sup> Street San Bernardino, CA 92401-1400
Angela K. Minkin California Public Utilities Commission 505 Van Ness Avenue San Francisco, CA94102	2	

List of Affected Property Owners (300')

14 OAKS ASSOCIATES LLC 4604 CEDROS AVE SHERMAN OAKS, CA 91403	74 CENTRAL SELF STORAGE 27403 YNEZ RD STE 218 TEMECULA, CA 92591	ABOOD NICHOLAS & KATHRYN J 4254 MOTOR AVE CULVER CITY, CA 90232
ACACIA CREDIT FUND 10-A LLC 400 E VAN BUREN ST STE 650 PHOENIX, AZ 85004	ACEVEDO JUAN M 13022 VOLUNTEER AVE NORWALK, CA 90650	AGUILAR ALONSO 45034 ALTISSIMO WAY LAKE ELSINORE, CA 92532
ALMAHMUD MOHAMMAD PO BOX 70092 LOS ANGELES, CA 90070	ANAYA SANTOS M 45013 ALTISSIMO WAY LAKE ELSINORE, CA 92532	ANDREWS VLASIOS S & STEPHEN V 29288 WHITLEY COLLINS DR ROLLING HILLS ESTATES, CA 90275
ANTON ALBERT J 2930 ANACAPA PL FULLERTON, CA 92835	ARELLANO ALEJANDRO 45022 ALTISSIMO WAY LAKE ELSINORE, CA 92532	ARTEAGA MARIO 45035 ALTISSIMO WAY LAKE ELSINORE, CA 92532
AT & SF RR 740 CARNEGIE DR SAN BERNARDINO, CA 92408	AYALA MARIA D 10441 WRANGLER WAY CORONA, CA 92883	BACHER MARK J 35030 MENIFEE RD MENIFEE, CA 92584
BACHER MARK J 40575 CAL OAK RD D-2 #290 MURRIETA, CA 92562	BANK OF NEW YORK 400 COUNTRYWIDE WAY SV 35 SIMI VALLEY, CA 93065	BARCELO ANTONIO C & ROSA 3993 CONCORDIA LN FALLBROOK, CA 92028
BLAIR CAROLYN J 6510 DALE LN ANDERSON, CA 96007	BLITZ RICHARD A & GLADYS A 28220 LINDELL RD LAKE ELSINORE, CA 92532	BLOOD DAVID G PO BOX 426 LAKE ELSINORE, CA 92531
BONNER ROBERT H & KELLY M 29122 ALLAN ST LAKE ELSINORE, CA 92532	BOULANGER MARIE B 18480 MERMACK RD LAKE ELSINORE, CA 92532	BRADSHAW DON O 29123 ALLAN ST LAKE ELSINORE, CA 92532
BRANT JACK P 18490 MERMACK RD LAKE ELSINORE, CA 92532	BROWN GEORGE O 26460 HORSETHIEF CANYON RD CORONA, CA 92883	BROWN KAREN FRANCES 28590 RED GUM RD LAKE ELSINORE, CA 92532
BROWN ROBERT 10429 WRANGLER WAY CORONA, CA 92883	BROWN WILLIAM L & SANDRA 26320 HORSETHIEF CANYON RD CORONA, CA 92883	BUTTERFIELD ESTATES HOMEOWNERS ASSN 3954 HAMPTON DR POMONA, CA 91766

BYNUM JOHN M 28245 LINDELL RD LAKE ELSINORE, CA 92532	CABELLERO MANUEL & JACOBA 28570 ROSTRATA ST LAKE ELSINORE, CA 92532	CABLE JEANETTE 10508 N RUSSELL RD MARICOPA, AZ 85239
CABRERA RAFAEL A & DOLORES R 902 E FRANCIS ST CORONA, CA 92879	CALIFORNIA PAC ANN CONF UNITED METHODIST CH PO BOX 6006 PASADENA, CA 91102	CALL EVERARD C & BETH S 1002 N BEVERLY DR BEVERLY HILLS, CA 90210
CAMARGO JOSE IGNACIO & MARIA C 28178 WELLS FARGO RD LAKE ELSINORE, CA 92532	CAMARGO JOSE J & ROSA 45026 ALTISSIMO WAY LAKE ELSINORE, CA 92532	CANDEE WILLIAM H & JOAN M 14299 TEMESCAL CANYON RD CORONA, CA 92883
CANDELARIA KEITH A & GINA R 45020 ALTISSIMO WAY LAKE ELSINORE, CA 92532	CARDENAS GREGORIO B 45040 ALTISSIMO WAY LAKE ELSINORE, CA 92532	CARDOZA RAYMOND DAVID 28260 EL TORO RD LAKE ELSINORE, CA 92532
CARLSTON MARK A & PAMELA J PO BOX 279 LAKE ELSINORE, CA 92531	CARLSTON MARK A & PAMELA J PO BOX 279 LAKE ELSINORE, CA 92531	CASTILLO ROLANDO & SHIRLEY 45009 ALTISSIMO WAY LAKE ELSINORE, CA 92532
CASTLE & COOKE LAKE ELSINORE W 10900 WILSHIRE BLVD STE 1600 LOS ANGELES, CA 90024	CASTLE & COOKE LK ELSINORE OUTLET CENTERS 10000 STOCKDALE HWY BAKERSFIELD, CA 93311	CENTEX HOMES 2280 WARDLOW CIR STE 150 CORONA, CA 92880
CHAE SIJOON 45017 ALTISSIMO WAY LAKE ELSINORE, CA 92532	CHARY CHRISTOPHER A 40575 CALIFORNIA OAKS RD STE D2 MURRIETA, CA 92562	CHENG BENJAMIN & WINIFER C PO BOX 1406 SPRING, TX 77383
CHENG ENRIQUE & TIN TIN PO BOX 1406 SPRING, TX 77383	CL PHARRIS SAND & GRAVEL INC 21852 BALEON MISSION VIEJO, CA 92691	CLIFFORD CHARLES A 5523 SECREST DR LOS ANGELES, CA 90043
COBB GEORGE 28201 WELLS FARGO RD LAKE ELSINORE, CA 92532	COFFMAN DAVID C & GLORIA A 28454 WOOD MESA CT LAKE ELSINORE, CA 92532	CORMAN COMMUNITIES INC 32823 HIGHWAY 79 SOUTH TEMECULA, CA 92592
CORONA CANYON JK INV LLC 5469 KEARNY VILLA RD STE 208 SAN DIEGO, CA 92123	CORONA LAKE 4060 E LA PALM AVE ANAHEIM, CA 92806	COUNTY INVESTMENTS LLC 291 S LA CIENEGA BLVD STE 307 BEVERLY HILLS, CA 90211

COUNTY OF RIVERSIDE 3525 14TH ST RIVERSIDE, CA 92501	COUTINO GABRIEL & YOLANDA 28100 STONEHOUSE RD LAKE ELSINORE, CA 92532	COX JIMMY E & INA M 18625 TERETICORNIS AVE LAKE ELSINORE, CA 92532
COX OTIS & C LIVING TRUST 28631 ROSTRATA ST LAKE ELSINORE, CA 92532	CREAMER LOUIS W & CATHERINE 18551 ACACIA AVE LAKE ELSINORE, CA 92530	CURIEL ANTONIO 29111 ALLAN ST LAKE ELSINORE, CA 92532
CURIEL DORA & SALVADOR 28632 ROSTRATA ST LAKE ELSINORE, CA 92532	CUTHERS TIM J & VICKI K PO BOX 3766 ORANGE, CA 92857	DACOSTA JOHN & ANTONIO JOSEPH 28164 STONEHOUSE RD LAKE ELSINORE, CA 92532
DAR INVESTMENTS	DELEO GERALD	DELEO JOSEPH JR & GERALD
1321 N KRAEMER BLVD	628 LANCER LN	646 FORD ST
ANAHEIM, CA 92806	CORONA, CA 92879	CORONA, CA 92879
DELRINCON MARIO	DELVILLAR JULIAN & PAULA	DIAZ JUAN C & ANGELA S
10405 WRANGLER WAY	45007 ALTISSIMO WAY	45024 ALTISSIMO WAY
CORONA, CA 92883	LAKE ELSINORE, CA 92532	LAKE ELSINORE, CA 92532
DIAZ ROMAN & CARMEN	DONATHAN LOIS L	DOOLEY MARK R
28375 ROSTRATA AVE	PO BOX 203	45037 ALTISSIMO WAY
LAKE ELSINORE, CA 92530	LAKE ELSINORE, CA 92531	LAKE ELSINORE, CA 92532
DRL LLC PO BOX 3000 LAKE ELSINORE, CA 92531	DUNCAN ROBERT R 28230 ROSTRATA ST LAKE ELSINORE, CA 92532	EDMONDSON R & K 1997 TRUST 581 BIRCH ST STE A LAKE ELSINORE, CA 92530
EGGLESTON MATTHEW	ELETER AHMAD M	ESQUIBEL AMBYR
28179 LINDELL RD	45028 ALTISSIMO WAY	28053 LEONA ST
LAKE ELSINORE, CA 92532	LAKE ELSINORE, CA 92532	LAKE ELSINORE, CA 92532
EVANS TRUST	EVMWD	FAESSLER ANDREW J
30199 SKIPPERS WAY DR	PO BOX 3000	45039 ALTISSIMO WAY
CANYON LAKE, CA 92587	LAKE ELSINORE, CA 92531	LAKE ELSINORE, CA 92532
FAIRFIELD RAMSGATE 5510 MOREHOUSE DR STE 200 SAN DIEGO, CA 92121	FARNAM HALEY A 32295 MISSION TRL STE R2 LAKE ELSINORE, CA 92530	FARNHAM NATHAN T & JESSICA C 29106 ALLAN ST LAKE ELSINORE, CA 92532

87

FETNER JAMES B & SHERYL L 28343 11TH ST LAKE ELSINORE, CA 92532	FLEMING TERRANCE 45012 ALTISSIMO WAY LAKE ELSINORE, CA 92532	FLOOD TIMOTHY 29138 ALLAN ST LAKE ELSINORE, CA 92532
FLORES OSCAR R 45002 EVENING STAR RD LAKE ELSINORE, CA 92532	FREDERICK & NANCY MOTT TE 11631 BLUE JAY LN GARDEN GROVE, CA 92841	GAFFEY WILLIAM T 28930 ALLAN ST LAKE ELSINORE, CA 92532
GALLARDO EULALIO & CAROLINA 28510 ROSTRATA ST LAKE ELSINORE, CA 92532	GAMEZ STEVE 107 BODKIN AVE LAKE ELSINORE, CA 92530	GAMST THEODORE L & MARILYN S 2118 HIGHCREST CT FULLERTON, CA 92831
GARCIA DAVID & CHARLENE PO BOX 477 LAKE ELSINORE, CA 92531	GARCIA DONNA R 18490 MERMACK RD LAKE ELSINORE, CA 92532	GARCIA IVANA Y 45041 ALTISSIMO WAY LAKE ELSINORE, CA 92532
GARCIA JAIME L 45003 ALTISSIMO WAY LAKE ELSINORE, CA 92532	GERBER GRANT ARDEN & SYLVIA ANNE 28150 EL TORO RD LAKE ELSINORE, CA 92532	GLEN EDEN CORP 25999 GLEN EDEN RD CORONA, CA 92883
GOMEZ ALFRED F & MARIA C 28011 LEONA ST LAKE ELSINORE, CA 92532	GOMEZ ALFRED F & MARIA C 28011 LEONA ST LAKE ELSINORE, CA 92532	GONZALEZ ARNULFO 45035 CARLA CT LAKE ELSINORE, CA 92532
GONZALEZ DAVID G & LUCILA T 28946 ALLAN ST LAKE ELSINORE, CA 92532	GONZALEZ FLORINA H 28392 WOOD MESA CT LAKE ELSINORE, CA 92532	GRITTON DIANE 28670 CARMEL RD SUN CITY, CA 92586
GTE CALIF INC PO BOX 152206 IRVING, TX 75015	GUTIERREZ CHRISTIAN 45015 ALTISSIMO WAY LAKE ELSINORE, CA 92532	HANMER WILLIAM G PO BOX 2407 CORONA, CA 92878
HARMATZ JERRY & NADINE 106 S MAIN ST LAKE ELSINORE, CA 92530	HELLER GARRETT J & MENDIE J 20796 CASHEW ST WILDOMAR, CA 92595	HENSON VERNON D & ELIZABETH C 28211 LEONA ST LAKE ELSINORE, CA 92532
HERNANDEZ PINEDA JUVENAL & BLANCA 10489 WRANGLER WAY CORONA, CA 92883	HERRERA RICARDO 45042 ALTISSIMO WAY LAKE ELSINORE, CA 92532	HINOJOSA EDUARDO E & GLADYS G 28962 ALLAN ST LAKE ELSINORE, CA 92532

HO BAU N & MYY V 24982 SHAVER LAKE CIR LAKE FOREST, CA 92630	HOBSON DONALD L & RUTH PO BOX 893 LAKE ELSINORE, CA 92531	HONG SON T 7251 RESEDA BLVD RESEDA, CA 91335
HORSETHIEF CANYON RANCH MAINTENANCE CORP 19 CORPORATE PLAZA DR NEWPORT BEACH, CA 92660	HORSETHIEF CANYON RANCH MAINTENANCE CORP 22659 OLD CANAL RD YORBA LINDA, CA 92887	HOUSTON DAWN C & MARK Y 28627 ROSTRATA ST LAKE ELSINORE, CA 92532
HUFFMAN RICHARD W & NADINE L 25260 BUNDY CANYON RD MENIFEE, CA 92584	HUGHES VICTOR L & MARIA D 8584 BELMONT ST CYPRESS, CA 90630	INDIAN TRUCK TRAIL DEV 37859 OXFORD DR MURRIETA, CA 92562
INDUSI 1609 N BUSH ST STE 1 SANTA ANA, CA 92701	INDUSI 21852 BALEON MISSION VIEJO, CA 92691	JUSTICE JAMES L 10114 SUNBROOK DR BEVERLY HILLS, CA 90210
KELTY JOHN ANDREW & EMILIE B 28933 ALLAN ST LAKE ELSINORE, CA 92532	KEMPA DAVID J 31301 VIA CURTIDOR WINCHESTER, CA 92596	KING THEODORE C C & LI HENG 711 CHURCH HILL RD LA HABRA HEIGHTS, CA 90631
KITCHELL ANGELINA CAROLINE 26678 HOSTETTLER RD CORONA, CA 92883	KOLIBER GEORGE J 5555 HERON POINT DR APT 501 NAPLES, FL 34108	KOSKI FAMILY TRUST 18711 TERETICORNIS AVE LAKE ELSINORE, CA 92532
KRALL DONALD PO BOX 3033 SAN CLEMENTE, CA 92674	KROUSE MARC W 45019 ALTISSIMO WAY LAKE ELSINORE, CA 92532	LABBITT LAURIE ANNE 28830 8TH ST LAKE ELSINORE, CA 92532
LACAYO JOSE & DIANA 45029 ALTISSIMO WAY LAKE ELSINORE, CA 92532	LAGRECA CLAUDIA L 26830 HOSTETTLER RD CORONA, CA 92883	LAGRONE CHARLES E & MARJORIE K 29161 ALLAN ST LAKE ELSINORE, CA 92532
LAM LONG S & MELISSA J 45031 ALTISSIMO WAY LAKE ELSINORE, CA 92532	LANG ROBERT F 28260 ROSTRATA ST LAKE ELSINORE, CA 92532	LAZARO ALONZO 28855 ROSTRATA ST LAKE ELSINORE, CA 92532
LECKEY MERNA L 15356 SILVERTHORN RD REDDING, CA 96003	LEE LAKE WATER DIST 22646 TEMESCAL CANYON RD CORONA, CA 92883	LEMBESIS PETER D 432 STONE CANYON WAY BREA, CA 92821

LEMMON JASON	LISTON ELIZABETH A	LISTON MICHAEL K
29139 ALLAN ST	21501 TEMESCAL CANYON RD	21501 TEMESCAL CANYON RD
LAKE ELSINORE, CA 92532	CORONA, CA 92883	CORONA, CA 92883
LISTON MICHAEL KEITH	LONG BILL E & RAE JEAN	LOPEZ LUPE
26760 HOSTETTLER RD	PO BOX 390654	10465 WRANGLER WAY
CORONA, CA 92883	ANZA, CA 92539	CORONA, CA 92883
LUNA SANTIAGO & ROSA	MA MARTHA GLORIA	MADRIGAL JESSE & CYNTHIA
28130 LAISTER RD	10477 WRANGLER WAY	29095 ALLAN ST
PERRIS, CA 92570	CORONA, CA 92883	LAKE ELSINORE, CA 92532
MANEECHOTE VANCHAI	MARTINEZ JOSE C	MARTINEZ JOSE R & DELMY A
18600 MERMAC RD	28859 ROSTRATA ST	18553 MERMACK RD
LAKE ELSINORE, CA 92530	LAKE ELSINORE, CA 92532	LAKE ELSINORE, CA 92532
MARTINEZ MARIANO & CECILIA 2879 HIGHWAY 74 LAKE ELSINORE, CA 92530	MARTINEZ SALVADOR & ANTOINETTE ELAINE 28230 LINDELL RD LAKE ELSINORE, CA 92532	MATTA SIMON I 11891 BEACH BLVD STANTON, CA 90680
MATTESON JILAI & ANNE EVANS 28639 ROSTRATA ST LAKE ELSINORE, CA 92532	MCCLUNG TOM P & CAMEO C 29177 ALLAN ST LAKE ELSINORE, CA 92532	MCCUTCHEON JAMES T & LILLIAN M 7732 MIDFIELD AVE LOS ANGELES, CA 90045
MCDONALD MICHAEL & DONNA B 28162 STONEHOUSE RD LAKE ELSINORE, CA 92532	MEDINA IRMA 18670 TERETICORNIS AVE LAKE ELSINORE, CA 92532	MEDINA JEREMIAS & EMMA 28060 STONEHOUSE RD LAKE ELSINORE, CA 92532
MENDOZA FELIPE & DULCE MARIA 18560 TERETICORNIS AVE LAKE ELSINORE, CA 92532	MENNE BRYAN T S 31988 10TH AVE LAGUNA BEACH, CA 92651	MITCHELL BILL W & PATRICIA ANN 2995 VAN BUREN BLVD STE A13 RIVERSIDE, CA 92503
MOLINA LUIS F & CECILIA	MOLLIE JAMES E	MOLLIE JOHN E & DOLORES T
20873 NANDINA AVE	28777 ROSTRATA ST	28777 ROSTRATA ST
PERRIS, CA 92570	LAKE ELSINORE, CA 92532	LAKE ELSINORE, CA 92532
MOLLIE KENNETH J	MORENO JOSE G & DEBBIE	MORGER JANICE M
28777 ROSTRATA ST	28310 TRELLIS LN	3325 W LINCOLN AVE
LAKE ELSINORE, CA 92532	LAKE ELSINORE, CA 92532	ANAHEIM, CA 92801

MORRIS TERRY & MARCIA A 28595 ROSTRATA ST LAKE ELSINORE, CA 92532	MORRIS TERRY R & MARCIA A PO BOX 1514 LAKE ELSINORE, CA 92531	MOTA SALVADOR R & CARMEN H 28875 10TH ST LAKE ELSINORE, CA 92532
MOTT FREDERICK & NANCY 11631 BLUE JAY LN GARDEN GROVE, CA 92841	MUAYADAZEM NAZEH 45016 ALTISSIMO WAY LAKE ELSINORE, CA 92532	MULLIKIN HAJAR T 28281 ORTEGA HWY SAN JUAN CAPISTRANO, CA 92675
MUNIZ GREGORIO 29059 ALLAN ST LAKE ELSINORE, CA 92532	NAM YANG ELECTRONICS CO LTD LA BRANCH 1359 CANTERBURY LN FULLERTON, CA 92831	NAM YANG ELECTRONICS CO LTD LA BRANCH 1359 CANTERBURY LN FULLERTON, CA 92831
NICOLSON ROBERT A & ELLEN 18556 MERMACK RD LAKE ELSINORE, CA 92532	NORTH PEAK PARTNERS 20274 CARREY RD WALNUT, CA 91789	NORTH PEAK PARTNERS 20274 CARREY RD WALNUT, CA 91789
NORTH PEAK PARTNERS 20274 CARREY RD WALNUT, CA 91789	NUGENT ANN 13005 DE PALMA RD CORONA, CA 92883	NUGENT ANN 13005 DE PALMA RD CORONA, CA 92883
ONEAL DALE 1208 W FLINT ST LAKE ELSINORE, CA 92530	ORTIZ MIGUEL & DELIA 29674 MOUNT BACHELOR WAY SUN CITY, CA 92586	OUTLAW JERRY L & KATHLEEN S PO BOX 1397 LAKE ELSINORE, CA 92531
OWENS CLEO & BETTY LOU 1044 W ONTARIO AVE CORONA, CA 92882	PABON MOISES & TITA F 28290 TRELLIS LN PERRIS, CA 92570	PACHECO ANDREW 10417 WRANGLER WAY CORONA, CA 92883
PACIFIC CLAY PRODUCTS INC 14741 LAKE ST LAKE ELSINORE, CA 92530	PACIFIC GLOBAL DEV LLC 500 SHATTO PL STE 320 LOS ANGELES, CA 90020	PAGE RAYMOND H & MARILLYN H PO BOX 457 LAKE ELSINORE, CA 92531
PENULIAR DENNIS & FLORIDA F 45033 ALTISSIMO WAY LAKE ELSINORE, CA 92532	PERALESSANCHEZ JOSE A 45011 ALTISSIMO WAY LAKE ELSINORE, CA 92532	PHARRIS GROUP PO BOX 18119 ANAHEIM, CA 92817
PHARRIS GROUP PO BOX 18119 ANAHEIM, CA 92817	PHARRIS GROUP PO BOX 18119 ANAHEIM, CA 92817	PHUNG ANH H T 45006 THALIA LN LAKE ELSINORE, CA 92532

PICUNIARY CAPITAL PO BOX 6130 CORONA, CA 92878	PINTO WALTER A & EMPERATRIZ R 17200 NEWHOPE ST NO 38 FOUNTAIN VALLEY, CA 92708	PIPKIN GLEN A & MARY H 28000 HIGHWAY 74 PERRIS, CA 92570
POWERS SUZANNE P 28392 RED GUM RD LAKE ELSINORE, CA 92532	QUINONES AMADA RIVERA 28175 WELLS FARGO RD LAKE ELSINORE, CA 92532	QUINTO DOMINADOR S & JULITA B 45031 CARLA CT LAKE ELSINORE, CA 92532
RECTOR JERRY & ELNIE 28285 EL TORO RD LAKE ELSINORE, CA 92532	RENTERIA TORIBIO CASTRO 3655 JOSEPHINE ST LYNWOOD, CA 90262	RICHARD JEFFERY PO BOX 781 ALTA LOMA, CA 91701
RIVERSIDE COUNTY TRANSPORTATION COMMISSION PO BOX 12008 RIVERSIDE, CA 92502	RODRIGUEZ MIGUEL S 10393 WRANGLER WAY CORONA, CA 92883	ROJAS ELISEO R 29075 ALLAN ST LAKE ELSINORE, CA 92532
ROJAS VIRGINIA SANCHEZ 28195 LEONA ST LAKE ELSINORE, CA 92532	ROSALES MIGUEL CEJA & PATRICIA ANN 28841 8TH ST LAKE ELSINORE, CA 92532	ROWELL HENRY M & BOBBIE J PO BOX 72214 YUMA, AZ 85365
ROYALTY DANIEL W 28645 ROSTRATA ST LAKE ELSINORE, CA 92532	RUGGLES PETER R & GLORIA J 28245 LINDELL RD LAKE ELSINORE, CA 92532	RUIZ GREGORIO & LUCIA 14733 S CATALINA AVE GARDENA, CA 90247
RUNCIE WAYNE & MARY H 28445 ROSTRATA ST LAKE ELSINORE, CA 92532	RUVALCABA MIGUEL M 29083 ALLAN ST LAKE ELSINORE, CA 92532	SALGADO ROBERTO 28165 LINDELL RD LAKE ELSINORE, CA 92532
SANCHEZ JOSE & ELIDIA 15730 ALVARADO ST LAKE ELSINORE, CA 92530	SANDOR SANDRA N 33345 BLANCHE DR LAKE ELSINORE, CA 92530	SCHWENN DONALD L & RACHEL D 2635 E OCEAN BLVD LONG BEACH, CA 90803
SCHWENN DONALD L & RACHEL D 2635 E OCEAN BLVD LONG BEACH, CA 90803	SCHWENN RACHEL D 2635 E OCEAN BLVD LONG BEACH, CA 90803	SCHWENN RACHEL D 2635 E OCEAN BLVD LONG BEACH, CA 90803
SECRETARY HOUSING & URBAN DEVOF WASH D C 2500 MICHELSON DR STE 100 IRVINE, CA 92612	SIMS CHARLES H & ANDREA 33280 HOLLISTER DR LAKE ELSINORE, CA 92530	SIMS CHARLES H & ANDREA 33280 HOLLISTER DR LAKE ELSINORE, CA 92530

SINGELYN ED J 16921 HOLLOW BARROW LAKE ELSINORE, CA 92530	SLINGERLAND JOHN B 29147 ALLAN ST LAKE ELSINORE, CA 92532	SMITH MARGARITA D 28949 ALLAN ST LAKE ELSINORE, CA 92532
SMITH TERRANCE T & VALARIE MCNEAL 28281 ROSTRATA ST LAKE ELSINORE, CA 92532	SO CAL SANDBAGS INC 12620 BOSLEY LN CORONA, CA 92883	SOLARES ORALIA 45014 ALTISSIMO WAY LAKE ELSINORE, CA 92532
SOLORZANO LEONEL & IRMA 45033 CARLA CT LAKE ELSINORE, CA 92532	SONG PETER & KYUNG JA PO BOX 1491 WILDOMAR, CA 92595	SOO HOO WILLIE L & HOO LILLIAN W 485 GIANO AVE LA PUENTE, CA 91744
SOO HOO WILLIE L & HOO LILLIAN W 485 GIANO AVE LA PUENTE, CA 91744	SORTO GUILLERMO & MARIA 45005 ALTISSIMO WAY LAKE ELSINORE, CA 92532	SOUTH PACIFIC DIST OF CHRISTIAN 4130 ADAMS ST STE A RIVERSIDE, CA 92504
SOUTHERN CALIF EDISON CO PO BOX 800 ROSEMEAD, CA 91770	STARR BRENDA SUE & RANDY 28600 ROSTRATA ST LAKE ELSINORE, CA 92532	STATE OF CALIFORNIA PO BOX 231 SAN BERNARDINO, CA 92402
STEFANOVIC VLADIMIR 3020 OLD RANCH PKWY STE 300 SEAL BEACH, CA 90740	STEVENS DANNY V & TRUDE M 28601 N FRONTAGE RD LAKE ELSINORE, CA 92532	STOLPA KENNETH W 28596 ROSTRATA ST LAKE ELSINORE, CA 92532
STOUT JEFF T 28230 EL TORO RD LAKE ELSINORE, CA 92532	SUNBELT ACQUISITIONS INC PO BOX 4120 ONTARIO, CA 91761	SYCAMORE CREEK MARKETPLACE 3 IMPERIAL PROMENADE STE 550 SANTA ANA, CA 92707
SYCAMORE CREEK MARKETPLACE 3 IMPERIAL PROMENADE STE 550 SANTA ANA, CA 92707	T T GROUP INC 606 N 1ST ST SAN JOSE, CA 95112	TARR PAUL GREGORY & CARMEN M DACOSTA 28164 STONEHOUSE RD LAKE ELSINORE, CA 92532
TEMECULA VALLEY 391 N MAIN ST STE 301 CORONA, CA 92880	TEMECULA VALLEY 391 N MAIN ST STE 301 CORONA, CA 92880	TERLE UBALDA L 28869 ROSTRATA ST LAKE ELSINORE, CA 92532
THOMPSON REX W & MARTHA L 28350 ROSTRATA ST LAKE ELSINORE, CA 92532	THOMPSON WILBURN L & MARY V 28343 11TH ST LAKE ELSINORE, CA 92532	TOBIAS JEFFREY SCOTT 18800 BOSTRATA AVE LAKE ELSINORE, CA 92532

TOWNSEND LARRY W	TROXLER RONALD & PAMELA	TRUONG KEITH
28185 LINDELL RD	18563 BOURBON ST	45001 ALTISSIMO WAY
LAKE ELSINORE, CA 92532	LAKE ELSINORE, CA 92532	LAKE ELSINORE, CA 92532
TWAITE REES E & PEGGY L	VALENCIA JORGE & MARIA	VALLERY LENORA H
28238 LEONA ST	29101 ALLAN ST	342 BELTWOOD PL
LAKE ELSINORE, CA 92532	LAKE ELSINORE, CA 92532	DESOTO, TX 75115
VARGAS DAVID & JILOMENA	VILLEGAS JOSE L	VYAS JAYANT
28377 EL TORO RD	25205 LINDELL RD	45038 ALTISSIMO WAY
LAKE ELSINORE, CA 92532	LAKE ELSINORE, CA 92532	LAKE ELSINORE, CA 92532
WALKER AUDREY D	WESSELING JERRY	WHITE ROCK ACQUISITION CO
10501 WRANGLER WAY	28971 ALLAN ST	114 PACIFICA STE 245
CORONA, CA 92883	LAKE ELSINORE, CA 92532	IRVINE, CA 92618
WILHELM FAMILY TRUST	WILLIAMS EDITH	WILLIAMS PHILIP R
35091 PASHAL PL	6396 SAN ANDRES AVE	28195 WELLS FARGO RD
WILDOMAR, CA 92595	CYPRESS, CA 90630	LAKE ELSINORE, CA 92532
WILLIAMS ROBERT G	WITT KELLEY E	WOODY AARON & JILL
PO BOX 519	297 W MAIN ST	28310 ROSTRATA ST
LAKE ELSINORE, CA 92531	BRAWLEY, CA 92227	LAKE ELSINORE, CA 92532
YOUNG RONALD D & NERISA M L 1810 PAVAS CT ROWLAND HEIGHTS, CA 91748	ZARASATE MARGERIE C 45032 ALTISSIMO WAY LAKE ELSINORE, CA 92532	ZARASATE MYLA C 45030 ALTISSIMO WAY LAKE ELSINORE, CA 92532
ZAVALA CONNIE VIRGINIA PO BOX 6371 NORCO, CA 92860	ZIEGLER JEFFREY A & V J TRUST 26933 CHAMPAGNE BLVD ESCONDIDO, CA 92026	HARNS JAMES K & CHRISTY L 314 E 3RD ST PERRIS, CA 92570
HOLLAUS LEOPOLDINE 27805 HIGHWAY 74 PERRIS, CA 92570	SOUTHERN CALIFORNIA EDISON CO PO BOX 800 ROSEMEAD, CA 91770	HOLLAUS LEOPOLDINE 27805 STATE HIGHWAY 74 PERRIS, CA 92570
EVMWD PO BOX 3000 LAKE ELSINORE, CA 92531	DITTMER MARK A 27720 HIGHWAY 74 PERRIS, CA 92570	ANDREWS GEORGE V & EKATERINI A 3881 MEADOW PARK LN TORRANCE, CA 90505

ANDREWS GEORGE V & EKATERINI G 18202 PRAIRIE AVE TORRANCE, CA 90504	HARNS J KIRK 314 E 3RD ST PERRIS, CA 92570	BENTLY FOUNDATION 28736 E WORCESTER RD SUN CITY, CA 92586
HARNS J KIRK 314 E 3RD ST PERRIS, CA 92570	EWING MORRIS M 928 N GAFFEY PL SAN PEDRO, CA 90731	LAWSON KIMBER L 27877 HIGHWAY 74 PERRIS, CA 92570
JOHNSON PATRICIA K 27900 HIGHWAY 74 PERRIS, CA 92570	STRONG ALBERT 20280 OAK ST PERRIS, CA 92570	MCMULLEN TINA L 27820 HAMMACK AVE PERRIS, CA 92570
CHAIDEZ MAGDALENO E & EMMA E 27736 HAMMACK AVE PERRIS, CA 92570	PALMER ROBERT & MIRIAM C PO BOX 967 PERRIS, CA 92572	GRIFFIN FE P 33033 FAIRVIEW ST LAKE ELSINORE, CA 92530
DAUM JEAN & NICOLE YVONNE 27751 HAMMACK AVE PERRIS, CA 92570	CHATWIN CURTIS & APRIL 20291 OAK ST PERRIS, CA 92570	GILLAND LAMAR RUAL & KITTY ELLEN 20311 OAK ST PERRIS, CA 92570
THATCHER RICHARD A 8421 HEIL AVE WESTMINSTER, CA 92683	GONZALES JAMES A & ESTELA L 22210 VILLAGE WAY DR CANYON LAKE, CA 92587	VIRAMONTES GUILLERMO 28408 ONTEVEDRA DR RNCH PALOS VERDES, CA 90274
GARCIA ALFONSO & GRISELDA 315 E ASH AVE FULLERTON, CA 92832	BARTA DOLORES 27670 HAMMACK AVE PERRIS, CA 92570	RIVERSIDE COUNTY TRANSPORTATION COMMISSION PO BOX 12008 RIVERSIDE, CA 92502
CONTRERAS MICHAEL 27610 HIGHWAY 74 PERRIS, CA 92570	SALINE JOSEPH P JR 5545 CANOGA AVE APT 306 WOODLAND HILLS, CA 91367	HEARTZ RONALD R & JOHNA 20675 LARI MARK ST PERRIS, CA 92570
STRUNK WILLIAM A 27867 WASSON CANYON RD PERRIS, CA 92570	MARRELLI JOHN C 201 LOMAS SANTA FE DR STE 250 SOLANA BEACH, CA 92075	ANDREWS STEPHEN V & HELEN S 29288 WHITLEY COLLINS DR ROLLING HILLS ESTATES, CA 90275
MARRELLI JOHN C 201 LOMAS SANTA FE DR STE 250 SOLANA BEACH, CA 92075	ALTEMUS ARMIN J PO BOX 189003-306 CORONADO, CA 92178	RIVERSIDE COUNTY TRANSPORTATION COMMISSION 3133 MISSION INN AVE RIVERSIDE, CA 92507

······		
JEFFSTRA INC 8306 WILSHIRE BLVD PH 10 BEVERLY HILLS, CA 90211	KIM WOON JA 20935 BERYL ST PERRIS, CA 92570	FAY THOMAS E 27580 HIGHWAY 74 PERRIS, CA 92570
YTURRALDE KENNETH L & CATHY L 22177 DOBIE PL CANYON LAKE, CA 92587	INDA PRUDENCIO H 15012 VISTA VW LAKE ELSINORE, CA 92530	KRAMER FRED G & TAMMY M 3378 COUNTRY RD FALLBROOK, CA 92028
HENDRICK DAYNIS 27560 PEACH ST PERRIS, CA 92570	ZURITA ALEJANDRO J 27333 GREENWALD AVE PERRIS, CA 92570	MILLER WILLIAM B & TERYN K 27323 HIGHWAY 74 PERRIS, CA 92570
WIDAWER MARTHA 29859 LONGHORN DR CANYON LAKE, CA 92587	LINDEMUTH HENRY A & JESSICA 27333 HIGHWAY 74 PERRIS, CA 92570	ARCE FRED A & JOSIE S 27471 HIGHWAY 74 PERRIS, CA 92570
FURR DORSEY L & JEANNE E 27381 HIGHWAY 74 PERRIS, CA 92570	CASWELL MARJORIE J 7956 BEARDSLEY AVE NW GIG HARBOR, WA 98335	MARTINEZ JUAN & GENOVEVA 20235 BARNARD AVE WALNUT, CA 91789
LOWERY JOANN PO BOX 687 LAKE ELSINORE, CA 92531	BINIASZ LAVERNE M 140 MAPLE DR SACRAMENTO, CA 95823	PANTOJA LUZ PO BOX 913 LAKE ELSINORE, CA 92531
RIVERSIDE COUNTY TRANSPORTATION COMMISSION PO BOX 12008 RIVERSIDE, CA 92502	HUFF SELETHA G 3530 PECAN POINT DR SUGAR LAND, TX 77478	MARTIN CHONG SOON PO BOX 50074 PASADENA, CA 91115
RIVERSIDE CNTY TRANSPORTATION 3133 MISSION INN AVE RIVERSIDE, CA 92507	PHILLIPS MARTHA LOUISE 1939 WESTRIDGE RD LOS ANGELES, CA 90049	OCONNELL JOHN P & KATHLEEN D 32158 CAMINO CAPISTRANO A108 SAN JUAN CAPISTRANO, CA
BONNER LILLIE M 27020 HIGHWAY 74 PERRIS, CA 92570	MARTIN CHONG SOON PO BOX 50074 PASADENA, CA 91115	HUFF SELETHA G 3530 PECAN POINT DR SUGAR LAND, TX 77478
MARRELLI JOHN C 770 E SHAW AVE STE 302 FRESNO, CA 93710	BONNER LILLIE M 27020 HIGHWAY 74 PERRIS, CA 92570	HOA DAO ANH 27080 STATE HIGHWAY 74 PERRIS, CA 92570

OCONNELL JOHN P & KATHLEEN D 32158 CAMINO CAPISTRANO A108 SAN JUAN CAPISTRANO, CA	HARNS JAMES K & CHRISTY L 22420 SKYLINE DR YORBA LINDA, CA 92887	MENDEZ CARMEN R 26960 PEACH ST PERRIS, CA 92570
NEVAREZ SANTIAGO MONTENEGRO 26835 HIGHWAY 74 PERRIS, CA 92570	SCHAUL PAUL & SUSAN 21220 MAZIE AVE PERRIS, CA 92570	STEVENS DAVE 26985 HIGHWAY 74 PERRIS, CA 92570
RIVERSIDE CNTY TRANSPORTATION 3133 MISSION INN AVE RIVERSIDE, CA 92507	VAN VICTOR 10391 BONNIE DR GARDEN GROVE, CA 92843	CISNEROS SERGIO F & OLGA 40756 LA COLIMA RD TEMECULA, CA 92591
GARCIA JOSE A & MARIA 26855 HIGHWAY 74 PERRIS, CA 92570	ESPINOZA JOSE LUIS & ALICIA 15326 LA PALMA WAY MORENO VALLEY, CA 92555	HANEY STEVE & KATHERINE 8662 LOWMEAD DR HUNTINGTON BEACH, CA 92646
CISNEROS SERGIO F & OLGA 40756 LA COLIMA RD TEMECULA, CA 92591	STATUM RONALD L & MARILYN V 7916 E SAFFRON ST ANAHEIM, CA 92808	KEIL DIANE MARIE 29030 VACATION DR CANYON LAKE, CA 92587
PHAM KIM 26745 HIGHWAY 74 PERRIS, CA 92570	EVANS THEODORE & ESTHER 26650 HIGHWAY 74 PERRIS, CA 92570	HOSP FRANZ P 4628 ALTA CANYADA RD LA CANADA, CA 91011
DOMANN JAMES E & CYNTHIA R 21588 APPALOOSA CT CANYON LAKE, CA 92587	LEE CHANG B & HAE YEONG 2501 REATA PL DIAMOND BAR, CA 91765	RIVERSIDE CNTY TRANSPORTATION 3133 MISSION INN AVE RIVERSIDE, CA 92507
KRAMER JOHN H PO BOX 891552 TEMECULA, CA 92589	FONTENOT FREEMAN A & ISABELL C 410 N BOWEN AVE COMPTON, CA 90221	LEE CHANG B & HAE YEONG 2501 REATA PL DIAMOND BAR, CA 91765
JAMES KENNETH PAUL 1126 N GRAND AVE STE A COVINA, CA 91724	GIVENS WILLIE CHARLES & GRACE MAE 27105 JARVIS ST PERRIS, CA 92570	REGAL DEV 96 CORPORATE PARK STE 200 IRVINE, CA 92606
GRITTON NORM & LYNN 27245 HIGHWAY 74 PERRIS, CA 92570	CHAVEZ ODILON 26689 SPRING ST PERRIS, CA 92570	NUNEZ JOSE & MARIA 26420 ROBERT ST PERRIS, CA 92570

DOBRY TY T 2620 W BALL RD APT 102 ANAHEIM, CA 92804	REGAL DEV 96 CORPORATE PARK STE 200 IRVINE, CA 92606	SOUTHERN CALIFORNIA EDISON CO PO BOX 800 ROSEMEAD, CA 91770
RIVERSIDE CNTY TRANSPORTATION 3133 MISSION INN AVE RIVERSIDE, CA 92507	RIVERSIDE COUNTY TRANSPORTATION COMMISSION PO BOX 12008 RIVERSIDE, CA 92502	ROBERTS BRET S 7150 S STATE ST MIDVALE, UT 84047
SOUTHERN CALIFORNIA EDISON CO PO BOX 800 ROSEMEAD, CA 91770	GERSCH JOSEPH L 2004 TRUST 9780 KIWI MEADOW LN ESCONDIDO, CA 92026	SOUTHERN CALIFORNIA EDISON CO PO BOX 800 ROSEMEAD, CA 91770
RIVERSIDE COUNTY TRANSPORTATION COMMISSION PO BOX 12008 RIVERSIDE, CA 92502	KIM MICHAEL & ANN 21630 FESTUS CIR PERRIS, CA 92570	SHETH DILIP & MALA D 1905 VIA CORONEL PALOS VERDES ESTATES, CA 90274
MARRELLI JOHN C 770 E SHAW AVE STE 302 FRESNO, CA 93710	GARCIA JORGE & ANTONIA 2733 WEBSTER AVE LONG BEACH, CA 90810	JAMES KENNETH PAUL 1126 N GRAND AVE STE A COVINA, CA 91724
NGUYEN LIEN 21286 CYPRESS AVE PERRIS, CA 92570	ESPARZA ROBERTO S & ELENA G 26020 HIGHWAY 74 PERRIS, CA 92570	

List of Interested Parties

Valley-Ivyglen Interested Parties

Barbara Wilder Save Southwest Riverside County 28560 Via Santa Rosa Temecula,CA 92590	Carl Johnson 30500 Caliente Place Canyon Lake,CA 92587	Catherine Barrett-Fisher Citizens Alliance for Riverside's Economy and Environment 24871 Appian Way Murrieta,CA 92562
Chuck Shamblin 14984 Via Carabia Lake Elsinore,CA 92530	David Lovingier Lake Elsinore Unified School District 545 Chaney St. Lake Elsinore,CA 92530	Edith Stafford 29700 Hursh St. Lake Elsinore,CA 92530 5075
Garry Grant Riverside County Unified Communities 27068 Jarvis Street Perris,CA 92570	Gene Frick Friends of the Forest, Trabuco District 17205 Monterey Rd. Lake Elsiinore,CA 92530	Jack Burdy Elsinore Valley Municipal Water District 17807 Hayes Avenue Lake Elsinore,CA 92530
Ken Cox Monument Ranch 187 Monument Parkway Perris,CA 92548	Mark Macarro Pechanga Band of Luiseno Indians P.O. Box 1477 Temecula,CA 92593	Pardee Homes San Diego Regional Office 12626 High Bluff Drive, Ste. 100 San Diego,CA 92130
Bob Guillians 39770 Roripangh Road Temecula,CA 92589	Carol Nielsen 30275 Palm Drive Lake Elsinore,CA 92532	Edith Stafford 29700 Hursh St. Lake Elsinore,CA 92530 5075
Horsethief Canyon Homeowners Association 13289 Mountain Rd. LAKE ELSINORE,CA 92530	LESSER ROBERT L 27785 EL TORO RD LAKE ELSINORE,CA 92532	Linda Ridenour 3368 Brand Street Lake Elsinore,CA 92530
Liston Pete 21501 TEMESCAL CANYON RD CORONA,CA 92883	Rolfe Preisendanz Community Development, Lake Elsinore 130 S. Main St. Lake Elsinore,CA 92530	Bob Brady City of Lake Elsinore 130 S. Main St. Lake Elsinore, CA,CA 92530
Dave Petersen Butsko Utility Design, Inc. 26835 Jefferson Avenue Murrieta,CA 92562	Paul Freandsen Riverside County Regional Park and Open-Space District 4600 Crestmore Road Riverside,CA 92509	

## APPENDIX F

# Field Management Plan

ł

# FIELD MANAGEMENT PLAN

# VALLEY - IVYGLEN 115 kV SUBTRANSMISSION PROJECT

## TABLE OF CONTENTS

I.	Executive Summary
II.	Background Regarding EMF And Public Health Research On EMF6
III.	Application Of the CPUC's No-Cost And Low-Cost EMF Policy To This Project
IV.	Project Description
V.	Evaluation of no-cost and low-cost magnetic field reduction measures
VI. mea	Final recommendations for implementing no-cost and low-cost magnetic field reduction sures
VII. cone	Appendix A: two-dimentional model assumptions and year 2009 forecasted loading ditions
VIII	. Appendix B: Magnetic Field Models
A li	Magnetic field model for the proposed single-circuit overhead 115 kV subtransmission ne design. This proposed design is applicable for Segments C-1 through W-8
B ទា	Appendix B: Magnetic field model for the proposed double-circuit overhead 115 kV abtransmission line design. This proposed design is applicable for Segment W-10
C st	Appendix B: Magnetic field model for the proposed single-circuit overhead 115 kV lbtransmission line design along the existing 500 kV ROW (Segment E-1)

## LIST OF TABLES

Table 1. Preferred Overhead 115 kV Subtransmission Line Designs with Most Effective         Magnetic Field Reduction Options Incorporated	16
Table 2. No-cost and Low-cost Magnetic Field Reduction Measures Along the Proposed         Subtransmission Line Route Segments	23
Table 3. Year 2009 Forecasted Loading Conditions:	28

## LIST OF FIGURES

Figure 1. Proposed Subtransmission Line Route in Nine Segments	15
Figure 2. Proposed 115 kV Single-Circuit Design	17

Figure 3. Magnetic Fields for 115 kV Single-Circuit Design Segments	. 18
Figure 4. Proposed 115 kV Double-Circuit Design	. 19
Figure 5. A Design Comparison of Magnetic Field Levels for Segment E-1	. 20
Figure 6. A Design Comparison of Magnetic Field Levels for Double-Circuit Segment W-10.	. 21
Figure 7. Proposed 115 kV Phasing for Segment E-1	. 26
Figure 8. Proposed 115 kV Phasing for Double-Circuit Design	. 27

#### I. EXECUTIVE SUMMARY

This document, Appendix F, is Southern California Edison Company's (SCE) Field Management Plan (FMP) for the Proposed Valley-Ivyglen 115 kilovolt (kV) Subtransmission Project (Proposed Project). SCE proposes to construct, operate, and maintain a new 115 kV subtransmission line (Proposed Subtransmission Line) to connect the existing SCE Valley and Ivyglen substations. The Proposed Project also includes constructing limited improvements at both substations to accommodate the Proposed Subtransmission Line, installation of a telecommunications line, transfer of distribution facilities, and stockpiling and/or disposal of old electrical distribution line poles.

The Proposed Project is needed to maintain safe and reliable electrical service to SCE's customers and to meet the forecasted demand for electricity in the southwestern area of Riverside County, the northern portion of the City of Lake Elsinore, and the community of Glen Ivy Hot Springs.

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 measures for this project, and SCE's proposed plan to apply these measures 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 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 measures that are incorporated into the design of the Proposed Project are:

- Using taller poles;
- Using a triangular type pole-head configuration for single-circuit segments and a double-circuit pole-head configuration for double-circuit segment; and

• Phasing the Proposed Subtransmission Line with respect to the adjacent existing transmission and subtransmission lines.

SCE's plan for applying the above no-cost and low-cost magnetic field reduction measures uniformly and equitably for the entire Proposed Subtransmission Line route 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.

<sup>1</sup> SCE filed the <u>EMF Design Guidelines</u> with the CPUC on July 26, 2006.

## II. <u>BACKGROUND REGARDING EMF AND PUBLIC HEALTH RESEARCH ON</u> <u>EMF</u>

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>.

 $<sup>\</sup>frac{2}{2}$  In U.S., it is 60 Hertz (Hz).

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

<sup>&</sup>lt;u>A 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.</u>

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

<sup>6</sup> California Department of Health Services, <u>An Evaluation of the Possible Risks from Electric and Magnetic Fields from Power Lines, Internal Wiring, Electrical Occupations, and Appliances</u>, June 2002.

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 lowfrequency (ELF) electric and magnetic fields, IARCPress, 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."10

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:

<sup>&</sup>lt;u>8</u> National Institute of Environmental Health Sciences, <u>NIEHS Report on Health Effects from Exposures to</u> <u>Power-Frequency Electric and Magnetic Fields</u>, 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, <u>NRPB Advisory Group on Non-ionizing Radiation Power Frequency Electromagnetic Fields and the Risk of Cancer</u>, 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. <u>APPLICATION OF THE CPUC'S NO-COST AND LOW-COST EMF POLICY TO</u> <u>THIS PROJECT</u>

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

14 *ibid.*, p. 332 - 334

<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

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.

<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]..."18

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

18 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>

- The CPUC provided further policy direction in Decision 06-01-042, stating 3. 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.
- <sup>19</sup> CPUC Decision 93-11-013, § 3.3.2, p.10.
- 20 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, operate, and maintain a new 115 kV subtransmission line to connect the existing SCE Valley and Ivyglen substations (Proposed Project). The Proposed Project also includes constructing improvements at the Valley and Ivyglen substations to accommodate the Proposed Subtransmission Line, installation of a telecommunications line, transfer of distribution facilities, and stockpiling and/or disposal of old electrical distribution line poles. The Proposed Subtransmission Line would be approximately 25 miles long. Valley Substation is located in unincorporated Riverside County, east of the incorporated City of Perris, at the southwest corner of State Highway 74 East and Menifee Road. Ivyglen Substation is

21 CPUC Decision 06-01-042, p. 11

located in unincorporated Riverside County, on the south side of Temescal Canyon Road between Maitri Road and Interstate 15 Freeway.

The total cost of the Proposed Project, excluding real estate and telecommunications costs, is approximately \$21.3 million. Four percent of the Proposed Project cost is \$852 thousand.

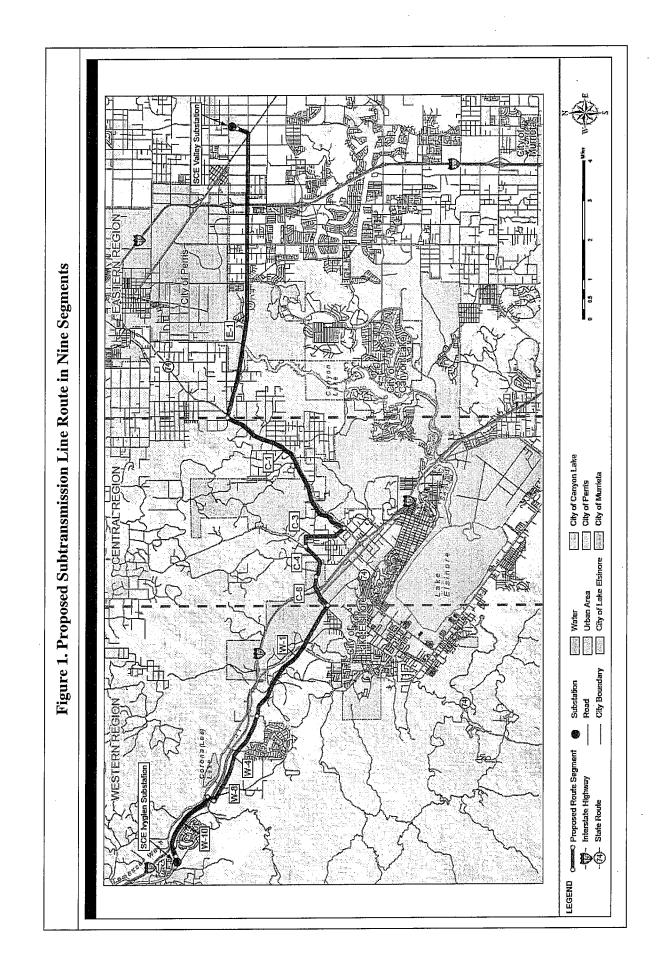
SCE engineers added magnetic field reduction measures early in the design phase for this project. The total project cost, therefore, includes low-cost magnetic field reduction measures in the proposed designs.

## Proposed Subtransmission Line Route for the Proposed Subtransmission Line:

SCE's Proposed Subtransmission Line route consists of nine line segments. Route segments comprising the Proposed Subtransmission Line are summarized below and shown on Figure 1:

- Segment E-1: Exits the Valley Substation from the south and runs approximately 7.5 miles west along the north side of the existing 500 kV transmission line right-of-way (ROW), across the Interstate 215 Freeway, until it reaches Highway 74.
- Segment C-1: Proceeds southwest along the northwest side of Highway 74, from the existing 500 kV ROW to Conard Avenue.
- Segment C-3: From Highway 74, travels northwest on Conard Avenue; north on Rostrata Avenue; west on Mermack Avenue; north on Stonehouse Road; west on a dirt road and existing 12 kV distribution line to El Toro Road.
- Segment C-4: Follows El Toro Road for approximately 1 mile; turns west and runs approximately 0.5 mile along the north side of Nichols Road.
- Segment C-6: Continues west near Nichols Road; crosses the I-15 Freeway; and back onto Nichols Road for approximately 1 mile to the existing 33 kV line ROW.

- Segment W-1: Follows an existing 33 kV line ROW for approximately 4 miles to Hostettler Road.
- Segment W-4: From the intersection of Hostettler Road and Desperado Drive, follows the south side of the I-15 Freeway northwest along an existing 33 kV line to an existing 12 kV line, southeast of Indian Truck Trail.
- Segment W-8: Crosses over the I-15 Freeway a short distance southeast of Indian Truck Trail, near an existing 12 kV line crossing.
- Segment W-10: From the crossing over the I-15 Freeway southeast of Indian Truck Trail; continues on the north side of the I-15 Freeway between the I-15. and Temescal Canyon Road, toward the I-15 Freeway and Temescal Canyon Road overpass and into the Ivyglen Substation.



Currently, there are no schools along the Proposed Subtransmission Line route as shown on Figure 1 above.

## V. EVALUATION OF NO-COST AND LOW-COST MAGNETIC FIELD REDUCTION MEASURES

The following magnetic field reduction methods are applicable for an overhead subtransmission line design such as SCE's Proposed Subtransmission Line:

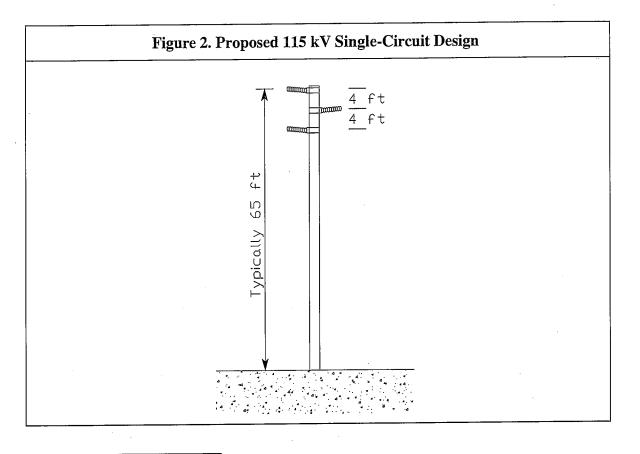
- 1. Selecting taller poles;
- 2. Selecting pole-head configurations with less phase-to-phase distance and/or circuit-to-circuit distance;
- Phasing proposed 115 kV circuits with respect to the adjacent transmission or subtransmission line(s).

After ten years of evaluating and implementing no-cost and low-cost magnetic field reduction measures for subtransmission line designs, SCE established preferred overhead 66 kV and 115 kV subtransmission line designs in 2004. These preferred designs incorporate the most effective no-cost and low-cost magnetic field reduction measures (such as pole-head configurations and taller poles). For overhead 115 kV subtransmission lines, SCE's preferred designs<sup>22</sup> are as follows:

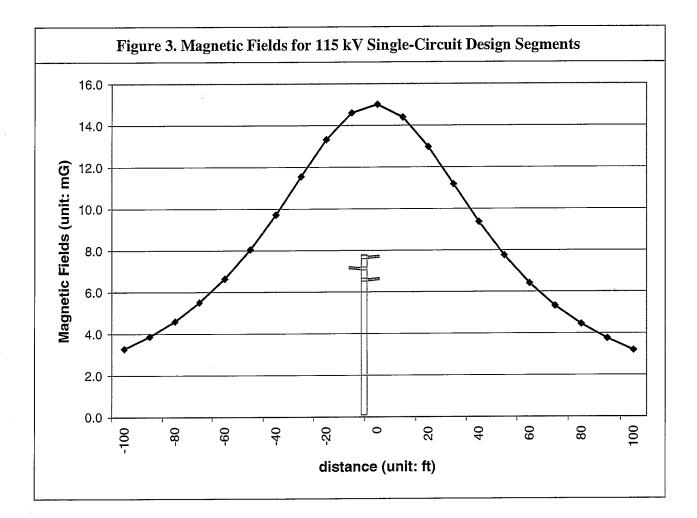
Table 1. Preferred Overhead 115 kV Subtransmission Line Designs with MostEffective Magnetic Field Reduction Options Incorporated								
115 kV Overhead Construction								
	Single Circuit Design	Double Circuit Design						
Base Pole Height	70 feet	75 feet						
Base Pole-head Configuration	"Delta" or equivalent	"Double-Circuit"						
Minimum Clearance	. 35 feet	35 feet						

<sup>&</sup>lt;sup>22</sup> The base pole height of the "preferred design" includes the buried portion of the pole (typically 9 to 10 feet below the ground). Exceptions to the "preferred design" are recommended by the primary designer based on engineering & safety requirements.

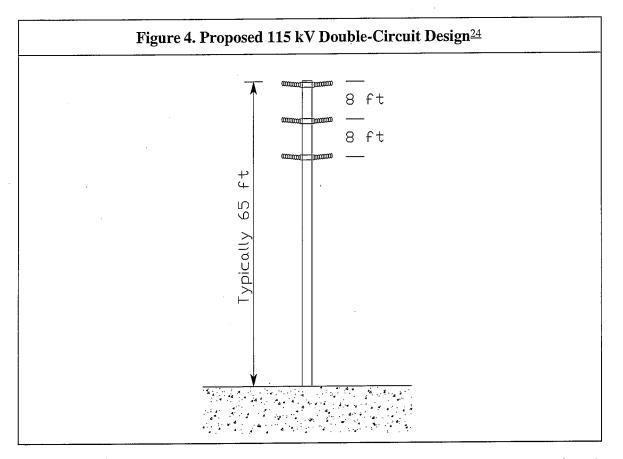
The typical proposed overhead design for the single-circuit portions of the Proposed Subtransmission Line (single-circuit design) with no-cost and low-cost magnetic field reduction measures is shown on Figure 2. This design meets and exceeds<sup>23</sup> the preferred single-circuit design as listed on Table 1. This is the proposed design for Segments E-1 through W-8. A twodimensional magnetic field model of the proposed single-circuit portions of the Proposed Subtransmission Line is shown on Figure 3. The model is based upon the forecasted peak loading conditions for 2009 (see §VII-Appendix A for more detailed information about the calculation assumptions and loading conditions). Up to 100 foot tall poles may be needed in areas where the Proposed Subtransmission Line crosses the I-15, I-215 Freeways, or major streets.



<sup>23</sup> The proposed pole height is about 5 feet taller than the "preferred" 115 kV overhead design. All conductors can be placed vertically (i.e. all insulators on the one side of pole) in areas where the Proposed Subtransmission Line would cross a freeway or making turns with a significant angle. A shorter pole would be used where the proposed line would cross underneath the existing 500 kV transmission line.



The typical proposed overhead design for the double-circuit portion of the Proposed Subtransmission Line (double-circuit design) is shown on Figure 4 below. The double-circuit design is the proposed design for Segment W-10, near the existing Ivyglen Substation. This design also meets the preferred double-circuit design as listed on Table 1. The proposed pole is typically 65 feet tall (above the ground) in areas where the Proposed Subtransmission Line would be paired with the existing Valley-Elsinore-Ivyglen 115 kV subtransmission line on the proposed double-circuit poles. Up to 100 foot tall poles may be needed in areas where the Proposed Subtransmission Line crosses the I-15 Freeway or major streets.



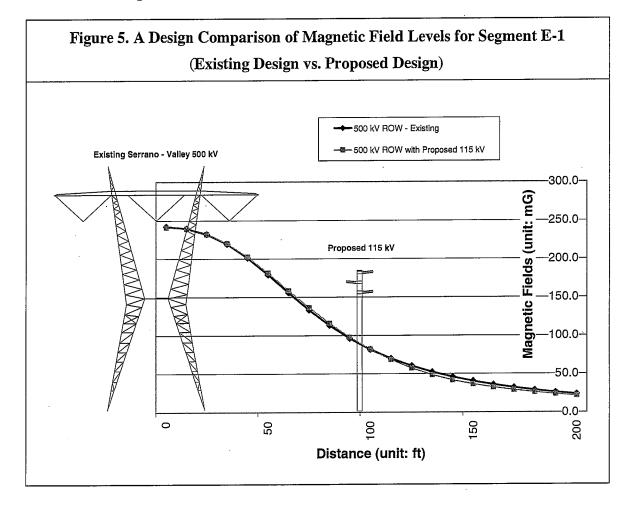
Both the proposed single-circuit and double-circuit designs<sup>25</sup> meet SCE's preferred double-circuit designs as listed on Table 1. These designs would be uniformly and equitably applied to the entire Proposed Subtransmission Line route (i.e. no-cost and low-cost magnetic field reduction measures can be applied to the entire route); therefore, the proposed overhead designs for the Proposed Subtransmission Line incorporate no-cost and low-cost magnetic field reduction measures.

The proposed overhead designs for the Proposed Subtransmission Line can further reduce magnetic field levels by incorporating phasing options relative to the adjacent existing

 $<sup>\</sup>frac{24}{24}$  The phase-to-phase spacing can be up to 11 feet for dead-end poles.

<sup>25</sup> Depending upon locations, the proposed poles would be either light duty steel (LDS) or tubular steel pole (TSP) designs.

transmission and subtransmission lines. For Segment E-1, the Proposed Subtransmission Line would parallel the existing Serrano - Valley 500 kV transmission line. Thus, the Proposed Subtransmission Line can be phased, with respect to the existing 500 kV transmission line, to reduce the magnetic field level along the north side edge of the 500 kV transmission ROW.<sup>26</sup> Figure 5 shows a comparison between the magnetic field levels of the existing design (i.e. without the Proposed Subtransmission Line) vs. the proposed design (i.e. once the Proposed Subtransmission Line is operational) along the existing 500 kV ROW. Because of SCE's proposed low-cost and no-cost magnetic field reduction measures, there is no significant difference in magnetic field levels between the existing and the proposed designs.



<sup>&</sup>lt;sup>26</sup> The phasing has less than significant magnetic field reductions along the south side edge of ROW where there are existing subtransmission lines.

For Segment W-10, the Proposed Subtransmission Line would be placed on the same poles with the existing Valley-Elsinore-Ivyglen 115 kV subtransmission line. Thus, the Proposed Subtransmission Line can be phased to further reduce magnetic field levels. Figure 6 shows the Proposed Subtransmission Line with the existing 115 kV subtransmission line on the proposed double-circuit poles with the additional phasing option incorporated.

As Figure 6 illustrates, Segment W-10 of the Proposed Subtransmission Line would cause an increase in magnetic field levels due to expected heavier currents on the Proposed Subtransmission Line. However, this increase would have been much greater if no-cost and lowcost magnetic field reduction measures were not added in to the proposed double-circuit design.

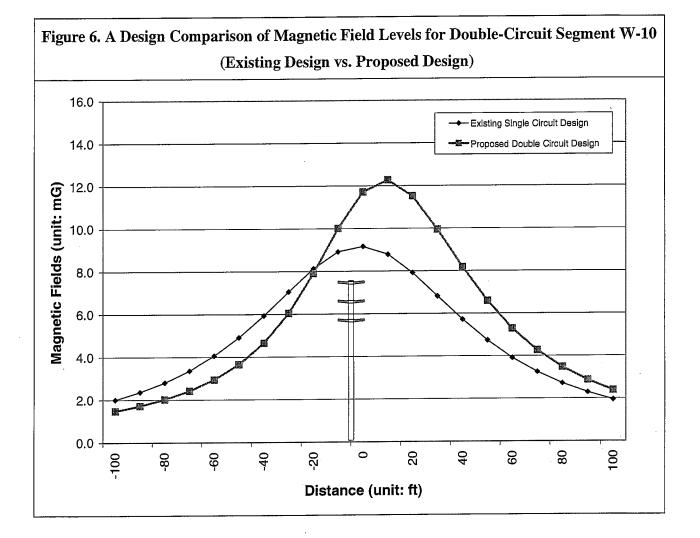


Table 2 on page 23 summarizes no-cost and low-cost magnetic field reduction measures that SCE considered for each segment of the Proposed Project:

Reason(s) if not adopted				
Measure(s) Adopted? (Yes/No)	• Yes • Yes • Yes	• Yes • Yes	• Yes • Yes	• Yes • Yes
Estimated Cost to Adopt	<ul> <li>Low-Cost</li> <li>No-Cost</li> <li>Low-Cost<sup>30</sup></li> </ul>	<ul> <li>Low-Cost</li> <li>No-Cost</li> </ul>	<ul> <li>Low-Cost</li> <li>No-Cost</li> </ul>	<ul> <li>Low-Cost</li> <li>No-Cost</li> </ul>
MF Reduction Measures Considered <sup>29</sup>	<ul> <li>Taller poles</li> <li>Pole-head configuration</li> <li>Phase Circuit</li> </ul>	<ul> <li>Taller poles,</li> <li>Pole-head configuration</li> </ul>	<ul> <li>Taller poles,</li> <li>Pole-head configuration</li> </ul>	<ul> <li>Taller poles,</li> <li>Pole-head configuration</li> </ul>
Adjacent Land Use <sup>28</sup>	2, 3, 5	2,3	5	ý Š
Location <sup>21</sup>	Exits the Valley Substation from the south and runs approximately 7.5 miles west along the north side of the existing 500 kV transmission line right-of-way (ROW), across the Interstate 215 Freeway, until it reaches Highway 74.	Proceeds southwest along the northwest side of Highway 74, from the existing 500 kV ROW to Conard Avenue.	From Highway 74, travels northwest on Conard Avenue; north on Rostrata Avenue; west on Mermack Avenue; north on Stonehouse Road; west on a dirt road and existing 12 kV distribution line to El Toro Road.	Follows El Toro Road for approximately 1 mile; turns west and runs approximately 0.5 mile along the north side of Nichols Road.
Line Segment No.	E-I	C-1	C-3	C-4

Table 2. No-cost and Low-cost Magnetic Field Reduction Measures Along the Proposed Subtransmission Line Route Segments

This column shows the nearest cross streets as reference points. <sup>28</sup> Land usage codes are as follows: 1) schools, licensed day-cares, ar

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.

See Figure 2 for the 115 kV "Single-Circuit Design" and Figure 4 for the 115 kV "Double-Circuit Design." The Single-Circuit Design is the proposed design for Segments E-1 through W-8, and the Double-Circuit Design is the proposed design for Segment W-10. 29

One or two 115 kV transposition poles would be needed to change the phasing arrangements for all line segments. 30

Reason(s) if not adopted									-																
Measure(s) Adopted? (Yes/No)	• Yes	• Yes		• Yes	• Yes	• Yes	• Yes	• Yes						• Yes	• Yes	• Yes		• Yes	• Yes	• Yes					
Estimated Cost to Adopt	Low-Cost	No-Cost		Low-Cost	No-Cost	No-Cost	Low-Cost	No-Cost						• Low-Cost	No-Cost	No-Cost		<ul> <li>Low-Cost</li> </ul>	<ul> <li>No-Cost</li> </ul>	<ul> <li>No-Cost</li> </ul>					
H	•	•		•	•	•	•	•						•	-		-	-	-						
MF Reduction Measures Considered <sup>29</sup>	Taller poles,	Pole-head configuration		Taller poles,	Pole-head configuration		Taller poles,	Pole-head configuration						Taller poles,	Pole-head configuration			Taller poles,	Pole-head configuration	Phase Circuit					
	•	•		•	•		٠	•					_	•	•			•	•	•			-		
Adjacent Land Use <sup>28</sup>		y c	Z, U		2,3					2					"	r					ç	1			
Location <sup>27</sup>	Continues west near Nichols Road;	crosses the I-15 Freeway; and back	onto Nictious Koau 101 approximately 1 mile to the existing 33 kV line ROW.	Follows an existing 33 kV line	ROW for approximately 4 miles to	Hostettler Road.	From the intersection of Hostettler	Road and Desperado Drive,	follows the south side of the I-15	Freeway northwest along an	existing 33 kV line to an existing	12 kV line, southeast of Indian	Truck Trail.	Crosses over the I-15 Freeway a	short distance southeast of Indian	Truck Trail, near an existing 12 kV	line crossing.	From the crossing over the I-15	Freeway southeast of Indian Truck	Trail; continues on the north side	of the I-15 Freeway between the I-	15. and Temescal Canyon Road,	toward the I-15 Freeway and	Temescal Canyon Road overpass	and into the Ivyglen Substation.
Line Segment No.		, C	ې د		W-1					W-4	_	,			0 111	Q- M						M-10			

This FMP includes only no-cost and low-cost magnetic field reduction measures for SCE's Proposed Subtransmission Line route. SCE's Proponent's Environmental Assessment (PEA) contains various project alternatives, including various alternative line routes. The proposed overhead designs for the Proposed Subtransmission Line, as shown on Figure 2 and Figure 4, can also be applied to these alternative line routes. If any alternative route is chosen for this project, a supplemental FMP will be prepared, along with an engineering design.

### VI. <u>FINAL RECOMMENDATIONS FOR IMPLEMENTING NO-COST AND LOW-</u> COST MAGNETIC FIELD REDUCTION MEASURES

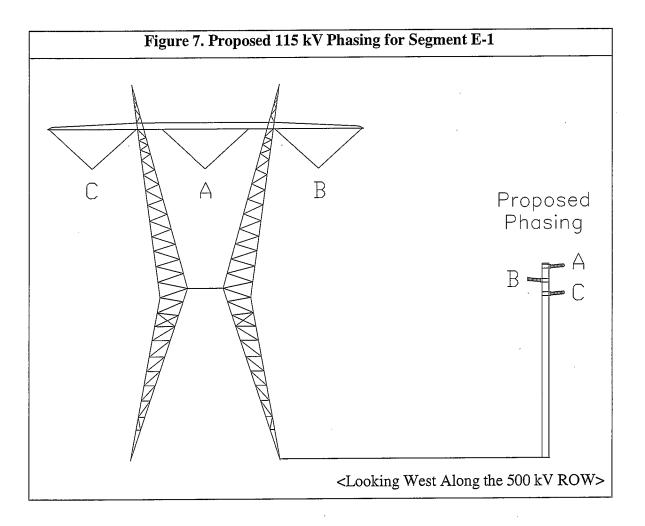
In accordance with the "EMF Design Guidelines", filed with the CPUC in compliance with CPUC Decisions 93-11-013 and 06-01-042, SCE would implement the following no-cost and low-cost magnetic field reduction measures for this project. These recommended magnetic field reduction measures would be uniformly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

#### For Single-Circuit 115 kV Overhead Design:

- Using taller poles (typically 65 feet above the ground);
- Using a triangular type pole-head configuration as shown on Figure 2.

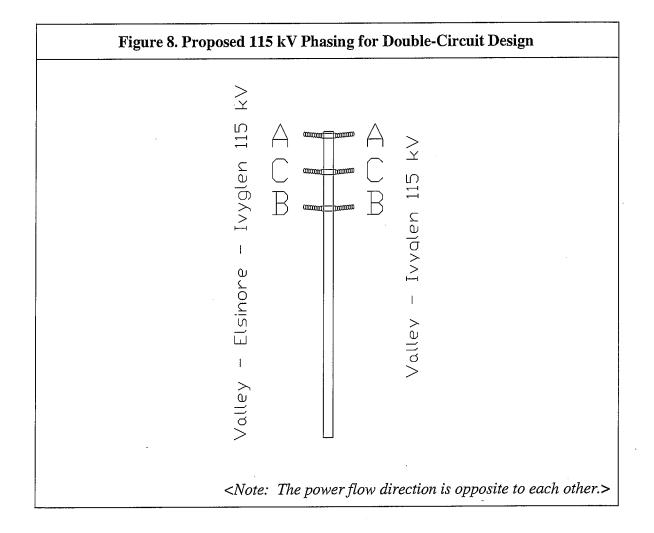
#### For Single-Circuit 115 kV Overhead Design Along Segment E-1:

 In addition to the no-cost and low-cost magnetic field reduction measures stated above, the Proposed Subtransmission Line would be phased, with respect to the existing Serrano – Valley 500 kV transmission line, as shown on Figure 7 below:



# For Double-Circuit 115 kV Overhead Design Along Segment W-10:

- Using taller poles (typically 65 feet above the ground);
- Using a double-circuit pole-head configuration as shown on Figure 4;
- Phasing the Proposed Subtransmission Line with respect to the existing 115 kV subtransmission line as shown on Figure 8 below:



SCE's plan for applying the above no-cost and low-cost magnetic field reduction measures equitably and uniformly for the Proposed Subtransmission Line 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. National Institute of Environmental Health Sciences. Furthermore, the recommendations above meet the CPUC approved EMF Design Guidelines as well as all applicable national and state safety standards for new electric facilities.

## VII. APPENDIX A: TWO-DIMENTIONAL MODEL ASSUMPTIONS AND YEAR 2009 FORECASTED LOADING CONDITIONS

#### **Magnetic Field Assumptions:**

SCE' uses a computer program titled "Fields"<sup>31</sup> to model the magnetic field characteristics of various transmission and subtransmission line designs and magnetic field reduction measures. Two-dimensional magnetic field modeling assumptions include:

- All transmission and subtransmission lines would be considered operating at forecasted loads (see Table 3 below) and all conductors are straight and infinitely long;
- Six feet of sagging for all 115 kV overhead subtransmission line designs and an average sagging<sup>32</sup> for transmission line(s);
- All towers and poles are located next to each other;
- Magnetic field strength is calculated at a height of three feet above ground (assuming flat terrain);
- Resultant magnetic fields are being used;
- All line currents are balanced (i.e. neutral or ground currents are not considered);
- Terrain is flat; and
- Dominant power flow directions are being used.

Table 3. Year 2009 Forecasted Loading Conditions:								
Circuit Name	Without Proposed Project	With Proposed Project						
	(Amp)	(Amp)						
Serrano – Valley 500 kV Transmission Line	2220	2220						
	244	142						
Valley – Elsinore – Ivyglen 115 kV Subtransmission Line	(from Elsinore to Ivyglen)	(from Ivyglen to Elsinore)						

<sup>31</sup> Kim, C., Fields for Excel Version 1.0, 2005.

<sup>32</sup> Average sagging is approximately equal to 1/3 of sagging plus minimum clearance to the ground

Table 3. Year 2009 Forecasted Loading Conditions:								
Circuit Name	Without Proposed Project (Amp)	With Proposed Project (Amp)						
Valley – Ivyglen 115 kV Subtransmission Line	N/A	400						

Note:

- 1. Unless and otherwise indicated, the power flows from Valley Substation to other substations.
- 2. Forecasted loading data is based upon scenarios representing load forecasts for the year 2009. The forecasting data is subject to change depending upon availability of generations, load increase, changes in load demand, and by many other factors.
- 3. "Without Proposed Project" indicates the year 2009 forecasted loading conditions if the Proposed Project is not operational.

# VIII. APPENDIX B: MAGNETIC FIELD MODELS

A. Magnetic field model for the proposed single-circuit overhead 115 kV subtransmission line design. This proposed design is applicable for Segments C-1 through W-8.

#### Input Data

Proposed Single Circuit Design	Phase Coo	rdinates	Phase Current	Phase Angle
Phase Name	X (ft)	Y (ft)	(Amp)	(Degree)
Valley - Ivyglen 115 kV	-7.0	59.0	400	30
Valley - Ivyglen 115 kV	7.0	55.0	400	270
Valley - Ivyglen 115 kV	-7.0	51.0	400	150

## Output Table

Distance (ft)	Proposed Single Circuit Design (mG) <u>33</u>
-100	3.3
-90	3.9
-80	4.6
-70	5.5
-60	6.6
-50	8.0
-40	9.7
-30	11.6
-20	13.3
-10	14.6
0	15.0
10	14.4
20	13.0
30	11.2
40	9.4
50	7.8
60	6.4
70	5.3
80	4.4
90	3.8
100	3.2

<u>33</u> mG stands for milliGauss.

Note: See Figure 3 on page 18 for the magnetic field graph for this proposed design.

# B. Appendix B: Magnetic field model for the proposed double-circuit overhead 115 kV subtransmission line design. This proposed design is applicable for Segment W-10.

## Input Data

Existing Single Circuit Design	Phase Coordinates		Phase	Phase
Phase Name	X	Y	Current	Angle
Valley - Elsinore - Ivyglen 115 kV	-7.0	59.0	244	30
Valley - Elsinore - Ivyglen 115 kV	7.0	55.0	244	270
Valley - Elsinore - Ivyglen 115 kV	-7.0	51.0	244	150

Proposed Double Circuit Design	Phase Coord	inates	Phase	Phase
Phase Name	X (ft)	$(ft)^{\sim}$	Current (Amp)	Angle (Amp)
Valley - Elsinore - Ivyglen 115 kV	-7.0	59.0	-142	30
Valley - Elsinore - Ivyglen 115 kV	-7.0	51.0	-142	270
Valley - Elsinore - Ivyglen 115 kV	-7.0	43.0	-142	150
Valley - Ivyglen 115 kV	7.0	59.0	400	30
Valley - Ivyglen 115 kV	7.0	51.0	400	270
Valley - Ivyglen 115 kV	7.0	43.0	400	150

## **Output Table**

Distance (ft)	Existing Single Circuit Design (mG)	Proposed Double Circuit Design (mG)
-100	2.0	1.5
-90	2.4	1.7
-80	2.8	2.0
-70	3.4	2.4
-60	4.1	2.9
-50	4.9	3.6
-40	5.9	4.6
-30	7.0	6.0
-20	8.1	7.9
-10	8.9	10.0
0	9.2	11.7
10	8.8	12.3
20	7.9	11.5
30	6.8	9.9
40	5.7	8.2
50	4.7	6.6
60	3.9	5.3

Distance (ft)	Existing Single Circuit Design (mG)	Proposed Double Circuit Design (mG)
70	3.2	4.3
80	2.7	3.5
90	2.3	2.9
100	1.9	2.4

Note: See Figure 4 on page 19 for the magnetic field graph for this proposed design.

# C. Appendix B: Magnetic field model for the proposed single-circuit overhead 115 kV subtransmission line design along the existing 500 kV ROW (Segment E-1)

#### **Input Data**

500 kV ROW – Existing	Phase Coc	ordinates	Phase	Phase
Phase Name	X (ft)	Y (ft)	Current (Amp)	Angle (Degree)
Valley - Serrano 500 kV	-38.5	56.5	2220	240
Valley - Serrano 500 kV	0.0	56.5	2220	0
Valley - Serrano 500 kV	38.5	56.5	2220	120

500 kV ROW with Proposed 115 kV	Phase Coordinates		Phase	Phase
Phase Name	X (ft)	Y (ft)	Current (Amp)	Angle (Degree)
Valley - Serrano 500 kV	-38.5	56.5	2220	240
Valley - Serrano 500 kV	0.0	56.5	2220	0
Valley - Serrano 500 kV	38.5	56.5	2220	120
Valley - Ivyglen 115 kV	107.0	59.0	400	30
Valley - Ivyglen 115 kV	93.0	55.0	400	150
Valley - Ivyglen 115 kV	107.0	51.0	400	270

## **Output Table**

Distance (ft)	500 kV ROW – Existing (mG)	500 kV ROW with Proposed 115 kV (mG)
0.0	242.1	241.5
10.0	239.7	239.6
20.0	232.3	233.0
30.0	219.4	221.1
40.0	201.4	204.0
50.0	179.4	183.1
60.0	155.9	160.6
70.0	133.4	138.6
80.0	113.2	118.2
90.0	96.1	99.6
100.0	81.8	82.6
110.0	70.0	67.7
120.0	60.4	55.6
130.0	52.5	46.5
140.0	45.9	40.0

Distance (ft)	500 kV ROW – Existing (mG)	500 kV ROW with Proposed 115 kV (mG)
150.0	40.5	35.2
160.0	35.9	31.5
170.0	32.0	28.4
180.0	28.7	25.8
190.0	25.9	23.5
200.0	23.5	21.5

Note: See Figure 7 on page 26 for the magnetic field graph for this proposed design.

### **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: VALLEY-IVYGLEN 115 KV SUBTRANSMISSION LINE 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 16th day of January, 2007, at Rosemead, California.

/s/\_

RAQUEL IPPOLITI Project Analyst SOUTHERN CALIFORNIA EDISON COMPANY

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