BEFORE THE PUBLIC UTILITIES COMMISSION OF THE

STATE OF CALIFORNIA

In the Matter of the Application of SOUTHERN CALIFORNIA EDISON COMPANY (U338E) for a Permit to Construct Electrical Facilities with Voltages between 50 kV and 200 kV: Fogarty Substation Project.	)	Application No. 07-04-028 (Filed April 30, 2007)
In the Matter of the Application of SOUTHERN CALIFORNIA EDISON COMPANY (U338E) for a Permit to Construct Electrical Facilities with Voltages between 50 kV and 200 kV: Valley-Ivyglen 115 kV Subtransmission Line Project	)	Application No. 07-01-031 (Filed January 16, 2007)

SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) PETITION FOR MODIFICATION OF DECISION 10-08-009

BETH GAYLORD
TAMMY JONES

Attorneys for
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, CA 91770
Telephone: (626) 302-3539
Facsimile: (626) 302-1926
E-mail: tammy.jones@sce.com

LAURA GODFREY
MARC CAMPOPIANO

LATHAM & WATKINS LLP

650 Town Center Drive
20th Floor
Costa Mesa, CA 92626
Telephone: (714) 755-2204
Facsimile: (714)755-8290
E-mail: marc.campopiano@lw.com

Attorneys for
SOUTHERN CALIFORNIA EDISON COMPANY

Dated: March 29, 2013

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

ATTACHMENTS:

APPENDICES:

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE

STATE OF CALIFORNIA

In the Matter of the Application of SOUTHERN CALIFORNIA EDISON COMPANY (U338E) for a Permit to Construct Electrical Facilities with Voltages between 50 kV and 200 kV: Fogarty Substation Project.	))))))))	Application No. 07-04-028 (Filed April 30, 2007)
In the Matter of the Application of SOUTHERN CALIFORNIA EDISON COMPANY (U338E) for a Permit to Construct Electrical Facilities with Voltages between 50 kV and 200 kV: Valley-Ivyglen 115 kV Subtransmission Line Project	))))))))	Application No. 07-01-031 (Filed January 16, 2007)

SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) PETITION FOR MODIFICATION OF DECISION 10-08-009

I.

INTRODUCTION

Pursuant to California Public Utilities Commission (Commission) Rule of Practice and Procedure 16.4, Southern California Edison Company (SCE) hereby files a Petition For Modification (PFM) to Decision (D.)10-08-009 (Decision Granting Southern California Edison Company A Permit To Construct The Fogarty Substation And The Valley-Ivyglen 115 kV Subtransmission Line Project), issued August 17, 2010.

II.

PROCEDURAL HISTORY

On January 16, 2007, SCE filed Application (A.) 07-01-031 for a Permit To Construct the Valley-Ivyglen 115 kV Subtransmission Line Project, and subsequently on April 30, 2007, SCE filed A.07-04-028 for a Permit To Construct the Fogarty Substation Project. D. 10-08-009 at 2. The applications were consolidated by ruling of the Administrative Law Judge on June 7, 2007 (collectively, the Proposed Project). The Proposed Project involved: constructing a new 25-mile 115-kilovolt (kV) Valley-Ivyglen Subtransmission Line; connecting the existing Valley and Ivyglen Substations; installing a new telecommunications line alongside the subtransmission line; constructing the new Fogarty Substation; and improving the Valley and Ivyglen Substations in southwestern Riverside County. *Id.* The Valley-Ivyglen 115 kV Subtransmission Line would traverse the City of Perris, the City of Lake Elsinore, and the Glen Ivy/Corona Lake area. The Fogarty Substation would be located on approximately 6.6 acres in the northern portion of the City of Lake Elsinore. *Id.*

A Draft Environmental Impact Report (EIR) for the Proposed Project was issued on June 15, 2009. *Id.* at 4. The Draft EIR analyzed the Proposed Project, a "no project" alternative, and five additional alternatives incorporating different route configurations and/or substation siting. *Id.* at 7. The Final EIR, issued on May 26, 2010 (*id.* at 5), determined that the Proposed Project would result in significant unavoidable adverse impacts to land use, visual resources, mineral resources and air quality. *Id.* at 9. Pursuant to Title 14, California Code of Regulations § 15093, the Commission adopted a statement of overriding conditions. *Id.* at 15.

The Commission determined that "Alternative 5, the Warm Springs-Pacific Clay alternative, is the environmentally superior alternative." *Id.* at 10. Ultimately, the Commission

granted SCE a Permit To Construct Alternative 5 in conformance with the Mitigation and Monitoring Plan, attached to D.10-08-009 (Approved Project). *Id.* at 19.

The Fogarty Substation has been built in accordance with D.10-08-009. Otherwise, construction of the Approved Project has not commenced for the reasons provided herein.

III.

LEGAL STANDARD

A party may file a PFM to request changes to an issued Commission decision. Under Rule 16.4(b), PFMs shall "concisely state the justification for the requested relief." Rule 16.4(d) requires an explanation of timing for any PFM filed more than one year after the effective date of the Commission's decision. In Section IV, below, SCE explains the need for the requested relief and the timing of the PFM.

Allegations of new or changed facts must be supported by a declaration or affidavit. Rule 16.4(b). SCE provides the Declaration of Jennifer Wolf, Project Manager, in Attachment C (J. Wolf Decl.) to support this PFM and allegations of new and changed circumstances. A PFM "must propose specific wording to carry out all requested modifications to the decision." Rule 16.4(b). In Attachment A, SCE proposes changes to the findings of fact, conclusions of law, and ordering paragraphs in D.10-08-009. In Attachment B, SCE proposes changes to Attachment A (Mitigation and Monitoring Plan) of D.10-08-009.

IV.

EXPLANATION FOR PETITION FOR MODIFICATION

Following D.10-08-009, SCE began final engineering of the Approved Project, which included the evaluation of differences between the Proposed Project and Approved Project. As part of this final engineering review, SCE identified new and changed circumstances that would affect the construction and design of the Approved Project. J. Wolf Decl. at ¶ 2, 3.

Based on SCE's final engineering review and new/changed circumstances, SCE determined that modifications to the construction and design of the Approved Project were needed to comply with the Commission's General Order 95, account for topography constraints, facilitate efficient construction and maintenance, reduce the number of pole replacements, and minimize impacts to jurisdictional drainages and sensitive species, among other factors. J. Wolf Decl. at ¶ 3. As modifications were identified for one aspect of the Approved Project, SCE evaluated whether the modifications would trigger additional modifications with other aspects of the Approved Project, taking into account a variety of considerations, such as engineering constraints, constructability and environmental impacts. *Id.* This iterative process was repeated several times until the scope of the modifications were fully determined, which added to the overall time of SCE's review. *Id.*

SCE remained in communications with the Commission's staff during SCE's post-approval evaluation process. J. Wolf Decl. at ¶ 4. After SCE determined that modifications to the construction and design of the Approved Project would likely be required, SCE communicated with the Commission's Energy Division and Legal Division about the appropriate mechanism to seek authorization for the necessary modifications to the Approved Project. *Id.* Energy Division and Legal Division provided guidance that a formal PFM would be necessary. *See* Attachment D, Letter From Jensen Uchida, Energy Division, To Tom Burhenn, Southern California Edison, dated November 7, 2011.

Accordingly, SCE prepared this PFM and the *Southern California Edison Company, Valley-Ivyglen 115 kV Subtransmission Line Project, Project Modification Report (*PMR), appended as Attachment E, which is fully incorporated into this PFM. The PMR provides a

detailed explanation of SCE's proposed modifications to the Approved Project associated with this PFM, summarized below.

A. Proposed Design Modifications to the Valley-Ivyglen 115 kV Subtransmission Line

1. Segment Realignment

The Approved Project is divided into eight segments, starting in the east at Valley Substation and ending in the west at Ivyglen Substation. PMR at 2-3 Figure 2.1, J. Wolf Decl. at ¶ 5. SCE proposes to realign portions of Segments 4, 5, 7, and 8. J. Wolf Decl. at ¶ 5. SCE proposes to realign Segment 4 to reduce the number of pole replacements that would be required, and for constructability and ease of maintenance. *Id.* SCE proposes to realign Segment 5 to reduce impacts to Additional Reserve Lands (ARLs) as part of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). *Id.* SCE proposes to realign Segment 7 to reduce impacts to Riversidean Alluvial Fan Sage Scrub (RAFS) vegetation communities. *Id.* SCE proposes to realign Segment 8 to minimize jurisdictional drainages and avoid potential impacts associated with landslides. *Id.*

2. Conversion to Underground

SCE proposes to underground an approximately 300-foot portion of Segment 1 and approximately 1.9-mile portion of Segment 8. J. Wolf Decl. at ¶ 6. SCE proposes to underground Segment 1 to cross under an existing 500-kV overhead transmission line that connects the Inland Empire Energy Center to Valley Substation, and to underground Segment 8 to minimize impacts to jurisdictional drainages and avoid potential landslide hazards between I-15 and Temescal Canyon Road. *Id.*

3. Modified Span Length/Pole Height/Number of Poles

SCE proposes to reduce the minimum and increase the maximum span length between poles, increase the maximum pole height, reduce the total number of light-weight steel poles (LWSPs), increase the number of tubular steel poles (TSPs) to ensure consistency with General Order 95, address topography constraints, and account for other proposed modifications in the PFM. J. Wolf Decl. at ¶ 7.

4. Additional Pole Types

SCE proposes to use three new pole types (hybrid poles, wood poles, and guy poles) to meet safety and reliability standards, minimize impacts to jurisdictional waters, and account for other proposed modifications in the PFM. J. Wolf Decl. at ¶ 8.

5. Modified Conductor Configuration

SCE proposes modifications to the conductor configuration to account for changes with the primary distribution circuit underbuilt along the subtransmission line and account for other proposed modifications in the PFM. J. Wolf Decl. at ¶ 9.

6. Access Road Design Changes

The Final EIR assumes that existing and new access roads used during construction would be approximately 12 feet wide in most areas and approximately 15 to 16 feet wide in areas where tight-radius curves may be required. J. Wolf Decl. at ¶ 10. Due to safety concerns for construction and maintenance personnel, SCE proposes to increase the width of the access roads to approximately 22 feet along curves in steep terrain areas and other key locations. *Id.* These changes would apply to approximately 30 percent of the roads used during construction of the proposed modifications. *Id.* When the terrain would be altered for access roads, an additional two feet of drainage berm or swale may be required along each side of the access roads. *Id.*

B. Proposed Construction Modifications to the Valley-Ivyglen 115 kV Subtransmission Line

Construction of the proposed modifications for the Valley-Ivyglen 115 kV Subtransmission Line would generally involve the same construction methods and techniques as those described in the Final EIR. J. Wolf Decl. at ¶ 11. However, based on the design modifications proposed by the PFM and changed circumstances, several new or revised construction methods will be required. *Id.* SCE proposes modifications to the construction work areas (staging areas, stringing areas, and helicopter operation yards) and guard structure installation techniques. *Id.* SCE also proposes to use several new construction methods and related equipment (shooflies, blasting, and helicopters). *Id.* Additional information about the proposed construction modifications is provided in the PMR. *See id.*; PMR at 2-18 to 2-33.

C. Proposed Modifications to the Fogarty Substation

At the existing Fogarty Substation, which has been developed consistent with D.10-08-009, SCE proposes to modify two distribution getaways to accommodate the proposed modifications, and install a permanent restroom. J. Wolf Decl. at ¶ 12. Additional information about the proposed changes to the Fogarty Substation is provided in the PMR. *See id.*; PMR at 2-33 to 2-34.

D. Proposed Modifications to the Telecommunications Systems

SCE proposes changes to the construction and design of the telecommunications systems associated with the Approved Project. J. Wolf Decl. at ¶ 13. SCE proposes to install additional portions of the fiber optic cable underground and attach the overhead portions of the fiber optic cable to the subtransmission line via a wood cross-arm based on construction constraints and to accommodate the proposed modifications in the PFM. *Id.* Additional information about the

proposed changes to the construction and design of the telecommunications systems is provided in the PMR. *See id*.; PMR at 2-34 to 2-45.

V.

CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

A. The Project Modification Report Documents that the Proposed Modifications Do Not Affect the Determinations on Environmental Impacts in the Final EIR

In accordance with the California Environmental Quality Act (CEQA), the PMR analyzes the potential environmental effects of the modifications proposed in the PFM as compared to the impacts identified in the Final EIR, and documents that the proposed modifications do not affect the Final EIR determinations. *See* Attachment E. The PMR determines that, with the incorporation of proposed revisions to mitigation measures and applicant proposed measures (APMs) identified in the Final EIR, the proposed modifications associated with the PFM do not result in any new significant environmental impacts or substantially increase the severity of previously identified significant effects identified in the Final EIR. J. Wolf Decl. ¶ 2.

The PMR analyzes the potential effects of the proposed modifications on the following environmental resource areas, which were addressed in the Final EIR:

- Land Use
- Visual Resources
- Biological Resources
- Cultural Resources
- Geology, Soils, and Minerals Resources
- Hydrology and Water Quality
- Hazards and Public Safety
- Recreation
- Air Quality
- Noise and Vibration
- Transportation and Traffic
- Public Services and Utilities
- Agriculture
- Population and Housing

- Cumulative Impacts

B. An Addendum Is the Appropriate Mechanism for Documenting CEQA Compliance

CEQA requires a subsequent or supplemental EIR for project modifications only when "[s]ubstantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects." Title 14, Cal. Code Regs., § 15162(a)(1); *see also* Cal. Pub. Res. Code § 21166(a) ("no subsequent or supplemental environmental impact report shall be required" unless "[s]ubstantial changes are proposed in the project which will require major revisions of the environmental impact report"); Title 14, Cal. Code Regs., § 15163(a)(1) (a supplemental EIR is appropriate only when the conditions in Section 15162(a)(1) quoted above apply).

The California Court of Appeal has confirmed that CEQA does not require a supplemental EIR where project modifications do not affect the determinations on environmental impacts in a final EIR. For example, modifications to the route for a pipeline to supply recycled non-potable water to an energy generation facility did not require a supplemental EIR because the realignment would not cause significant impacts not disclosed in prior studies or impacts more severe than previously anticipated. *Santa Teresa Citizen Action Group v. City of San Jose*, 114 Cal. App. 4th 689, 702-06 (2003). A supplemental EIR was also unnecessary for modifications to site access for a residential development where an additional traffic report determined that the modifications would not significantly change projected traffic on the adjacent street network. *Bowman v. City of Petaluma*, 185 Cal. App. 3d 1065, 1078-80 (1986). The court noted that the additional traffic report's conclusions were substantially the same as those in the original EIR. *See id.* Similarly, a subsequent or supplemental EIR was not required

for a change in the water source for a project because an addendum determined that the impacts were the same as those in the original EIR. *Fund for Envt'l Defense v. County of Orange*, 204 Cal. App. 3d 1538, 1548 (1988).

A subsequent or supplemental EIR is unnecessary here because the proposed modifications do not constitute a substantial change to the Approved Project that involves "new significant environmental effects or a substantial increase in the severity of previously identified significant effects." *See* Title 14, Cal. Code Regs., § 15162(a)(1). The Commission may wish to prepare an addendum to the Final EIR to explain the proposed modifications as part of its consideration of this PFM. An addendum to a previously certified EIR is appropriate "if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred." *Id.* § 15164(a). An addendum need not be circulated for public review and can instead be attached to the final EIR. *Id.* § 15164(c).

An addendum should include a "brief explanation," supported by substantial evidence, of the decision not to prepare a subsequent or supplemental EIR. *See id.* § 15164(e). Courts often rely on an addendum to bolster their conclusion that an agency's decision not to prepare a subsequent or supplemental EIR was proper. *See*, *e.g.*, *Fund for Envt'l. Defense*, 204 Cal. App. 3d at 1546 (relying on information in an addendum to determine that a supplemental EIR was not necessary). An addendum would support a conclusion by the Commission that the proposed modifications to the Approved Project do not warrant a subsequent or supplemental EIR.

VI.

CONCLUSION

For the reasons described herein, SCE respectfully asks the Commission to modify D.10-08-009 as requested in Attachment A.

Dated: March 29, 2013 Respectfully submitted,

TAMMY L. JONES

/s/ Tammy L. Jones
By: Tammy L. Jones

Attorney for
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, CA 91770
Telephone: (626) 302-6634
Facsimile: (626) 302-1926
E-mail: tammy.jones@sce.com

ATTACHMENT A

REQUESTED CHANGES TO THE FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDERING PARAGRAPHS IN DECISION 10-08-009

ATTACHMENT A

REQUESTED CHANGES TO THE FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDERING PARAGRAPHS IN DECISION 10-08-009

SCE requests the following changes to the findings of fact, conclusions of law, and ordering paragraphs in Decision 10-08-009 (D.10-08-009), consistent with Commission Rule of Practice and Procedure 16.4(b). Requested revisions to existing text are in underline and ~~strikethrough~~ text:

A. Findings of Fact

- **Add Four New Findings of Fact After Finding of Fact 7 (D.10-08-009 at 18)**

"SCE filed a Petition For Modification (PFM) on March 29, 2013, proposing modifications to Alternative 5 to address construction and design modifications to the Valley-Ivyglen 115 kV Subtransmission Line, Fogarty substation, and related telecommunications systems."

"To facilitate compliance with CEQA, SCE prepared a Project Modification Report (PMR) to analyze the potential environmental impacts associated with the PFM as compared to the impacts identified in the Final EIR. The PMR determined that the proposed modifications associated with the PFM would not result in any new significant environmental impacts or substantially increase the severity of significant environmental effects identified in the Final EIR."

"With consideration of the PMR, the Commission prepared an Addendum to the Final EIR to evaluate the potential environmental impacts associated with the PFM. The Addendum to the Final EIR was issued on [date]."

"The Addendum to the Final EIR documents that the proposed modifications associated with the PFM would not result in any new significant environmental impacts or substantially increase the severity of significant environmental effects identified in the Final EIR."

- **Revise Finding of Fact 9 (D.10-08-009 at 18)**

"The EIR and Addendum to the Final EIR were ~~was~~ completed in compliance with CEQA."

- **Revise Finding of Fact 10 (D.10-08-009 at 18)**

"The Commission has reviewed and considered the information contained in the EIR and Addendum to the Final EIR."

- **Revise Finding of Fact 11 (D.10-08-009 at 18)**

"The EIR and Addendum to the Final EIR reflect~~s~~ the Commission's independent judgment."

- **Revise Finding of Fact 12 (D.10-08-009 at 18)**

"Alternative 5, as amended by D.[Insert Decision Number], is feasible."

- **Revise Finding of Fact 13 (D.10-08-009 at 18)**

"The need to increase the operating capacity of the facilities serving the Lake Elsinore Electrical Needs Area and provide greater reliability in the event of an outage on the single line that currently serves the Ivyglen Substation are overriding considerations that support our approval of Alternative 5, as amended by D.[Insert Decision Number], despite each and every significant unavoidable impact."

- **Revise Finding of Fact 14 (D.10-08-009 at 19)**

"Alternative 5, as amended by D.[Insert Decision Number], includes no-cost and low-cost measures (within the meaning of D.93-11-013 and D.06-01-042) to reduce possible exposure to EMF."

A. Conclusions of Law

- **Revise Conclusion of Law 1 (D.10-08-009 at 19)**

"SCE should be granted a permit to construct Alternative 5, as amended by D.[Insert Decision Number], the Warm Springs-Pacific Clay alternative, of the Fogarty Substation and Valley-Ivyglen Subtransmission Line Project, with mitigation identified in the Mitigation and Monitoring Plan set forth in Attachment A, as amended by D.[Insert Decision Number], to this order."

- **Add New Conclusion of Law after Conclusion of Law 2 (D.10-08-009 at 19)**

"The Addendum to the Final EIR has been completed in compliance with CEQA and is incorporated into the record of this proceeding."

- **Add New Conclusion of Law after Conclusion of Law 4 (D.10-08-009 at 19)**

"SCE's PFM, [date], satisfies the requirements of Commission Rule of Practice and Procedure 16.4."

B. Ordering Paragraphs

- **Revise Ordering Paragraph 1 (D.10-08-009 at 19)**

"Southern California Edison Company is granted a permit to construct the Valley-Ivyglen 115 kilovolt Subtransmission Line Project and Fogarty Substation Project Alternative 5, as amended by D.[Insert Decision Number], the Warm Springs-Pacific Clay alternative, in

conformance with the Mitigation and Monitoring Plan which is attached as Attachment A, as amended by D.[Insert Decision Number], to this decision."

- **Revise Ordering Paragraph 2 (D.10-08-009 at 19)**

"The final Environmental Impact Report (which incorporates the draft Environmental Impact Report) and Addendum to the Final EIR are ~~is~~ adopted pursuant to the requirements of the California Environmental Quality Act."

- **Revise Ordering Paragraph 3 (D.10-08-009 at 19)**

"The Mitigation and Monitoring Plan, which is attached to this decision as Attachment A, as amended by D.[Insert Decision Number], is adopted."

- **Add New Ordering Paragraph after Ordering Paragraph 3 (D.10-08-009 at 19)**

"Energy Division may approve requests by SCE for minor project refinements that may be necessary due to final engineering of the approved project, as amended by D. [Insert Decision Number], so long as such minor project refinements are located within the geographic boundary of the study area of the Final EIR, and Addendum to the Final EIR, and do not, without mitigation, result in a new significant impact or a substantial increase in the severity of a previously identified significant impact based on the criteria used in the environmental document; conflict with any mitigation measure or applicable law or policy; or trigger an additional permit requirement. SCE shall seek any other project refinements by a petition to modify this decision."

ATTACHMENT B

REQUESTED CHANGES TO ATTACHMENT A
(MITIGATION AND MONITORING PLAN) OF THE FINAL DECISION

6. Updated Mitigation Monitoring and Reporting

The purpose of this Mitigation and Monitoring Plan (MMP) is to ensure that each mitigation measure, applicant proposed measure, or other condition of project approval is effectively implemented. The MMP, provided in Table 6-1, includes the:

- Measures that Southern California Edison Company (SCE) must implement as part of the Project;
- The actions required to implement these measures;
- The monitoring requirements; and
- The timing of implementation for each measure.

An environmental monitor designated by the California Public Utilities Commission (CPUC) would carry out all construction field monitoring to ensure that all measures are fully implemented. In all instances where non-compliance occurs, the environmental monitor would issue a warning to the construction foreman and SCE project manager. Continued non-compliance shall be reported to the CPUC's designated project manager.

Any decisions to halt work due to non-compliance would be made by the CPUC. The CPUC's designated environmental monitor would keep a record of any incidents of non-compliance with mitigation measures, applicant proposed measures, or other conditions of project approval. Copies of these documents shall be supplied to SCE and the CPUC.

Dispute Resolution

It is expected that the MMP would reduce or eliminate many potential disputes. However, even with the best preparation, disputes may occur. In such event, the following procedure would be observed:

- Step 1. Disputes and complaints (including those of the public) should be directed first to the CPUC designated Project Manager for resolution. The Project Manager would attempt to resolve the dispute.

- Step 2. Should this informal process fail, the CPUC Project Manager may initiate enforcement or compliance action to address deviations from the Proposed Project or adopted MMP.

- Step 3. If a dispute or complaint regarding the implementation or evaluation of the MMP cannot be resolved informally or through enforcement or compliance action by the CPUC, any affected participant in the dispute or complaint may file a written "notice of dispute" with the CPUC Executive Director. This notice should be filed in order to resolve the dispute in a timely manner, with copies concurrently served on other affected participants. Within 10 days of receipt, the Executive Director or designee(s) shall meet or confer with the filer and other affected participants for purposes of resolving the dispute. The Executive Director shall issue an Executive Resolution describing his/her decision, and serve it on the filer and other affected participants.

Table 6-1 Mitigation Monitoring Plan (Updated)

Environmental Impact	Mitigation Measure (MM) or Applicant Proposed Measure	Monitoring Requirement	Timing of Action
D.2. Land Use			
Impact LAND-1: Physical Division	No mitigation required	None	N/A
Impact LAND-2: Applicable Land Use Plan, Policy, or Regulations	**AES-SCE-1** through **AES-SCE-4** (see below)		
Impact LAND-3: Habitat Conservation Plan or Natural Community Conservation Plan	**MM BIO-5a** (see below)		
D.3 Visual Resources			
Impact VIS-1: Adverse Effect on a Scenic Vista	**AES-SCE-1** (Revegetation): Implement a revegetation program that will help restore the visual quality of segments along State Scenic Highways. **AES-SCE-2** (Reflection and Contrast): Use only non-specular 954 stranded aluminum conductor (SAC) conductors. Use light duty and tubular steel poles for the proposed subtransmission line that will weather to be non-reflective. **AES-SCE-3** (Reflection): Use galvanized electrical poles with a flat finish. **AES-SCE-4** (Presence): Locate poles off of ridgelines, except in areas where an existing pole line exists, and site construction and permanent access roads such that they will be screened from view by existing vegetation.	**AES-SCE-1:** Implement revegetation plan.	Following site restoration activities and prior to operation
Impact VIS-2: Damage to Scenic Resources within a State Scenic Highway		**AES-SCE-2**: Use non-specular conductors, light duty steel, and tubular steel poles	During construction
Impact VIS-3: Degradation to Existing Visual Character		**AES-SCE-3:** Use galvanized electrical poles with a flat finish.	During construction
Impact VIS-4: New Source of Substantial Light or Glare Affecting Daytime or Nighttime Views		**AES-SCE-4:** Locate poles off of ridgelines, except in areas where an existing pole line exists, and site construction and permanent access roads such that they will be screened from view by existing vegetation	During construction
D.4 Biological Resources			
Impact BIO-1: Effects on Sensitive Biological Communities and Sensitive Species	**MM BIO-1a (Environmentally Sensitive Areas):** The Applicant shall reduce impacts to the habitat of the special status species listed in Tables D.4-2 and D.4-3 by engineering the Project so that it minimizes impacts to special status species. This can be accomplished by siting permanent project elements (i.e., roads and poles) away from known locations of special status species and communities. Environmentally sensitive areas such as rare plant populations or specific breeding habitat will be identified in the field to minimize the possibility of inadvertent encroachment using the	**MM BIO-1a though i**	Prior to and during construction

Table 6-1 Mitigation Monitoring Plan (Updated)

	following avoidance methods: a. A qualified botanist (i.e., a person with at least an undergraduate degree in biology, ecology, or a related field, with botany training and a minimum of 3 years' professional field experience within the region or working under the direct supervision of a professional botanist with at least 6 years of field experience in the region) will flag or otherwise mark special status plant species. Construction crews will avoid direct or indirect impacts to these flagged areas and be instructed to avoid intrusion beyond these marked areas. b. A qualified botanist will monitor the known locations of special status plant populations that might be found prior to or during the construction period. Monitoring will occur during construction and for one year following construction to assess the effectiveness of protection measures. c. The Applicant will limit removal of native vegetation communities, including intact coastal sage scrub, riparian vegetation, wetland habitat, and mature trees. An onsite qualified biologist (i.e., a person with at least an undergraduate degree in biology, ecology, or a related field, with botany training and a minimum of 3 years' professional field experience within the region or working under the direct supervision of a professional botanist with at least 6 years of field experience in the region) with local knowledge of the area will be consulted for identification, flagging of individuals or boundaries of vegetation communities (see MM BIO-2a and 2b for flagging of wetland boundaries), and assessment of sensitive vegetation habitats within the construction footprint. The biologist will provide oversight to ensure compliance of this measure. d. Temporary impacts to Riversidean Alluvial Fan Sage Scrub (RAFS) shall be restored to pre-construction conditions using species similar to those present prior to disturbance. Permanent impacts to RAFS will be mitigated pursuant to the MSHCP as determined by the MSHCP Participating Special Entity (PSE) process. This may include purchase of replacement land at a 1:1 ratio and/or restoration at a 2:1 ratio in an off-site location to be determined by RCA with USFWS and CDFG concurrence. All		

Table 6-1 Mitigation Monitoring Plan (Updated)

	mitigation is subject to review and approval by the RCA, with USFWS and CDFG concurrence In the unlikely event that SCE does not to participate in the MSHCP, the project's overall restoration monitoring and reporting plan will include RAFS restoration, subject to review and approval by United States (U.S.) Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG).[1] The restoration plan will include, but is not limited to, identification of responsible parties, restoration details and schedule, monitoring and maintenance, and success criteria **MM BIO-1b (Special Status Plant Species):** Pre-construction surveys will be conducted ~~during the appropriate blooming and precipitation period~~ by a qualified botanist for all special status plant species as defined by Table D.4-3. ~~On the ground mapping of sensitive soils that are in direct association with these populations will be conducted during the pre-construction surveys.~~ The limits of populations of special status plant species shall be flagged or otherwise marked by a qualified botanist to ensure construction crews will avoid direct impacts to these populations. A minimum buffer of ~~100~~25 feet around these flagged plant populations shall be maintained to protect any special status plant seedbank that may be dormant in the sensitive soils. However, should the Applicant participate in the MSHCP as intended, avoidance, minimization, and mitigation would be handled for each plant species pursuant to the MSHCP. Some species do not require an avoidance buffer while others would be subject to mitigation in the form of a Determination of Biological or Superior Preservation (DBESP). The Applicant will also report geo-referenced special status plant locations to the CDFG and USFWS. The Applicant will implement avoidance measures including, but not limited to, the following: • No construction work (e.g., vegetation clearing, ground disturbance) will be authorized to begin until pre-construction surveys have been completed and results submitted to the		

[1] As of January 1, 2013, CDFG is called California's Department of Fish and Wildlife. To maintain consistency with the MMs from the Final EIR, this agency is still referred to as CDFG.

Table 6-1 Mitigation Monitoring Plan (Updated)

	CPUC. • The Applicant will avoid the flagged areas and will not drive vehicles, go by foot, or place equipment or materials in any area with special status plants. • The Applicant will maintain a minimum distance of 25 feet from the flagged boundary of special status plants for equipment staging and fueling and fill stockpile areas from special status plant populations. • Overhead installation of telecommunication lines will be accomplished by crews on foot as necessary to negotiate around flagged sensitive resources. This will also occur in areas where there is no established access road within the ROW and sensitive resources have been flagged during pre-construction surveys. • Trenching to install telecommunications will be conducted a minimum of 25 feet from the flagged boundary of special status plant populations. • If special status plants are present in an area where trenching to install telecommunications or other equipment would be required to connect to an existing subtransmission structure, the Applicant will identify and connect to an alternate structure where disturbance of special status plants can be avoided. This may require the Applicant to extend the length of the trench to reach the alternate structure or to avoid underground trenching in certain areas. • TSP and line positioning and installation activities will avoid and span all flagged resources. If the Applicant cannot avoid direct and/or indirect impacts to special status plants, then as a PSE under the MSHCP, the Applicant will consult with the CDFG, USFWS, and RCA and follow the provisions set forth in the MSHCP, including but not limited to: 1. Submittal to the RCA of required documentation, including quantitative evaluations for the ~~Determination of Biologically Equivalent or Superior Preservation (~~DBESP~~)~~, as needed.		

Table 6-1 Mitigation Monitoring Plan (Updated)

	2. Adhering to policies and procedures in MSHCP Section 6.1.2 (Riparian/Riverine/Vernal Pool Policy), Section 6.1.3 (Narrow Endemic Plant Species Policy), and Section 6.3.2 (Additional Survey Needs and Procedures for Criteria Area Species). 3. Proposing and implementing mitigation measures developed in consultation with and approved by the CDFG, USFWS, and RCA. As specifically applies to plants covered under MSHCP policies 6.1.3 and 6.3.2, the Applicant shall implement avoidance and mitigation measures to reduce impacts on special status plant species to a less than significant level as consistent with provisions set forth in the MSHCP. Mitigation shall include a tiered approach as summarized below and any other measures determined in consultation with the CDFG, USFWS, and RCA: 1. Avoid 90% of the plant populations with long-term conservation value found within suitable habitat within the project area. If 90% conservation cannot be maintained, then a DBESP will be prepared according to MSHCP provisions. 2. The known locations of special status plant populations within the project footprint found prior to or during the construction period will be monitored during ground disturbing construction activities by a qualified botanist. The Applicant will submit a post-construction report/technical memo to the CPUC within 60 days post-construction reporting on the effectiveness of protection measures. 3. Mitigation for impacted special status plants shall include restoration, conservation, and compensation measures, and may be onsite and/or offsite. As some special status plants such as Munz's onion and San Diego Ambrosia cannot be successfully salvaged and restored, mitigation shall include purchase of credits in an established mitigation bank as approved by the Resource Agencies. Expected mitigation ratios shall be a minimum of 1:1 for plant populations that are restored or conserved onsite, and 2:1 for plant populations that are preserved or conserved offsite. The Applicant will prepare a Habitat Mitigation and Monitoring Plan that will be submitted to		

Table 6-1 Mitigation Monitoring Plan (Updated)

	and approved by the RCA and the CDFG and USFWS prior to initiating ground disturbance activities in areas where special status plants will be impacted. The plan will outline restoration and conservation activities, locations, monitoring requirements, and criteria to measure mitigation success. 4. Conservation measures shall include preservation of portions of the impacted onsite plant populations. The Applicant will establish conservation easements within one year of construction implementation on any onsite (where possible) and offsite mitigation site(s) to protect the populations in perpetuity. In the unlikely event that SCE does not participate in the MSHCP or if a particular species is not covered by the MSHCP, a similar level of mitigation as that which would be required by the MSHCP to ensure that impacts to special status plants are reduced to less than significant levels, would include but not be limited to, restoration, conservation, and compensation measures, and may be on site and/or off site. For species and seedbank that cannot be successfully salvaged and restored, mitigation shall include purchase of credits in an established mitigation bank or implementation of other mitigation strategies subject to the approval of the USFWS and CDFG. Expected mitigation ratios shall be a minimum of 1:1 for plant populations that are restored or conserved on site, and 2:1 for plant populations that are preserved or conserved off site. The Applicant would prepare a Habitat Mitigation and Monitoring Plan that would be submitted to and approved by the USFWS and CDFG, as appropriate, prior to initiating ground disturbance activities in areas where special-status plants would be impacted. The plan would outline restoration and conservation activities, locations, monitoring requirements, and criteria to measure mitigation success. **MM BIO-1c (Invasive Plant Species):** The Applicant will use standard BMPS to avoid the introduction and/or spread of controllable invasive plant species such as tamarisk (*Tamarix sp.*) and giant reed (*Arundo donax*). Proper handling during construction shall include the following: • All vehicles and equipment will be cleaned prior to arrival at the work site. Vehicle washing will concentrate on tracks or tires, on		

Table 6-1 Mitigation Monitoring Plan (Updated)

	the undercarriage, and on front bumper/brush guard assemblies. • Crews, with construction inspector oversight, will ensure that vehicles and equipment are free of soil and debris capable of transporting noxious weed seeds, roots or rhizomes before the vehicles and equipment are allowed use of access roads. • Straw or hay bales used for sediment barrier installations or mulch distribution will be obtained from state-cleared sources that are free of invasive weeds. **MM BIO-1d (Special Status Wildlife Species):** Preconstruction surveys will be conducted by a qualified wildlife biologist for all special status species as defined by Table D.4-2 prior to commencement of construction activities. The locations of any special status species and their habitats shall be marked and avoided during final project design and construction. A qualified wildlife biologist will be onsite to conduct biological monitoring for special status wildlife species including, but not limited to, those found in Table D.4-2 during construction in areas where special status wildlife and occupied habitat have been identified. **MM BIO-1e (Pre-Construction Nesting Bird Surveys):** To avoid the impacts to active nests (with eggs or young) of any protected bird, the Applicant shall implement one of the following: a. Conduct all construction activity (including vegetation pruning or removal) during the non-breeding season (generally between August 31 and February 1) for most special status and non-special status migratory birds. b. If construction activities are scheduled to occur during the breeding season (February through August), a qualified biologist with knowledge of local wildlife resources will conduct pre-construction focused nesting surveys no more than 30 days prior to any ground disturbing activity or vegetation trimming or removal activities. These surveys shall be conducted up to a distance of 500 feet from the centerline of the subtransmission line and 500 feet from existing and new (i.e., Fogarty) substations. If active nests are found, a biological monitor with		

Table 6-1 Mitigation Monitoring Plan (Updated)

	expertise in bird behavior would establish a species-specific buffer around the nest and no activities would be allowed within the buffer until the young have fledged from the nest or the nest fails. A project-specific Nesting Bird Management Plan would be prepared to establish buffers based on, but not limited to, the following: the bird species (some species are more tolerant of disturbance while other are less tolerant), location of nest building and active nests, threshold for nesting disturbance taking into account bird behavior, including signs of agitation, continuous focused nest monitoring by qualified biologists, background noise, type of construction activity, and dust emissions and noise levels from construction. Buffers would be adjusted based on no exceedance of an established threshold of behavioral agitation and other signs indicating disruption of nesting behavior. Buffers may be increased or decreased based on the opinion of the biologist with expertise in bird behavior to ensure that impacts to nesting birds would not occur. Further, the biologist in coordination with the Project's Lead Biologist may stop construction activities at any time if necessary. The Nesting Bird Management Plan would also address avoidance and minimization of potential impacts by implementing buffers from blasting activities and helicopter use, and ensuring that dust suppression techniques are implemented. The Nest Bird Management Plan establishes a communication and reporting protocol involving SCE, biological monitors, and the CPUC, CDFG, and USFWS. The Nesting Bird Management Plan will be prepared by the Project's Lead Biologist and would be subject to the approval of the CDFG (pursuant to the California Fish and Game Code) and USFWS (pursuant to the Migratory Bird Treaty Act). ~~If active nests are found, the Applicant will maintain appropriate buffers as follows from occupied nests with all construction, operations, and maintenance activities:~~ • ~~500 feet from nesting raptors~~ • ~~250 feet from all other nesting birds~~ c. During active construction, the qualified biologist will monitor and assess any nesting birds within the specified buffer ranges to determine whether disturbance is impacting the birds. The qualified biologist will have the authority to halt construction in		

Table 6-1 Mitigation Monitoring Plan (Updated)

	the area of disturbance impacting the birds, and will immediately contact the Applicant's Lead Biologist. ~~until the~~The Applicant's Lead biologist ~~can~~will notify the CPUC, USFWS, and CDFG and consult on an appropriate course of action. **MM BIO-1f (Burrowing owls):** If burrowing owls are found during the pre-construction surveys, occupied burrows will be flagged and construction buffers will be established to avoid direct and indirect impacts to active nests, as follows: • 160 feet from occupied burrows during the non-nesting season • 500 feet from occupied burrows during the nesting season (February 1 through August 31). Should this buffer not be able to be maintained, the closest distance allowable will be 300 feet, and the qualified biologist shall monitor the owls for signs of stress and/or other behavioral changes to determine if construction should be halted and discussions initiated with CPUC, USFWS and CDFG on an appropriate course of action. For lands under the MSHCP, as a PSE, the Applicant will follow procedures in MSHCP policy 6.3.2, and as outlined in the Applicant prepared DBESP. For lands not under the MSHCP, if the appropriate buffers cannot be maintained and impacts on the burrowing owl and/or their habitat (i.e., occupied burrows) are unavoidable, the Applicant will develop and implement a Burrowing Owl Compensation Plan, as approved by the CDFG that is consistent with mitigation guidelines as outlined in the *California Burrowing Owl Consortium Protocol*. The plan will describe the compensatory measures that will be undertaken to address the loss of burrowing owl burrows within the project area. This will include preservation of 6.5 acres of onsite foraging habitat contiguous with occupied burrow sites per breeding pair or single bird, unless otherwise determined in consultation with the CDFG. If avoidance of burrows cannot be maintained, onsite passive relocation of owls will be preferred over active relocation. To compensate for loss of burrows, the Applicant will provide one alternate natural (enlarged or		

Table 6-1 Mitigation Monitoring Plan (Updated)

	cleared of debris) or artificial burrow in nearby contiguous foraging habitat for each occupied collapsed burrow within the project area. Prior to collapsing burrows vacated through passive relocation, the Applicant's biological monitor will conduct daily monitoring for up to a one-week period to confirm that the alternate burrows provided are being used by the owls. The Applicant will not conduct active relocation unless the attempt at passive relocation has failed after one week. The Applicant will obtain approval from the CDFG before initiating any activities that have the potential to adversely impact burrowing owls. **MM BIO-1g (Least Bell's Vireo and Southwestern Willow Flycatcher):** The Applicant will avoid construction activities during the nesting season (March 1 through August 31) in areas that provide suitable habitat for the least Bell's vireo and southwestern willow flycatcher, as determined by a qualified biologist and including those areas already identified from the Project surveys (AMEC 2007b, AMEC 2009). The Applicant will avoid construction activities within riparian habitat occupied by these two species, as determined from Project surveys (AMEC 2007b, AMEC 2009). If avoidance of these occupied areas is not possible for MSHCP-covered lands, mitigation will be performed in accordance with MSHCP policy 6.1.2. **MM BIO-1h (Noise Control):** The Applicant will avoid impacts to migratory and special status bird species protected under federal or state regulations by ensuring that construction or operational noise does not exceed ~~ambient levels~~the nest disturbance threshold and/or noise level threshold established in the Nesting Bird Management Plan during the general nesting period. This will be accomplished through 1) work scheduling (i.e., scheduling construction to avoid segments where occupied nests are found) and 2) having properly functioning mufflers on construction vehicles. No vehicles, chain saws, or heavy equipment will be operated within the ~~minimum exclusion zones of 250 feet~~buffer zones established within the Nesting Bird Management Plan until the nesting season is over or until a qualified wildlife biologist has determined that nesting is finished and the young have fledged. If a qualified wildlife biologist determines that any particular construction, operation, or maintenance activities pose a high risk of disturbing an active nest, the biologist will		

Table 6-1 Mitigation Monitoring Plan (Updated)

	halt work in the particular area of impact and/or recommend additional, feasible measures to minimize the risk of nest disturbance. If work activities are found to result in harm to nesting birds, destruction of an active nest, or nest abandonment prior to fledging, the biologist will report this to the CDFG and USFWS. **MM BIO-1i (Wildlife Entrapment):** At the end of each workday during construction, the Applicant will cover all small holes, open trenches or excavations, or provide escape ramps, to prevent the entrapment of wildlife (e.g., reptiles and small mammals). The Applicant will maintain fencing around the covered excavations at night. The Applicant's qualified biologist will clear open trenches for wildlife at the end of each day and again prior to resuming work on the trench.		
Impact BIO-2: Wetlands and Riparian Habitats	**MM BIO-2a (Wetlands Avoidance and Restoration):** Before construction work will start on Project, the Applicant's qualified wetland biologist will flag the boundaries of wetland resources based on prior surveys (AMEC 2006a, AMEC 2010, Entrix 2006). The Applicant's Lead Biologist will determine who is best qualified for the biological monitoring team. For vernal pool wetlands, habitat will be flagged based on the vernal pool watershed (i.e., the internal drainage into the wetland system from the surrounding watershed based on hydrographic breaks) not the wet basin. The Applicant's construction crews will not cross non-culverted drainages with vehicles, nor conduct construction activities or placement of equipment or supplies within the bed, bank, or riparian zone of any drainage, wetland, or water body. Many of the larger creeks flow through culverts beneath existing roads and will not be directly impacted. However, smaller creeks and resources may flow across the ROW and would be affected. Project infrastructure will be designed to avoid all sensitive aquatic resources, including spanning drainages and vernal pools with transmission lines. If construction activities require placement of fill, crews, or equipment in sensitive aquatic resources, or require disturbance to a riparian area or vernal pool watershed, then the Applicant will do the following: • Where avoidance of riparian and wetland areas is not feasible and work is required within jurisdictional wetlands, drainages,	**MM BIO-2a and b**	Prior to and during construction

Table 6-1 Mitigation Monitoring Plan (Updated)

	and other wetland habitats, or where non-culverted drainages must be crossed to access work sites, the Applicant will obtain and comply with all necessary USACE and CDFG permits under the Clean Water Act and CDFG 1600 regulations. A wetland delineation report will be prepared and submitted to the USACE and CDFG for verification as part of this permit process. • Restore temporarily impacted wetlands, riparian zones, and other aquatic resources to pre-construction condition, and monitor during and after disturbance. Include aquatic resource restoration efforts in the Habitat Mitigation and Monitoring Plan (MM BIO-1b) that will be developed as part of the regulated waters permitting and/or DBESP that will be prepared as part of MSHCP PSE compliance for riparian/riverine impacts. ~~This plan~~ Any Mitigation/restoration plans shall also be submitted to and approved by the RCA, USACE, USFWS, CDFG, and the CPUC prior to initiating any mitigation activities. The plan will outline restoration and conservation activities, locations, monitoring requirements, and criteria to measure mitigation success. • Mitigate for permanent impacts on wetlands and riparian areas caused by new structures and fill activities, prior to impact activities. At a minimum, mitigation ratios will be a 1:1 ratio for wetlands and riparian areas. High quality riparian zones, as determined by a qualified wetland biologist in consultation with the CPUC and the USACE, CDFG, and USFWS, will be mitigated at a minimum of 2:1 ratio. Mitigation may include compensation and conservation of in-kind, offsite areas at a minimum ratio of 1:1. **MM BIO-2b (BMPs):** BMPs to be prescribed by the Stormwater Pollution Prevention Plan (SWPPP) (APM-BIO 2, Hydro-SCE-1) will include but are not limited to the following: • The Applicant will not stockpile brush, loose soils, excavation spoils, or other similar debris material within sensitive habitats. • The Applicant will maintain minimum distance of 100 feet for equipment staging, fueling, hazardous material storage/use, and fill stockpile areas from the flagged boundaries of riparian areas		

Table 6-1 Mitigation Monitoring Plan (Updated)

	and wetlands. • If visible dust is present during construction activities, standard dust suppression techniques (e.g., water spraying) will be used in all ground disturbance areas. The BMPs included in the SWPPP will be implemented during construction to minimize indirect impacts associated with erosion and dust generation. The SWPPP will be reviewed and approved by the Santa Ana RWQCB prior to construction commencement (MM HYD-1a).		
Impact BIO-3: Migratory Wildlife	Refer to all of the mitigation measures under Impact BIO-1 and Impact BIO-2 (see above). **BIO-SCE-17** (Wildlife Movement): At various locations retaining walls or some other method of slope stabilization may be needed. Walls will be sited, designed, and oriented to avoid impacts to movement of native resident wildlife species and established wildlife corridors, in coordination with the RCA, USFWS, and CDFG.	**MM BIO-1a though i and MM BIO-2a and b**	Prior to and during construction
Impact BIO-4: Local Policies	**MM BIO-4a (Tree Removal Permitting):** Obtain a Tree Removal Permit from the County of Riverside. The County of Riverside, Roadside Tree Ordinance 12.08 requires permits for tree removal within county highway ROWs (County of Riverside 2004). In addition, the County of Riverside requires that any future development in an identified sensitive vegetation area (including oak woodlands) must be evaluated individually and cumulatively for potential impact on vegetation (County of Riverside 1993). Mitigation will be coordinated, as required, with the appropriate public and resource agencies once tree removal permits or approvals for lost significant trees are obtained. Mitigation for lost trees may not be implemented within the ROW due to fire safety concerns and instead may be implemented in an alternative agency approved location.	**MM BIO-4a:** Obtain a Tree Removal Permit from the County of Riverside	Prior to construction
Impact BIO-5: Conservation Plans	Refer to all of the mitigation measures under Impact BIO-1, BIO-2, and BIO-3 (see above). **BIO-SCE-15** (RCHCA): Mitigation will be implemented through payment of fees pursuant to the Riverside County Habitat Conservation Agency (RCHCA) Stephens' Kangaroo Rat Habitat Conservation Plan Agreement approved by the RCHCA on	**MM BIO-1a though i and MM BIO-2a and b**	Prior to and during construction

Table 6-1 Mitigation Monitoring Plan (Updated)

	September 20, 2012 and with concurrence by USFWS and CDFG. Prior to start of construction, SCE will obtain a Certificate of Inclusion from the RCHCA for the project. **BIO-SCE-16** (ARL): Temporary impacts to MSHCP Additional Reserve Lands (ARL) will be restored to greatest extent practicable using species present prior to disturbance. Should any permanent impacts to ARL result during construction, the Applicant will dedicate biologically equivalent or superior land to the MSHCP. The Applicant will prepare an ARL equivalency analysis to be included as part of the MSHCP PSE submittal. This equivalency analysis will compare the potential effects on the ARL to the benefits of proposed replacement land, including compensation for potentially lost conservation functions and values. The analysis will consider specific project design features, siting and design, and MSHCP BMPs, as well as address effects on covered species and habitats, core areas, linkages, constrained linkages, MSHCP Conservation Area configuration and management, and ecotones. The replacement land ratio is anticipated to be not less than 2:1 within MSHCP Core 1 but will ultimately be determined through MSHCP consistency findings made by RCA, CDFG and USFWS concurrence as part of the MSHCP PSE process.		
D.5 Cultural Resources			
Impact CUL-1: Adverse Change in the Significance of a Historical Resource	**MM CUL-1a** (Avoid Environmentally Sensitive Areas): Known ~~h~~Historical ~~r~~Resources and all prehistoric archaeological sites (California Register of Historic Resources [CRHR] Eligible or Ineligbile) located within ~~the project APE~~ Area of Potential Impact (API) shall be designated as Environmentally Sensitive Areas (ESAs), and will include a buffer of ~~100~~50 feet beyond ~~historical site~~ the cultural resource boundaries to ensure avoidance. Site information is confidential; therefore, ~~site~~cultural resource boundaries will be delineated in the ~~Cultural Resources Treatment Plan~~ Construction Phase Management Plan (CPMP~~CRTP~~). All personnel involved in construction activities shall be instructed on how to avoid an ESA prior to construction operations. Avoidance of ESAs ~~shall~~may be achieved, but is not limited to, by shifting the proposed subtransmission line route, by spanning the site, by not placing any new utility poles or access roads, or redesigning the footprint of a facility. ~~Design of access roads and pole locations shall result in~~	**MM CUL-1a through d**	Prior to and during construction

Table 6-1 Mitigation Monitoring Plan (Updated)

	~~complete avoidance of historical resources. A qualified archaeologist and/or architectural historian shall be on site to monitor all ground-disturbing work within 1,000 feet of an ESA.~~ **MM CUL-1b** (Cultural Resources Treatment Plan): There are resources within the Project area whose eligibility for the CRHR is undetermined due to lack of evidence. These resources may be found to be considered significant archaeological or cultural resources pending further investigation. If avoidance of these resources is not feasible, each ~~site~~cultural resource identified ~~in the sections above~~ as having an undetermined eligibility status must be tested and evaluated by an archaeologist with the qualifications defined in MM CUL-1c. Testing and evaluation may consist of surface collection and mapping, limited subsurface excavations, and the appropriate analyses and research necessary to characterize the artifacts and deposit from which they originated, archival research, and photo documentation. Upon completion of the test level investigations for cultural resources~~sites~~ determined to be unique archaeological sites or historical resources as set forth in CEQA Guidelines Section 15064.5, the archaeologist shall prepare recommendations for submission to the CPUC in a "~~Cultural Resources Treatment~~ Construction Phase Management Plan" (~~CRTP~~CMPM) on the measures that shall be implemented to protect or mitigate the impact to the cultural resources~~sites~~. Prior to submission to the CPUC, the Applicant will consult with Native American groups including, but not limited to, the Pechanga and Soboba Bands of Luiseño Indians on appropriate mitigation and treatment of recovered artifacts. ~~The Native American Heritage Commission can mediate negotiations at the Applicant's discretion under California Public Resources Code 5097.94(k) or (l). All t~~Test- and data-recovery level excavations of prehistoric or Native American related sites shall be monitored by representatives of interested Native American Tribes. The Pechanga and Soboba Bands of Luiseño Indians have expressed a desire to be present during excavations. Appropriate measures for unique archaeological resources or historical resources could include preservation in place through planning construction to avoid the resources, capping cultural resources deposits with a layer of chemically stable soil, or		

Table 6-1 Mitigation Monitoring Plan (Updated)

	incorporation of sites into parks, greenspace, or other open space. In the event that preservation of the resources is not feasible the CPMP~~RTP~~ should detail an appropriate data recovery plan which makes provisions for adequately recovering the scientifically consequential information from and about the resource in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitation, Restoring, and Reconstructing Historic Buildings (1995). Such studies shall be deposited with the California Historical Resources Regional Information Center. Any excavations of archaeological resources that are prehistoric or Native American in nature shall be monitored by a Native American Representative. A report detailing the results of all evaluation and data recovery activities shall be completed and submitted to the CPUC as well as the Eastern Information Center, and other agencies, as appropriate. Any artifacts recovered as a result of mitigation shall be managed in accordance with procedures in the CPMP~~donated to a qualified scientific institution or approved curation facility where they would be afforded long term preservation to allow future scientific study~~. The C~~RTP~~PMP shall address procedures for working in ESAs or other areas deemed sensitive for encountering cultural resources. The CPMP~~RTP~~ shall include detailed procedures for encountering cultural resource sites or isolates; encountering human remains; requirements for contacting personnel qualified to assess a discovery and its treatment; collections and curation requirements; and compliance with applicable laws and regulations. Avoidance of known cultural resources is central to the current project objectives; however, the CPMP~~RTP~~ shall define protocol to reduce impacts to undiscovered cultural resources that may be encountered during construction to a Class II impact. **MM CUL-1c** (Construction Monitoring): Prior to any ground disturbing activities taking place in conjunction with this project the applicant shall provide evidence that an archaeologist has been retained by the landowner or subsequent project applicant and that the consultant(s) will ~~be present during all grading and other significant ground disturbing activities~~monitor for CRHR eligible and all prehistoric archaeological sites within 400 feet from proposed ground-disturbing		

Table 6-1 Mitigation Monitoring Plan (Updated)

	areas, with the exception of monitoring ground disturbing activities within 1,000 feet of P-33-000714. Ground-disturbing activities include grading, blading, trenching, grubbing, drilling/boring, and excavation. These consultants shall be selected from the roll of qualified archaeologists maintained by the County of Riverside. Tribal monitoring of prehistoric archaeological sites shall occur as outlined in the CPMP. Should any cultural resources be discovered, the qualified archaeologist ~~monitor~~ is authorized to stop all ~~grading~~ground disturbing activities in the immediate area of the discovery, and shall make recommendations to the CPUC on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. If the resources are determined to be "historical resources" as defined in Section 15064.5, mitigation measures shall be identified by the ~~monitor~~qualified archaeologist and recommended to the CPUC. Appropriate treatment for such previously undiscovered resources should be in accordance with the ~~CRTP~~CPMP implemented in MM CUL-1b. No further ~~grading~~ground-disturbing activities shall occur in the area of the discovery until the CPUC approves the measures to protect these resources. Any archaeological artifacts recovered as a result of monitoring and mitigation shall be ~~submitted to an approved curation facility for storage~~managed in accordance with procedures outlined in the CPMP ~~All construction activities in ESAs, or any other area of the project deemed sensitive for containing cultural resources, shall be monitored by a qualified archaeologist. Since significant~~ pPortions of the project site contain ~~sedimentary deposits~~ late Pleistocene to Holocene sediments (Figure D.5-1)[2] that may hold buried cultural resources, ~~full-time cultural resources monitoring should be implemented during all phases of ground disturbing work~~ in these areas a qualified archaeologist shall be present to spot-check in areas of ground-disturbing activities within each Project segment. Based on observations of soil stratigraphy or other factors, and in consultation with the CPUC, the archaeologist may reduce the level and duration of spot-check or suspend it as warranted. ~~(Figure D.5-1).~~ A cultural		

[2] Refers to Figure D.5-1: Late Pleistocene to Holocene Sediments in the Project Area Requiring Cultural Resources Monitoring During Construction of the Project in the Final EIR

Table 6-1 Mitigation Monitoring Plan (Updated)

	resource monitor must meet the Secretary of the Interior Standards Qualifications as a professional archaeologist, and must be on the County of Riverside Cultural Resources Consultants list. The archaeological monitor(s) must also be familiar with the project area and therefore capable of anticipating the types of cultural resources that may be encountered. **MM CUL-1d (Human Remains):** In the event of the accidental discovery or recognition of human remains during Project construction, the following steps shall be taken: There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Riverside County Coroner is contacted to determine if the remains are prehistoric and that no investigation of the cause of death is required. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within a reasonable timeframe. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code 5097.98. The Native American Heritage Commission can mediate negotiations at the Applicant's discretion under California Public Resources Code 5097.94(k) or (l), as appropriate.		

Table 6-1 Mitigation Monitoring Plan (Updated)

Impact CUL-2: Adverse Change in the Significance of an Archaeological Resource	**MM CUL-1a** through **MM CUL-1d** (see above)		
Impact CUL-3: Indirectly Destroy a Unique Paleontological Resource or Site or Unique Geologic Feature	**MM CUL-1b** and **MM Cul-1d** (see above) **MM CUL-3a** (Paleontological Monitoring): A qualified paleontologist shall be present during ground-disturbing construction activities in areas of paleontological sensitivity. The Applicant shall prepare a map showing the areas underlain by the Silverado Formation in Temescal Canyon and under the Fogarty Station site. These shall be considered areas of paleontological sensitivity. The paleontological monitor shall have regional experience identifying paleontological resources, be an approved paleontologist listed with Riverside County, and shall work in accordance with MM CUL-1b.	**MM CUL-3a:** A qualified paleontologist shall be present during ground-disturbing construction activities in areas of paleontological sensitivity.	During construction
Impact CUL-4: Disturb Human Remains, Including Those Interred Outside of Formal Cemeteries	**MM CUL-1a** through **MM CUL-1c** (see above)		
D.6 Geology, Soils, and Mineral Resources			
Impact GEO-1: Adverse Effects to People and Structures Due to Seismic Activity	**MM GEO-1a:** All construction personnel shall adhere to the Applicant's worker safety guidelines and policies to avoid additional adverse effects to health and safety in the event of an earthquake during construction. Prior to construction, all construction personnel shall participate in a worker awareness program that highlights seismic activity as a potential hazard during onsite construction. **MM GEO-1b:** The Applicant shall perform design-level geotechnical investigations including site-specific seismic analyses to evaluate the peak ground acceleration for design of project components. The design guidelines determined in SCE-GEO-2 shall be implemented during construction of all project components. Compliance with this measure shall be documented to the CPUC at least 30 days before construction by submittal of reports describing potential peak ground accelerations expected for design level earthquake and a description of how the design will accommodate this anticipated motion.	**MM GEO-1a and b**	Prior to and during construction
Impact GEO-2: Soil Erosion	**MM GEO-2a:** An erosion and sedimentation control plan shall be incorporated into the SWPPP for Project construction activities to minimize onsite soil erosion and offsite sedimentation. The plan shall include site maps, identification of construction activities, and measures for providing erosion and sediment control. Compliance with this measure shall be documented to the CPUC at least 60 days	**MM GEO-2a:** Compliance documented to the CPUC.	At least 60 days prior to construction.

Table 6-1 Mitigation Monitoring Plan (Updated)

	before construction.		
Impact GEO-3: Soil Stability	**MM GEO-3a:** The Applicant shall perform design-level geotechnical investigations to assess the potential for geological hazards to include liquefaction, unstable slopes, landslides, earth flows, debris flows, and expansive soils to affect the approved project structures. Where hazards are found to exist, appropriate engineering design and construction measures shall be incorporated into the final project design, such as: • Ground improvement of liquefiable zones • Incorporation of slack in underground portions of the telecommunications system • Positioning of project structures away from steep hillsides and steep drainages • Excavation of expansive soils during construction and replacement with tested and engineered backfill • Redirection of surface water and draining away from expansive foundation soils Compliance with this measure shall be documented to the CPUC at least 60 days prior to construction.	**MM GEO-3a:** Compliance documented to the CPUC.	At least 60 days prior to construction.
Impact GEO-4: Expansive Soils	**MM GEO-3a** (see above)		
Impact GEO-5: Wastewater Disposal	No mitigation required.	None	N/A
Impact GEO-6: Availability of a Known Valuable Mineral Resource	No mitigation required.	None	N/A
Impact GEO-7: Mineral Resource Recovery Sites	No mitigation possible.	None	N/A
D.7 Hydrology and Water Quality			
Impact HYD-1: Water Quality Standards and Waste Discharge Requirements	**MM HYD-1a:** All plans identified in HYDRO-SCE-1 and 3 shall be reviewed and approved by the Santa Ana RWQCB for compliance with the Santa Ana Water Quality Control Plan prior to initiation of construction. Verification of approval shall be provided to the California Public Utilities Commission (CPUC) at least 30 days before construction.	**MM HYD-1a**: Submit all plans to Santa Ana RWQCB and CPUC.	Prior to construction
Impact HYD-2: Groundwater Supplies and Recharge	No mitigation required	None	N/A
Impact HYD-3: Drainage Patterns, Erosion,	**HYDRO-SCE-1:** The SWPPP would be submitted to Riverside County	**HYDRO-SCE-1 through**	Prior to and during

Table 6-1 Mitigation Monitoring Plan (Updated)

and Siltation	along with grading permit applications. Implementation of the SWPPP would help stabilize graded areas and waterways, and reduce erosion and sedimentation. The plan would designate BMPs that would be adhered to during construction activities. Erosion-minimizing efforts such as straw wattles, water bars, covers, silt fences, and sensitive area access restrictions (for example, flagging) would be installed before clearing and grading began. Mulching, seeding, or other suitable stabilization measures would be used to protect exposed areas during construction activities. During construction activities, measures would be in place to ensure that contaminants are not discharged from construction sites. The SWPPP would define areas where hazardous materials would be stored, where trash would be in-place, where rolling equipment would be parked, fueled and serviced, and where construction materials such as reinforcing bars and structural steel members would be stored. Erosion control during grading of the construction sites and during subsequent construction would be in-place and monitored as specified by the SWPPP. A silting basin(s) would be established, as necessary, to capture silt and other materials, which might otherwise be carried from the site by rainwater surface runoff. **HYDRO-SCE-2:** An environmental training program would be established to communicate environmental concerns and appropriate work practices, including spill prevention and response measures and SWPPP measures, to all field personnel. A monitoring program would be implemented to ensure that the plans are followed by all personnel throughout the construction period. **HYDRO-SCE-3:** The SWPPP would include procedures for quick and safe cleanup of accidental spills during construction. This plan would be submitted to Riverside County with the grading permit application. The SWPPP would prescribe hazardous materials handling procedures for reducing the potential for a spill during construction and would include an emergency response program to ensure quick and safe cleanup of accidental spills. The plan would identify areas where refueling and vehicle maintenance activities and storage of hazardous materials, if any, would be permitted. **HYDRO-SCE-4:** Dewatering operations would be performed if	**4**	construction

Table 6-1 Mitigation Monitoring Plan (Updated)

	groundwater is encountered while excavating or constructing the proposed subtransmission line, telecommunications line, or Fogarty Substation. These operations would include, as applicable, the use of sediment traps and sediment basins in accordance with BMP NS-2 (Dewatering Operations) from the California Storm water Quality Association's (CASQA) California Storm water BMP Handbook.		
Impact HYD-4: Draining Patterns and Flooding	No mitigation required	None	N/A
Impact HYD-5: Runoff Water and Storm Water Drainage Systems	**MM HYD-5a:** ~~The environmental training and monitoring program identified in HYDRO-SCE-2 shall be reviewed and approved by the Santa Ana RWQCB for compliance with the Santa Ana Water Quality Control Plan prior to initiation of construction.~~ SCE will obtain Construction General Permit coverage through the State Water Resources Control Board. Verification of approval shall be provided to the CPUC at least 30 days before construction. ~~**MM HYD-5b:** The SWPPP discussed in HYDRO-SCE-1 and 3 shall be reviewed and approved by the Santa Ana RWQCB for compliance with the Santa Ana Water Quality Control Plan prior to initiation of construction. Verification of approval shall be provided to the CPUC at least 30 days before construction.~~	**MM HYD-5a and b**	Prior to construction
Impact HYD-6: Water Quality	No mitigation required	None	N/A
Impact HYD-7: Flood Hazard Zones	**MM HYD-7a**: Aboveground project features such as the TSPs, poles, underground conduit, and substation shall be placed outside the flow path of watercourses unless an engineering analysis, reviewed by the CPUC, demonstrates that watercourse avoidance is not practicable, and that appropriate flood avoidance measures, such as raising foundations, have been taken to identify and prevent potential flooding and erosion hazards. The Applicant shall provide documentation to the CPUC at least 30 days before the start of the construction regarding which structures would be in flow paths and what protective measures, such as design specifications, are proposed. **MM HYD-7b:** Ensure all National Flood Insurance Program building requirements are followed.	**MM HYD-7a and b**	Prior to construction
Impact HYD-8: **Structures that Impede or Redirect Flood Flows**	No mitigation required	None	N/A
Impact HYD-9: Flooding as a Result of Failure of a Levee or Dam	**MM HYD-7a** and **MM HYD-7b** (see above)		

Table 6-1 Mitigation Monitoring Plan (Updated)

Impact HYD-10: Inundation by Seiche, Tsunami, or Mudflow	No mitigation required	None	N/A
D.8 Hazards and Public Safety			
Impact HAZ-1: Environmental Hazards Due to the Use, Transport, or Storage of Hazardous Materials	No mitigation required	None	N/A
Impact HAZ-2: Environmental Hazards Due to Release of Hazardous Materials into the Environment	**MM HAZ-2a:** As part of the siting and engineering process for the proposed subtransmission line, the Applicant shall precisely locate all underground natural gas lines in the area. Prior to finalizing the engineering design, the Applicant shall contact the Underground Service Alert of Southern California (DigAlert 2006) to identify the exact locations of gas pipelines within the project area. In addition, the Applicant shall contact affected private landowners to determine if septic systems and associated leach fields as well as other underground facilities may be impacted by construction of the Project. Final engineering plans for the Project shall be designed to avoid or minimize interference or damage to underground facilities, both public and private. The Applicant shall immediately notify by telephone the owner of underground facilities that may have been damaged or dislocated during construction of the Project.	**MM HAZ-2a:** Locate all underground natural gas lines in the area using Underground Service Alert. Contact private landowners about the locations of septic systems or other underground facilities.	Prior to construction
Impact HAZ-3: Hazardous Emissions within a Quarter Mile of a School	**MM HAZ-2a** (see above)		
Impact HAZ-4: Located on Hazardous Materials Site pursuant to Government Code Section 65962.5	No mitigation required	None	N/A
Impact HAZ-5: Public or Worker Safety Hazard Due to Proximity to a Public or Public Use Airport	No mitigation required	None	N/A
Impact HAZ-6: Public or Worker Safety Hazard Due to Proximity to Private Airstrip	No mitigation required	None	N/A
Impact HAZ-7: Interference with an Emergency Response Plan or Emergency Evacuation Plan	No mitigation required	None	N/A
Impact HAZ-8: Significant Hazards Associated with Wildfires	No mitigation required	None	N/A
D.9 Recreation			
Impact REC-1: Neighborhood and Regional Parks	No mitigation required	None	N/A
Impact REC-2: Construction of Recreational	No mitigation required	None	N/A

Table 6-1 Mitigation Monitoring Plan (Updated)

Facilities			
D.10 Air Quality			
Impact AIR-1: Net Emission Increase of Criteria Pollutants from Construction Activities	**MM AIR-1a:** The following control measures shall be implemented to minimize impacts due to fugitive dust emissions: • Stabilize unpaved roads with water or other stabilizing agents; • Install wheel washers where vehicles enter and exit construction sites onto paved roads or wash off trucks and equipment leaving sites; • Sweep streets at the end of the day if visible amounts of soil are carried onto adjacent public paved roads. Water sweepers with reclaimed water are recommended; • Install wind breaks at construction areas if activities cause persistent visible PM emissions beyond the work area; • Suspend excavation, trenching, grading, or other earthmoving activities if winds exceed 25 mph; and • Use all required best available control measures as outlined in Table 1 of SCAQMD Rule 403.	**MM AIR-1a through e**	Prior to and during construction
	MM AIR-1b: All construction equipment greater than 50 hp shall meet the cleanest off-road emission standard available but, at minimum, meet Tier 3 emission standards and be equipped with Level 2 or 3 CARB-verified diesel emission control technology. **MM AIR-1c:** An equipment emission reduction plan shall be prepared for submission to the CPUC for review and approval at least 60 days prior to construction. The plan shall be incorporated into all contracts and contract specifications for construction work. The plan shall specify all project emission reduction measures and required mitigation measures related to construction equipment emission standards/controls as contractually required. The plan shall outline additional measures, as contractually required, to reduce or eliminate potential impacts associated with construction-related emissions of criteria air pollutants and toxic air contaminants. At minimum, the plan shall include the following additional measures: • As feasible, reduce emissions of PM and other pollutants by using alternative clean fuel technology such as electric, hydrogen		

Table 6-1 Mitigation Monitoring Plan (Updated)

	fuel cell, propane, or compressed natural gas-powered equipment with oxidation catalysts instead of gasoline- or diesel-powered engines. • Ensure that all construction equipment is properly tuned and maintained and shut off when not in direct use. • Prohibit engine tampering to increase horsepower. • Locate engines, motors, and equipment as far as possible from residential areas and sensitive receptors, such as schools, daycare centers, and hospitals. • Provide carpool shuttles and vans to transport construction workers to and from construction sites to minimize private vehicle use. • Minimize construction-related transport of workers and equipment including trucks. • Require that on-road vehicles be less than 10 years old. **MM AIR-1d:** The Applicant shall designate a Construction Relations Officer to ensure the enforceability and efficacy of construction-related mitigation measures. Each construction site shall include clearly visible signs with a phone number for the public to contact the Construction Relations Officer. The Construction Relations Officer shall be readily available to answer questions or field complaints regarding the Project.		
	MM AIR-1e: Prior to commencing construction, all personnel working on the Project shall be trained to minimize emissions and other air quality impacts during construction. Training would include procedures for: • Stabilizing disturbed areas, including storage piles; • Controlling dust emissions during land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities; • Transporting materials to minimize visible dust emissions; • Stabilizing on-site unpaved roads and off-site unpaved roads; and Using transportation best practices such as carpooling, minimization		

Table 6-1 Mitigation Monitoring Plan (Updated)

	of vehicle idling, and reduced speed.		
Impact AIR-2: Temporary Ambient Air Impacts Caused by Construction Activities	**MM AIR-1a** through **MM AIR-1d** (see above)		
Impact AIR-3: Net Increase in Criteria Pollutant Emissions During Maintenance and Inspection Activities	No mitigation required	None	N/A
Impact AIR-4: Odor from Project Construction, Maintenance, and Inspections	No mitigation required	None	N/A
Impact AIR-5: Net Increase in GHG Emissions During Project Construction	**MM AIR-5a:** The Applicant shall obtain and hold for the duration of project construction, sufficient carbon credits to fully offset construction-phase GHG emissions ("project carbon offsets"). At minimum, the Applicant shall obtain and hold carbon credits to offset at least 4,229 metric tons of CO_2e emissions for the first year of construction and prorated during the second year as required. Prior to completion of project construction, the Applicant shall prepare a detailed written summary of the project carbon offsets, including offset project type, location, calculation methodology protocol employed, and registration status. In addition, prior to completion of project construction, the Applicant shall provide to the CPUC an independent verification opinion statement(s), from a verification body registered with the California Climate Action Registry, Chicago Climate Exchange, ANSI, or the CARB, for the credits to be applied. Offsets purchased from a third-party or developed by the Applicant must meet at least one of the following requirements: 1) Offset project is located within California; 2) Offset project is located in jurisdictions that hold current, specific agreements with California (such as the Climate Action Reserve), or exist in the context of an ISO-compliant regional trading system like that being developed in the Western Climate Initiative or other regional program; and/or 3) Offset project is an internally developed reduction measure following a recognized protocol (such as the Climate Action Reserve, the Voluntary Carbon Standard, or the Chicago Climate Exchange). Some potential offset projects of this type include: • Fuel switching in applicant-owned equipment;	**MM AIR-5a:** Obtain and hold carbon credits to offset 4,229 metric tons of CO2-e emissions for the first year of construction, and prorated during the second year as required.	Prior to and during construction

Table 6-1 Mitigation Monitoring Plan (Updated)

	• Energy efficiency upgrades beyond business as usual; • Implementation of a quantifiable carpooling program above and beyond what is currently in place; and • Sequestration and/or destruction of GHG conducted in accordance with any protocol available at the time of construction from the Climate Action Reserve, the Voluntary Carbon Standard, or the Chicago Climate Exchange. Any project carbon offset either purchased or developed by the Applicant through another entity must either be registered in, or developed in accordance with a protocol for, an established Carbon Reduction/Sequestration Project. Established projects and protocols would include those provided by recognized organizations, such as the Climate Action Reserve, the Voluntary Carbon Standard, or the Chicago Climate Exchange, that can provide a reasonable level of assurance that GHG reductions are real, additional, permanent, and verifiable. Should the Applicant develop a project carbon offset without registering it with one of the above-referenced registration bodies, the Applicant is required to demonstrate to the CPUC that the offset satisfies the four additionality tests as outlined in the UNFCC Additionality Tool and must obtain an independent evaluation by a qualified third-party confirming that the offset meets additionality testing requirements. With the implementation of MM AIR-5, the impact of the project would be reduced, but it would not be mitigated to a less than significant level and would remain a significant impact.		
Impact AIR-6: GHG Emissions from Project Operations	~~**MM AIR-6a:** The Applicant shall obtain and hold for the life of the Project sufficient carbon credits to fully offset GHG emissions caused by transmission line operation, maintenance, and inspection activities. Within the first year of project operation, the Applicant shall purchase carbon offsets for at least 34 tonnes of CO_2e. To determine the quantity of carbon reductions that must occur each year after this initial year, the Applicant shall develop a complete GHG inventory annually. The Applicant shall follow established methodologies (such as the California Climate Action Registry or World Resources Institute~~	**MM AIR-6a:** Obtain and hold for the life of the Project sufficient carbon credits to fully offset GHG emissions caused by transmission line operation, maintenance, and inspection activities.	Following construction and prior to operation

Table 6-1 Mitigation Monitoring Plan (Updated)

	~~protocols) to report GHG emissions associated with operation of the Project. All operational emissions, including SF6 leakage and vehicle travel, will be fully offset using one of the approaches outlined in **MM AIR-5a.** The Applicant shall report to the CPUC annually on the status of efforts to obtain these offsets and the quantity of GHG emissions offset.~~		
D.11 Noise and Vibration			
Impact NOISE-1: Noise Levels that Exceed Standards	**MM NOISE-1a:** The Applicant shall stop all construction work within 300 feet of sensitive receptors within Riverside County at 6:00 pm unless the California Independent System Operator (CAISO) and/or California Department of Transportation (Caltrans) require that conductor stringing over freeways or highways occur after 6:00 p.m.	**MM NOISE-1a:** Stop all construction work within 300 feet of sensitive receptors within Riverside County at 6:00 pm.	During construction
Impact NOISE-2: Excessive Ground-Bourne Vibrations or Ground-Bourne Noise Levels	No mitigation required	None	N/A
Impact NOISE-3: Permanently Increase Ambient Noise Levels in the Project Vicinity	No mitigation required	None	N/A
Impact NOISE-4: Substantial Temporary or Periodic Increase in Ambient Noise Levels in the Project Vicinity	No mitigation required	None	N/A
Impact NOISE-5: Impacts to Construction Workers from Airports and Airstrips Noise	No mitigation required	None	N/A
Impact NOISE-6: Impacts to Residents in the Vicinity of a Private Airstrip	No mitigation required	None	N/A
D.12 Transportation and Traffic			
Impact TRANS-1: Traffic and Level of Service	No mitigation required	None	N/A
Impact TRANS-2: Roadway Closure	No mitigation required	None	N/A
Impact TRANS-3: Air Traffic	No mitigation required	None	N/A
Impact TRANS-4: Design Hazards	No mitigation required	None	N/A
Impact TRANS-5: Emergency Response	No mitigation required	None	N/A
Impact TRANS-6: Parking	No mitigation required	None	N/A
Impact TRANS-7: Pedestrians and Bicycles	No mitigation required	None	N/A
Impact TRANS-8: Damage to Roadways	**MM TRANS-8a:** Repair roadways damaged by construction activities. If roadways, sidewalks, medians, curbs, shoulders, or other such features are damaged by the Project's construction activities, as determined by the CPUC Environmental Monitor or the affected public agency, the Applicant shall coordinate repairs with the affected public agencies and ensure that any such damage is repaired to the pre-	**MM TRANS-8a:** Repair roadways damaged by construction activities.	30 days after construction

Table 6-1 Mitigation Monitoring Plan (Updated)

	construction condition within 30 days from the end of the construction period.		
D.13 Public Services and Utilities			
Impact PUB-1: Impact on and Demand for Public Services	No mitigation required	None	N/A
Impact PUB-2: Wastewater Treatment Requirements	**MM HYD-1a** and **HYDRO-SCE-1** (see above)		
Impact PUB-3: Water and Wastewater Treatment Facilities	No mitigation required	None	N/A
Impact PUB-4: Storm Water Drainage Facilities	No mitigation required	None	N/A
Impact PUB-5: Water Supply	No mitigation required	None	N/A
Impact PUB-6: Wastewater Treatment Capacity	No mitigation required	None	N/A
Impact PUB-7: Landfill and Waste Disposal Needs	No mitigation required	None	N/A
Impact PUB-8: Solid Waste Statutes and Regulations	No mitigation required	None	N/A
D.14 Agriculture			
Impact AG-1: Designated Farmland	No mitigation required	None	N/A
Impact AG-2: Williamson Act Lands	No mitigation required	None	N/A
Impact AG-3: Other Farmland Considerations	No mitigation required	None	N/A
D.15 Population and Housing			
Impact POP-1: Population Growth	No mitigation required	None	N/A
Impact POP-2: Existing Housing	No mitigation required	None	N/A
Impact POP-3: Existing Residents	No mitigation required	None	N/A

ATTACHMENT C

DECLARATION OF JENNIFER WOLF

ATTACHMENT C

DECLARATION OF JENNIFER WOLF

I, Jennifer Wolf, declare as follows:

1. I, Jennifer Wolf, am a Project Manager at Southern California Edison Company (SCE). I have been with SCE since 2010. I have a Bachelor of Arts in Environmental Policy and Analysis from Bowling Green State University and a Master of Public Administration from University of Colorado. I have over ten years of work experience as a Project Manager in building and development.

2. The document entitled *Southern California Edison Company, Valley-Ivyglen 115 kV Subtransmission Line Project, Project Modification Report* (PMR) was prepared under my supervision regarding proposed modifications to the project approved by D.10-08-009 (Approved Project). I have knowledge of new or changed facts and circumstances described in the PMR that support SCE's filing of this Petition For Modification (PFM). If called as a witness, I could and would competently testify thereto. The PMR determines that, with the incorporation of proposed revisions to mitigation measures and applicant proposed measures (APMs) identified in the Final Environmental Impact Report (EIR), the proposed modifications associated with the PFM do not result in any new significant environmental impacts or substantially increase the severity of previously identified significant effects identified in the Final EIR. *See* PMR at 1-1, 2-45 to 2-54.

3. Following D.10-08-009, SCE began final engineering of the Approved Project, which included the evaluation of differences between the originally proposed project and Approved Project. As part of this final engineering review, SCE identified new and changed circumstances that would affect the construction and design of the Approved Project. Based on SCE's final engineering review and new/changed circumstances, SCE determined that

modifications to the construction and design of the Approved Project were needed to comply with the Commission's General Order 95, account for topography constraints, facilitate efficient construction and maintenance, reduce the number of pole replacements, and minimize impacts to jurisdictional drainages and sensitive species, among other factors. *See* PMR at 1-1. As modifications were identified for one aspect of the Approved Project, SCE evaluated whether the modifications would trigger additional modifications with other aspects of the Approved Project, taking into account a variety of considerations, such as engineering constraints, constructability and environmental impacts. This iterative process was repeated several times until the scope of the modifications were fully determined, which added to the overall time of SCE's review.

4. SCE remained in communications with the Commission's staff during SCE's post-approval evaluation process. After SCE determined that modifications to the construction and design of the Approved Project would likely be required, SCE communicated with the Commission's Energy Division and Legal Division about the appropriate mechanism to seek authorization for the necessary modifications to the Approved Project. Energy Division and Legal Division provided guidance that a formal PFM would be necessary. *See* Letter From Jensen Uchida, Energy Division, To Tom Burhenn, Southern California Edison, dated November 7, 2011.

Proposed Design Modifications to the Valley-Ivyglen 115 kV Subtransmission Line

5. *Segment Realignment* – The Approved Project is divided into eight segments, starting in the east at Valley Substation and ending in the west at Ivyglen Substation. SCE proposes to realign portions of Segments 4, 5, 7, and 8. SCE proposes to realign Segment 4 to reduce the number of pole replacements that would be required, and for constructability and ease of maintenance. PMR at 2-7. SCE proposes to realign Segment 5 to reduce impacts to

Additional Reserve Lands (ARLs) as part of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). *Id.* SCE proposes to realign Segment 7 to reduce impacts to Riversidean Alluvial Fan Sage Scrub (RAFS) vegetation communities. *Id.* at 2-8. SCE proposes to realign Segment 8 to minimize jurisdictional drainages and avoid potential impacts associated with landslides. *Id.*

6. *Conversion to Underground* – SCE proposes to underground an approximately 300-foot portion of Segment 1 and approximately 1.9-mile portion of Segment 8. *Id.* at 2-8. SCE proposes to underground Segment 1 to cross under an existing 500-kV overhead transmission line that connects the Inland Empire Energy Center to Valley Substation, and to underground Segment 8 to minimize impacts to jurisdictional drainages and avoid potential landslide hazards between I-15 and Temescal Canyon Road. *Id.*

7. *Modified Span Length/Pole Height/Number of Poles* – SCE proposes to reduce the minimum and increase the maximum span length between poles, increase the maximum pole height, reduce the total number of light-weight steel poles (LWSPs), increase the number of tubular steel poles (TSPs) to ensure consistency with General Order 95, address topography constraints, and account for other proposed modifications in the PFM. *Id.* at 2-9.

8. *Additional Pole Types* – SCE proposes to use three new pole types (hybrid poles, wood poles, and guy poles) to meet safety and reliability standards, minimize impacts to jurisdictional waters, and account for other proposed modifications in the PFM. *Id.* at 2-10 to 2-17.

9. *Modified Conductor Configuration* – SCE proposes modifications to the conductor configuration to account for changes with the primary distribution circuit underbuilt

along the subtransmission line and account for other proposed modifications in the PFM. *Id*. at 2-17.

10. *Access Road Design Changes* – The Final EIR assumes that existing and new access roads used during construction would be approximately 12 feet wide in most areas and approximately 15 to 16 feet wide in areas where tight-radius curves may be required. *Id*. at 2-17. Due to safety concerns for construction and maintenance personnel, SCE proposes to increase the width of the access roads to approximately 22 feet along curves in steep terrain areas and other key locations. These changes would apply to approximately 30 percent of the roads used during construction of the proposed modifications. *Id*. at 2-18. When the terrain would be altered for access roads, an additional two feet of drainage berm or swale may be required along each side of the access roads. *Id.* Additional information about the proposed design modifications is provided in the PMR. *See id*. at 2-17 to 2-18.

Proposed Construction Modifications to the Valley-Ivyglen 115 kV Subtransmission Line

11. Construction of the proposed modifications for the Valley-Ivyglen 115 kV Subtransmission Line would generally involve the same construction methods and techniques as those described in the Final EIR. *Id.* at 2-18. However, based on the design modifications proposed by the PFM and changed circumstances, several new or revised construction methods will be required. *Id.* SCE proposes modifications to the construction work areas (staging areas, stringing areas, and helicopter operation yards) and guard structure installation techniques. *Id.* at 2-30 to 2-32. SCE also proposes the use of several new construction methods and related equipment (shooflies, blasting, and helicopters). *Id.* at 2-32 to 2-33. Additional information about the proposed construction modifications is provided in the PMR. *See id.* at 2-18 to 2-33, 2-45.

Proposed Modifications to the Fogarty Substation

12. At Fogarty Substation, SCE proposes to modify two distribution getaways to accommodate the proposed modifications in the PFM, and install a permanent restroom. *Id.* at 2-33. Additional information about the proposed changes to the Fogarty Substation is provided in the PMR. *See id.* at 2-33 to 2-34.

Proposed Modifications to the Telecommunications Systems

13. SCE proposes changes to the construction and design of the telecommunications systems associated with the Approved Project. SCE proposes to install additional portions of the fiber optic cable underground and attach the overhead portions of the fiber optic cable to the subtransmission line via a wood cross-arm based on construction constraints and to accommodate the proposed modifications in the PFM. *Id.* at 2-34. Additional information about

the proposed changes to the construction and design of the telecommunications systems is provided in the PMR. *See id*. at 2-34 to 2-45.

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

Executed March 29, 2013, at Rosemead, California.

/s/ Jennifer Wolf
By: Jennifer Wolf

ATTACHMENT D

LETTER FROM JENSEN UCHIDA, ENERGY DIVISION, TO TOM BURHENN, SOUTHERN CALIFORNIA EDISON, DATED NOVEMBER 7, 2011

STATE OF CALIFORNIA
Edmund G. Brown Jr., Governor

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

November 7, 2011

VIA FIRST CLASS MAIL AND EMAIL

Mr. Tom Burhenn
Southern California Edison
Regulatory Affairs
2244 Walnut Grove Avenue, Quad 3D, GO1
Rosemead, California 91770

Dear Mr. Burhenn:

Thank you for meeting with me and other members of the Energy and Legal Divisions of the CPUC on October 27, 2011 to discuss Southern California Edison's (SCE) intent to file a variance request to modify the design of the Fogarty Substation's vault/getaway systems. During the meeting, you noted that an official request for the variance would be delivered to the Energy Division within a few days of the meeting. The request, along with maps and other supplemental data were received by the Energy Division on October 31, 2011.

After reviewing the materials submitted, the Energy and Legal Divisions concur that the only mechanism available to SCE to seek Commission approval of the type of project changes planned for the substation would be to re-file the request as a formal Petition for the Modification (PTM) of D.10-08-009. No further action can be taken on the proposed modification until a PTM is submitted by SCE.

Sincerely,

Jensen Uchida

CC: Mary Jo Borak, CPUC, Energy Division
Nicholas Sher, CPUC, Legal Division

ATTACHMENT E

SOUTHERN CALIFORNIA EDISON COMPANY VALLEY-IVYGLEN 115 KV SUBTRANSMISSION LINE PROJECT
PROJECT MODIFICATION REPORT

Appendix A

BALANCE SHEET AND STATEMENT OF INCOME

AS OF DECEMBER 31, 2012

SOUTHERN CALIFORNIA EDISON COMPANY

BALANCE SHEET

DECEMBER 31, 2012

CAPITALIZATION AND LIABILITIES

(Unaudited)

(Millions of Dollars)

CAPITALIZATION:	
Common stock	$2,168
Additional paid-in capital	581
Accumulated other comprehensive loss	(29)
Retained Earnings	7,228
Common shareholder's equity	9,948
Preferred and preference stock	1,795
Long-term debt	8,828
	20,571
CURRENT LIABILITIES:	
Short-term debt	175
Accounts payable	1,297
Accrued taxes	72
Accrued interest	172
Customer deposits	193
Derivative liabilities	126
Regulatory liabilities	536
Deferred income taxes	81
Other current liabilities	861
	3,513
DEFERRED CREDITS:	
Deferred income taxes	6,669
Deferred investment tax credits	104
Customer advances	149
Derivative liabilities	939
Pensions and benefits	2,245
Asset retirement obligations	2,782
Regulatory liabilities	5,214
Other deferred credits and other long-term liabilities	1,848
	19,950
	$44,034

SOUTHERN CALIFORNIA EDISON COMPANY

STATEMENT OF INCOME

12 MONTHS ENDED DECEMBER 31, 2012

(Unaudited)

(Millions of Dollars)

OPERATING REVENUE	$11,851
OPERATING EXPENSES:	
Fuel	308
Purchased power	3,831
Operation and maintenance	3,544
Depreciation, decommissioning and amortization	1,562
Property and other taxes	295
Disallowances and other	32
Total operating expenses	9,572
OPERATING INCOME	2,279
Interest income	7
Other income	137
Interest expense	(499)
Other expenses	(50)
INCOME BEFORE INCOME TAX	1,874
INCOME TAX EXPENSE	214
NET INCOME	1,660
Less: Dividends on preferred and preference stock	91
NET INCOME AVAILABLE FOR COMMON STOCK	$1,569

Appendix B

LIST OF COUNTIES AND MUNICIPALITIES

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

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

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

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

Appendix C

NOTICE OF PETITION FOR MODIFICATION

NOTICE OF PETITION FOR MODIFICATION
Valley-Ivyglen 115 kV Subtransmission Line and Fogarty Substation Project

Date: March 29, 2013

Petition For Modification: Southern California Edison (SCE) is proposing to modify the Valley-Ivyglen 115 Kilovolt (kV) Subtransmission Line and Fogarty 115/12 kV Substation Project (Approved Project) that was approved by the California Public Utilities Commission (CPUC) following the preparation of the Final Environmental Impact Report (EIR) and Decision 10-08-009. Following the decision, SCE began final engineering of the Approved Project and identified new and changed circumstances that would affect the construction and design of the Approved Project. Based on SCE's final engineering review and new/changed circumstances, SCE determined that modifications to the construction and design of the Approved Project were needed to comply with the Commission's General Order 95, account for topography constraints, facilitate efficient construction and maintenance, reduce the number of pole replacements, and minimize impacts to jurisdictional drainages and sensitive species, among other factors.

The Petition For Modification (PFM) includes the following elements:

- Valley-Ivyglen 115 kV Subtransmission Line Design Modifications
- Valley-Ivyglen 115 kV Subtransmission Line Construction Modifications
- Fogarty Substation Modifications
- Telecommunications System Modifications

Construction is scheduled to begin in mid-2014. The Project is planned to be operational by late 2015.

EMF Compliance: The CPUC requires utilities to employ "no cost" and "low cost" measures to reduce public exposure to electric and magnetic fields (EMF) in accordance with EMF Design Guidelines. (Decisions 93-11-013 and 06-01-042.) The project implements the following measures[s]:

- Utilize structure heights that meet or exceed SCE's EMF preferred design criteria.
- Utilize double-circuit construction that reduces spacing between circuits as compared with single-circuit construction.
- Utilize subtransmission line construction that reduces the space between conductors as compared with other designs.
- Arrange conductors of proposed subtransmission line for magnetic field reduction.
- Utilize underground subtransmission construction for engineering reasons.

Environmental Review: SCE has prepared a Project Modification Report (PMR) analyzing the potential environmental impacts associated with the PFM. The PMR concludes that, with the implementation of Applicant Proposed Measures (APMs) and Mitigation Measures (MMs), as

described in the PMR, the PFM would not result in new significant environmental effects or increase the severity of previously identified significant effects as compared to the Final EIR. Pursuant to the California Environmental Quality Act (CEQA), the CPUC will evaluate potential environmental effects associated with the PFM.

Public Participation:

- For information on the environmental review associated with the PFM, contact the CPUC's Energy Division at enviroteam@cpuc.ca.gov or (415) 703-2126.
- Persons may obtain party status by filing a protest to the PFM by April 29, 2013 in compliance with Rule 2.6, or by making a motion for party status at any time in compliance with Rule 1.4 of the CPUC's Rules of Practice and Procedure (posted at www.cpuc.ca.gov).
- The public may communicate their views regarding the PFM by writing to the CPUC at 505 Van Ness Avenue, San Francisco, CA 94102, or by emailing the Public Advisor at public.advisor@cpuc.ca.gov.

Document Subscription Service: The CPUC's free online subscription service sends subscribers an email notification when any document meeting their subscription criteria is published on the CPUC's website, such as documents filed in a CPUC proceeding (e.g., notices of hearings, rulings, briefs and decisions). To sign up to receive notification of documents filed in this proceeding (or other CPUC matters), visit www.cpuc.ca.gov/subscription.
Contacts: For assistance from the CPUC, please contact the Public Advisor in San Francisco at (415)703-2074 (public.advisor@cpuc.ca.gov) or in Los Angeles at (213) 567-7055 (Public.Advisor.LA@cpuc.ca.gov).

To obtain a copy of SCE's PFM or PMR, or to request further information about the proposed project, please contact:

Raymond Hicks
SCE Region Manager
for Menifee & Perris
Menifee Service
Center
26100 Menifee Rd
Menifee, CA 92585
Phone: (951) 317-
5608

Louis Davis
SCE Region Manager for Riverside County
Wildomar Service Center
24487 Prielipp Dr.
Wildomar CA 92595
Phone: (951) 505-9097

Jeremy Goldman
SCE Region Manager
for Lake Elsinore
Wildomar Service
Center
24487 Prielipp Dr.
Wildomar CA 92595
Phone: (951)
249-8466

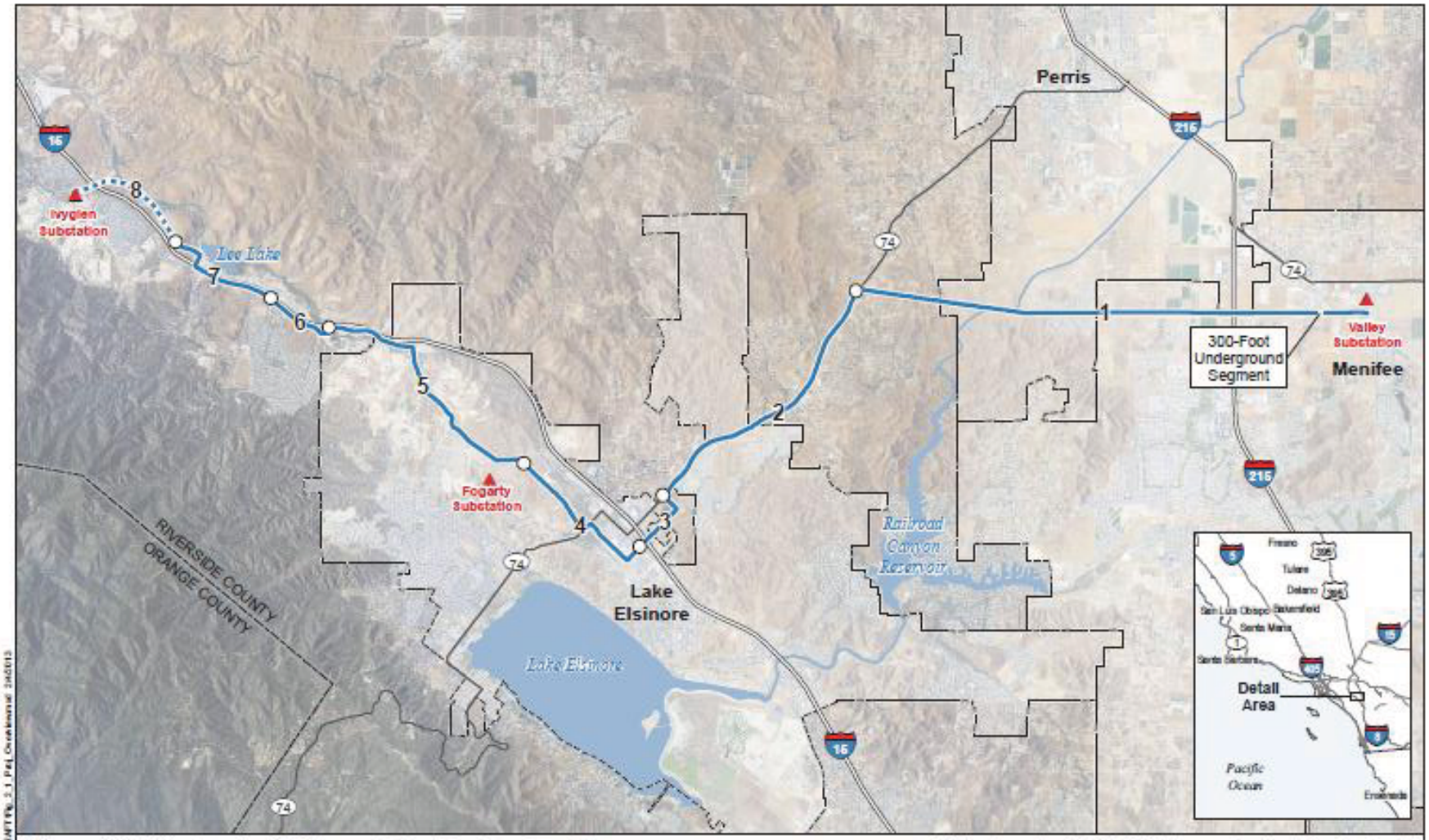


Figure 2-1: Valley-Ivyglen Subtransmission Line Overview Map

Valley-Ivyglen 115 kV Subtransmission Line Project

LIST OF NEWSPAPERS
PUBLISHING THE NOTICE FOR A
PERMIT TO CONSTRUCT

The Press Enterprise
3450 Fourteenth Street
Riverside, CA 92501

Appendix D

CERTIFICATE OF SERVICE OF NOTICE OF

PETITION FOR MODIFICATION

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 **NOTICE OF PETITION FOR MODIFICATION** 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 29th day of March 2013, at Rosemead, California.

/s/Monica Romero
Project Analyst
SOUTHERN CALIFORNIA EDISON COMPANY

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

300 – FOOT OWNERSHIP LISTING PHASE 1

OWNER NAME	OWNER ADDRESS	OWNER CITY	OWNER STATE	OWNER ZIP
74 CENTRAL SELF STORAGE	27403 YNEZ RD 218	TEMECULA	CA	92591
74 CENTRAL SELF STORAGE	200 E CARRILLO ST 200	SANTA BARBARA	CA	93101
AARD LECA VL1	1440 BLAKE ST 310	DENVER	CO	80202
ABDULHAMEED,EVELYN A	273 CALDERA ST	PERRIS	CA	92570
ABDULZAHRA,HAZIM	5107 VENICE BLVD	LOS ANGELES	CA	90019
ABOOD,NICHOLAS & KATHRYN J TRU	4254 MOTOR AVE	CULVER CITY	CA	90232
ADAMS,KATHLEEN	346 CALDERA ST	PERRIS	CA	92570
AGUIRRE,MANUEL & KARINA L	113 HEADLANDS WAY	PERRIS	CA	92570
ALFARO,JOSE F & ESMERALDA	117 HEADLANDS WAY	PERRIS	CA	92570
ALLAN ST LAKE ELSINORE INC	29154 ALLAN ST	LAKE ELSINORE	CA	92532
ALMAHMUD,MOHAMMAD	PO BOX 79185	CORONA	CA	92877
ALTEMUS,ARMIN J & JAE C	12549 W BAJADA RD	PEORIA	AZ	85383
ALVARENGO,ADELA D	124 GOLDENROD AVE	PERRIS	CA	92570
ANACAPA LAND CO	717 TEXAS ST 1000	HOUSTON	TX	77002
ANDREWS,GEORGE V & EKATERINI A	3881 MEADOW PARK LN	TORRANCE	CA	90505
ANDREWS,GEORGE V & EKATERINI G	18202 PRAIRIE AVE	TORRANCE	CA	90504
ANDREWS,STEPHEN V & HELEN S	29288 WHITLEY COLLINS DR	ROLLING HILLS ESTATES	CA	90275
ANG,DOMINADOR BANDARLIPE	3057 N SPRINGDALE DR 57	LONG BEACH	CA	90810
ANGUIANO,DALILA	325 CALDERA ST	PERRIS	CA	92570
ANZA BUTTERFIELD ROAD 34 LLC	13240 EVENING CREEK DR S 315	SAN DIEGO	CA	92128
ARAGON,LARRY & EMILY	29106 ALLAN ST	LAKE ELSINORE	CA	92532
ARCE,FRED A & JOSIE S	27471 STATE HIGHWAY 74	PERRIS	CA	92570
ARENAS,JESUS	1177 LA MIRADA ST	LAGUNA BEACH	CA	92651
ARROYO DEL TORO EQQ	28051 TEFIR	MISSION VIEJO	CA	92692
ARROYO,CARLOS F & ISELA	22740 LEMON ST	WILDOMAR	CA	92595
ARROYO,DEL TORO EQQ	28051 TEFIR	MISSION VIEJO	CA	92692
AVILA,RODOLFO	226 CALDERA ST	PERRIS	CA	92570
AYALA,ELVIRA	28527A HIGHWAY 74	LAKE ELSINORE	CA	92532
BAERRESEN,DRAKE A	45021 ALTISSIMO WAY	LAKE ELSINORE	CA	92532
BAEZ,JAMES & SALLY ANN	30028 LOS NOGALES RD	TEMECULA	CA	92591
BANK OF AMERICA NA	30870 RUSSELL RANCH RD	WESTLAKE VILLAGE	CA	91362
BARAJAS,LYDIA C	45035 CARLA CT	LAKE ELSINORE	CA	92532
BARBEE,RUDOLPH B	15413 NEWTON ST	HACIENDA HEIGHTS	CA	91745
BARTA,DOLORES	27670 HAMMACK AVE	PERRIS	CA	92570
BENITEZ,SANTIAGO & INES	157 HEADLANDS WAY	PERRIS	CA	92570
BINIASZ,LAVERNE M	31941 CORYDON ST 1	LAKE ELSINORE	CA	92530
BLABY,STANLEY T TRUST	29135 MELBY DR	LAKE ELSINORE	CA	92532
BLAKELEY,BRIAN L & ELIDA E	3801 JUNIPER LN	PERRIS	CA	92570
BOERSMA,PETER & PAMELA	1995 MARKET ST	RIVERSIDE	CA	92501
BONNER,LILLIE M	27020 STATE HIGHWAY 74	PERRIS	CA	92570
BONNER,ROBERT H & KELLY M	29122 ALLAN ST	LAKE ELSINORE	CA	92532
BOU,KEATH	25699 VISTA FAMOSO DR	MORENO VALLEY	CA	92551
BOYKINS,DERNISE	221 CALDERA ST	PERRIS	CA	92570
BRETTO,SANDRA JEAN TRUST	21451 ETHANAC RD	PERRIS	CA	92570
BROWN,JAY REED	43107 AVOLA CT	TEMECULA	CA	92592
BUENROSTRO,ROBERTO JR & YESENI	45039 ALTISSIMO WAY	LAKE ELSINORE	CA	92532
BUI LE D & CUONG TRUST	14656 JUNIPER ST	WESTMINSTER	CA	92683
BURGOS,RAMON	349 CALDERA ST	PERRIS	CA	92570
BURKLE,ROGER W & CYNTHIA A	122 GOLDENROD AVE	PERRIS	CA	92570
C & C COLLIER DEV PARTNERS	33761 KINKERRY LN	SAN JUAN CAPISTRANO	CA	92675
CALIFORNIA PAC ANN CONF UNITED	PO BOX 6006	PASADENA	CA	91102
CALVILLO,MIGUEL L & YOLANDA C	16549 GILMORE ST	LAKE BALBOA	CA	91406
CAMPANA,ALMA L & AGUSTIN G	110 GOLDENROD AVE	PERRIS	CA	92570

CAMPAS,GILBERT S	25850 STATE HIGHWAY 74	PERRIS	CA	92570
CAMPBELL,CARL A	4446 CAHUENGA BLVD	TOLUCA LAKE	CA	91602
CARLSTON,MARK A & PAMELA J	PO BOX 279	LAKE ELSINORE	CA	92531
CASTELLANOS,JOSE F & MARGARITA	337 CALDERA ST	PERRIS	CA	92570
CASTRO,VICTOR M & DAVID	45003 ALTISSIMO WAY	LAKE ELSINORE	CA	92532
CASWELL,MARJORIE J	7956 BEARDSLEY AVE NW	GIG HARBOR	WA	98335
CERVANTES,JOSE L & GABRIELA J	3763 MONOLITH TRL	PERRIS	CA	92570
CHACHULSKI,BARBARA	22600 BUTTERCUP PL	SUN CITY	CA	92587
CHAIDEZ,ANGELICA & MAGDALENO E	27736 HAMMACK AVE	PERRIS	CA	92570
CHAMBERLIN,KARLAN A	26375 DAWSON RD	ROMOLAND	CA	92585
CHAPARRAL,VALLEY	3220 BERN CT	LAGUNA BEACH	CA	92651
CHASE,JAMES R	129 HEADLANDS WAY	PERRIS	CA	92570
CHAU,QUYEN	585 AUSTRIAN WAY	AVON	IN	46123
CHAVEZ,STEVEN A	45027 CARLA CT	LAKE ELSINORE	CA	92532
CHEN,DER B	1 LEUCADIA	IRVINE	CA	92602
CHEUNG,WINNIE	4851 HELEO AVE	TEMPLE CITY	CA	91780
CIMARRON RIDGE	2900 ADAMS ST C25	RIVERSIDE	CA	92504
CLARK,DEBBIE	26951 HAMMACK AVE	PERRIS	CA	92570
COLINAS DEL ORO LAND CO	PO BOX 540	SANTA BARBARA	CA	93102
COLLINS,RICHARD M & ROSEMARY L	1938 PALMER DR	OCEANSIDE	CA	92056
COLON,JAMES & DAISY	106 GOLDENROD AVE	PERRIS	CA	92570
CONNEALLY,JOHN F & NORMA TRUST	6356 W 81ST ST	LOS ANGELES	CA	90045
CONTRERAS,MICHAEL	27610 STATE HIGHWAY 74	PERRIS	CA	92570
COOPER,JOSEPH & BEVERLY	29185 3RD ST	LAKE ELSINORE	CA	92532
CORDOVA,JULIO C	134 HEADLANDS WAY	PERRIS	CA	92570
CORDOVA,LUIS T & LETICIA	3761 PROMONTORY PT	PERRIS	CA	92570
CORTEZ,PETER & MELISSA	369 CALDERA ST	PERRIS	CA	92570
COUDURES FAMILY LTD PARTNERSHI	1688 N PERRIS BLVD F4	PERRIS	CA	92571
COUDURES,JOHN M JR	1688 N PERRIS BLVD F4	PERRIS	CA	92571
COUNTY INV	12770 HIGH BLUFF DR 160	SAN DIEGO	CA	92130
COUNTY LANDS PIP IV	923 N PENNSYLVANIA AVE	WINTER PARK	FL	32789
COUNTY OF RIVERSIDE	PO BOX 1180	RIVERSIDE	CA	92502
CRESPO,JULIO	285 CALDERA ST	PERRIS	CA	92570
CROLL,RAYMOND & SUSAN TRUST	1351 S CAMPUS AVE	ONTARIO	CA	91761
CULLORS,ANTHONY	218 CALDERA ST	PERRIS	CA	92570
CURIEL,ANTONIO	29111 ALLAN ST	LAKE ELSINORE	CA	92532
CURIEL,SALVADOR & MARIA F	18870 WELCH DR	LAKE ELSINORE	CA	92532
DANFORTH,DANNY J	22150 MCPHERSON RD	PERRIS	CA	92570
DAU,LONG NGUYEN	3586 HIDDEN CREEK ST	CORONA	CA	92881
DAUM,JEAN & NICOLE YVONNE	27751 HAMMACK AVE	PERRIS	CA	92570
DAVID,DAISY D	114 GOLDENROD AVE	PERRIS	CA	92570
DAVIES,MARK	45011 CARLA CT	LAKE ELSINORE	CA	92532
DAVIS,JANICE E	928 N GAFFEY PL	SAN PEDRO	CA	90731
DELAFUENTE,RIGOBERTO	45015 CARLA CT	LAKE ELSINORE	CA	92532
DELAPP,ROBERT W & DEBORAH	18889 WELCH DR	LAKE ELSINORE	CA	92532
DELATORRE,INGRID PANTALEON & J	313 CALDERA ST	PERRIS	CA	92570
DELATORRE,JOSE	3755 MONOLITH TRL	PERRIS	CA	92570
DELATORRE,RAUL & LUPE	6603 CHALET DR	BELL GARDENS	CA	90201
DELEO,G K & J LIVING TRUST	628 LANCER LN	CORONA	CA	92879
DENOS,RONALD S & JULIE A	18933 CONARD AVE	LAKE ELSINORE	CA	92532
DEOCA,ALONDRA MONTES	362 CALDERA ST	PERRIS	CA	92570
DEXTER PARTNERS	4645 VIA BENDITA	SANTA BARBARA	CA	93110
DIAZ,ISMAEL	3771 MONOLITH TRL	PERRIS	CA	92570
DIAZ,JOSE L & ANA C	338 CALDERA ST	PERRIS	CA	92570
DITTMER,MARK A	27720 STATE HIGHWAY 74	PERRIS	CA	92570
DOMINICK,VINCENT P	22831 KLAMATH CT	CANYON LAKE	CA	92587
DOOLEY,MARK R	45037 ALTISSIMO WAY	LAKE ELSINORE	CA	92532

DURAN,PATRICIA L	26225 RICHLAND LN	PERRIS	CA	92570
EARHART,JAMES	45031 CARLA CT	LAKE ELSINORE	CA	92532
EASTERN MUNICIPAL WATER DIST	PO BOX 8300	PERRIS	CA	92572
EDMONDSON,ROBERT MAX & KARLA K	581 BIRCH ST A	LAKE ELSINORE	CA	92530
ELSINGER,JIM	18818 WELCH DR	LAKE ELSINORE	CA	92532
ESPARZA,ROBERTO S & ELENA G	26020 STATE HIGHWAY 74	PERRIS	CA	92570
ESPINOZA,JOSE LUIS & ALICIA	15326 LA PALMA WAY	MORENO VALLEY	CA	92555
ESQUIVIAS,GLORIA J	305 CALDERA ST	PERRIS	CA	92570
ETHANAC SP LLC	PO BOX 2429	SUN CITY	CA	92586
ETZEL,GEORGE E & GEORGIA A TRU	29315 3RD ST	LAKE ELSINORE	CA	92532
EUBANKS,RAYMOND L & RUBY M	2122 W 78TH ST	LOS ANGELES	CA	90047
EVMWD	PO BOX 3000	LAKE ELSINORE	CA	92531
EZELL,APRIL L	245 CALDERA ST	PERRIS	CA	92570
FAKHOURY,SALEEM & SAMIRA	217 CALDERA ST	PERRIS	CA	92570
FASSEL,STEPHEN LYLE & LORRAINE	102 GOLDENROD AVE	PERRIS	CA	92570
FAY,THOMAS E	27580 STATE HIGHWAY 74	PERRIS	CA	92570
FIRST CITIZENS BK & TRUST CO	27708 JEFFERSON AVE 100	TEMECULA	CA	92590
FITCH,RAFAEL JR	104 GOLDENROD AVE	PERRIS	CA	92570
FLECK,RICHARD J & ANNE R	361 HALE AVE	ESCONDIDO	CA	92025
FLOOD,TIMOTHY	29138 ALLAN ST	LAKE ELSINORE	CA	92532
FLYNN,IRIS	20291 OAK ST	PERRIS	CA	92570
FONTENOT,FREEMAN A & ISABELL C	410 N BOWEN AVE	COMPTON	CA	90221
FOSTER,RONALD E	PO BOX 556	MURRIETA	CA	92564
FREESE,THERESA	PO BOX 40378	SAN DIEGO	CA	92164
FRENCH,JAN TRUST	PO BOX 1205	ROMOLAND	CA	92585
FUENTES,CARLOS & RUBY G	6270 CHADBOURNE AVE	RIVERSIDE	CA	92505
FUNKE,KAISER RALPH MICHAEL	2601 LAGUNA CANYON RD	LAGUNA BEACH	CA	92651
FURR,DORSEY L & JEANNE E TRUST	27381 STATE HIGHWAY 74	PERRIS	CA	92570
FURR,TR	27381 HIGHYWAY 74	PERRIS	CA	92370
GAETA,COVARRUBIAS RAYMUNDO & J	309 CALDERA ST	PERRIS	CA	92570
GALLARDO,LYNDA	45013 ALTISSIMO WAY	LAKE ELSINORE	CA	92532
GALLEGOS,JOE	1084 BAINBRIDGE CIR	CORONA	CA	92882
GARCIA,GRISELDA & JAIME	315 E ASH AVE	FULLERTON	CA	92832
GARCIA,JORGE & ANTONIA	2733 WEBSTER AVE	LONG BEACH	CA	90810
GARCIA,JOSE A & MARIA	26855 STATE HIGHWAY 74	PERRIS	CA	92570
GARCIA,JOSE LUIS	28102 BLUE DIAMOND LN	SUN CITY	CA	92585
GARCIA,VICTOR	137 HEADLANDS WAY	PERRIS	CA	92570
GAVARRETE,RAUL & IRMA	11824 GARD AVE	NORWALK	CA	90650
GENTILLON,JOHN VAL	4004 LAGO DI GRATA CIR	SAN DIEGO	CA	92130
GERSCH,JOSEPH L & J L TRUST	9780 KIWI MEADOW LN	ESCONDIDO	CA	92026
GILES,IVAN G	45029 CARLA CT	LAKE ELSINORE	CA	92532
GILLAND,LAMAR RUAL & KITTY ELL	20311 OAK ST	PERRIS	CA	92570
GILLUM,DALE & ELSA	3752 MONOLITH TRL	PERRIS	CA	92570
GIVENS,WILLIE CHARLES & GRACE	27105 JARVIS ST	PERRIS	CA	92570
GLOSECKI,IAN D & RENEE M	3742 PROMONTORY PT	PERRIS	CA	92570
GONZALES,BENITO	253 CALDERA ST	PERRIS	CA	92570
GONZALES,JAMES A & ESTELA L	22210 VILLAGE WAY DR	CANYON LAKE	CA	92587
GONZALES,RAUL	29511 3RD ST	LAKE ELSINORE	CA	92532
GONZALES,RAUL C	29489 3RD ST	LAKE ELSINORE	CA	92532
GONZALEZ,LARRY & CIRLEY	3489 CANNES AVE	RIVERSIDE	CA	92501
GONZALEZ,MARIO P & KATHERINE S	27560 PEACH ST	PERRIS	CA	92570
GORDON,MICHAEL D & CAROL A	24 SHADY HILL LN	FALLBROOK	CA	92028
GOUGH,DANIEL	317 CALDERA ST	PERRIS	CA	92570
GRITTON,HELEN B & NORM	27245 STATE HIGHWAY 74	PERRIS	CA	92570
GRITTON,HELEN B & RUTH V	27245 STATE HIGHWAY 74	PERRIS	CA	92570
GRITTON,NORM & LYNN R	27245 STATE HIGHWAY 74	PERRIS	CA	92570

GTE CALIF INC	PO BOX 152206	IRVING	TX	75015
GUMMS,LEROY	261 CALDERA ST	PERRIS	CA	92570
GUTIERREZ,LOUIE A	229 CALDERA ST	PERRIS	CA	92570
GUTIERREZ,PANFILO & ALEXANDRA	201 CALDERA ST	PERRIS	CA	92570
GUTIERREZ,SONIA L	138 HEADLANDS WAY	PERRIS	CA	92570
HALL,MICHAEL L	250 CALDERA ST	PERRIS	CA	92570
HARMAN,RONALD F	27678 HAMMACK AVE	PERRIS	CA	92570
HARNS,J KIRK	314 E 3RD ST	PERRIS	CA	92570
HARNS,JAMES K & CHRISTY L	314 E 3RD ST	PERRIS	CA	92570
HARTLEY,RONALD J & JERYL C	29826 HAUN RD 305	SUN CITY	CA	92586
HEARTZ,RONALD ROY & JOHNA	20675 LARI MARK ST	PERRIS	CA	92570
HEATHMAN,MARK J & KARYL J	22265 LANTANA DR	PERRIS	CA	92570
HENEIN,FAYEZ & AMAL	6528 GREENLEAF AVE 128	WHITTIER	CA	90601
HIGAREDA,MAURICIO	2403 S LA CADENA DR	COLTON	CA	92324
HINSON,ROBERT HUGH & LAWRENCE	3769 PROMONTORY PT	PERRIS	CA	92570
HOLLAUS,EVA M	27805 STATE HIGHWAY 74	PERRIS	CA	92570
HOOVER,RANDY	26900 STATE HIGHWAY 74	PERRIS	CA	92570
HSM PACIFIC	3228 LONG LAKE DR SE	OLYMPIA	WA	98503
HUFF,SELETHA G	PO BOX 431233	LOS ANGELES	CA	90043
HUFFMAN,RICHARD W & NADINE L	25260 BUNDY CANYON RD	MENIFEE	CA	92584
HULL STREET VENTURE	PO BOX 715	MURRIETA	CA	92564
HURTADO,ELOISA	145 HEADLANDS WAY	PERRIS	CA	92570
INLAND EMPIRE ENERGY CENTER	PO BOX 4900	SCOTTSDALE	AZ	85261
JACINTO,PABLO VEGA	18974 CONARD AVE	LAKE ELSINORE	CA	92532
JAMES,KENNETH PAUL	1126 N GRAND AVE A	COVINA	CA	91724
JEFFERSON,CHRISTOPHER L	120 GOLDENROD AVE	PERRIS	CA	92570
JEFFSTRA INC	8306 WILSHIRE BLVD 10	BEVERLY HILLS	CA	90211
JOHNSON,CYNTHIA A	3760 PEAK TRL	PERRIS	CA	92570
JOHNSON,GARY & KARI	27455 PEACH ST	PERRIS	CA	92570
JOHNSON,PATRICIA K	103 QUAIL RUN RD	SEMINOLE	OK	74868
JONES,WILLIAM R	345 CALDERA ST	PERRIS	CA	92570
K E S INV INC	19069 COLIMA RD	ROWLAND HEIGHTS	CA	91748
KASITA RENTALS	PO BOX 221	LAKE ELSINORE	CA	92531
KEIL,DIANE M	26795 STATE HIGHWAY 74	PERRIS	CA	92570
KELTY,JOHN ANDREW & EMILIE B	28933 ALLAN ST	LAKE ELSINORE	CA	92532
KENNEY,STEPHEN F	333 CAIDERA ST	PERRIS	CA	92570
KHAMVONGSOD,PHOKHAM	98 500 KOAUKA LOOP 21J	AIEA	HI	96701
KIM,HO JUNG	19431 AMETHYST CT C	CERRITOS	CA	90703
KIM,SUN JIK	1359 CANTERBURY LN	FULLERTON	CA	92831
KIMES,SHAPLEIGH H & PATRICIA A	2112 LA COLINA DR	SANTA ANA	CA	92705
KING,JOSE R	45033 ALTISSIMO WAY	LAKE ELSINORE	CA	92532
KINGSLY FAMILY INV	3007 SANTA MONICA BLVD	SANTA MONICA	CA	90404
KIRBY,JAMES P & PATRICIA C TRU	27590 MEDFORD WAY	SUN CITY	CA	92586
KIRKPATRICK,ROXANNE M & JEFFRE	24153 ROSITA DR	WILDOMAR	CA	92595
KOBLENSKY,NANCY C	3932 TOLAND CIR	LOS ALAMITOS	CA	90720
KONETZNY,PETER	18962 CONARD AVE	LAKE ELSINORE	CA	92532
KRALL,DONALD	PO BOX 3033	SAN CLEMENTE	CA	92674
KRAMER,FRED G & TAMMY M	3378 COUNTRY RD	FALLBROOK	CA	92028
LACAYO,ADOLFO & JULIA ANNE TRU	PO BOX 1096	LAKE ELSINORE	CA	92531
LAGRONE,CHARLES E & MARJORIE K	29161 ALLAN ST	LAKE ELSINORE	CA	92532
LAKE PLACE HOMES LLC	125 HEADLANDS WAY	PERRIS	CA	92570
LAM,TOM & NANCY	45017 CARLA CT	LAKE ELSINORE	CA	92532
LAMB,STEPHANIE	20223 LOOKOUT CIR	PERRIS	CA	92570
LANDAVERDE,ANDRES	1643 FAIRMONT DR	CORONA	CA	92882
LAWSON,KIMBER L ETAL	27877 STATE HIGHWAY 74	PERRIS	CA	92570
LE MARGUERITE CUC	30 ASCENSION	IRVINE	CA	92612
LEE,ARTHUR K	2452 PUNTA DEL ESTE DR	HACIENDA HEIGHTS	CA	91745

LEE,CHANG B	2501 REATA PL	DIAMOND BAR	CA	91765
LEE,JIAN JONG	14240 SAPPHIRE HILL LN	CHINO HILLS	CA	91709
LEMMON,JASON	29139 ALLAN ST	LAKE ELSINORE	CA	92532
LEPRO,EMIGDIO & MARIA MARIBEL	3750 PROMONTORY PT	PERRIS	CA	92570
LIMINOIS,CHRIS A & KELLY A TRU	26228 RICHLAND LN	PERRIS	CA	92570
LINDEMUTH,HENRY A & JESSICA	32295 MISSION TRL R8	LAKE ELSINORE	CA	92530
LIPTRAP,LUPE G	21835 MARTIN ST	PERRIS	CA	92570
LIZARRAGA,EDWARD A & RAPHAEL	13179 BALBOA LN	MORENO VALLEY	CA	92553
LOEUNG,SARETH	29170 ALLAN ST	LAKE ELSINORE	CA	92532
LONG,BILL E & RAE JEAN	PO BOX 390654	ANZA	CA	92539
LONG,STEPHEN H TRUST	18906 CONARD AVE	LAKE ELSINORE	CA	92532
LONGORIA,REYMUNDO & CAROLINA S	3766 PROMONTORY PT	PERRIS	CA	92570
LOPEZ,SAUL	365 CALDERA ST	PERRIS	CA	92570
LOTTERER,MARIA T	29074 ALLAN ST	LAKE ELSINORE	CA	92532
LOWERY,JOANN	PO BOX 687	LAKE ELSINORE	CA	92531
LYLES,GEORGIA F	257 CALDERA ST	PERRIS	CA	92570
MAIALE,JOANNE	108 GOLDENROD AVE	PERRIS	CA	92570
MARIGLIANO,CARMELLA M	29440 3RD ST	LAKE ELSINORE	CA	92532
MARMOLEJO,RUBEN G	238 CALDERA ST	PERRIS	CA	92570
MARRELLI,JOHN C	201 LOMAS SANTA FE DR 400	SOLANA BEACH	CA	92075
MARTIN,CHONG SOON	29637 PACIFIC COAST HWY	MALIBU	CA	90265
MARTIN,EVA	27805 STATE HIGHWAY 74	PERRIS	CA	92570
MARTIN,JOSE	PO BOX 864	ADELANTO	CA	92301
MARTINEZ,DIANA	341 CALDERA ST	PERRIS	CA	92570
MARTINEZ,JUAN & GENOVEVA	20235 BARNARD AVE	WALNUT	CA	91789
MARTINEZ,MARIANO R & CECILIA A	28709 HIGHWAY 74	LAKE ELSINORE	CA	92532
MARTINEZ,PARTIDA HUMBERTO A	193 CALDERA ST	PERRIS	CA	92570
MATTA,ABDALLAH IBRAHIM	18770 CONARD AVE	LAKE ELSINORE	CA	92532
MAYERSON,KEITH B	256 10TH AVE 2ND	NEW YORK	NY	10001
MAYES,JERRY & PATRICIA	25981 ELM ST	ROMOLAND	CA	92585
MBK HOMES LTD	175 TECHNOLOGY DR 200	IRVINE	CA	92618
MCCLARY,ROBERT B & TAKAKO	29146 ALLAN ST	LAKE ELSINORE	CA	92532
MCCLOSKEY,BETTY J TRUST	44980 DOS RIOS RD	TEMECULA	CA	92590
MCMULLEN,TINA L	27820 HAMMACK AVE	PERRIS	CA	92570
MCNALL,ANTHONY D	153 HEADLANDS WAY	PERRIS	CA	92570
MEDINA,ERNIE & MARIA	45042 ALTISSIMO WAY	LAKE ELSINORE	CA	92532
MEJIA,JOSE	233 CALDERA ST	PERRIS	CA	92570
MELENDREZ,J GUADALUPE & ROSA M	370 CALDERA ST	PERRIS	CA	92570
MELLAND,PAUL F TRUST	26530 TRUMBLE RD	SUN CITY	CA	92585
MELLINGER,STEPHEN	1053 IRON WHEEL ST	SANTEE	CA	92071
MENDEZ,CARMEN R & ALICIA	26960 PEACH ST	PERRIS	CA	92570
MENDEZ,UBALDO	45031 ALTISSIMO WAY	LAKE ELSINORE	CA	92532
MENDOZA,JAVIER A & GLORIA M	3745 PROMONTORY PT	PERRIS	CA	92570
MERCED,MERLINDA	29265 3RD ST	LAKE ELSINORE	CA	92532
METZLER,EDWARD F & LYNDA J TRU	38875 AVENIDA LA CRESTA	MURRIETA	CA	92562
MILLER,BILLY J & MARY A TRUST	29155 MELBY DR	LAKE ELSINORE	CA	92532
MILLER,JOHNATHAN & RAYZA	45025 ALTISSIMO WAY	LAKE ELSINORE	CA	92532
MO PROPERTIES INC	1301 W 19TH ST	UPLAND	CA	91784
MONTOYA,CRUZ AGUILAR	1329 S SHELLEY ST	SANTA ANA	CA	92704
MOORE,RONALD C & JEANETTE	21670 FESTUS CIR	PERRIS	CA	92570
MORALES,FABIOLA	271 JAYME JOY WAY	CORONA	CA	92881
MOTTE TOWNE CENTER	445 S D ST	PERRIS	CA	92570
MUELLER,DAVID	PO BOX 858	SUN CITY	CA	92586
MULLINS,MICHAEL & SANDRA L	27800 GREENWALD AVE	PERRIS	CA	92570
MUTH HOLDINGS	8042 KATELLA AVE	STANTON	CA	90680
NADEAU,PAUL J & SUZANNE L	277 CALDERA ST	PERRIS	CA	92570
NAVA,VICENTE	3768 MONOLITH TRL	PERRIS	CA	92570

NAVAR,ALFONSO JR	146 HEADLANDS WAY	PERRIS	CA	92570
NEIMAN,CELESTE MARIE	353 CALDERA ST	PERRIS	CA	92570
NEVAREZ,SANTIAGO MONTENEGRO	26835 STATE HIGHWAY 74	PERRIS	CA	92570
NGUYEN,BAY T	28949 ALLAN ST	LAKE ELSINORE	CA	92532
NGUYEN,MICHELLE MY & SOPHIA NH	18 WILDBROOK	IRVINE	CA	92614
NOLAND,RUTH	26540 TRUMBLE RD	SUN CITY	CA	92585
NORTH PEAK PARTNERS	1310 144 4TH AVE SW	N/A	N/A	N/A
NORWAY,BRIAN E & KANDI LYNN	20219 LOOKOUT CIR	PERRIS	CA	92570
NUTTER,ARNOLD G	26510 SHERMAN RD	SUN CITY	CA	92585
OBRIEN,JAMES E	29090 ALLAN ST	LAKE ELSINORE	CA	92532
OCHOA,FRANK X SR & BEATRICE I	354 CALDERA ST	PERRIS	CA	92570
OCONNELL,JOHN P & KATHLEEN D	32158 CAMINO CAPO A108	SAN JUAN CAPISTRANO	CA	92675
ODOHERTY,JOHN TRUST	19025 GROVEWOOD DR	CORONA	CA	92881
PABON,MOISES SR & TITA F	28290 TRELLIS LN	LAKE ELSINORE	CA	92532
PACIFIC GLOBAL DEV	4055 WILSHIRE BLVD 100	LOS ANGELES	CA	90010
PACWEST GROUP INC	41391 KALMIA ST 200	MURRIETA	CA	92562
PAIK,SUNG JUN	3256 MILLS AVE	LA CRESCENTA	CA	91214
PALMER,AMY A	141 HEADLANDS WAY	PERRIS	CA	92570
PALMER,ROBERT & MIRIAM C TRUST	PO BOX 967	PERRIS	CA	92572
PALMER,ROBERT E	PO BOX 967	PERRIS	CA	92572
PANTOJA,LUZ	27025 STATE HIGHWAY 74	PERRIS	CA	92570
PARK,JANG BU	1216 LAKE SHORE DR	BEAVER DAM	WI	53916
PATRIS,WILLIAM G & MARIA G	10739 JUNIPER PARK LN	SAN DIEGO	CA	92121
PATTERSON,CYNTHIA F ONEAL	29305 3RD ST	LAKE ELSINORE	CA	92532
PENA,ANGEL & ESTELLA	21630 FESTUS CIR	PERRIS	CA	92570
PENROD,JOSHUA C & ANGELA M	358 CALDERA ST	PERRIS	CA	92570
PERDUE,ROBERT S & MAURA J	26933 CHAMPAGNE BLVD	ESCONDIDO	CA	92026
PEREZ,VIVIANA A	45001 ALTISSIMO WAY	LAKE ELSINORE	CA	92532
PHAM,KIM	26745 STATE HIGHWAY 74	PERRIS	CA	92570
PHH MORTGAGE CORP	2001 BISHOPS GATE BLVD	MOUNT LAUREL	NJ	08054
PHILLIPS,MARTHA LOUISE TRUST	5517 ARCH CREST DR	LOS ANGELES	CA	90043
PHIMPASOUK,SOUKSADA	98 500 KOAUKA LOOP 21J	AIEA	HI	96701
PICA,FRANK P & PATRICIA A	33592 HONEYSUCKLE LN	TEMECULA	CA	92593
PINE,CHARLES E JR	241 CALDERA ST	PERRIS	CA	92570
PLAVALA,LAWRENCE	PO BOX 963	LAKE ELSINORE	CA	92531
PONCE,RUEBEN	118 GOLDENROD AVE	PERRIS	CA	92570
PRAWARTANA,MUKTI	105 HEADLANDS WAY	PERRIS	CA	92570
QUINTERO,GUSTAVO	329 CALDERA ST	PERRIS	CA	92570
QUIROZ,BYRON	18856 WELCH DR	LAKE ELSINORE	CA	92532
RAMIREZ,AGUSTIN LARIOS JR	269 CALDERA ST	PERRIS	CA	92570
RAMIREZ,MARIA ROSARIO	246 CALDERA ST	PERRIS	CA	92570
RAMIREZ,RAMIRO & KRISTEN S	3758 PROMONTORY PT	PERRIS	CA	92570
RANGEL,IVAN	265 CALDERA ST	PERRIS	CA	92570
REGIS,SAIDEE R	45013 CARLA CT	LAKE ELSINORE	CA	92532
REUST,THOMAS J & MARGARET A	753 W AVENUE J9	LANCASTER	CA	93534
RHODES,TIMOTHY	18740 CAMBERN AVE	LAKE ELSINORE	CA	92532
RICHMOND AMERCIAN HOMES OF MAR	5171 CALIFORNIA AVE 120	IRVINE	CA	92617
RIMROCK PARTNERS	6753 BROCKTON AVE	RIVERSIDE	CA	92506
RIOS,GUADALUPE S	121 HEADLANDS WAY	PERRIS	CA	92570
RIVERSIDE COUNTY FLOOD CONTROL	1995 MARKET ST	RIVERSIDE	CA	92501
RIVERSIDE COUNTY TRANSPORTATIO	3133 MISSION INN AVE	RIVERSIDE	CA	92507
ROCKWOOD,BERNARD A & JUDY L	18840 WELCH DR	LAKE ELSINORE	CA	92532
RODRIGUEZ FAMILY TRUST	45017 ALTISSIMO WAY	LAKE ELSINORE	CA	92532
RODRIGUEZ,EDWARD MEZA	26510 TRUMBLE RD	ROMOLAND	CA	92585
RODRIGUEZ,JOSE A & GUADALUPE	23411 WESTERN RIDGE RD	MORENO VALLEY	CA	92557
ROICO INV	170 WILKERSON AVE B	PERRIS	CA	92570

ROJAS,ELISEO R	29075 ALLAN ST	LAKE ELSINORE	CA	92532
ROMERO,JESSE JORDAN	25955 FLOYD AVE	SUN CITY	CA	92585
ROMERO,SYLVIA S	9127 MILLERGROVE DR	SANTA FE SPRINGS	CA	90670
ROMOLAND INV	512 CHANEY ST	LAKE ELSINORE	CA	92530
ROSA,ALFREDO E	106 GOLDENROD AVE	PERRIS	CA	92570
ROSA,DANIEL	116 GOLDENROD AVE	PERRIS	CA	92570
ROSETTA CANYON COMMUNITY ASSN	1451 RIMPAU AVE 107	CORONA	CA	92879
ROSETTA CANYON COMMUNITY ASSN	2280 WARDLOW CIR 150	CORONA	CA	92880
RUBALCABA,RAMIRO & GUADALUPE	26395 DAWSON RD	SUN CITY	CA	92585
RUBALCAVA,JULIAN & CLEMENTINA	26450 DAWSON RD	ROMOLAND	CA	92585
RUVALCABA,MIGUEL M	29083 ALLAN ST	LAKE ELSINORE	CA	92532
RV COU TRANSPORTATION	426 N OLIVE ST	ANAHEIM	CA	92805
RV,C	27333 STATE HIGHWAY 74	PERRIS	CA	92570
SALAS,PETER JR	PO BOX 2268	SUN CITY	CA	92586
SALINE,JOSEPH P JR	5838 REDONDO DR	BONSALL	CA	92003
SAMARIN,JACK FILLATOFF	24020 GUNTHER RD	ROMOLAND	CA	92585
SANCHEZ,JOSE & ELIDIA	28036 STATE HIGHWAY 74	PERRIS	CA	92570
SANDERSON,JANICE	209 CALDERA ST	PERRIS	CA	92570
SANDOR,SANDRA N	3561 IVY PL	SYRACUSE	UT	84075
SBA TOWERS III LLC	5900 BROKEN SOUND PKWY NW	BOCA RATON	FL	33487
SCHMIDT,ERIC K & JANET LYN	289 CALDERA ST	PERRIS	CA	92570
SCHWAB,DAVID M & DIANA L	29285 3RD ST	LAKE ELSINORE	CA	92532
SCHWARTZ,CHAD	3753 PROMONTORY PT	PERRIS	CA	92570
SCHWENN,DONALD L & RACHEL D TR	2635 E OCEAN BLVD	LONG BEACH	CA	90803
SELLECK,SHERI L	142 HEADLANDS WAY	PERRIS	CA	92570
SHARP,ALLEN C & ANNETTE	6351 MERLOT LN	PASO ROBLES	CA	93446
SHAW,LARRY A & SANDRA	29300 3RD ST	LAKE ELSINORE	CA	92532
SHAWKAT,A W TRUST	70 MAGDALENA DR	RANCHO MIRAGE	CA	92270
SHERFEY,VIRGINIA	28930 ALLAN ST	LAKE ELSINORE	CA	92532
SHERWOOD,NANCY E	16056 GRAND AVE	LAKE ELSINORE	CA	92530
SHETH,DILIP & MALA D	1905 VIA CORONEL	PALOS VERDES ESTATES	CA	90274
SHICKLER,MARK W & LINDA T	6381 DAPHNE ST	CORONA	CA	92880
SHIPLEY,WAYNE D & DIANA G	357 CALDERA ST	PERRIS	CA	92570
SILVA,ISRAEL R & ADRIENNE M	133 HEADLANDS WAY	PERRIS	CA	92570
SIMMONS,JULIE A	18867 WELCH DR	LAKE ELSINORE	CA	92532
SIMS,CHARLES H & ANDREA	33280 HOLLISTER DR	LAKE ELSINORE	CA	92530
SINGH,ROUPWATIE	22200 MCPHERSON RD	PERRIS	CA	92570
SLINGERLAND,JOHN B	29147 ALLAN ST	LAKE ELSINORE	CA	92532
SORIANO,JORGE & DEANNA M	45015 ALTISSIMO WAY	LAKE ELSINORE	CA	92532
SORTO,GUILLERMO & MARIA	45005 ALTISSIMO WAY	LAKE ELSINORE	CA	92532
SPT LAKE ELSINORE HOLDING CO	8951 RESEARCH DR	IRVINE	CA	92618
STATE OF CALIFORNIA DIVISION O	PO BOX 231	SAN BERNARDINO	CA	92402
STATUM,RONALD L & MARILYN V	7916 E SAFFRON ST	ANAHEIM	CA	92808
STENLAKE,TROY L	3768 PEAK TRL	PERRIS	CA	92570
STEVENS,DANNY & TRUDEE M	28601 N FRONTAGE RD	LAKE ELSINORE	CA	92532
STEVENS,DAVID W TRUST	26985 STATE HIGHWAY 74	PERRIS	CA	92570
STOCKSTILL,MARK D & CYNTHIA	3747 MONOLITH TRL	PERRIS	CA	92570
STONECREST INCOME & OPPORTUNIT	4300 STEVENS CREEK BLVD 275	SAN JOSE	CA	95129
STRIPLING,EVERETT L	281 CALDERA ST	PERRIS	CA	92570
STRONG,ALBERT JR	20280 OAK ST	PERRIS	CA	92570
STRUNK,WILLIAM A	27867 WASSON CANYON RD	PERRIS	CA	92570
SU ANDREW	12362 KNOTT ST	GARDEN GROVE	CA	92841
SU ANDREW & ALICE LEE	10751 ROCKHURST AVE	SANTA ANA	CA	92705
SUNWOOD MENIFEE 79	2600 LANING RD	SAN DIEGO	CA	92106
TALAVERA,JAIME JR	18946 CONARD AVE	LAKE ELSINORE	CA	92532
TAYLOR,BARBARA	18821 CAMBERN AVE	LAKE ELSINORE	CA	92532
TAYLOR,DOLORES ZEPEDA	149 HEADLANDS WAY	PERRIS	CA	92570

THATCHER,RICHARD A JR	8421 HEIL AVE	WESTMINSTER	CA	92683
TINCHER,DWIGHT ERNEST	350 CALDERA ST	PERRIS	CA	92570
TISDALE,WILLIE ANN TRUST	4411 MYRTLE AVE	LONG BEACH	CA	90807
TORRES,ERIC F & JENNIFER M	45009 CARLA CT	LAKE ELSINORE	CA	92532
TORRES,PAUL & PETRA	18931 CONARD AVE	LAKE ELSINORE	CA	92532
TORRES,TINA MARIE	45023 ALTISSIMO WAY	LAKE ELSINORE	CA	92532
TRAN,QUYEN T	10585 SLATER AVE 5	FOUNTAIN VALLEY	CA	92708
TRINIDAD,MONICA	109 HEADLANDS WAY	PERRIS	CA	92570
TURNER,DIANA	112 GOLDENROD AVE	PERRIS	CA	92570
URQUIDES,PETE M & PATRICIA A	18937 CONARD AVE	LAKE ELSINORE	CA	92532
VALENCIA,JORGE & MARIA	29101 ALLAN ST	LAKE ELSINORE	CA	92532
VALENTIN,ROBERT AL & LORENZA O	25650 PHILLIPS ST	PERRIS	CA	92570
VAR,SAMBO	45040 ALTISSIMO WAY	LAKE ELSINORE	CA	92532
VARGAS,JOSE	45035 ALTISSIMO WAY	LAKE ELSINORE	CA	92532
VASQUEZ,MIGUEL A & TERRY	644 S GILBUCK DR	ANAHEIM	CA	92802
VASQUEZ,RAFAEL & BERTHA ALICIA	22045 ETHANAC RD	PERRIS	CA	92570
VAUGHAN,STEVEN & MARIA	28067 STATE HIGHWAY 74	PERRIS	CA	92570
VENEGAS,DAVID	29265 3RD ST	LAKE ELSINORE	CA	92532
VENEGAS,DAVID J	29200 MELBY DR	LAKE ELSINORE	CA	92532
VENERABLE,WENDELL E & MARY E T	23535 STATE HIGHWAY 74	PERRIS	CA	92570
VENICE INVESTMENTS GROUP LLC	1520 S BROADWAY	LOS ANGELES	CA	90015
VILLALOBOS,ZENON	342 CALDERA ST	PERRIS	CA	92570
VILLICANA,JESUS RODRIGUEZ	714 S WALNUT AVE	BREA	CA	92821
VILLICANA,MAURICIO	225 CALDERA ST	PERRIS	CA	92570
VIRAMONTES,GUILLERMO	28408 ONTEVEDRA DR	RNCH PALOS VERDES	CA	90274
WALKER,OMAR & HELEN	29350 3RD ST	LAKE ELSINORE	CA	92532
WARD,LONNIE MAY	2635 BONITA DR	HIGHLAND	CA	92346
WASHINGTON,ADAM JR	249 CALDERA ST	PERRIS	CA	92570
WEIL,IMRE & ROBERTA B	6520 PLATT AVE 272	WEST HILLS	CA	91307
WEINREICH,IDA D	29123 ALLAN ST	LAKE ELSINORE	CA	92532
WELLS FARGO BK NA	N/A	N/A	N/A	N/A
WESOLOWSKI,HENRY & SUE ANN M	24375 JACKSON AVE T207	MURRIETA	CA	92562
WESTPORT PROP 3	20712 INDIAN OCEAN DR	LAKE FOREST	CA	92630
WIELAND,CHARLES & BARBARA	19821 POTOMAC LN	HUNTINGTON BEACH	CA	92646
WILHELM,BRADLEY T & SUZIE L	2461 URRARD ST	HENDERSON	NV	89044
WONG,PETER	10391 BONNIE DR	GARDEN GROVE	CA	92843
YAU,HON Y	45033 CARLA CT	LAKE ELSINORE	CA	92532
YAZBECK,JULIE	21220 MAZIE AVE	PERRIS	CA	92570
YEN,TINA & YUNGLO	43 LINDCOVE	IRVINE	CA	92602
YOUNG,J D	100 GOLDENROD AVE	PERRIS	CA	92570
YTURRALDE,KENNETH L & CATHY L	22177 DOBIE PL	CANYON LAKE	CA	92587

300 – FOOT OWNERSHIP LISTING PHASE 2

OWNER NAME	OWNER ADDRESS	OWNER CITY	OWNER STATE	OWNER ZIP
HASSELL	22453 ARBORDALE CT	MURRIETA	CA	92562
AGGREGATES MAYHEW	PO BOX 77850	CORONA	CA	92877
ANDREW PACHECO	10417 WRANGLER WAY	CORONA	CA	92883
ANGELINA KITCHELL	26678 HOSTETTLER RD	CORONA	CA	92883
ANN NUGENT	13005 DE PALMA RD	CORONA	CA	92883
ASGARD	1609 N BUSH ST 6	SANTA ANA	CA	92701
AT & SF RR	740 CARNEGIE DR	SAN BERNARDINO	CA	92408
AT & T BROADBAND DBA CONTINENT	PO BOX 173838	DENVER	CO	80217
AUDREY WALKER	10501 WRANGLER WAY	CORONA	CA	92883
B & N GROUP	3240 S STANDARD AVE	SANTA ANA	CA	92705
BETH BIDDICK	3406 VAL VERDE AVE	LONG BEACH	CA	90808
BFW CORONA	1131 E MAIN ST 207B	TUSTIN	CA	92780
BISON MANAGEMENT SERVICES INC	PO BOX 4848	ONTARIO	CA	91761
BRIGETTE LODEN	26860 CANYON END RD	CANYON COUNTRY	CA	91387
BUTTERFIELD ESTATES HOMEOWNERS	3954 HAMPTON DR	POMONA	CA	91766
C & C COLLIER DEV PARTNERS	33761 KINKERRY LN	SAN JUAN CAPISTRANO	CA	92675
CARTIER LIQUIDATING TRUST NO 1	16 CORPORATE PLAZA DR	NEWPORT BEACH	CA	92660
CASTLE & COOKE ALBERHILL RANCH	PO BOX 11165	BAKERSFIELD	CA	93389
CENTRAL AVENUE INDUSTRIAL	512 CHANEY ST	LAKE ELSINORE	CA	92530
CHANEY ARI	20951 WARNER CENTER LN B	WOODLAND HILLS	CA	91367
CHUCK CONGDON	2460 CHESAW RD	OROVILLE	WA	98844
CITY OF LAKE ELSINORE	130 S MAIN ST	LAKE ELSINORE	CA	92530
CONCORDIA PROP	2550 S SANTA FE AVE	VISTA	CA	92084
CONNIE ZAVALA	10453 WRANGLER WAY	CORONA	CA	92883
CORMAN LEIGH COMMUNITIES	32823 TEMECULA PKWY	TEMECULA	CA	92592
CORONA CANYON JK INV	9370 SKY PARK CT 220	SAN DIEGO	CA	92123
CORONA LAKE	4060 E LA PALM AVE	ANAHEIM	CA	92806
CORP OF PRES BISHOP CH OF JESU	50 E NORTH TEMPLE 22ND	SALT LAKE CITY	UT	84150
COUNTRY CLUB HOLDINGS	PO BOX 566	RIVERSIDE	CA	92502
COUNTY OF RIVERSIDE	PO BOX 1180	RIVERSIDE	CA	92502
CYNTHIA SHIELDS	11720 LEIBACHER AVE	NORWALK	CA	90650
DAR INV	1321 N KRAEMER BLVD	ANAHEIM	CA	92806
DAVE & BEVERLY RIOS	24650 BANDIT WAY	CORONA	CA	92883
DAVID BLOOD	PO BOX 426	LAKE ELSINORE	CA	92531
DAVID HAYS	PO BOX 1271	LAKE ELSINORE	CA	92531
DAVID MAIZLAND	1891 1ST ST	NORCO	CA	92860
DO NIEU	4523 EVART ST	MONTCLAIR	CA	91763
DORIS BALSZ	12799 MAGNOLIA AVE	RIVERSIDE	CA	92503
EASTERN MUNICIPAL WATER DIST	PO BOX 8300	PERRIS	CA	92572
EASTERN MUNICIPAL WATER DIST	227 TUMBLE RD	PERRIS	CA	92572
EDDIE & LORI SANDOVAL	710 25 BOVEE LN	JANESVILLE	CA	96114
EDDIE NAKSHABANDI	4400 W FLORIDA AVE 206	HEMET	CA	92545
EDWARD TADLA	8464 W KIMBERLY WAY	PEORIA	AZ	85382
EID	6984 E OVERLOOK TER	ANAHEIM	CA	92807
ELSINORE VALLEY MUNICIPAL WATE	PO BOX 3000	LAKE ELSINORE	CA	92531
EVMWD	PO BOX 3000	LAKE ELSINORE	CA	92531
FARMERS & MERCHANTS TRUST TR	302 PINE AVE 2ND	LONG BEACH	CA	90802
FCI CONST INC	1770 LA COSTA MEADOWS DR	SAN MARCOS	CA	92078
FIRST CITIZENS BK & TRUST CO	27708 JEFFERSON AVE 100	TEMECULA	CA	92590
FRANCISCO & SILVIA LOPEZ	10511 WRANGLER WAY	CORONA	CA	92883
FRANSSONS INV CO	18 CYPRESS POINT LN	NEWPORT BEACH	CA	92660
FRANZ & PATRICIA FROEHLICH	41315 GALLOP LN	MURRIETA	CA	92562
FREDA BUNTING	2315 PASEO SAUCEDAL	CARLSBAD	CA	92009

FSA REALTY I	10890 THORNMINT RD	SAN DIEGO	CA	92127
GARY & ELENA MORRIS	31115 LANCASHIRE DR	LAKE ELSINORE	CA	92530
GEORGE KOLIBER	5555 HERON POINT DR 501	NAPLES	FL	34108
GLEN EDEN CORP	25999 GLEN EDEN RD	CORONA	CA	92883
GLOBAL SIGNAL ACQUISITIONS IV	4017 WASHINGTON RD	MCMURRAY	PA	15317
GUILLERMO & DOLORES VALENZUELA	18339 PASADENA ST	LAKE ELSINORE	CA	92530
HAINES LAND CO	24042 TIBURON	DANA POINT	CA	92629
HAVEN RICH	4100 NEWPORT PLACE DR 800	NEWPORT BEACH	CA	92660
INDIAN TRUCK TRAIL DEV CO	44915 PALLADIAN CT	TEMECULA	CA	92590
INDUSI	1609 N BUSH ST 1	SANTA ANA	CA	92701
INES BONILLA	32635 SAN LUCAS	LAKE ELSINORE	CA	92530
JANE OTTO	459 CROWN RIDGE RD	PERRIS	CA	92570
JANICE MORGER	3325 W LINCOLN AVE	ANAHEIM	CA	92801
JANICE RENTERIA	231 E ALESSANDRO BLVD A	RIVERSIDE	CA	92508
JERRY COLLINS	25291 MADRONE DR	MURRIETA	CA	92563
JIM MILLER	41802 HUTCHISON CT	MURRIETA	CA	92562
JOE MADRIGAL	16322 WHITTIER LN	HUNTINGTON BEACH	CA	92647
JOHN & FIROUZEH GAMBLE	20091 MOUNT ISRAEL PL	ESCONDIDO	CA	92029
JOHN & FLORENCE KRENZALEK	1833 S CORDOVA ST	ALHAMBRA	CA	91801
JOHN & MARY HASSELL	22453 ARBORDALE CT	MURRIETA	CA	92562
JOHN & ROBIN BECKHAM	10405 WRANGLER WAY	CORONA	CA	92883
JOHN & SARA MACFALL	1855 MACKINNON AVE	CARDIFF BY THE SEA	CA	92007
JOHN ODOHERTY	19025 GROVEWOOD DR	CORONA	CA	92881
JOSE & CONSTANCIA LAVIN	2510 23RD AVE	SACRAMENTO	CA	95820
JOYCE MORENO	3701 FILLMORE ST 13	RIVERSIDE	CA	92505
JUAN AGUILAR	29372 TURNBULL AVE	LAKE ELSINORE	CA	92530
KAMBIZ MORIDI	17458 BLUE WATER CT	RIVERSIDE	CA	92503
KATHLEEN PETERSON	8304 ORANGE AVE	PICO RIVERA	CA	90660
LAKE ELSINORE 1	512 CHANEY ST	LAKE ELSINORE	CA	92530
LAKE ELSINORE ASSOC I	4300 VON KARMAN AVE	NEWPORT BEACH	CA	92660
LAWRENCE & CAROLYN MCLINGBERG	31854 CORTE POSITAS	TEMECULA	CA	92592
LEE LAKE WATER DIST	22646 TEMESCAL CANYON RD	CORONA	CA	92883
LICK & STICK IT	512 CHANEY ST	LAKE ELSINORE	CA	92530
LOUIS DUBY	11583 WOODSIDE TER	SANTEE	CA	92071
LUCERO ROCHA	7010 COOLIDGE AVE	RIVERSIDE	CA	92506
LUPE LOPEZ	10465 WRANGLER WAY	CORONA	CA	92883
MAD DOG CENTRAL AVE	512 CHANEY ST	LAKE ELSINORE	CA	92530
MARGARET BATTANY	25291 MADRONE DR	MURRIETA	CA	92563
MARIA AYALA	10441 WRANGLER WAY	CORONA	CA	92883
MARK & SUZY LACY	35701 AVENIDA LA CRESTA	MURRIETA	CA	92562
MARK KOSTER	18775 SW 351ST ST 389	HOMESTEAD	FL	33034
MAYHEW AGGREGATES & MINE RECLA	PO BOX 77850	CORONA	CA	92877
MAYHEW AGGREGATES & MINE RECLA	PO BOX 295	LOMITA	CA	90717
MICHAEL & CAROL GORDON	24 SHADY HILL LN	FALLBROOK	CA	92028
MICHAEL & ELENE MACKEY	224 ESPLANADE	SAN CLEMENTE	CA	92672
MICHAEL BERTETTO	22584 PIN TAIL DR	SUN CITY	CA	92587
MICHAEL TODD	7 SEAMIST CT	NEWPORT BEACH	CA	92663
MIN CHEI HSU	853 E VALLEY BLVD 200	SAN GABRIEL	CA	91776
MITCHEL & VICKI HAYNAM	6518 VIA DEL PRADO	CHINO HILLS	CA	91709
MKJ ADNOFF INV	4621 TELLER AVE 200	NEWPORT BEACH	CA	92660
MOLD CHARLES & GREG	28351 PASADENA ST	LAKE ELSINORE	CA	92530
NAHID KADKHODAZADEH	1609 CORSICA PL	COSTA MESA	CA	92626
NARLEP SIHOTA	1383 SONNET HILL LN	CORONA	CA	92881
NATIONAL CITY MORTGAGE	3232 NEWMARK DR	MIAMISBURG	OH	45342
ORANGE COAST TITLE CO OF RIVER	1060 E WASHINGTON ST	COLTON	CA	92324
PACIFIC CLAY PRODUCTS	14741 LAKE ST	LAKE ELSINORE	CA	92530

PASADENA BUILDING N	512 CHANEY ST	LAKE ELSINORE	CA	92530
PASADENA ELSINORE	2199 INNERBELT BUSINESS	ST LOUIS	MO	63114
PATRICIA LINDSEY	17575 BAKER ST	LAKE ELSINORE	CA	92530
PHARRIS GROUP	2050 MAIN ST 250	IRVINE	CA	92614
PINEDA & BLANCA HERNANDEZ	10489 WRANGLER WAY	CORONA	CA	92883
PROVIDENT ENGINEERING DEV CO	PO BOX 1239	VISTA	CA	92085
RHONDA CLEMENTS	647 COLE RD SW	LILBURN	GA	30047
RICHARD ELMORE	696 N 8TH ST	BRAWLEY	CA	92227
RIVERSIDE COUNTY FLOOD & WATER	1995 MARKET ST	RIVERSIDE	CA	92501
RKW & MLW ELSINORE	2384 HOXIE DR	TUSTIN	CA	92782
ROBERT & GLADYS JOHNSON	39481 NEWPORT RD	HEMET	CA	92543
ROBERT CISSNA	PO BOX 2262	LOS ANGELES	CA	90078
RONALD & PAMELA SHAN	8362 CLARKDALE DR	HUNTINGTON BEACH	CA	92646
RONALD PHARRIS	2050 MAIN ST 250	IRVINE	CA	92614
ROSEMARY EVANS	PO BOX 3384	PALM SPRINGS	CA	92263
ROY GARGUS	10440 WRANGLER WAY	CORONA	CA	92883
SALVADOR & MARIA RUVALCABA	960 BEVERLY RD	CORONA	CA	92879
SANDRA BROWN	26320 HORSETHIEF CANYON RD	CORONA	CA	92883
SHARO KHASTOO	3030 STEEPLECHASE LN	DIAMOND BAR	CA	91765
SITL INV	PO BOX 566	RIVERSIDE	CA	92502
SO CAL SANDBAGS INC	12620 BOSLEY LN	CORONA	CA	92883
SOUTH IC DEV INC	24273 PARK GRANADA	CALABASAS	CA	91302
SPEEDWAY DEVS LLC	15350 FAIRCHILD RANCH RD K	CHINO HILLS	CA	91709
STANLEY & JULIE OCK	23875 PETREL CT	LAGUNA NIGUEL	CA	92677
STARFIELD SYCAMORE INV	14 CORPORATE PLAZA DR	NEWPORT BEACH	CA	92660
STATE OF CALIF DEPARTMENT OF T	PO BOX 231	SAN BERNARDINO	CA	92402
STATE OF CALIF DEPT OF TRANSPO	464 W 4TH ST 6TH	SAN BERNARDINO	CA	92401
STEVEN FAVERO	3044 WESTFIELD DR	RIVERSIDE	CA	92503
SYCAMORE CREEK MARKETPLACE	3 MACARTHUR PL 550	SANTA ANA	CA	92707
T T GROUP INC	606 N 1ST ST	SAN JOSE	CA	95112
TARGET CORP	1000 NICOLLET MALL 12	MINNEAPOLIS	MN	55403
TEMECULA VALLEY	391 N MAIN ST 301	CORONA	CA	92880
TEMESCAL ELSINORE PARTNERS	1131 E MAIN ST 207B	TUSTIN	CA	92780
TEMESCAL OFFICE PARTNERS	3151 AIRWAY AVE U2	COSTA MESA	CA	92626
TEMESCAL VALLEY LAND	10621 CIVIC CENTER DR	RANCHO CUCAMONGA	CA	91730
THEODORE C KING	711 CHURCH HILL RD	LA HABRA	CA	90631
TIM & VICKI CUTHERS	PO BOX 3766	ORANGE	CA	92857
TONY GUTIERREZ	10429 WRANGLER WAY	CORONA	CA	92883
UNITED BRICK & CLAY WORKER LOC	2851 RAZOR WAY	RIVERSIDE	CA	92509
VALLEY TEMECULA	391 N MAIN ST 301	CORONA	CA	92880
VICTOR CHARLEBOIS	16627 LAKE KNOLL PKWY	RIVERSIDE	CA	92503
WALTER & EMPERATRIZ PINTO	PO BOX 77638	CORONA	CA	92877
WESTERN RIVERSIDE CO REG CONSE	3133 MISSION INN AVE	RIVERSIDE	CA	92507
WILLIAM & JOAN CANDEE	PO BOX 5039	FALLON	NV	89407
WILLIAM & PHYLLIS BIGELSON	9010 CORBIN AVE 10	NORTHRIDGE	CA	91324
WILLIAM & SANDRA BROWN	26320 HORSETHIEF CANYON RD	CORONA	CA	92883
WILLIAM DONNELLY	PO BOX 1236	PRIEST RIVER	ID	83856
WILLIAM HANMER	PO BOX 2407	CORONA	CA	92878
YAACOV LIMON	10573 W PICO BLVD 211	LOS ANGELES	CA	90064

VALLEY IVYGLEN PROJECT AGENCY SERVICE LIST		
Riverside County Board of Supervisors Honorable Kevin Jeffries, Supervisor County Administrative Center 4080 Lemon Street, 5th Floor Riverside, CA 92501	Riverside County Board of Supervisors Honorable Marion Ashley, Supervisor County Administrative Center 4080 Lemon Street, 5th Floor Riverside, CA 92501	Riverside County Board of Supervisors Honorable Jeff Stone, Vice-Chairman County Administrative Center 4080 Lemon Street, 5th Floor Riverside, CA 92501
Riverside Co. Planning Department Ms.Carolyn Syms Luna Planning Director P.O. Box 1409 Riverside, CA 92502-1409	County of Riverside Ms. Mary Stark Planning Commission Secretary P.O. Box 1409 Riverside, CA 92501	City of Lake Elsinore The Honorable Bob Magee, Mayor 130 S. Main Street Lake Elsinore, CA 92530
City of Lake Elsinore Mr. Rick Morsch, Chairman Planning Commission 130 S. Main Street Lake Elsinore, CA 92530	City of Lake Elsinore Mr. Richard MacHott Acting Planning Manager 130 S. Main Street Lake Elsinore, CA 92530	City of Lake Elsinore Mr. Grant Yates, City Manager 130 S. Main Street Lake Elsinore, CA 92530
City of Perris The Honorable Daryl Busch, Mayor 101 N. D Street Perris, CA 92570	City of Perris Mr. Richard Belmudez, City Manager 101 N. D Street Perris, CA 92570	City of Perris Ms. Judy L. Roseen-Haughney, Chairperson 101 N. D Street Perris, CA 92570
City of Perris Ms. Clara Miramontes, Planning Manager 101 N. D Street Perris, CA 92570	City of Menifee Honorable Scott Mann, Mayor 29714 Haun Road Menifee, CA 92586	City of Menifee Ms. Jennifer Allen, Planning Commission Secretary 29714 Haun Road Menifee, CA 92586
City of Menifee Mr. Robert Johnson, Interim City Manager 29714 Haun Road Menifee, CA 92586	City of Menifee Ms. Carmen Cave Community Development Director 29714 Haun Road Menifee, CA 92586	City of Menifee Mr. Matt Liesemeyer, Chairman Planning Commission 29714 Haun Road Menifee, CA 92586
California Department of Health Services Mr. Toby Douglas Director 1501 Capitol Avenue, Suite 6001 Sacramento, CA 95814	California Energy Commission Mr. Robert Oglesby Executive Director 1516 Ninth Street Sacramento, CA 95814-5512	Natural Resources Agency Mr. John Laird Secretary 1416 Ninth Street, Suite 1311 Sacramento, CA 95814
California Department of Transportation Mr. Malcolm Dougherty Director P.O. Box 942873 Sacramento, CA 95814	California Department of Transportation Mr. Jeff Brown, Division of Aeronautics Chief Division of Aeronautics, MS #40 PO Box 952874 Sacramento, CA 94274-0001	California Department of Transportation Dr. Raymond Wolfe, District Director District 8 464 W. 4th Street San Bernardino, CA 92401
California Department of Fish and Wildlife Mr. Charlton H. Bonham Director Headquarters 1416 Ninth Street Sacramento, CA 95814	South Coast Air Quality Management Mr. Barry R. Wallerstein Executive Officer 21865 Copley Drive Diamond Bar, CA 91765	State Water Resources Control Board Mr. Thomas Howard Executive Director P.O. Box 100 Sacramento, CA 95812-0100

California Air Resources Board Ms. Mary D. Nichols, Board Chairman P.O. Box 2815 Sacramento, CA 95812	California Regional Water Mr. Kurt Burchtold Santa Ana Region 8 3737 Main Street, Suite 500 Riverside, CA 92501	California Public Utilities Commission Docket Clerk 505 Van Ness Avenue San Francisco, CA 94102
California Public Utilities Commission Ms. Karen Clopton, Chief ALJ 505 Van Ness Avenue San Francisco, CA 94102	California Public Utilities Commission Ms. Karen Miller, Public Advisor California State Building 505 Van Ness Avenue San Francisco, CA 94102-3298	California Public Utilities Commission Mr. Edward Randolph, Energy Division Director California State Building 505 Van Ness Avenue San Francisco, CA 94102-3298

Appendix E

FIELD MANAGEMENT PLAN

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

List of Terms

ACSR	Aluminum Conductor Steel Reinforced
CDHS	California Department of Health Services
CPCN	Certificate of Public Convenience and Necessity
CPUC	California Public Utilities Commission
ELF	Extremely Low Frequency
EIR	Environmental Impact Report
EMF	electric and magnetic fields
FMP	field management plan
GO	General Order
IARC	International Agency for Research on Cancer
kV	kilovolt
LWS	light weight steel
mG	milligauss
NIEHS	National Institute of Environmental Health Sciences
NRPB	National Radiation Protection Board
PMR	Project Modification Report
RAFS	Riversidean Alluvial Fan Sage Scrub
RAPID	Research and Public Information Dissemination
RCA	Regional Conservation Authority
SCE	Southern California Edison
SR	State Route
T/L	transmission line
TSP	tubular steel pole
WHO	World Health Organization

I. EXECUTIVE SUMMARY

This document is Southern California Edison Company's (SCE) Field Management Plan (FMP) for the Valley-Ivyglen 115 kilovolt (kV) Subtransmission Line Project (Project). SCE is proposing to modify the Project that was approved by the California Public Utilities Commission (CPUC) following preparation of the Final Environmental Impact Report (EIR). The Project would occur in the unincorporated Riverside County, City of Perris, and the City of Lake Elsinore (Figure 1). The Project has been divided into eight discrete geographic Project Segments per the Proposed Project Modification Report (PMR) - starting in the east at Valley Substation and ending in the west at Ivyglen Substation.

This FMP amends the FMP filed in 2007 due to the proposed project modifications described in the Proposed PMR.

SCE provides this FMP in order to inform the public, the California Public Utilities Commission (CPUC), and other interested parties of its evaluation of "no-cost and low-cost" magnetic field reduction design options for this Project, and SCE's proposed plan to apply these design options to this Project. This FMP has been prepared in accordance with CPUC Decision No. 93-11-013 and Decision No. 06-01-042 relating to extremely low frequency (ELF)[1] electric and magnetic fields (EMF). This FMP also provides background on the current status of scientific research related to possible health effects of EMF, and a description of the CPUC's EMF policy.

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

- Utilize structure heights that meet or exceed SCE's EMF preferred design criteria.
- Utilize double-circuit construction that reduces spacing between circuits as compared with single-circuit construction.
- Utilize subtransmission line construction that reduces the space between conductors as compared with other designs.
- Arrange conductors of proposed subtransmission line for magnetic field reduction.
- Utilize underground subtransmission construction for engineering reasons.

The "no-cost and low-cost" magnetic field reduction design options that SCE considered for the Project are summarized in Table 1. For the purpose of evaluating "no-cost and low-cost" magnetic field reduction design options, the evaluation of magnetic fields associated with the Project has been divided into various Project Segment routes that contain similar magnetic field models. Therefore, in some cases, portions of Project Segments have been grouped with other Project Segments for evaluation purposes.

---

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

SCE's plan for applying the above "no-cost and low-cost" magnetic field reduction design options for the Project is consistent with CPUC's EMF policy and with the direction of leading national and international health agencies. Furthermore, the plan complies with SCE's EMF Design Guidelines[2], and with applicable national and state safety standards for new electrical facilities.

2 EMF Design Guidelines, July 2006.

Table 1. Summary of "No-cost and Low-cost" Magnetic Field Reduction Design Options						
Area No.	**Location**[3]	**Adjacent Land Use Codes**[4]	**MF Reduction Design Options Considered**	**Estimated Cost to Adopt**	**Design Option(s) Adopted? (Yes/No)**	**Reason(s) if not adopted**
Project Segment 1 Existing Serrano-Valley 500kV T/L, existing Valley-Newcomb 115 kV Subtransmission Line, existing Valley-Elsinore-Fogarty 115 kV Subtransmission Line, and the proposed Valley-Ivyglen 115 kV Subtransmission Line	Exits Valley Substation, located in unincorporated Riverside County, within the existing Serrano-Valley 500 kV T/L ROW, up to the crossing of State Route (SR) 74.	2,3,4,5,6	• Utilize subtransmission structure heights that meet or exceed SCE's preferred EMF design criteria. • Arrange conductors of proposed subtransmission line for magnetic field reduction. • Utilize subtransmission line construction that reduces the space between conductors as compared with other designs.	• No-Cost[5] • No-Cost[6] • No-Cost[7]	• Yes • Yes • Yes	
Project Segments 2 and 3 Proposed Valley-Ivyglen 115 kV Subtransmission Line	From the end of Project Segment 1, up to the intersection of Third Street and Collier Avenue.	2,3,4,5,6	• Utilize subtransmission structure heights that meet or exceed SCE's preferred EMF design criteria. • Utilize subtransmission line construction that reduces the space between conductors as compared with other designs.	• No-Cost[8] • No-Cost[9]	• Yes • Yes	

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

4 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.

5 This option was included in the preliminary design and continues to be included in the design of the project.

6 This is considered a no-cost measure because the proposed phase arrangement can be obtained at the terminations of Valley Substation and Ivyglen Substation.

7 This option was included in the preliminary design and continues to be included in the design of the project.

8 *Ibid*

9 *Ibid*

Table 1. Summary of "No-cost and Low-cost" Magnetic Field Reduction Design Options (Cont.)						
Area No.	**Location**	**Adjacent Land Use Codes**	**MF Reduction Design Options Considered**	**Estimated Cost to Adopt**	**Design Option(s) Adopted? (Yes/No)**	**Reason(s) if not adopted**
Project Segment 4 and a portion of Project Segment 5 Proposed Valley-Ivyglen 115 kV Subtransmission Line	From the end of Project Segment 3, up to the intersection of Nichols Road (formerly known as Coal Road) and Lake Street.	2,3,4,6	• Utilize subtransmission structure heights that meet or exceed SCE's preferred EMF design criteria.	• No-Cost[10]	• Yes	
Remaining portion of Project Segment 5 Existing Fogarty-Ivyglen 115 kV Subtransmission Line and the proposed Valley-Ivyglen 115 kV Subtransmission Line	From the intersection of Nichols Road (formerly known as Coal Road) and Lake Street, up to the intersection of Hostettler Road and Temescal Canyon Road.	2,3,4,5,6	• Utilize subtransmission structure heights that meet or exceed SCE's preferred EMF design criteria.	• No-Cost[11]	• Yes	
Project Segment 6 and a portion of Project Segment 7 Proposed Valley-Ivyglen 115 kV Subtransmission Line	From the end of Project Segment 5, up to the crossing of I-15.	2,3,5,6	• Utilize subtransmission structure heights that meet or exceed SCE's preferred EMF design criteria. • Utilize subtransmission line construction that reduces the space between conductors as compared with other designs.	• No-Cost[12] • No-Cost[13]	• Yes • Yes	

10 This option was included in the preliminary design and continues to be included in the design of the project.

11 *Ibid*

12 *Ibid*

13 *Ibid*

Table 1. Summary of "No-cost and Low-cost" Magnetic Field Reduction Design Options (Cont.)						
Area No.	**Location**	**Adjacent Land Use Codes**	**MF Reduction Design Options Considered**	**Estimated Cost to Adopt**	**Design Option(s) Adopted? (Yes/No)**	**Reason(s) if not adopted**
Remaining portion of Project Segment 7 Existing Fogarty-Ivyglen 115 kV Subtransmission Line and the proposed Valley-Ivyglen 115 kV Subtransmission Line	From the crossing of I-15, up to the south of the I-15 (approximately 0.3 miles southeast of Indian Truck Trail).	6	• Utilize subtransmission structure heights that meet or exceed SCE's preferred EMF design criteria. • Utilize double-circuit construction that reduces spacing between circuits as compared with single-circuit construction.	• No-Cost[14] • No-Cost[15]	• Yes • Yes	.
Project Segment 8 Existing Fogarty-Ivyglen 115 kV Subtransmission Line and the proposed Valley-Ivyglen 115 kV Subtransmission Line	From the end of Project Segment 7, up to Ivyglen Substation.	2,6	• Utilize underground subtransmission construction for engineering reasons.	• No-Cost[16]	• Yes	

14 This option was included in the preliminary design and continues to be included in the design of the project.

15 *Ibid*

16 *Ibid*

II. BACKGROUND REGARDING EMF AND PUBLIC HEALTH RESEARCH ON EMF

There are many sources of power frequency[17] 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.[18]

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[19], the National Radiation Protection Board (NRPB) 2001[20], the International Commission on non-Ionizing Radiation Protection (ICNIRP) 2001, the California Department of Health Services (CDHS) 2002[21], the International Agency for Research on Cancer (IARC) 2002[22] and the World Health Organization (WHO) 2007[23] .

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."[24]

---

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

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

19 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.

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

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

22 World Health Organization / International Agency for Research on Cancer, IARC Monographs on the evaluation of carcinogenic risks to humans (2002), Non-ionizing radiation, Part 1: Static and extremely low-frequency (ELF) electric and magnetic fields, IARCPress, Lyon, France: International Agency for Research on Cancer, Monograph, vol. 80, p. 338, 2002.

23 WHO, Environmental Health Criteria 238, EXTREMELY LOW FREQUENCY FIELDS, 2007.

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

- "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."[25]
- "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."[26]

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."[27]

In 2002, three scientists for CDHS concluded:

> "To one degree or another, all three of the [CDHS] 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. For adult leukemia, two of the scientists are 'close to the dividing line

---

25 *Ibid.*, p. iii

26 *Ibid.*, p. 37 - 38

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

between believing or not believing' and one was 'prone to believe' that EMFs cause some degree of increased risk."[28]

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

> "ELF magnetic fields are possibly carcinogenic to humans"[29], 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."[30]

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

> "Scientific evidence suggesting that everyday, chronic low-intensity (above 0.3-0.4 μT [3-4 mG]) power-frequency magnetic field exposure poses a health risk is based on epidemiological studies demonstrating a consistent pattern of increased risk for childhood leukaemia."[31]
>
> "In addition, virtually all of the laboratory evidence and the mechanistic evidence fail to support a relationship between low-level ELF magnetic fields and changes in biological function or disease status. Thus, on balance, the evidence is not strong enough to be considered causal, but sufficiently strong to remain a concern."[32]
>
> "A number of other diseases have been investigated for possible association with ELF magnetic field exposure. These include cancers in both children and adults, depression, suicide, reproductive dysfunction, developmental disorders, immunological modifications and neurological disease. The scientific evidence supporting a linkage between ELF magnetic fields and any of these diseases is much weaker than for childhood leukemia and in some cases (for example, for cardiovascular disease or breast cancer) the evidence is sufficient to give confidence that magnetic fields do not cause the disease"[33]

---

28 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.

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

30 *Ibid*., p. 332 - 334

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

32 *Ibid*., p. 12

33 *Ibid*., p. 12

> "Furthermore, given both the weakness of the evidence for a link between exposure to ELF magnetic fields and childhood leukemia, and the limited impact on public health if there is a link, the benefits of exposure reduction on health are unclear. Thus the costs of precautionary measures should be very low."[34]

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

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

In 2006, the CPUC completed its review and update of its EMF Policy in Decision 06-01-042. This decision reaffirmed the finding that state and federal public health regulatory agencies have not established a direct link between exposure to EMF and human health effects,[35] and the policy direction that (1) use of numeric exposure limits was not appropriate in setting utility design guidelines to address EMF,[36] 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 "no-cost and low-cost" policies.[37]

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.

---

34 *Ibid*., p. 13

35 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.").

36 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.").

37 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, should:
     - Cost in the range of 4 percent of the total project cost.
     - Result in magnetic field reductions of "15% or greater at the utility R-O-W [right-of-way]…"[38]

   The CPUC Decision stated,

   > "We direct the utilities to use 4 percent as a benchmark in developing their EMF mitigation guidelines. We will not establish 4 percent as an absolute cap at this time because we do not want to arbitrarily eliminate a potential measure that might be available but costs more than the 4 percent figure. Conversely, the utilities are encouraged to use effective measures that cost less than 4 percent."[39]

3. The CPUC provided further policy direction in Decision 06-01-042, stating that, "[a]lthough equal mitigation for an entire class is a desirable goal, we will not limit the spending of EMF mitigation to zero on the basis that not all class members can benefit."[40] 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

---

38 CPUC Decision 06-01-042, p. 10

39 CPUC Decision 93-11-013, § 3.3.2, p.10.

40 CPUC Decision 06-01-042, p. 10

> 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.

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."[41]

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

IV. PROJECT DESCRIPTION

Southern California Edison (SCE) is proposing to modify the Valley-Ivyglen 115 kilovolt (kV) Subtransmission Line Project (Project) that was approved by the California Public Utilities Commission (CPUC) following preparation of the Final Environmental Impact Report (EIR). The Project would occur in the unincorporated Riverside County, City of Perris, and the City of Lake Elsinore (Figure 1). The Project has been divided into eight discrete geographic Project Segments per the Proposed Project Modification Report (PMR) - starting in the east at Valley Substation and ending in the west at Ivyglen Substation.

Segment 1

The approved route for Segment 1 would exit Valley Substation, located in unincorporated Riverside County, from the south and run approximately 3.9 miles west along the north side of the existing Serrano-Valley 500 kV transmission line right-of-way (ROW), briefly spanning the City of Perris and Interstate (I-) 215, and continue in unincorporated Riverside County until it reaches Goetz Road. From Goetz Road, the line would continue west for approximately 2.3 miles within the City of Perris, then would re-enter unincorporated Riverside County and continue west for approximately 1.2 miles until crossing State Route (SR-) 74.

Segment 2

For the approved route for Segment 2, from the intersection of SR-74 and the 500 kV ROW, the line would continue parallel to the existing 500 kV ROW for approximately 0.1 mile, then turn south and span the ROW, and proceed east to the western edge of SR-74. From this point, the subtransmission line would proceed southwest along the west side of SR-74 to Conard Avenue.

Segment 3

For the approved route for Segment 3, from the intersection of SR-74 and Conard Avenue, the subtransmission line would then proceed southeast along Conard Avenue from SR-74 to Third Street. It would then turn southwest and proceed along Third Street, cross over Dexter Avenue, and enter the City of Lake Elsinore. The line would continue along Third Street, span I-15, and extend to the intersection of Third Street and Collier Avenue.

Segment 4

The approved route for Segment 4 would proceed from the intersection of Third Street and Collier Avenue northwest along Collier Avenue to Riverside Drive, continue for approximately 1.1 miles, and then turn southwest to Baker Street. The line would continue northeast along Baker Street to Pierce Street.

The approved route for Segment 4 would require relocating a portion of the existing Valley-Elsinore-Fogarty (previously named Valley-Elsinore-Ivyglen) 115 kV Subtransmission Line from the intersection of Third Street and Collier Avenue to the intersection of Riverside Drive and Baker Street. This line would proceed along Third Street, from Collier Avenue to Pasadena Street, then turn northwest onto Pasadena Street to Riverside Drive. The line would then turn southwest onto Riverside Drive, then proceed northwest onto Baker Street until it

intersects the approved Valley-Ivyglen 115 kV Subtransmission Line route approximately 0.1 mile southeast of the intersection with Pierce Street.

The proposed realignment of Segment 4 would route the new line along Third Street from Collier Avenue to Pasadena Street and would then follow the Final EIR approved relocation route for the existing Valley-Elsinore-Fogarty 115 kV Subtransmission Line, then continue to the corner of Pierce Street and Baker Street. This proposed modification would eliminate the need to relocate a portion of the existing Valley-Elsinore-Fogarty 115 kV Subtransmission Line from Collier Avenue to Pasadena Street and, as a result, would reduce the number of poles to be replaced and outage-related impacts.

In order to maintain system reliability, at the crossing of the Valley-Ivyglen 115 kV Subtransmission Line with the existing Valley-Elsinore-Fogarty 115 kV Subtransmission Line, four wood poles would be replaced with two tubular steel poles (TSPs) and two new wood poles. This crossing is located on Baker Street, approximately 0.1 mile east of Pierce Street.

Segment 5

For the approved route for Segment 5, from the intersection of Baker Street and Pierce Street, the line would then follow an existing 33 kV distribution line ROW to Lake Street. From Lake Street, the line would follow the Castle & Cooke proposed trail system and utility corridor—which is part of a master-planned community that Castle & Cooke is developing south of I-15—to a location just south of I-15. The line would then turn west for approximately 0.2 mile where it would cross Temescal Canyon Road. The line would follow the south side of Temescal Canyon Road for approximately 0.4 mile, cross Temescal Canyon Road, then continue on the north side of Temescal Canyon Road for approximately 0.6 mile. The line would then cross Temescal Canyon Road, proceed west for approximately 0.1 mile, cross Hostettler Road, continue along the south side of Hostettler Road for approximately 0.1 mile, then cross Hostettler Road again. The line would proceed for less than 0.1 mile before reaching the starting point for Segment 6.

The approved line would also require relocating a portion of the existing Fogarty-Ivyglen 115 kV Subtransmission Line (previously referred to as Valley-Elsinore-Ivyglen 115 kV Subtransmission Line) eastward on Lake Street between Nichols Road and Temescal Canyon Road to accommodate the approved line within the future Castle & Cooke trail and utility corridor. A second portion would also be relocated northward along Temescal Canyon Road in the proposed Castle & Cooke trail and utility corridor on the south side of I-15 between Lake Street and Bernard Street. In addition, the approved line would require relocating a portion of the existing Fogarty-Ivyglen 115 kV Subtransmission Line northward from Temescal Canyon Road to Concordia Ranch Road between Bernard Street and Love Lane.

The proposed realignment of Segment 5 would involve a portion of Segment 5 to be realigned to follow Pierce Street in a northeast direction from the intersection of Baker Street and Pierce Street toward Nichols Road (formerly Coal Road). The segment would then head north across Nichols Road and proceed westerly on its north side approximately 0.5 mile to the intersection of the existing 33 kV distribution line ROW and Nichols Road. Then, the segment would follow the existing 33 kV distribution line ROW, as identified in the Final EIR, to the

intersection of Nichols Road and Alberhill Ranch Road. The line would then continue to follow Nichols Road to the future Castle & Cooke trail and utility corridor, as identified in the Final EIR. Another portion of Segment 5, north of the intersection of Lake Street and Temescal Canyon Road, would be realigned from the Castle & Cooke utility corridor westerly to minimize impacts to ARLs. Segment 5 would turn west near the intersection of Lake Street and I-15, cross Lake Street, then continue for approximately 0.2 mile where it crosses Temescal Canyon Road. The line would follow the south side of Temescal Canyon Road for approximately 0.4 mile, cross Temescal Canyon Road, then continue on the north side of Temescal Canyon Road for approximately 0.5 mile.

As described in the Final EIR, portions of the existing Fogarty-Ivyglen 115 kV Subtransmission Line would be rerouted to accommodate Segment 5.

Segment 6

The approved route for Segment 6 would proceed from approximately 0.2 mile west of the intersection of Hostettler Road and Temescal Canyon Road, and follow the south side of I-15 northwest along an existing 33 kV distribution line to Horsethief Canyon Road.

Segment 7

For the approved route for Segment 7, from Horsethief Canyon Road, the line would continue to follow the existing 33 kV distribution line to an existing 12 kV distribution line southeast of Indian Truck Trail. The line would cross I-15 approximately 0.3 mile southeast of Indian Truck Trail, near the existing 12 kV distribution line crossing.

To minimize impacts to Riversidean Alluvial Fan Sage Scrub (RAFS) vegetation communities, the proposed realignment of Segment 7 would involve a portion of Segment 7 to be realigned to cross I-15 approximately 500 feet southeast of the approved crossing. Once on the north side of I-15, Segment 7 would continue west along Temescal Canyon Road in a double-circuit configuration with the existing Fogarty-Ivyglen 115 kV Subtransmission Line to approximately 500 feet west of Indian Truck Trail. In order to accommodate the realignment of Segment 7, four wood poles would be replaced with new wood poles along the existing Fogarty-Ivyglen 115 kV Subtransmission Line.

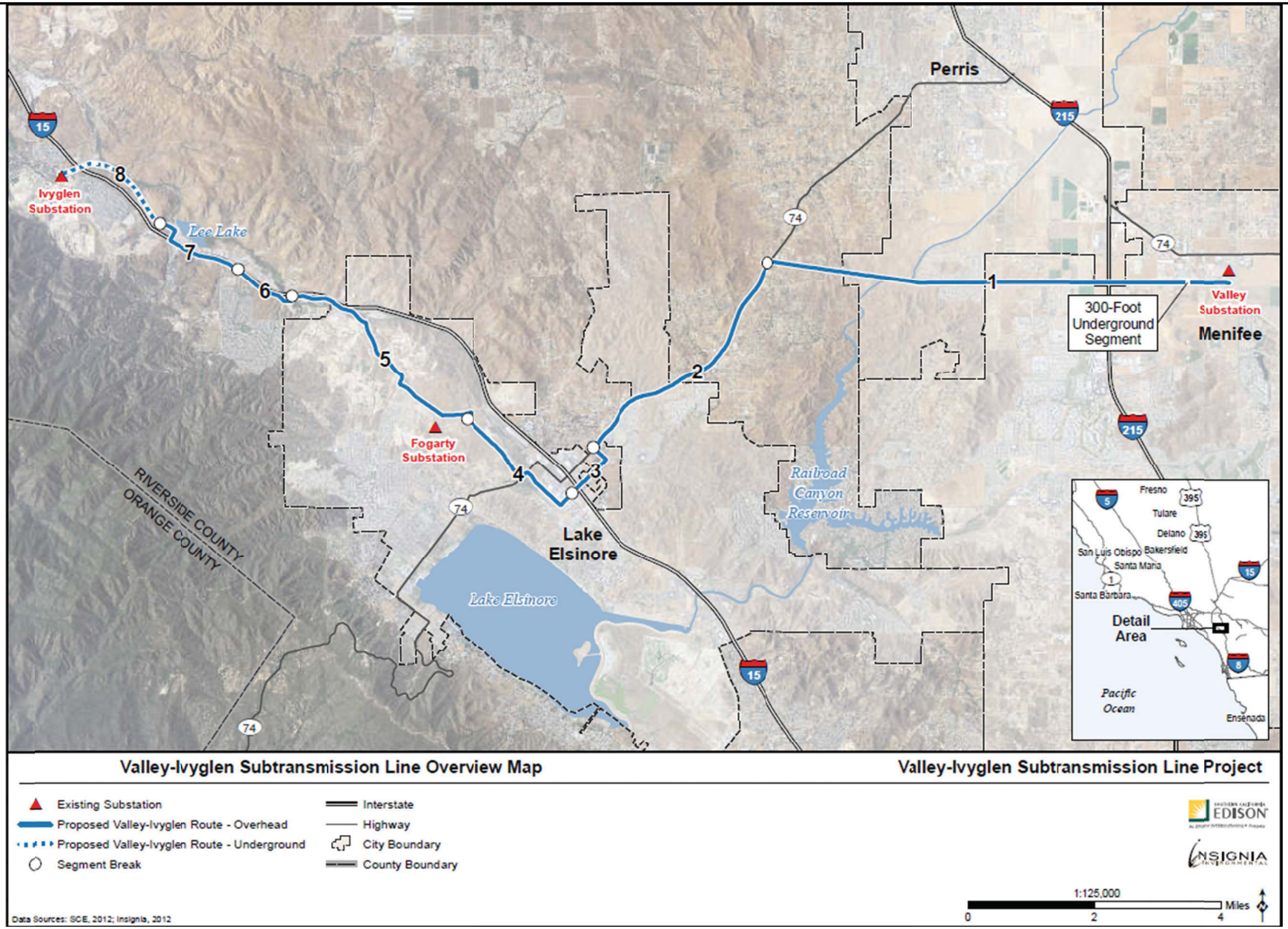
Segment 8

The approved route for Segment 8 would continue on the north side of I-15 between I-15 and Temescal Canyon Road, until spanning I-15 and entering Ivyglen Substation approximately 0.2 mile west of the intersection of Temescal Canyon Road and Campbell Ranch Road.

To minimize impacts to jurisdictional drainages and potential impacts associated with several recent large landslides located between I-15 and Temescal Canyon Road, the proposed realignment of Segment 8 would involve a portion of Segment 8 to be realigned underground primarily within the Temescal Canyon Road franchise. New riser poles would be installed on the south side of Temescal Canyon Road approximately 0.1 mile northwest of Indian Truck Trail and on the north side of Temescal Canyon Road across from Ivyglen Substation, converting the line to an overhead configuration for entry into the substation.

Further details of the modifications are contained in the Proposed PMR.

This FMP amends the FMP filed in 2007 due to the proposed project modifications described in the Proposed PMR.


Perris
Ivyglen Substation
Lee Lake
Fogarty Substation
Lake Elsinore
Lake Elsinore
Railroad Canyon Reservoir
300-Foot Underground Segment
Valley Substation
Menifee
RIVERSIDE COUNTY
ORANGE COUNTY
Detail Area
Pacific Ocean
Ensenada
Fresno
Tulare
Delano
Bakersfield
San Luis Obispo
Santa Maria
Santa Barbara
Valley-Ivyglen Subtransmission Line Overview Map
Valley-Ivyglen Subtransmission Line Project
Existing Substation
Proposed Valley-Ivyglen Route - Overhead
Proposed Valley-Ivyglen Route - Underground
Segment Break
Interstate
Highway
City Boundary
County Boundary
1:125,000
0
2
4
Miles
Data Sources: SCE, 2012; Insignia, 2012

V. EVALUATION OF "NO-COST AND LOW-COST" MAGNETIC FIELD REDUCTION DESIGN OPTIONS

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

For the purpose of evaluating "no-cost and low-cost" magnetic field reduction design options, the evaluation of magnetic fields associated with the Project has been divided into various Project Segment routes that contain similar magnetic field models. Therefore, in some cases, portions of Project Segments have been grouped with other Project Segments for the purpose of this evaluation.

Project Segment 1:

This segment would consist of four SCE circuits (existing Serrano-Valley 500kV T/L, existing Valley-Newcomb 115 kV Subtransmission Line, existing Valley-Elsinore-Fogarty 115 kV Subtransmission Line, and the proposed Valley-Ivyglen 115 kV Subtransmission Line) within the SCE ROW. Though the proposed Valley-Ivyglen 115 kV Subtransmission Line would be single-circuit overhead construction for a dominant portion of the Project Segment 1 route, the proposed Valley-Ivyglen 115 kV Subtransmission Line would be undergrounded during a span of approximately 300 ft. in this segment for engineering reasons (since this underground portion is relatively short in comparison with the entire Project Segment 1 route and is not adjacent to residential land use, only the predominant overhead design is modeled). The proposed overhead design is shown in Figure 2.

For EMF analysis, calculated field levels were evaluated at the edges of an approximately 350 feet wide ROW. Presently, there are no schools adjacent to Project Segment 1 of the proposed 115 kV subtransmission line route. The proposed route for Project Segment 1 is adjacent to residential, commercial / industrial, recreational, agricultural, and undeveloped land.

No-Cost Field Reduction Measures: The proposed design for Project Segment 1 includes the following no-cost field reduction measures:

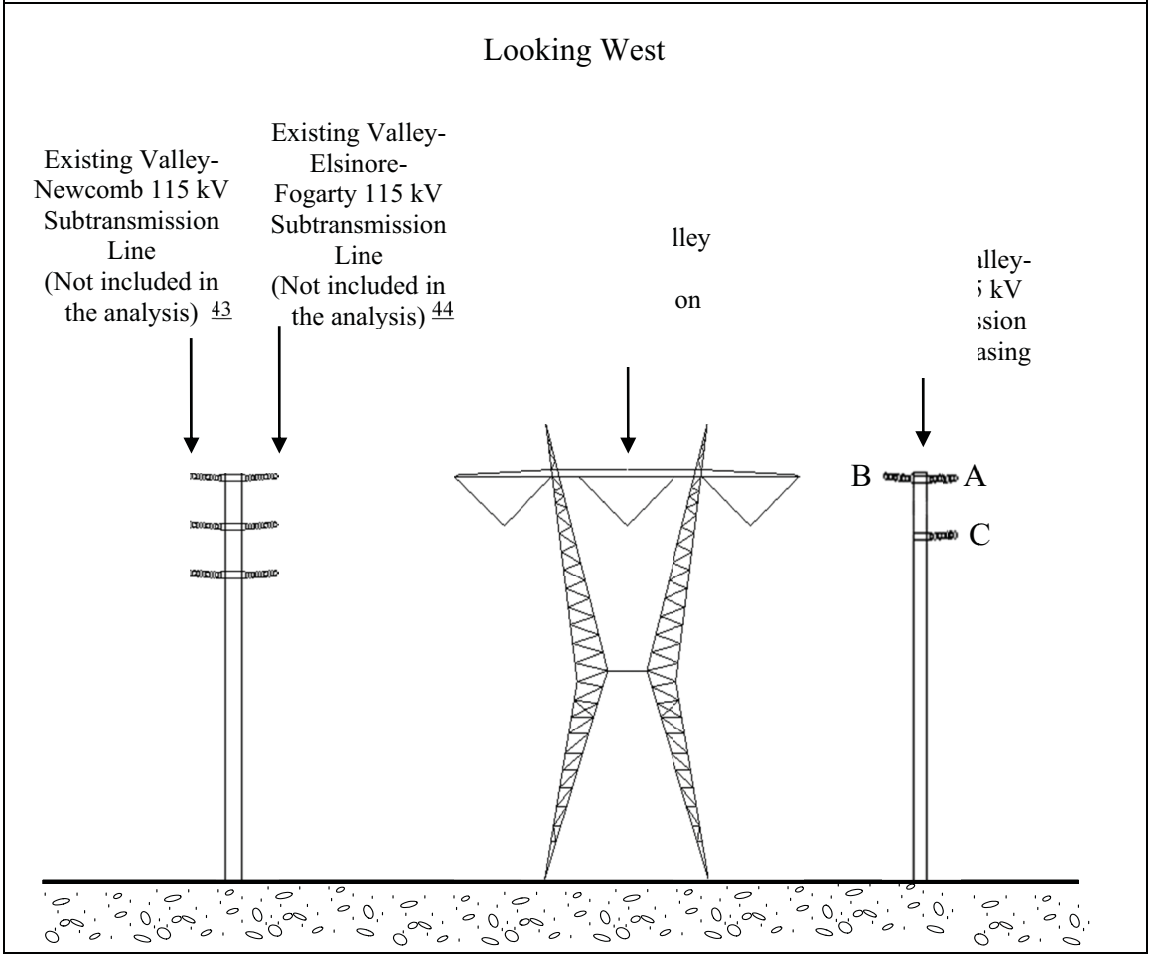
1. Utilize subtransmission structure heights that meet or exceed SCE's EMF preferred design criteria.

2. Arrange conductors of proposed subtransmission line for magnetic field reduction. This is considered a no-cost measure as the proposed phase arrangement can be obtained at the terminations of Valley Substation and Ivyglen Substation.

3. Utilize subtransmission line construction that reduces the space between conductors as compared with other designs.

Low-Cost Field Reduction Options: The proposed design incorporates the above listed no-cost field reduction measures that meet SCE's preferred design criteria, no low-cost reduction measures were considered for this section of the Project.

Figure 2. Proposed 115 kV Single Circuit Structure Design – Project Segment 1[42]



Magnetic Field Calculations: Figure 3 and Table 2 show the calculated magnetic field levels for the proposed design. These calculations were made using the proposed light weight steel (LWS) pole with a minimum height of 75 feet.

---

[42] Figure is not to scale.

[43] This subtransmission line is not included in the analysis due to the large distance (approximately 200 feet) between this subtransmission line and the location of the proposed Valley-Ivyglen 115 kV Subtransmission Line.

[44] *Ibid.*

Figure 3. Calculated Magnetic Field Levels[45] for Project Segment 1 Proposed 115 kV Subtransmission Line (Looking West)

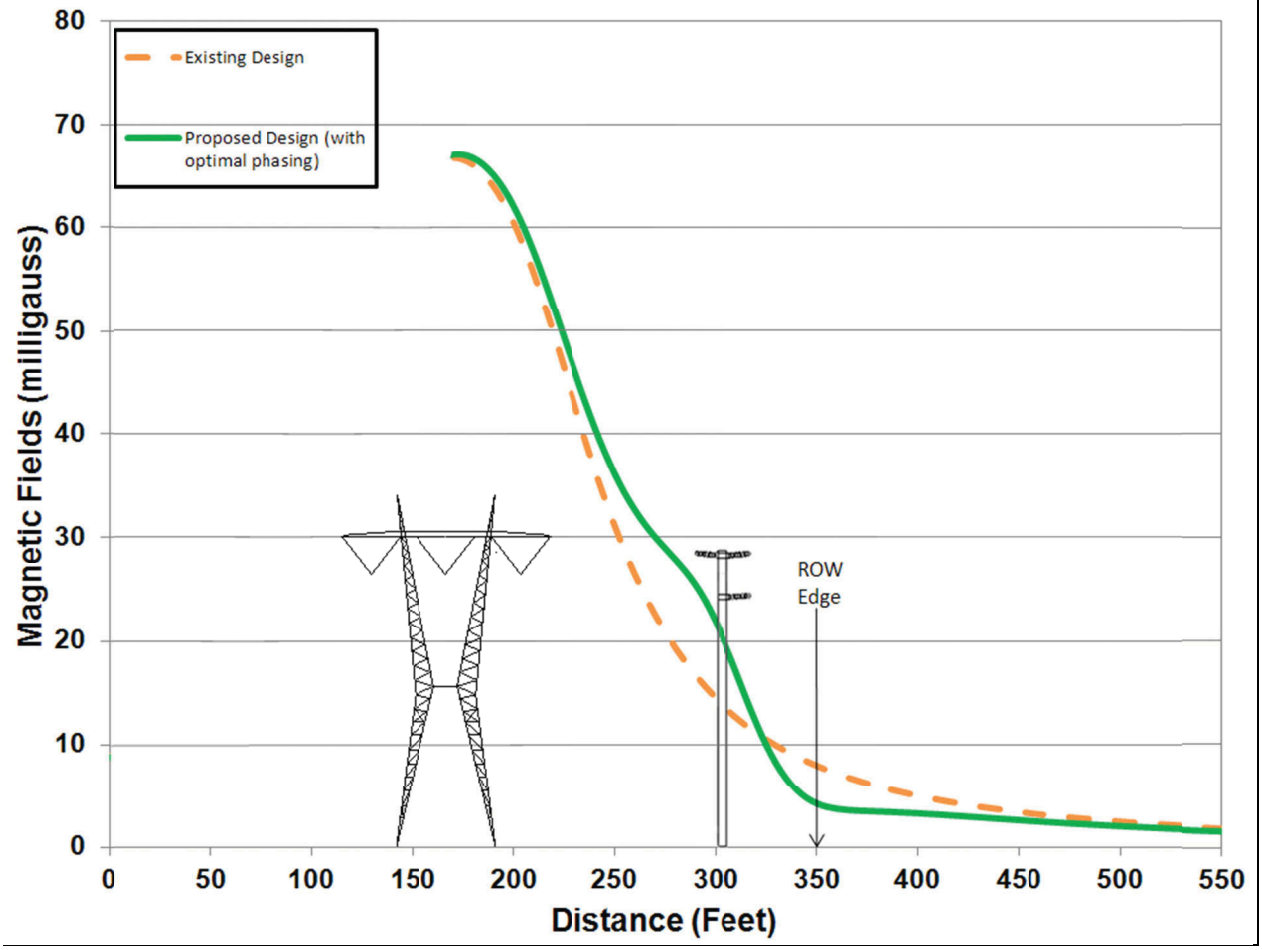


Table 2. Calculated Magnetic Field Levels[46] for Project Segment 1

Design Options	Left edge of ROW (mG)[47]	% Reduction	Right edge of ROW (mG)	% Reduction
Existing	Not Evaluated	-	7.9	-
Proposed	Not Evaluated	-	4.2	46.8

45 This figure shows calculated magnetic field levels for design comparison only and is not meant to predict actual magnetic field levels.

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

47 The left edge of the ROW is not evaluated due to the large distance (approximately 300 feet) between the left edge of the ROW and the location of the proposed Valley-Ivyglen 115 kV Subtransmission Line.

Recommendations for Project Segment 1: *The proposed design includes no-cost field reduction measures. Because the proposed design already incorporates structures with heights meeting or exceeding SCE's preferred design criteria, arranges phase conductors for magnetic field reduction, and utilizes subtransmission line construction that reduces the space between conductors as compared with other designs, no low-cost field reduction measures are recommended.*

Project Segments 2 and 3:

These segments would consist of one SCE circuit (proposed Valley-Ivyglen 115 kV Subtransmission Line). The proposed Valley-Ivyglen 115 kV Subtransmission Line would be single-circuit overhead construction. The proposed design is shown in Figure 4.

For EMF analysis, calculated field levels were evaluated at a distance of approximately 15 feet away from the center of the structures. Presently, there are no schools adjacent to Project Segments 2 and 3 of the proposed 115 kV subtransmission line route. The proposed route for Project Segments 2 and 3 is adjacent to residential, commercial / industrial, recreational, agricultural and undeveloped land.

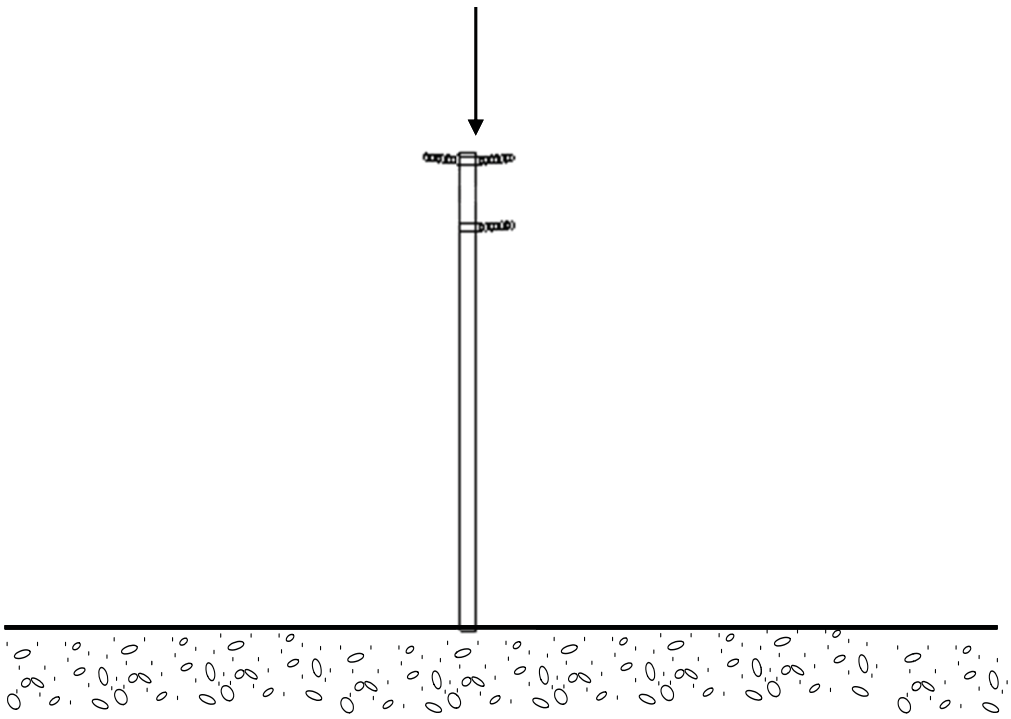
No-Cost Field Reduction Measures: The proposed design for Project Segments 2 and 3 includes the following no-cost field reduction measures:

1. Utilize subtransmission structure heights that meet or exceed SCE's EMF preferred design criteria.

2. Utilize subtransmission line construction that reduces the space between conductors as compared with other designs.

Low-Cost Field Reduction Options: The proposed design incorporates the above listed no-cost field reduction measures that meet SCE's preferred design criteria, no low-cost reduction measures were considered for this section of the Project.

Figure 4. Proposed 115 kV Single Circuit Structure Design – Project Segments 2 and 3[48]



Magnetic Field Calculations: Figure 5 and Table 3 show the calculated magnetic field levels for the proposed design. These calculations were made using the proposed LWS pole with a minimum height of 75 feet.

[48] Figure is not to scale.

Figure 5. Calculated Magnetic Field Levels[49] for Project Segments 2 and 3

Proposed 115 kV Subtransmission Line (the side with 2 insulators is shown facing the street)

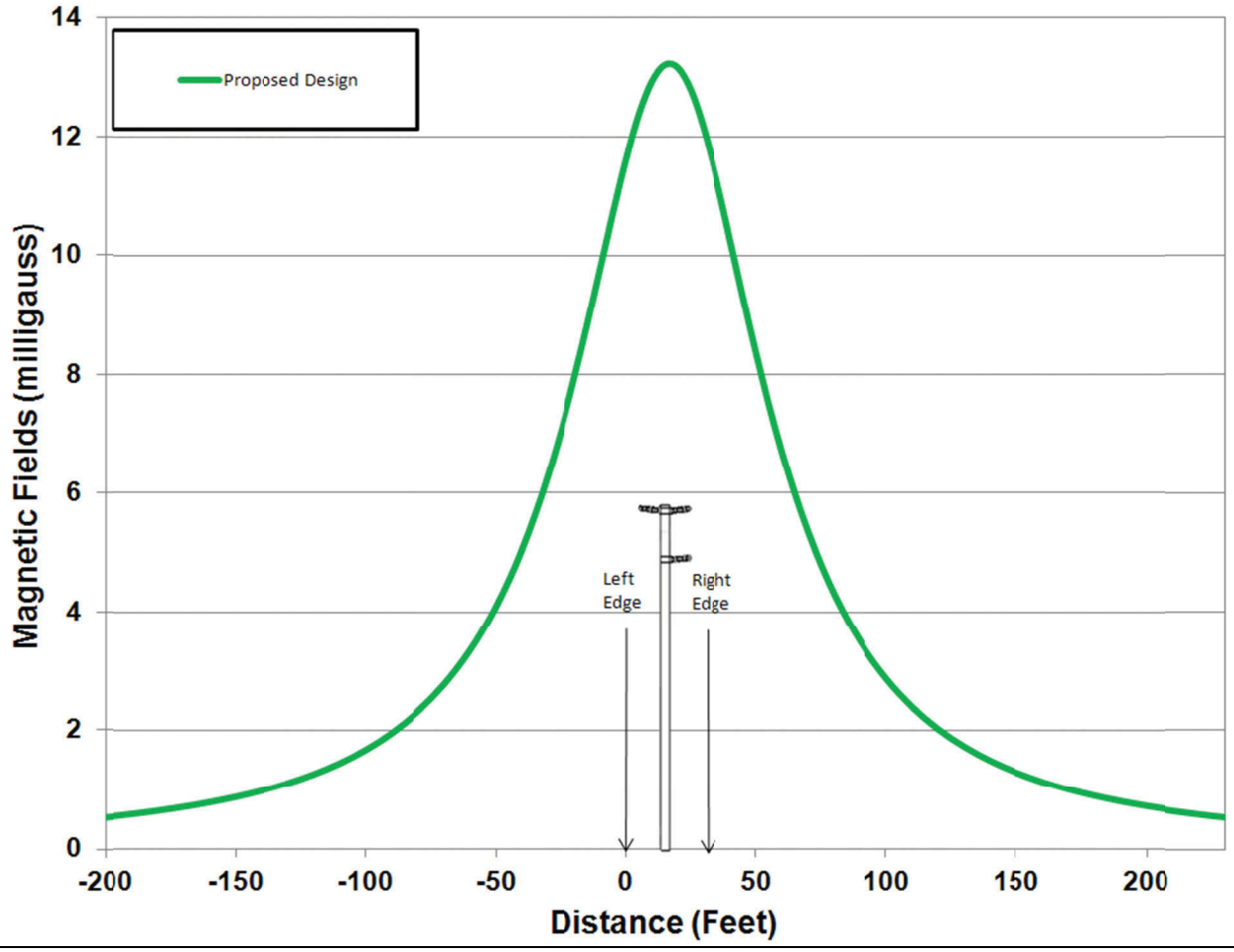


Table 3. Calculated Magnetic Field Levels[50] for Project Segments 2 and 3				
Design Options	Left Edge of Evaluation (mG)	% Reduction	Right Edge of Evaluation (mG)	% Reduction
Existing	N/A	-	N/A	-
Proposed	11.6	-	12.1	-

49 This figure shows calculated magnetic field levels for design comparison only and is not meant to predict actual magnetic field levels.

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

Recommendations for Project Segments 2 and 3: *The proposed design includes no-cost field reduction measures. Because the proposed design already incorporates structures with heights meeting or exceeding SCE's preferred design criteria and utilizes subtransmission line construction that reduces the space between conductors as compared with other designs, no low-cost field reduction measures are recommended.*

Project Segment 4 and a portion of Project Segment 5:

This section of the evaluation would consist of the entire route within Project Segment 4 and a portion of the route within Project Segment 5. These segments would consist of one SCE circuit (proposed Valley-Ivyglen 115 kV Subtransmission Line). The proposed Valley-Ivyglen 115 kV Subtransmission Line would be single-circuit overhead construction. The proposed design is shown in Figure 6.

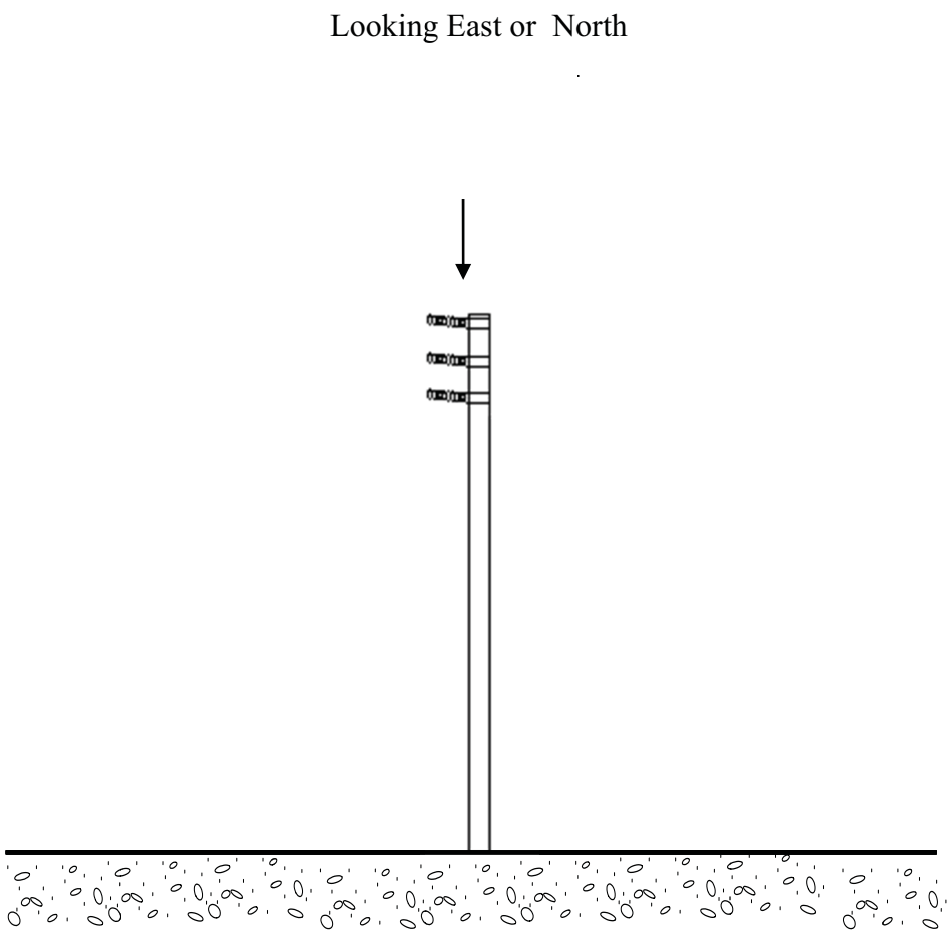
For EMF analysis, calculated field levels were evaluated at a distance of approximately 15 feet away from the center of the structures. Presently, there are no schools adjacent to Project Segment 4 and the evaluated portion of Project Segment 5 of the proposed 115 kV subtransmission line route. The proposed route for Project Segment 4 and the evaluated portion of Project Segment 5 is adjacent to residential, commercial / industrial, recreational, and undeveloped land.

No-Cost Field Reduction Measures: The proposed design for Project Segment 4 and the evaluated portion of Project Segment 5 includes the following no-cost field reduction measure:

1. Utilize subtransmission structure heights that meet or exceed SCE's preferred EMF design criteria.

Low-Cost Field Reduction Options: Because the proposed design incorporates the above no-cost field reduction measure that meets SCE's preferred design criteria, no low-cost reduction measures were considered for this section of the Project.

Figure 6. Proposed 115 kV Single Circuit Structure Design – Project Segment 4 and a portion of Project Segment 5[51]



Magnetic Field Calculations: Figure 7 and Table 4 show the calculated magnetic field levels for the proposed design. These calculations were made using the proposed LWS pole with a minimum height of 75 feet.

[51] Figure is not to scale.

Figure 7. Calculated Magnetic Field Levels[52] for Project Segment 4 and a portion of Project Segment 5
Proposed 115 kV Subtransmission Line (Looking East or North)

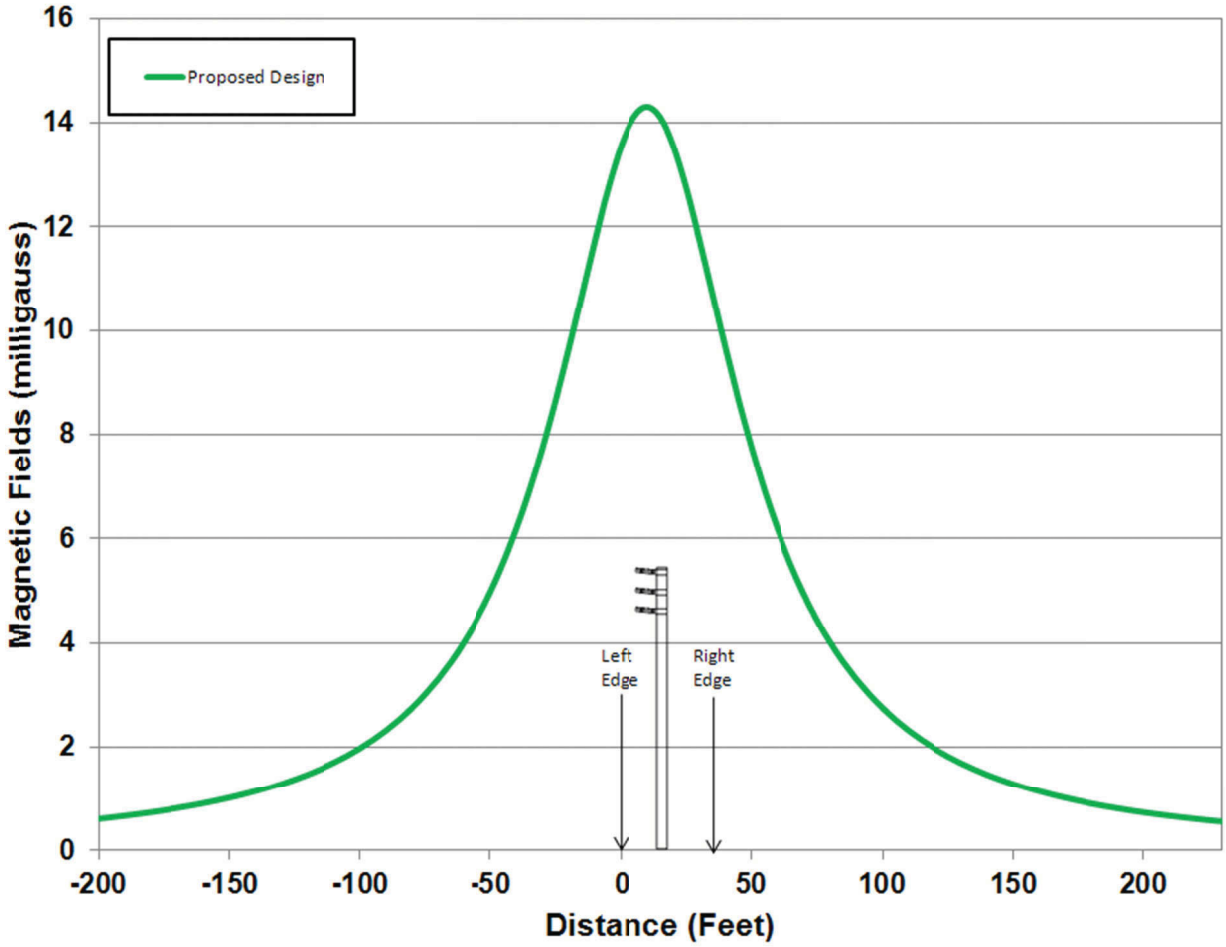


Table 4. Calculated Magnetic Field Levels[53] for Project Segment 4 and a portion of Project Segment 5

Design Options	Left Edge of Evaluation (mG)	% Reduction	Right Edge of Evaluation (mG)	% Reduction
Existing	N/A	-	N/A	-
Proposed	13.6	-	11.8	-

52 This figure shows calculated magnetic field levels for design comparison only and is not meant to predict actual magnetic field levels.

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

Recommendations for Project Segment 4 and the evaluated portion of Project Segment 5: *The proposed design includes no-cost field reduction measures. Because the proposed design already incorporates structures with heights meeting or exceeding SCE's preferred design criteria, no low-cost field reduction measures are recommended.*

Remaining portion of Project Segment 5:

This portion of the evaluation would consist of the remaining portion of the route within Project Segment 5. This segment would consist of two SCE circuits (the existing Fogarty-Ivyglen 115 kV Subtransmission Line and the proposed Valley-Ivyglen 115 kV Subtransmission Line). The proposed line route would also require relocating a portion of the existing Fogarty-Ivyglen 115 kV Subtransmission Line. The proposed Valley-Ivyglen 115 kV Subtransmission Line would be single-circuit overhead construction. The proposed design is shown in Figure 8.

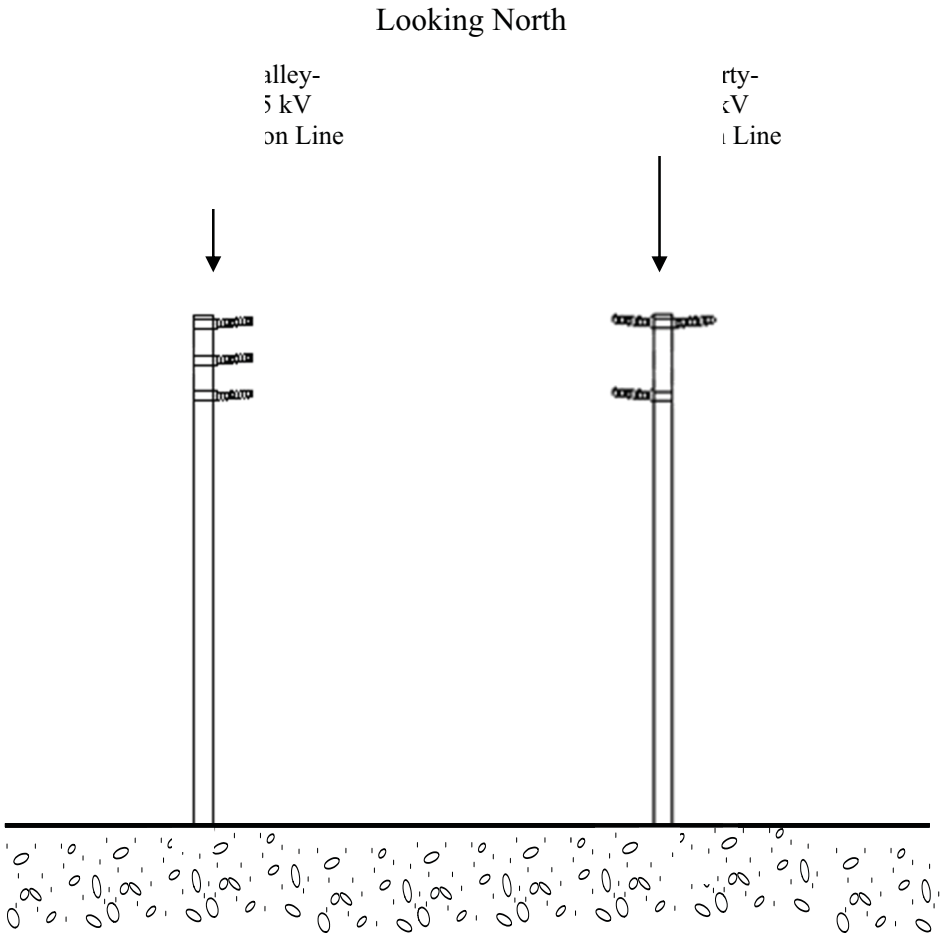
For EMF analysis, calculated field levels were evaluated at a distance of approximately 15 feet away from the center of the proposed Valley-Ivyglen 115 kV Subtransmission Line (due to the existing Fogarty-Ivyglen 115 kV Subtransmission Line and the proposed Valley-Ivyglen 115 kV Subtransmission Line being separated by Lake Street in various portions of the Project Segment 5 route) . Presently, there are no schools adjacent to the evaluated (remaining) portion of Project Segment 5 of the proposed 115 kV subtransmission line route. The proposed route for the evaluated (remaining) portion of Project Segment 5 is adjacent to residential (scarcely populated), commercial / industrial, recreational, agricultural and undeveloped land.

No-Cost Field Reduction Measures: The proposed design for the evaluated (remaining) portion of Project Segment 5 includes the following no-cost field reduction measure:

1. Utilize subtransmission structure heights that meet or exceed SCE's preferred EMF design criteria.

Low-Cost Field Reduction Options: Because the proposed design incorporates the above no-cost field reduction measure that meets SCE's preferred design criteria, no low- cost reduction measures were considered for this section of the Project (arranging conductors of proposed subtransmission line for magnetic field reduction was not considered due to engineering reasons).

Figure 8. Proposed 115 kV Single-Circuit Structure Design – Remaining portion of Project Segment 5[54]



Magnetic Field Calculations: Figure 9 and Table 5 show the calculated magnetic field levels for the proposed design. These calculations were made using the proposed LWS pole with a minimum overall length of 75 feet.

[54] Figure is not to scale.

Figure 9. Calculated Magnetic Field Levels[55] for the remaining portion of Project Segment 5 Proposed 115 kV Subtransmission Line (Looking North)

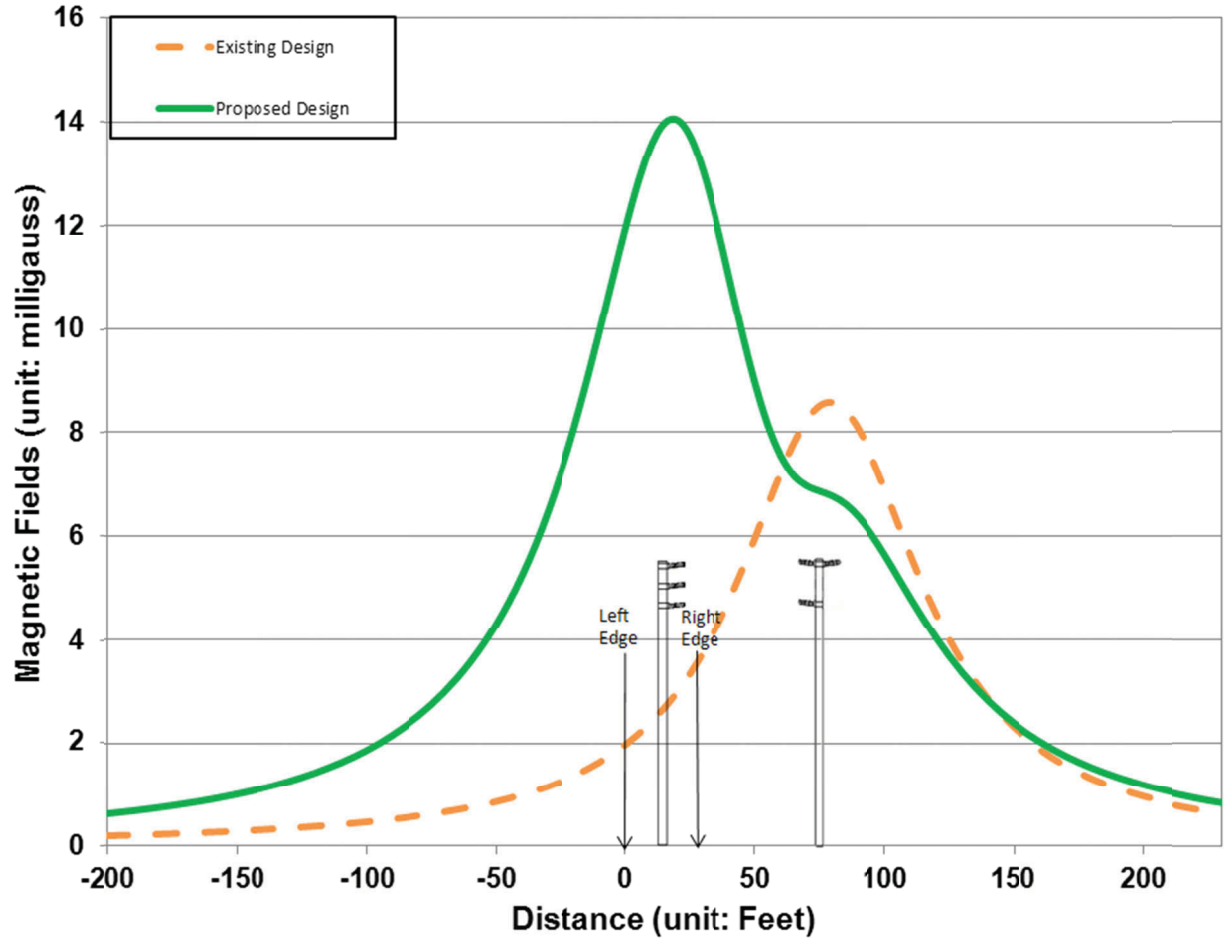


Table 5. Calculated Magnetic Field Levels[56] for the remaining portion of Project Segment 5

Design Options	Left Edge of Evaluation (mG)	% Reduction	Right Edge of Evaluation (mG)	% Reduction
Existing	2.0	-	3.8	-
Proposed	12.0	Increase	13.0	Increase

55 This figure shows calculated magnetic field levels for design comparison only and is not meant to predict actual magnetic field levels.

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

Recommendations for the evaluated (remaining) portion of Project Segment 5: *The proposed design includes the no-cost field reduction measure of incorporating structures with heights meeting or exceeding SCE's preferred design in the Project design.*

Project Segment 6 and a portion of Project Segment 7:

This portion of the evaluation would consist of the entire route within Project Segment 6 and a portion of the route within Project Segment 7. These segments would consist of one SCE circuit (proposed Valley-Ivyglen 115 kV Subtransmission Line). The proposed Valley-Ivyglen 115 kV Subtransmission Line would be single-circuit overhead construction. The proposed design is shown in Figure 10.

For EMF analysis, calculated field levels were evaluated at a distance of approximately 15 feet away from the center of the structures. Presently, there are no schools adjacent to Project Segment 6 and the evaluated portion of Project Segment 7 of the proposed 115 kV subtransmission line route. The proposed route for Project Segment 6 and the evaluated portion of Project Segment 7 is adjacent to residential (scarcely populated), commercial / industrial, agricultural, and undeveloped land.

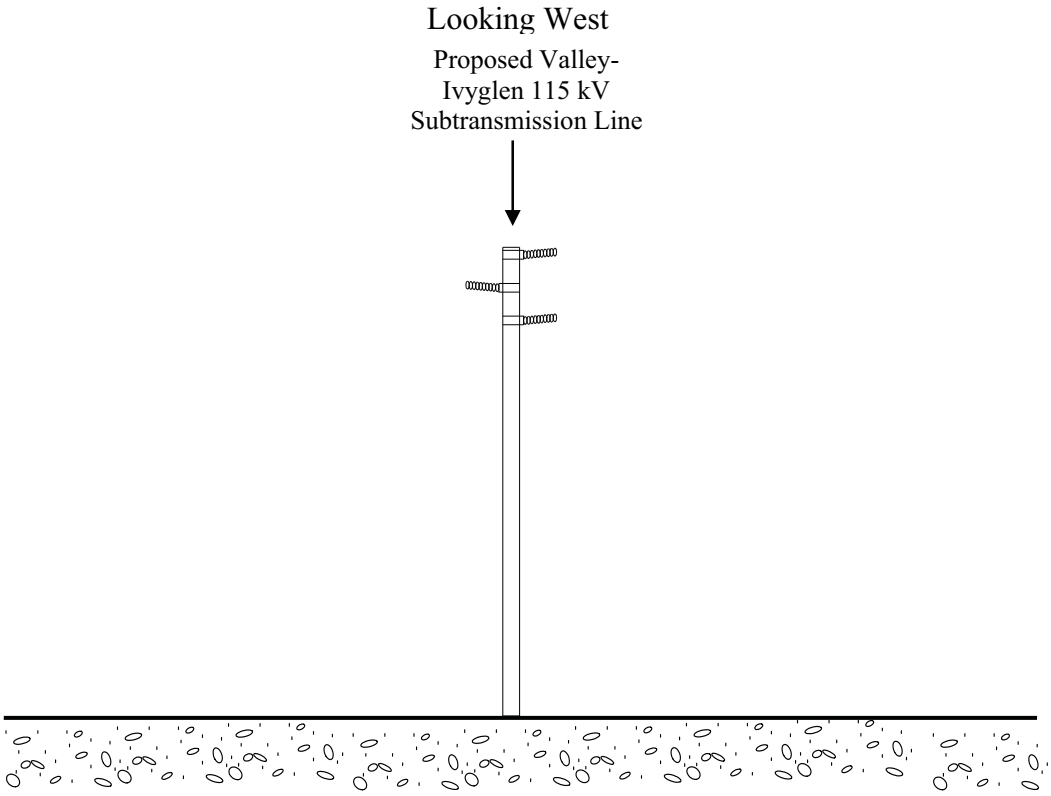
No-Cost Field Reduction Measures: The proposed design for Project Segment 6 and the evaluated portion of Project Segment 7 includes the following no-cost field reduction measures:

1. Utilize subtransmission structure heights that meet or exceed SCE's preferred EMF design criteria.

2. Utilize subtransmission line construction that reduces the space between conductors as compared with other designs.

Low-Cost Field Reduction Options: Because the proposed design incorporates the above no-cost field reduction measures that meet SCE's preferred design criteria, no low-cost reduction measures were considered for this section of the Project.

Figure 10. Proposed 115 kV Single-Circuit Structure Design - Project Segment 6 and a portion of Project Segment 7[57]



Magnetic Field Calculations: Figure 11 and Table 6 show the calculated magnetic field levels for the proposed design. These calculations were made using the proposed LWS pole with an overall minimum length of 75 feet.

[57] Figure is not to scale.

Figure 11. Calculated Magnetic Field Levels[58] for Project Segment 6 and a portion of Project Segment 7
Proposed 115 kV Subtransmission Line (Looking West)

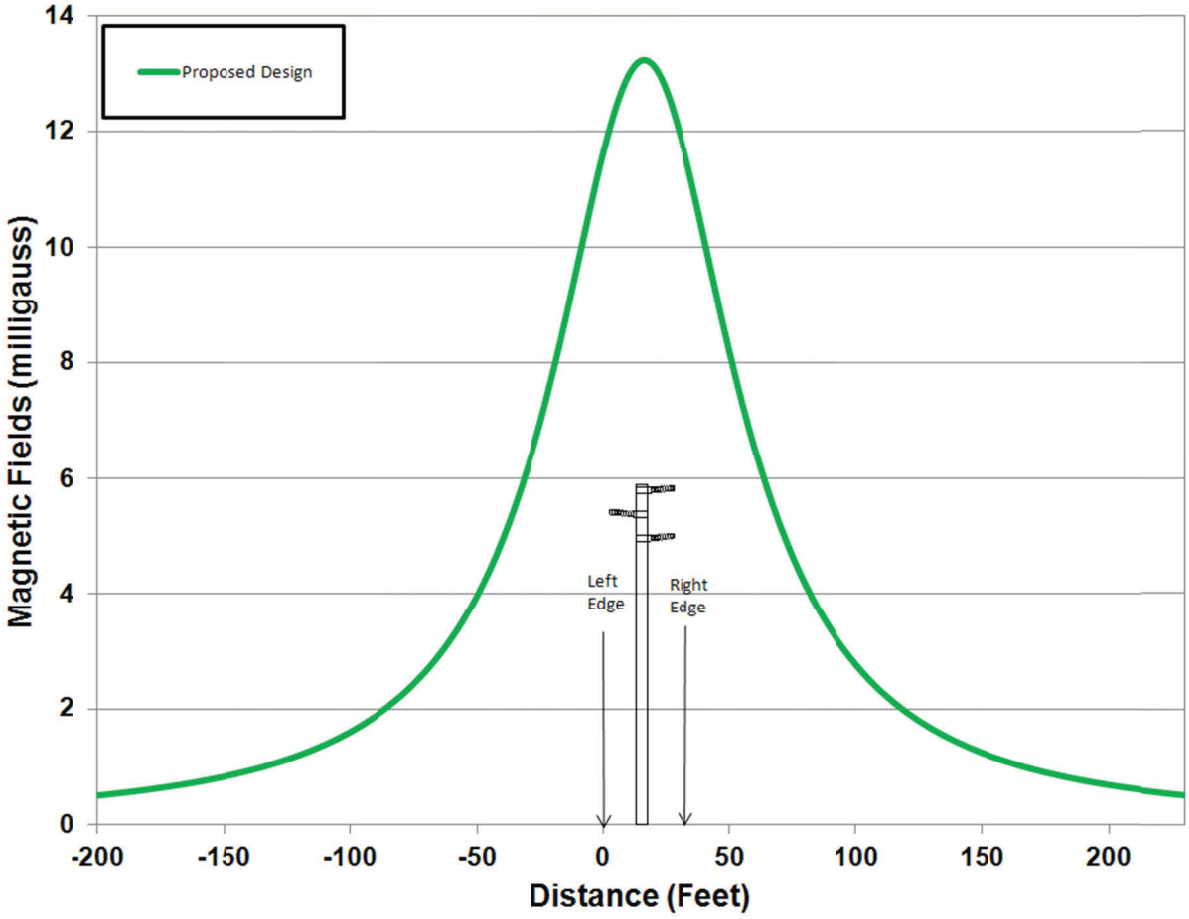


Table 6. Calculated Magnetic Field Levels[59] for Project Segment 6 and a portion of Project Segment 7

Design Options	Left Edge of Evaluation (mG)	% Reduction	Right Edge of Evaluation (mG)	% Reduction
Existing	N/A	-	N/A	-

58 This figure shows calculated magnetic field levels for design comparison only and is not meant to predict actual magnetic field levels.

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

Proposed	11.6	-	12.0	-

Recommendations for Project Segment 6 and the evaluated portion of Project Segment 7: *The proposed design includes no-cost field reduction measures. Because the proposed design already incorporates structures with heights meeting or exceeding SCE's preferred design criteria and utilizes subtransmission line construction that reduces the space between conductors as compared with other designs, no low-cost field reduction measures are recommended.*

Remaining portion of Project Segment 7:

This portion of the evaluation would consist of the remaining portion of the route within Project Segment 7. This segment would consist of two SCE circuits (the existing Fogarty-Ivyglen 115 kV Subtransmission Line and the proposed Valley-Ivyglen 115 kV Subtransmission Line). The existing Fogarty-Ivyglen 115 kV Subtransmission Line and the proposed Valley-Ivyglen 115 kV Subtransmission Line would be double-circuit overhead construction. The proposed design is shown in Figure 12.

For EMF analysis, calculated field levels were evaluated at a distance of approximately 15 feet away from the center of the structures. Presently, there are no schools adjacent to the evaluated (remaining) portion of Project Segment 7 of the proposed 115 kV subtransmission line route. The proposed route for the evaluated (remaining) portion of Project Segment 7 is adjacent to undeveloped land.

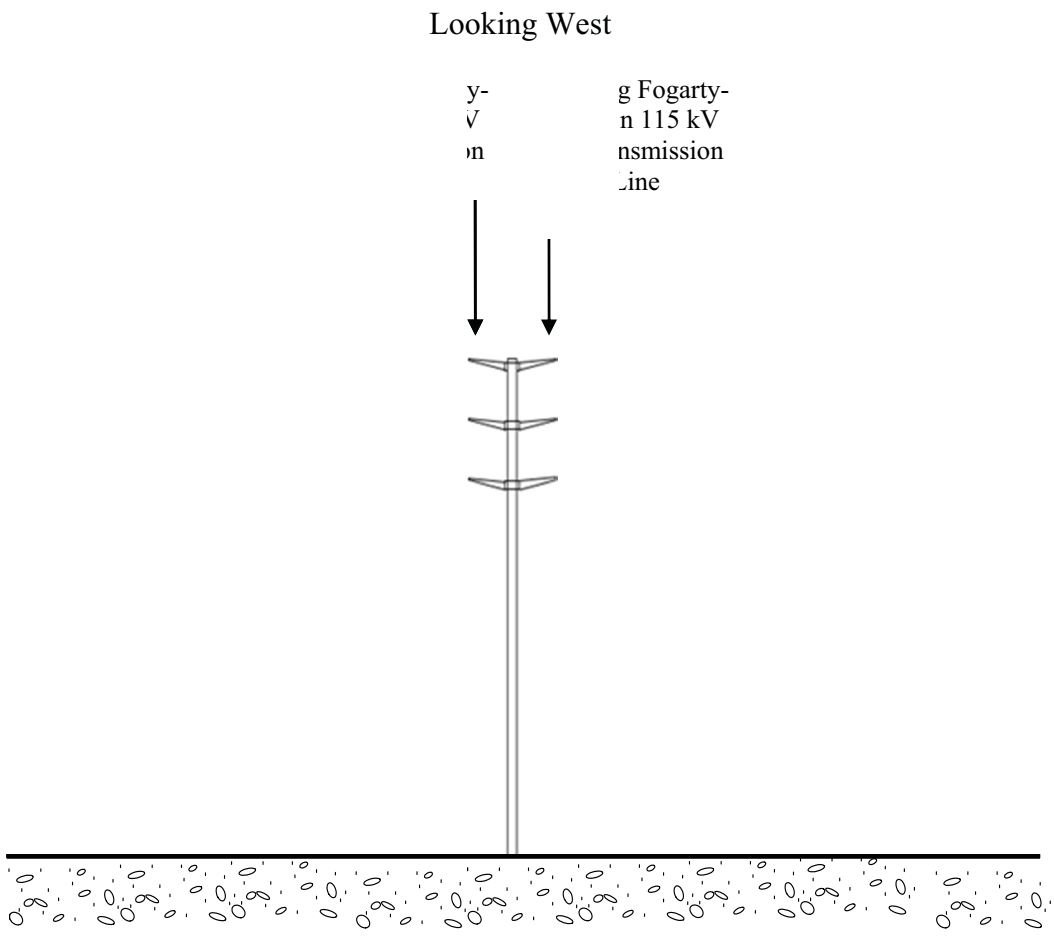
No-Cost Field Reduction Measures: The proposed design for the evaluated (remaining) portion of Project Segment 7 includes the following no-cost field reduction measures:

1. Utilize subtransmission structure heights that meet or exceed SCE's preferred EMF design criteria.

2. Utilize double-circuit construction that reduces spacing between circuits as compared with single-circuit construction.

Low-Cost Field Reduction Options: Because the proposed design incorporates the above no-cost field reduction measures that meet SCE's preferred design criteria, no low-cost reduction measures were considered for this section of the Project.

Figure 12. Proposed 115 kV Double-Circuit Structure Design - Remaining portion of Project Segment 7[60]



Magnetic Field Calculations: Figure 13 and Table 7 show the calculated magnetic field levels for the proposed design. These calculations were made using the proposed TSP with an overall minimum length of 80 feet.

[60] Figure is not to scale.

Figure 13. Calculated Magnetic Field Levels[61] for the remaining portion of Project Segment 7 Proposed 115 kV Subtransmission Line (Looking West)

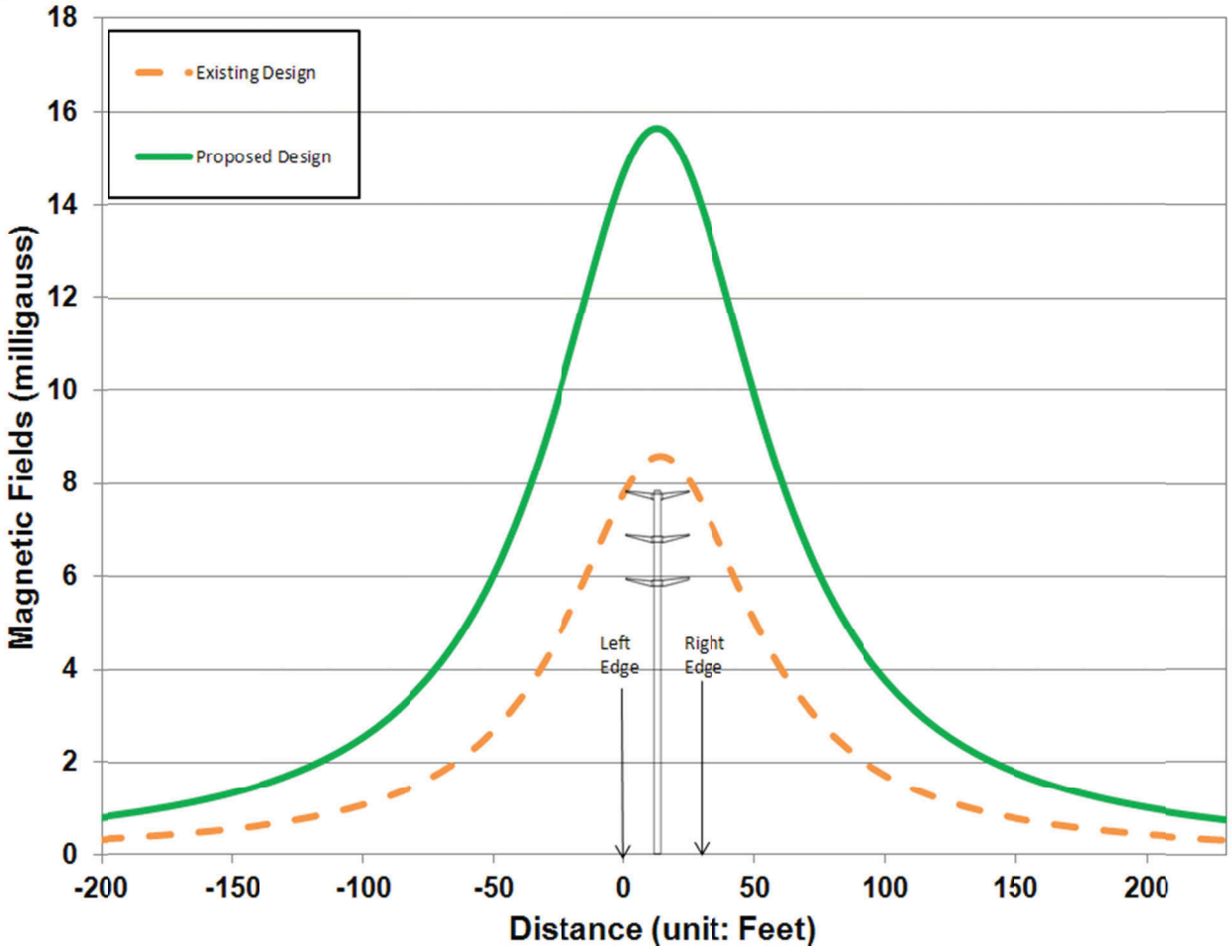


Table 7. Calculated Magnetic Field Levels[62] for the remaining portion of Project Segment 7

Design Options	Left Edge of Evaluation (mG)	% Reduction	Right Edge of Evaluation (mG)	% Reduction
Existing	7.8	-	7.5	-
Proposed	14.7	Increase	13.9	Increase

61 This figure shows calculated magnetic field levels for design comparison only and is not meant to predict actual magnetic field levels.

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

Recommendations for the evaluated (remaining) portion of Project Segment 7: *The proposed design includes no-cost field reduction measures which incorporates structures with heights meeting or exceeding SCE's preferred design criteria into the Project design and utilizes double-circuit construction that reduces spacing between circuits as compared with single-circuit construction.*

Project Segment 8:

This segment consists of the entire route within Project Segment 8. This segment would consist of two SCE circuits (the existing Fogarty-Ivyglen 115 kV Subtransmission Line and the proposed Valley-Ivyglen 115 kV Subtransmission Line). The proposed Valley-Ivyglen 115 kV Subtransmission Line would be single-circuit underground construction and the existing Fogarty-Ivyglen 115 kV Subtransmission Line would remain overhead construction. The proposed design is shown in Figure 14.

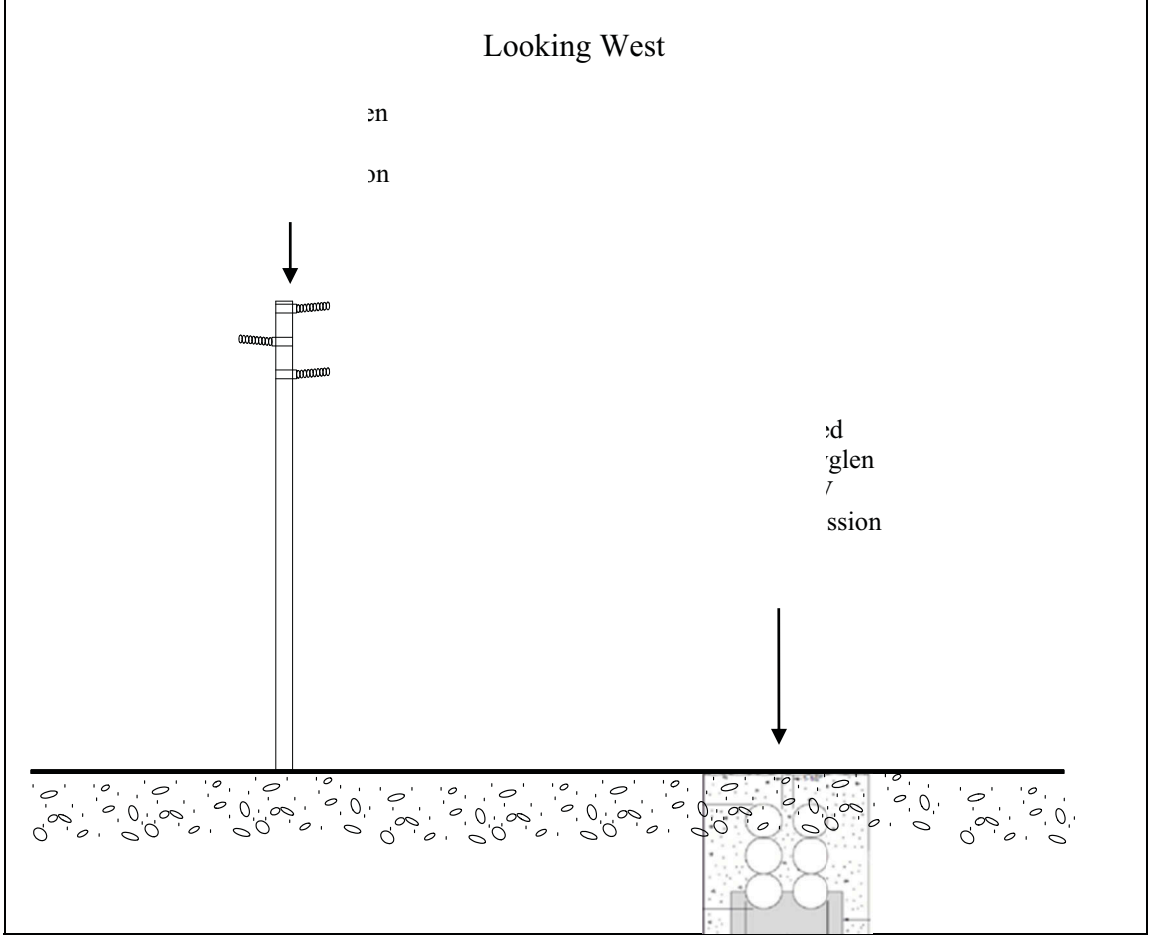
For EMF analysis, calculated field levels were evaluated at a distance of approximately 15 feet away from the center of the proposed underground Valley-Ivyglen 115 kV Subtransmission Line (due to the existing Fogarty-Ivyglen 115 kV Subtransmission Line and the proposed Valley-Ivyglen 115 kV Subtransmission Line being separated by a portion of Temescal Canyon Road in the Project Segment 8 route). Presently, there are no schools adjacent to Project Segment 8 of the proposed 115 kV subtransmission line route. The proposed route for Project Segment 8 is adjacent to residential (scarcely populated) and undeveloped land.

No-Cost Field Reduction Measures: The proposed design for Project Segment 8 includes the following no-cost field reduction measure:

1. Utilize underground subtransmission construction for engineering reasons.

Low-Cost Field Reduction Options: Because the proposed design incorporates the above no-cost field reduction measure that meet SCE's preferred design criteria, no further low-cost reduction measures were considered for this section of the Project.

Figure 14. Proposed 115 kV Single Circuit Underground Design - Project Segment 8[63]



Magnetic Field Calculations: Figure 15 and Table 8 show the calculated magnetic field levels for the proposed design. These calculations were made using the typical underground subtransmission circuit depth of approximately 3 feet below ground level.

[63] Figure is not to scale.

Figure 15. Calculated Magnetic Field Levels[64] for Project Segment 8 Proposed 115 kV Subtransmission Line (Looking West)

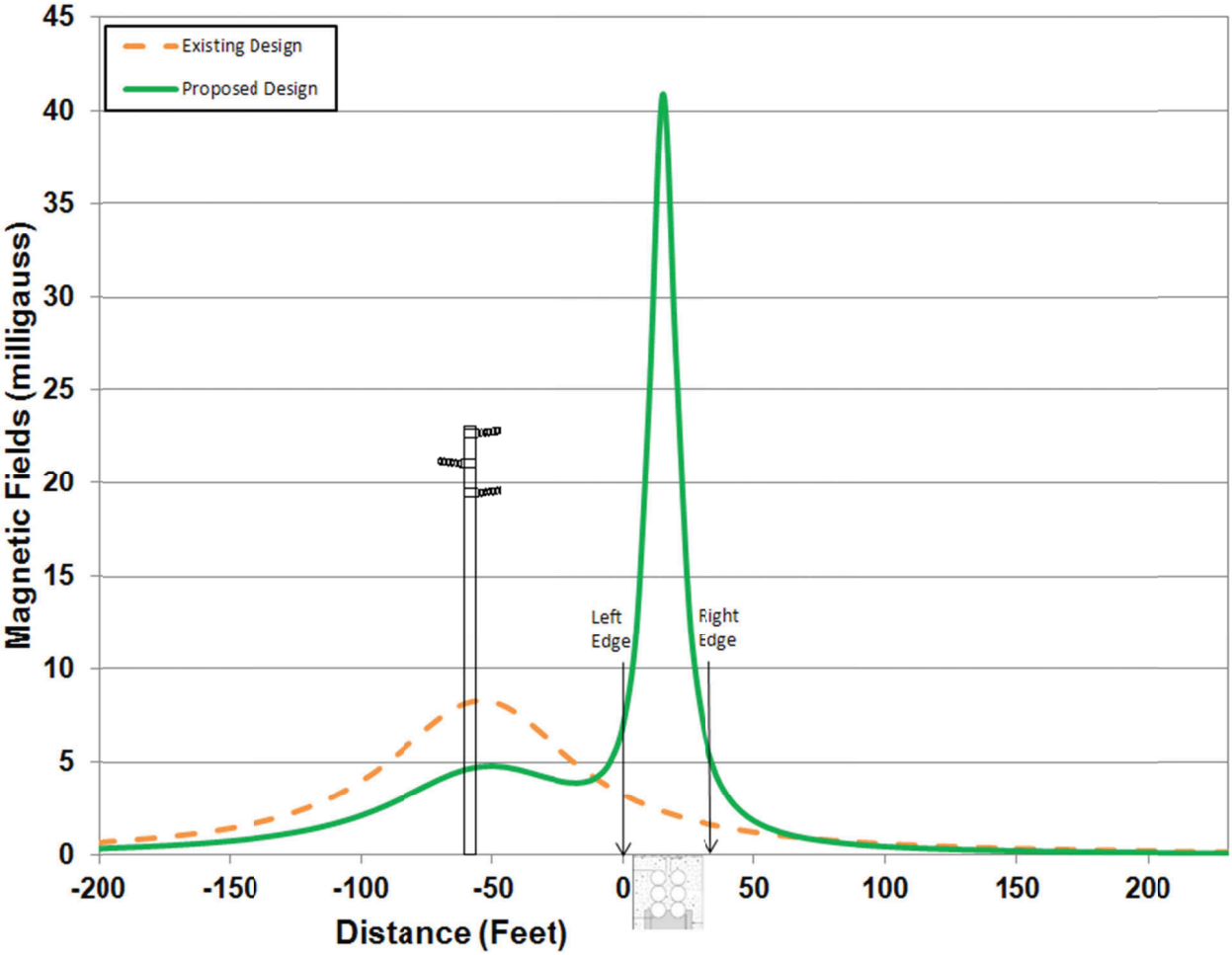


Table 8. Calculated Magnetic Field Levels[65] for Project Segment 8				
Design Options	Left Edge of Evaluation (mG)	% Reduction	Right Edge of Evaluation (mG)	% Reduction
Existing	3.3	-	1.8	-
Proposed	7.0	Increase	7.3	Increase

64 This figure shows calculated magnetic field levels for design comparison only and is not meant to predict actual magnetic field levels.

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

Recommendations for Project Segment 8: *The proposed design includes no-cost field reduction measures. Because the proposed design already utilizes underground subtransmission construction for engineering reasons, no low-cost field reduction measures are recommended.*

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

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

Project Segment 1 – The proposed Valley-Ivyglen 115 kV Subtransmission Line would be single-circuit construction:

- Utilize subtransmission structure heights that meet or exceed SCE's preferred EMF design criteria.

- Arrange conductors of proposed subtransmission line for magnetic field reduction:

    - Proposed Valley-Ivyglen 115 kV Subtransmission Line phase arrangement as shown in Figure 2.

- Utilize subtransmission line construction that reduces the space between conductors as compared with other designs.

Project Segments 2 and 3 – The proposed Valley-Ivyglen 115 kV Subtransmission Line would be single-circuit construction:

- Utilize subtransmission structure heights that meet or exceed SCE's preferred EMF design criteria.

- Utilize subtransmission line construction that reduces the space between conductors as compared with other designs.

Project Segment 4 and the evaluated portion of Project Segment 5 – The proposed Valley-Ivyglen 115 kV Subtransmission Line would be single-circuit construction:

- Utilize subtransmission structure heights that meet or exceed SCE's preferred EMF design criteria.

Evaluated (remaining) portion of Project Segment 5 – The proposed Valley-Ivyglen 115 kV Subtransmission Line would be single-circuit construction:

- Utilize subtransmission structure heights that meet or exceed SCE's preferred EMF design criteria.

Project Segment 6 and the evaluated portion of Project Segment 7 – The proposed Valley-Ivyglen 115 kV Subtransmission Line would be single-circuit construction:

- Utilize subtransmission structure heights that meet or exceed SCE's preferred EMF design criteria.

- Utilize subtransmission line construction that reduces the space between conductors as compared with other designs.

Evaluated (remaining) portion of Project Segment 7 – The proposed Valley-Ivyglen 115 kV Subtransmission Line and the existing Fogarty-Ivyglen 115 kV Subtransmission Line would be double-circuit construction:

- Utilize subtransmission structure heights that meet or exceed SCE's preferred EMF design criteria.
- Utilize double-circuit construction that reduces spacing between circuits as compared with single-circuit construction.

Project Segment 8 – The proposed Valley-Ivyglen 115 kV Subtransmission Line would be single circuit underground subtransmission construction:

- Utilize underground subtransmission construction for engineering reasons.

The recommended "no-cost and low-cost" magnetic field reduction design options listed above are based upon preliminary engineering design. If the preliminary engineering design is significantly modified (in the context of evaluating and implementing CPUC's "no-cost and low-cost" EMF Policy), then an Addendum to the FMP will be prepared.

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

VII. APPENDIX A: TWO-DIMENSIONAL MODEL ASSUMPTIONS AND YEAR 2015 FORECASTED LOADING CONDITIONS

Magnetic Field Model Assumptions:

SCE uses a computer program titled "MFields"[66] to model the magnetic field characteristics of various transmission designs options. All magnetic field models and the calculated results of magnetic field levels presented in this document are intended only for purposes of identifying the relative differences in magnetic field levels among various transmission line and subtransmission line design alternatives under a specific set of modeling assumptions and determining whether particular design alternatives can achieve magnetic field level reductions of 15 percent or more. The calculated results are not intended to be predictors of the actual magnetic field levels at any given time or at any specific location if and when the Project is constructed.

Typical two-dimensional magnetic field modeling assumptions include:

- All subtransmission lines were modeled using forecasted peak loads (see Tables 9, 10, & 11).
- All conductors were assumed to be straight and infinitely long.
- Average conductor heights accounted for line sag used in the calculation for the subtransmission line designs.
- Magnetic field strength was calculated at a height of three feet above ground.
- Resultant magnetic fields values were presented in this FMP.
- All line currents were assumed to be balanced. (i.e. neutral or ground currents are not considered)
- Terrain was assumed to be flat.
- Project dominant power flow directions were used.

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

Table 9. Year 2015 Forecasted Loading Conditions for Proposed Project (After Project Completion)		
Line Name	**Current (Amps)**	**Power Flow Direction**
Valley-Ivyglen 115 kV	307	Valley to Ivyglen
Valley-Elsinore-Fogarty 115 kV	692 (Valley Leg)	Valley to Valley-Elsinore-Fogarty node
Valley-Newcomb 115 kV	527	Valley to Newcomb
Fogarty-Ivyglen 115 kV	111	Ivyglen to Fogarty

Table 10. Year 2015 Forecasted Loading Conditions (Before Project Completion)		
Line Name	**Current (Amps)**	**Power Flow Direction**
Valley-Elsinore-Fogarty 115 kV	863 (Valley Leg)	Valley to Valley-Elsinore-Fogarty node
Valley-Newcomb 115 kV	559	Valley to Newcomb
Fogarty-Ivyglen 115 kV	199	Fogarty to Ivyglen

Table 11. Year 2015 Forecasted Loading Conditions		
Line Name	**Current (Amps)**	**Power Flow Direction**
Serrano-Valley 500 kV	612	Valley to Serrano

Notes:

1. Forecasted loading data is based upon scenarios representing load forecasts for 2015. The forecasting data is subject to change depending upon availability of generations, load increase, changes in load demand, and by many other factors.
2. The same loading was used for the Serrano-Valley 500 kV T/L (before and after the project) since the loading was not expected to change significantly as to impact the modeling results.