

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA**

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

A.21-08-XXX

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

BETH A. GAYLORD
ROBERT PONTELLE
LAUREN P. GOSCHKE

Attorneys for
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770
Telephone: (626) 302-4906
E-mail: Lauren.P.Goschke@sce.com

Date: **August 13, 2021**

**Application Of Southern California Edison Company (U 338-E) For A Permit To
Construct Electrical Facilities With Voltages Between 50 Kv And 200 Kv:
Control-Silver Peak Project**

Table Of Contents

Section	Page
I. INTRODUCTION	1
II. BACKGROUND	2
III. SUMMARY OF REQUEST.....	4
IV. STATUTORY AND PROCEDURAL REQUIREMENTS.....	7
A. Applicant.....	7
B. Articles of Incorporation.....	7
C. Balance Sheet and Statement of Income.....	9
D. Description of Southern California Edison Company	10
E. Service Territory	10
F. Location of Items Required in Permit to Construct Pursuant to G.O. 131-D Section IX.B.....	10
1. A description of the proposed power line or substation facilities, including the proposed power line route; proposed power line equipment, such as tower design and appearance, heights, conductor sizes, voltages, capacities, substations, switchyards, etc., and a proposed schedule for authorization, construction, and commencement of operation of the facilities.	11
2. A map of the proposed power line routing or substation location showing populated areas, parks, recreational areas, scenic areas, and existing electrical transmission or power lines within 300 feet of the proposed route or substation.	12
3. Reasons for adoption of the power line route or substation location selected, including comparison with alternative routes or locations, including the advantages and disadvantages of each.	13

**Application Of Southern California Edison Company (U 338-E) For A Permit To
Construct Electrical Facilities With Voltages Between 50 Kv And 200 Kv:
Control-Silver Peak Project**

Table Of Contents (Continued)

Section	Page
4. A listing of the governmental agencies with which proposed power line route or substation location reviews have been undertaken, including a written agency response to applicant’s written request for a brief position statement by that agency. (Such listing shall include The Native American Heritage Commission, which shall constitute notice on California Indian Reservation Tribal governments.) In the absence of a written agency position statement, the utility may submit a statement of its understanding of the position of such agencies.	14
5. A PEA or equivalent information on the environmental impact of the project in accordance with the provisions of CEQA and this Commission’s Rules of Practice and Procedure Rule 2.4 [formerly 17.1 and 17.3]. If a PEA is filed, it may include the data described in Items a. through d. above.	15
G. Compliance with G.O. 131-D, Section X	15
H. Compliance with Rule 2.1(c)	15
I. Statutory Authority	16
J. Public Notice.....	16
K. Supporting Appendices and Attachments.....	17
L. Compliance with Rule 2.5.....	17
M. Request for Ex Parte Relief.....	17
N. Request for Timely Relief.....	18
V. CONCLUSION.....	18
APPENDIX A STATEMENT OF INCOME AND BALANCE SHEET AS OF JUNE 30, 2021	
APPENDIX B LIST OF COUNTIES AND MUNICIPALITIES SERVED BY SCE	

**Application Of Southern California Edison Company (U 338-E) For A Permit To
Construct Electrical Facilities With Voltages Between 50 Kv And 200 Kv:
Control-Silver Peak Project**

Table Of Contents (Continued)

Section	Page
APPENDIX C CONTROL-SILVER PEAK PROJECT SCHEDULE	
APPENDIX D NOTICE OF APPLICATION FOR A PERMIT TO CONSTRUCT	
APPENDIX E CERTIFICATE OF SERVICE OF NOTICE OF APPLICATION FOR A PERMIT TO CONSTRUCT	
APPENDIX F FIELD MANAGEMENT PLAN	

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA**

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

A.21-08-XXX

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

I.

INTRODUCTION

Pursuant to California Public Utilities Commission (“Commission” or “CPUC”), General Order 131-D (“G.O. 131-D”), Southern California Edison Company (“SCE”) respectfully submits this application (“Application”) for a permit to construct (“PTC”) authorizing SCE to construct the proposed project known as the Control-Silver Peak Project (“CSP Project”). The purpose of the CSP Project is to remediate physical clearance discrepancies identified on some of SCE’s existing 55 kilovolt (“kV”) subtransmission lines while continuing to provide safe and reliable electric service.¹ SCE has prepared a Proponent’s Environmental Assessment” (“PEA”) that analyzes the CSP Project scope. The PEA is submitted concurrently with this Application.

¹ SCE identifies electrical lines operated at voltages between 50 kilovolts (kV) and 200 kV as subtransmission lines or subtransmission circuits. Electrical lines operated at voltages at or greater than 200 kV are identified as transmission lines.

II.

BACKGROUND

CPUC General Order 95 (“G.O. 95”) Rules 37 through 39 specify minimum vertical and horizontal clearances to be maintained between an electrical conductor and other conductors, or between a conductor and the ground, buildings, and a variety of other objects.

In 2006, SCE identified discrepancies along some of its circuits where minimum clearances are not being met compared to rules contained in G.O. 95. In response, SCE established its Transmission Line Rating Remediation (“TLRR”) Program. The TLRR Program is focused on developing and implementing engineering solutions for each identified discrepancy to bring the circuits into compliance with rules contained in G.O. 95 and the California Independent System Operator (“CAISO”) 2008 Transmission Register. SCE is committed to undertaking all reasonable efforts to correct discrepancies on its bulk electric system facilities prior to December 31, 2025. All subtransmission lines which make up the CSP Project are a part of the bulk electric system.

Pursuant to the TLRR Program, SCE identified G.O. 95 discrepancies along the following existing 55 kV subtransmission line circuits located in portions of unincorporated Inyo County and Mono County and the City of Bishop in Inyo County:

- Control-Silver Peak “A” Circuit
- Control-Silver Peak “C” Circuit

The work needed to remediate the discrepancies on these specific circuits constitutes the scope of the CSP Project.

As discussed in greater detail in the PEA submitted in conjunction with this Application, SCE has identified a number of ways to remediate the discrepancies identified along the five

subtransmission line segments that make up the Control-Silver Peak “A” and “C” circuits.² As a result of that effort, and as discussed more fully in Chapter 4 of the attached PEA, SCE analyzed several alternatives—in addition to a No Project Alternative—for feasibility and potential environmental impacts. The types of alternatives SCE analyzed to remediate discrepancies include: Reduced Footprint Alternatives (Decommission and Remove; Decommission and Remove With Upgrades); Energy Storage Alternatives; Other Technological Alternatives (Reconductor); Route Alternatives (Highway 6); and Alternative Engineering or Technical Approaches (Operating Voltage Decrease; Ampacity Derate; and Rebuild). The feasibility of these alternatives is summarized in Chapter 4 of the PEA.

Based on the analysis in the attached PEA, SCE identified the CSP Project, described more fully in Chapter 3 of the PEA, as the alternative that would meet the CSP Project objectives with the fewest environmental impacts compared to other alternatives. On that basis SCE respectfully requests approval of a PTC authorizing SCE to implement the CSP Project.

² The two circuits are comprised of the following five segments:

- Segment 1 consists of portions of the Control-Silver Peak ‘A’ and ‘C’ 55 kV circuits. Segment 1 spans approximately 3.4 miles from the Control Substation near the City of Bishop to where the CSP Project alignment intersects US Highway 395 (US 395).
- Segment 2 consists of portions of the Control-Silver Peak ‘A’ and ‘C’ 55 kV circuits. Segment 2 spans approximately 1.4 miles from the point where the CSP Project alignment intersects US 395 near the City of Bishop to the point where the two pole lines merge north-northeast of the US 395 crossing.
- Segment 3 consists of portions of the Control-Silver Peak ‘A’ and ‘C’ 55 kV circuits. Segment 3 spans 37.3 miles from the eastern end of Segment 2 to the Fish Lake Valley Metering Station located west of the California-Nevada border, approximately 2 miles east of the community of Oasis. The existing ‘A’ and ‘C’ circuits generally parallel each other along the length of Segment 3.
- Segment 4 consists of the portion of the Control-Silver Peak ‘C’ 55 kV circuit known as the Zack Tap. Segment 4 spans 16.0 miles from Segment 3 north of the City of Bishop to the Zack Substation.
- Segment 5 consists of the portion of the Control-Silver Peak ‘A’ 55 kV circuit known as the Deep Springs Tap. Segment 5 spans approximately 2.4 miles from Segment 3 south to the Deep Springs Substation.

The proposed scope of work for the CSP Project consists of the following major components, which are described in further detail below in Section III (Summary of Request):

- Installing optical groundwire (“OPGW”) on existing and replacement structures in Segments 1, 2, and 3;
- Replacing two existing single-circuited 55 kV subtransmission pole lines with two single-circuited 55 kV subtransmission pole lines in Segment 2;
- Replacing two existing single-circuited 55 kV subtransmission pole lines with one double-circuited 55 kV subtransmission pole line in Segment 3;
- Replacing structures in Segment 4; and
- Replacing structures in Segment 5.

III.

SUMMARY OF REQUEST

As described further in the PEA *Chapter 2 – Introduction*, the CSP Project is being proposed to meet the following objective³:

- Ensure compliance with CPUC G.O. 95 rules, North American Electric Reliability Corporation (“NERC”) Facility Rating standards, and applicable Western Electricity Coordinating Council (“WECC”) reliability planning criteria.

As presented in the PEA Chapter 4, SCE analyzed comprehensive Project Alternatives for remediating G.O. 95 discrepancies. Based on SCE’s analysis of alternatives in the PEA, SCE identified the CSP Project as its proposed project. The CSP Project includes the following components:

- **Subtransmission**
 - In Segments 2 and 3 remediate discrepancies by rebuilding approximately 39 miles of existing 55 kV subtransmission lines by:

³ As with all of SCE’s TLRR Projects, the CSP Project is designed to meet the CSP Project needs while minimizing environmental impacts, providing safe and reliable electric service, and conforming with industry and/or SCE’s approved engineering, design, and construction standards for substation and subtransmission system projects.

- Removing existing subtransmission poles and H-frames and replacing them with tubular steel poles (“TSPs”), wood-equivalent poles, lightweight steel (“LWS”) poles, and TSP H-frames.
- Removing existing conductor and installing new Aluminum Conductor Composite Core (“ACCC”) or Aluminum Conductor Steel Reinforced (“ACSR”) conductor.
- Installing overhead groundwire (“OHGW”) on some replacement structures.
- In Segments 4 and 5, remediate discrepancies by:
 - Replacing select existing subtransmission structures with DI or equivalent poles.
- **Distribution**
 - In Segment 3, topping approximately three poles after removal of subtransmission infrastructure.
 - In Segments 3, 4, and 5 transferring distribution circuitry to replacement poles.
- **Telecommunications/System Protection**
 - In Segments 1, 2, and 3 installing approximately 42 miles of OPGW and/or All-Dielectric Self-Supporting (“ADSS”) fiber optic cable overhead on new and existing structures.
 - In Segments 1 and 3 installing approximately 1,005 feet of fiber optic cable underground within and adjacent to the existing Control Substation and Fish Lake Valley Metering Station.
 - Installing system protection and telecommunications-associated equipment at Control, Deep Springs, White Mountain, and Zack Substations, and at the Fish Lake Valley Metering Station.
- **Substations**
 - Disconnect existing conductor from existing positions at the White Mountain Substation and connect new conductor to existing positions.
 - Install new OPGW and OHGW and make minor modifications to the existing terminal racks at White Mountain Substation to accommodate the new OPGW and OHGW.
 - Install telecommunication equipment on existing rack structures, install cable in new or existing underground cable raceways, and install new or replacement telecommunications infrastructure within existing cabinets, control buildings, or

Mechanical and Electrical Equipment Rooms (“MEERs”) within the Control Substation and at the Fish Lake Valley Metering Station.

- Update relay settings at Control, Deep Springs, White Mountain, and Zack Substations.
- Install a capacitor bank and circuit breaker at Fish Lake Valley Metering Station.

To increase worker safety while working in the White Mountains, SCE would temporarily de-energize portions of the Control-Silver Peak “A” and “C” circuits in Segment 3 between White Mountain Substation and the Deep Springs Tap. During de-energization, NV Energy would provide temporary electrical service to SCE’s Deep Springs Substation and Fish Lake Valley Metering Station. NV Energy would obtain authorization for the upgrades at its West Tonopah Substation located in Esmeralda County, NV needed to provide this service from the authority(ies) with jurisdiction over such lands and activities.

The estimated cost of the CSP Project is approximately \$242 million in 2021 constant dollars.⁴ The PEA prepared for the CSP Project, which discusses several alternatives to accomplish the CSP Project’s objectives (including a “No Project” alternative), is attached to this Application. The PEA will be referenced in this Application, where appropriate, as the source of information required in an Application for a PTC⁵ pursuant to G.O. 131-D, Section IX.B. A summary of the CSP Project’s purpose, need, and objectives is located in Chapter 2 of the PEA. A detailed description of the CSP Project is located in Chapter 3 of the PEA.

Construction of the CSP Project is scheduled to begin in 2nd quarter 2024 and scheduled to be completed by 1st quarter 2027. A detailed schedule for the CSP Project is included in this Application as APPENDIX C.

SCE requests that the Commission, upon completion of its review of this Application, issue and approve or certify an appropriate environmental document pursuant to the California

⁴ This is a conceptual estimate, prepared in advance of final engineering and prior to CPUC approval. Pension and benefits, administrative and general expenses, and allowance for funds during construction are not included in these estimates.

⁵ Other required information for a PTC application (*e.g.* Balance Sheet, Articles of Incorporation, *etc.*) is contained in this Application or its appendices.

Environmental Quality Act (Pub. Resources Code §§ 21000 *et seq.*, “CEQA”), and issue a PTC authorizing SCE to construct the CSP Project as set forth in this Application and the attached PEA within the timelines set forth in Section IV.H of this Application.

IV.

STATUTORY AND PROCEDURAL REQUIREMENTS

A. Applicant

The applicant is Southern California Edison Company (“SCE”), an electric public utility company organized and existing under the laws of the State of California. SCE’s principal place of business is 2244 Walnut Grove Avenue, Post Office Box 800, Rosemead, California 91770.

Please address correspondence or communications in regard to this Application to:

Lauren Goschke
Attorney
Southern California Edison Company
Post Office Box 800
Rosemead, California 91770
Phone: (626) 302-4906
Email: Lauren.p.goschke@sce.com

With a copy to:

Case Administration
Southern California Edison Company
8631 Rush St.
Rosemead, California 91770
Phone: (626) 302-6906
Fax: (626) 302-5060
Email: case.admin@sce.com

B. Articles of Incorporation

A copy of SCE’s Certificate of Restated Articles of Incorporation, effective on March 2, 2006, and presently in effect, certified by the California Secretary of State, was filed with the Commission on March 14, 2006, in connection with Application No. 06-03-020, and is incorporated herein by this reference pursuant to Rule 2.2 of the Commission’s Rules of Practice and Procedure.

A copy of SCE's Certificate of Determination of Preferences of the Series D Preference Stock filed with the California Secretary of State on March 7, 2011, and presently in effect, certified by the California Secretary of State, was filed with the Commission on April 1, 2011, in connection with Application No. 11-04-001, as is incorporated herein by this reference.

A copy of SCE's Certificate of Determination of Preferences of the Series E Preference Stock filed with the California Secretary of State on January 12, 2012, and a copy of SCE's Certificate of Increase of Authorized Shares of the Series E Preference Stock filed with the California Secretary of State on January 31, 2012, and presently in effect, certified by the California Secretary of State, were filed with the Commission on March 5, 2012, in connection with Application No. 12-03-004, and are incorporated herein by this reference.

A copy of SCE's Certificate of Determination of Preferences of the Series F Preference Stock filed with the California Secretary of State on May 5, 2012, and presently in effect, certified by the California Secretary of State, was filed with the Commission on June 29, 2012, in connection with Application 12-06-017, and is by reference made a part hereof.

A copy of SCE's Certificate of Determination of Preferences of the Series G Preference Stock filed with the Secretary of State on January 24, 2013, and presently in effect, certified by the California Secretary of State, was filed with the Commission on January 31, 2013, in connection with Application No. 13-01-016, and is by reference made a part hereof.

A copy of SCE's Certificate of Determination of Preferences of the Series H Preference Stock filed with the California Secretary of State on February 28, 2014, and presently in effect, certified by the California Secretary of State, was filed with the Commission on March 24, 2014, in connection with Application 14-03-013, and is by reference made a part hereof.

A copy of SCE's Certificate of Determination of Preferences of the Series J Preference Stock filed with the California Secretary of State on August 19, 2015, and presently in effect, certified by the California Secretary of State, was filed with the Commission on October 2, 2015, in connection with Application No. 15-10-001, and is by reference made a part hereof.

A copy of SCE's Certificate of Determination of Preferences of the Series K Preference Stock, filed with the California Secretary of State on March 2, 2016, and presently in effect, certified by the California Secretary of State, was filed with the Commission on April 1, 2016, in connection with Application No. 16-14-001, and is by reference made a part hereof.

A copy of SCE's Certificate of Determination of Preferences of the Series L Preference Stock filed with the California Secretary of State on June 20, 2017, and presently in effect, certified by the California Secretary of State, was filed with the Commission on June 30, 2017, in connection with Application No. 17-06-030, and is incorporated herein by this reference.

Certain classes and series of SCE's capital stock are listed on a "national securities exchange" as defined in the Securities Exchange Act of 1934, and copies of SCE's latest Annual Report to Shareholders and its latest proxy statement sent to its shareholders has been filed with the Commission with a letter of transmittal dated March 12, 2021, pursuant to Commission General Order Nos. 65-A and 104-A.

C. Balance Sheet and Statement of Income

APPENDIX A to this Application contains copies of SCE's balance sheet and statement of income for the period ending June 30, 2021. The balance sheet reflects SCE's utility plant at original cost, less accumulated depreciation.

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

Pursuant to Commission Decision No. 59926, dated April 12, 1960, SCE uses accelerated depreciation for income tax purposes and "flows through" reductions in income tax to customers within the Commission's jurisdiction for property placed in service prior to 1981. Consistent with Decision No. 93848 in OII-24, SCE uses the Accelerated Cost Recovery System ("ACRS") and Modified Accelerated Cost Recovery System ("MACRS") for federal income tax purposes and "normalizes" reductions in income tax to customers for property placed in service after 1980

in compliance with the Economic Recovery Tax Act of 1981, and also in compliance with the Tax Reform Act of 1986. Pursuant to Decision No. 88-01-061, dated January 28, 1988, SCE uses a gross of tax interest rate in calculating the AFUDC Rate, and income tax normalization to account for the increased income tax expense occasioned by the Tax Relief Act of 1986 provisions requiring capitalization of interest during construction for income tax purposes.

D. Description of Southern California Edison Company

SCE is a corporation organized and existing under the laws of the State of California, and is primarily engaged in the business of generating, purchasing, transmitting, distributing and selling electric energy for light, heat and power in portions of central and southern California as a public utility subject to the jurisdiction of the California Public Utilities Commission. SCE's properties, which are located primarily within the State of California, consist mainly of hydroelectric and thermal electric generating plants, together with transmission and distribution lines and other property necessary in connection with its business.

E. Service Territory

SCE's service territory is located in 15 counties in central and southern California, consisting of Fresno, Imperial, Inyo, Kern, Kings, Los Angeles, Madera, Mono, Orange, Riverside, Santa Barbara, San Bernardino, Tulare, Tuolumne,⁶ and Ventura Counties, and includes approximately 201 incorporated communities as well as outlying rural territories. A list of the counties and municipalities served by SCE is included hereto as APPENDIX B. SCE also supplies electricity to certain customers for resale under tariffs filed with the Federal Energy Regulatory Commission.

F. Location of Items Required in Permit to Construct Pursuant to G.O. 131-D Section IX.B

Much of the information required to be included in a PTC application pursuant to G.O. 131-D, Section IX.B is found in the PEA filed with this Application.

⁶ SCE provides electric service to a small number of customer accounts in Tuolumne County and is not subject to franchise requirements.

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

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

- Descriptions of the CSP Project are found throughout the PEA, including in Chapter 1, Chapter 2, and Chapter 3. Descriptions of comprehensive CSP Project Alternatives are discussed in Chapter 4 of the PEA. Descriptions of the CSP Project alignment, referring to the locations where work generally would be done, are described in the PEA in Chapter 3 Section 3.1 (“Project Overview”) and Section 3.2 (“Existing and Proposed System”) and all subsections contained therein, and illustrated in Figures/Figuresets 1.1-1 (“Proposed Project Location”), 3.1-1 (“Discrepancy Remediation Approaches”), and 3.2-1 (“Existing and “Proposed System”).
- The physical characteristics of the equipment proposed to be included in the CSP Project are described in the PEA in Chapter 3, particularly in Section 3.3 (“Project Components”) and all subsections contained therein, and illustrated in Figures/Figuresets 3.5-1 (“Staging Areas”), 3.5-2 (“Typical Pull-and-Tension/Stringing Site Set-Up”), 3.5-3 (“Telecommunications Underground Routes”), 3.5-4 (“Telecommunications Conduit Install Details”), and 3.5-5 (“Vault/Pull Box Detail”). The physical characteristics of alternatives to the CSP Project are described in the PEA in Chapter 4, and are illustrated in

Figures/Figuresets 4.1-1 (“Decommission and Removal with Upgrades Alternative”), and 4.1-2 (“Highway 6 Route Alternative”).

- The CSP Project Schedule is discussed in the PEA in Section 3.6.4 (“Construction Schedule”) and included in this Application as APPENDIX C.

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

- Locations of the CSP Project alignment, which generally includes the locations where work would be done, are illustrated in PEA Figures/Figuresets 1.1-1 (“Proposed Project Location”), 3.1-1 (“Discrepancy Remediation Approaches”), 3.2-1 (“Proposed and Existing Systems”), 3.5-1 (“Staging Areas”), and 3.5-3 (“Telecommunications Underground Routes”).
- Maps and aerial photographs showing populated areas, parks, recreational areas, scenic areas, and land uses in the vicinity of the CSP Project alignment are provided in PEA Figures/Figuresets 1.1-1 (“Proposed Project Location”), 3.2-1 (“Proposed and Existing Systems”), 3.5-1 (“Staging Areas”), 3.5-3 (“Telecommunications Underground Routes”), 5.1-1a (“Photograph Viewpoint Locations”), 5.1-3a (“USFS SIO Classifications”), 5.1-3b (“BLM VRM Classifications”), 5.2-1 (“Forest Lands”), 5.4-1 (“Habitat Designations”), 5.4-2 (“Sensitive Plant Species”), 5.4-3 (“CNDDDB Plant Species”), 5.4-4 (“Sensitive Wildlife Species”), 5.4-5 (“CNDDDB Wildlife Species”), 5.4-6 (“Critical Habitat”), 5.11-1 (“Land Use Designations”), 5.11-2 (“Zoning Designations”), 5.14-1 (“Cities, Reservations, And Census-Designated Places”), 5.15-1 (“Public Services In The Proposed Project

Vicinity”), 5.16-1 (“Parks And Recreational Facilities”), and 5.17-1 (“Circulation System”).

- Existing electrical system components along the CSP Project alignment and within 300 feet thereof are described in the PEA in Section 3.1 (“Project Overview”) and all subsections contained therein, and Section 3.2 (“Existing and Proposed System”) and all subsections contained therein, and are mapped/illustrated in Figures/Figuresets 1.1-1 (“Proposed Project Location”), 3.2-1 (“Proposed and Existing Systems”), and 3.5-3 (“Telecommunications Underground Routes”).

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

- Reasons for the construction of the CSP Project, including the challenges and additional environmental impacts associated with alternative sites, can be found in the PEA in Chapters 1, 2, 4, and 6. As discussed in the PEA, the CSP Project involves remediation of clearance discrepancies on existing subtransmission infrastructure within an established CSP Project alignment. Substantial deviation from that alignment would not be a reasonable approach to accomplishing the CSP Project’s objectives.

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

- PEA Section 2.2 (“Pre-Filing Consultation and Public Outreach”) describes the outreach that SCE has conducted to date with lead agencies and other agencies, including the CPUC, Bureau of Land Management (“BLM”), the United States Forest Service (“USFS”), the counties of Inyo and Mono; the City of Bishop, and Los Angeles Department of Water and Power. None of these agencies expressed any objections with respect to the CSP Project.
- PEA Section 2.2.1.1.10 describes SCE’s efforts with respect to Native American coordination. The Native American Heritage Commission (“NAHC”) maintains two databases to assist cultural resources specialists in identifying cultural resources of concern to California Native Americans. On September 10, 2019, SCE’s consultant, Environmental Intelligence, LLC, contacted the NAHC to obtain information about known cultural and tribal cultural resources and request a list of Native American tribal representatives who may have a cultural affiliation with the proposed project area. The NAHC responded stating that the Sacred Lands File (“SLF”) database includes previously identified sacred sites in the vicinity of the CSP Project. In consideration of these culturally significant sacred sites, the NAHC identified nine Native American organizations or individuals as contacts who

may have knowledge of cultural resources within or adjacent to the CSP project area. SCE sent letters of inquiry to these organizations and individuals on November 12, 2019.

5. A PEA or equivalent information on the environmental impact of the project in accordance with the provisions of CEQA and this Commission's Rules of Practice and Procedure Rule 2.4 [formerly 17.1 and 17.3]. If a PEA is filed, it may include the data described in Items a. through d. above.

- The PEA is attached to this Application.

G. Compliance with G.O. 131-D, Section X

G.O. 131-D, Section X, requires applications for a PTC to describe measures taken to reduce potential exposure to electric and magnetic fields (“EMF”) generated by the proposed facilities. A complete description of EMF-related issues is contained in SCE’s EMF Field Management Plan (“FMP”) for the CSP Project, which is included as APPENDIX F to this Application.

H. Compliance with Rule 2.1(c)

In compliance with Rule 2.1(c) of the Commission’s Rules of Practice and Procedure (California Code of Regulations, Title 20), SCE is required to state in this Application “[t]he proposed category for the proceeding, the need for hearing, the issues to be considered including relevant safety considerations, and a proposed schedule.” SCE proposes to categorize this Application as a rate-setting proceeding. SCE anticipates that a hearing will not be necessary. This proceeding involves the Commission’s: (1) environmental review of the CSP Project in compliance with G.O. 131-D and CEQA; and (2) issuance of a PTC authorizing SCE to construct the CSP Project.

SCE workers and contractors are required to implement and enforce the SCE Accident Prevention Manual, which is a company-wide manual containing safety rules and policies. These rules and policies cover work performed in every organizational unit, from office and

workplace safety to construction sites, and for operating and maintaining substations and steam generation stations.

SCE suggests the following proposed schedule for this Application:

Date	Event
August 2021	Application Filed
November 2021	Application Deemed Complete
January 2022	Initial Study Issued
August 2022	Draft CEQA Document Issued
December 2022	Final CEQA Document Issued
April 2023	Proposed Decision Issued
June 2023	Final Decision

I. Statutory Authority

This Application is made pursuant to the provisions of CEQA, G.O. 131-D, the Commission’s Rules of Practice and Procedure, and prior orders and resolutions of the Commission.

J. Public Notice

Pursuant to G.O. 131-D, Section XI.A, notice of this Application shall be given: (1) to certain public agencies and legislative bodies; (2) to owners of property located on or within 300 feet of the CSP Project alignment; (3) by advertisement in a newspaper or newspapers of general circulation; and (4) by posting a notice on-site and off-site at the project location. SCE has given, or will give, proper notice within the time limits prescribed in GO 131- D. A copy of the Notice of Application for a Permit to Construct and list of newspapers which will publish the notice are contained in APPENDIX D. A copy of the Certificate of Service of Notice of Application for a Permit to Construct and a service list are contained in APPENDIX E.

K. Supporting Appendices and Attachments

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

<u>APPENDIX A</u>	Statement of Income and Balance Sheet as of June 30, 2021.
<u>APPENDIX B</u>	List of Counties and Municipalities Served by SCE
<u>APPENDIX C</u>	Control-Silver Peak Project Schedule
<u>APPENDIX D</u>	Notice of Application for a Permit to Construct
<u>APPENDIX E</u>	Certificate of Service of Notice of Application for a Permit to Construct
<u>APPENDIX F</u>	Field Management Plan
ATTACHMENT	Southern California Edison's Control-Silver Peak Project PEA

L. Compliance with Rule 2.5

Rule 2.5 of the Commission's Rules of Practice and Procedure provides that an applicant include a deposit to be applied to the costs the Commission incurs to prepare a negative declaration or an environmental impact report when the Commission is acting as the lead agency pursuant to CEQA. In accordance with Rule 2.5, SCE is enclosing a deposit to be applied to the costs the Commission incurs to prepare a negative declaration or an environmental impact report for the CSP Project.

M. Request for Ex Parte Relief

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

N. Request for Timely Relief

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

V.

CONCLUSION

SCE respectfully requests the Commission issue a PTC authorizing SCE to construct the CSP Project described in this Application and PEA. SCE further requests that the relief be provided *ex parte* and within the time limits prescribed by the Permit Streamlining Act.

Respectfully submitted,

SOUTHERN CALIFORNIA EDISON COMPANY


By: Greg Ferree

Vice President Vegetation Inspections and Operational Services

/s/ Lauren Goschke

By: Lauren Goschke

Attorney for
SOUTHERN CALIFORNIA EDISON COMPANY
2244 Walnut Grove Ave. Post Office Box 800
Rosemead, California 91770
Telephone: (626) 302-4906
E-mail: Lauren.P.Goschke@sce.com

August 13, 2021

VERIFICATION

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

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

Executed this **29th day of July, 2021**, at Huntington Beach, California.



By: Greg Ferree
Vice President Vegetation Inspections and Operational Services
SOUTHERN CALIFORNIA EDISON COMPANY

APPENDIX A

STATEMENT OF INCOME AND BALANCE SHEET AS OF JUNE 30, 2021

SOUTHERN CALIFORNIA EDISON COMPANY

(h) A balance sheet as of the latest available date, together with an income statement covering the period from close of last year for which an annual report has been filed with the Commission to the date of the balance sheet attached to the application.

STATEMENT OF INCOME
SIX MONTHS ENDED JUNE 30, 2021

(In millions)

OPERATING REVENUE	<u>\$ 6,259</u>
OPERATING EXPENSES:	
Purchase power and fuel	2,296
Operation and maintenance	1,562
Wildfire insurance fund expense	107
Depreciation and amortization	1,057
Property and other taxes	242
Other operating income, net of impairment	<u>(11)</u>
Total operating expenses	<u>5,253</u>
OPERATING INCOME	1,006
Interest expense	(382)
Other income	136
INCOME BEFORE TAXES	<u>760</u>
Income tax expense	<u>52</u>
NET INCOME	708
Less: Preferred and preference stock dividend requirements	<u>53</u>
NET INCOME AVAILABLE FOR COMMON STOCK	<u><u>\$ 655</u></u>

SOUTHERN CALIFORNIA EDISON COMPANY

BALANCE SHEET
JUNE 30, 2021
ASSETS
(in millions)

UTILITY PLANT:

Utility plant, at original cost	\$ 55,894
Less- accumulated provision for depreciation and decommissioning	10,878
	<u>45,016</u>
Construction work in progress	3,656
Nuclear fuel - at amortized cost	128
	<u>48,800</u>

OTHER PROPERTY AND INVESTMENTS:

Nonutility property - less accumulated depreciation of \$88	183
Nuclear decommissioning trusts	4,886
Other investments	50
	<u>5,119</u>

CURRENT ASSETS:

Cash and equivalents	51
Receivables, less allowances of \$270 for uncollectible accounts	1,305
Accrued unbilled revenue	863
Inventory	406
Prepaid expenses	56
Regulatory assets	1,795
Wildfire insurance fund contributions	204
Other current assets	191
	<u>4,871</u>

DEFERRED CHARGES:

Regulatory assets (Includes \$329 related to VIEs)	7,810
Wildfire insurance fund contributions	2,462
Operating lease right-of-use assets	1,040
Long-term insurance receivable	75
Other long-term assets	861
	<u>12,248</u>
	<u>\$ 71,038</u>

SOUTHERN CALIFORNIA EDISON COMPANY

BALANCE SHEET
JUNE 30, 2021
CAPITALIZATION AND LIABILITIES
(in millions)

CAPITALIZATION:

Common stock	\$	2,168
Additional paid-in capital		6,616
Accumulated other comprehensive loss		(38)
Retained earnings		9,196
Common shareholder's equity		<u>17,942</u>
Preferred stock		1,945
Long-term debt (Includes \$320 related to VIEs)		<u>19,756</u>
Total capitalization		<u>39,643</u>

CURRENT LIABILITIES:

Short-term debt		2,796
Current portion of long-term debt		415
Accounts payable		1,799
Wildfire-related claims		141
Customer deposits		207
Regulatory liabilities		492
Current portion of operating lease liabilities		216
Other current liabilities		1,288
		<u>7,354</u>

DEFERRED CREDITS:

Deferred income taxes and credits		7,052
Pensions and benefits		131
Asset retirement obligations		2,894
Regulatory liabilities		8,960
Operating lease liabilities		824
Wildfire-related claims		1,519
Other deferred credits and other long-term liabilities		2,661
		<u>24,041</u>

\$ 71,038

APPENDIX B

LIST OF COUNTIES AND MUNICIPALITIES SERVED BY SCE

INCORPORATED CITIES AND COUNTIES SERVED BY SCE

COUNTIES

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

CITIES

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

APPENDIX C

CONTROL-SILVER PEAK PROJECT SCHEDULE

Proposed Control-Silver Peak 55 kV Project Schedule

Date	Event
August 2021	Application Filed
November 2021	Application Deemed Complete
January 2022	Initial Study Issued
August 2022	Draft CEQA Document Issued
December 2022	Final CEQA Document Issued
April 2023	Proposed Decision Issued
June 2023	Final Decision
May 2024	Commence Construction
February 2027	Commence Operation

APPENDIX D

NOTICE OF APPLICATION FOR A PERMIT TO CONSTRUCT

NOTICE OF APPLICATION FOR A PERMIT TO CONSTRUCT

CONTROL-SILVER PEAK PROJECT

Filing Date: August 13, 2021

Proposed Project: Southern California Edison Company (“SCE”) has filed an application (“Application”) with the California Public Utilities Commission (“CPUC”) for a Permit to Construct (“PTC”) the Control-Silver Peak Project (CSP Project). The primary purpose of the CSP Project is to ensure compliance with CPUC General Order 95 (“G.O. 95”) and North American Electric Reliability Corporation (“NERC”) Facility Ratings through remediating physical clearance discrepancies identified on existing 55 kilovolt (“kV”) subtransmission lines. In particular, G.O. 95 Rules 37 through 39 specify minimum vertical and horizontal clearances that must be maintained between an electrical conductor and other conductors, or between a conductor and the ground, buildings, and a variety of other objects. In 2006, SCE identified discrepancies along many of its circuits where minimum clearances are not being met compared to what is required by G.O. 95.

The CSP Project would remediate discrepancies along the following five Segments of the CSP ‘A’ and ‘C’ 55 kV circuits located in portions of unincorporated Inyo County and Mono County:

- Segment 1 consists of portions of the CSP ‘A’ and ‘C’ 55 kV circuits. Segment 1 spans from the Control Substation located near the City of Bishop to where the CSP Project alignment intersects US Highway 395 (“US 395”). Segment 1 is approximately 3.4 miles in length. Segment 1 is located in Inyo County.
- Segment 2 consists of portions of the CSP ‘A’ and ‘C’ 55 kV circuits. Segment 2 spans from the point where the CSP Project alignment intersects US 395 located near the City of Bishop to the point where the two existing pole lines merge north-northeast of the US 395 crossing. Segment 2 is approximately 1.4 miles in length. Segment 2 is located in Inyo County.
- Segment 3 consists of portions of the CSP ‘A’ and ‘C’ 55 kV circuits. Segment 3 spans from the eastern end of Segment 2 to the Fish Lake Valley Metering Station located west of the California-Nevada border, approximately 2 miles east of the community of Oasis. Segment 3 is approximately 37.3 miles in length. The existing ‘A’ and ‘C’ circuits generally parallel each other along the length of Segment 3. Segment 3 is located in Inyo County and Mono County.
- Segment 4 consists of the portion of the CSP ‘C’ 55 kV circuit known as the Zack Tap. Segment 4 spans from Segment 3 north of the City of Bishop to the Zack Substation. Segment 4 is located in Inyo County and Mono County; it is approximately 16.0 miles in length.
- Segment 5 consists of the portion of the CSP ‘A’ 55 kV circuit known as the Deep Springs Tap. Segment 5 spans from Segment 3 south to the Deep Springs Substation. Segment 5 is located in Inyo County; it is approximately 2.4 miles in length.

The proposed scope of work for the CSP Project consists of the following major components, which are described in further detail below under the “Project Description” heading:

- Installing optical groundwire (“OPGW”) on existing and replacement structures in Segments 1, 2, and 3;
- Replacing two existing single-circuit 55 kV subtransmission pole lines with two single-circuit 55 kV subtransmission pole lines in Segment 2;

- Replacing two existing single-circuited 55 kV subtransmission pole lines with one double-circuited 55 kV subtransmission pole line in Segment 3;
- Replacing structures in Segment 4; and
- Replacing structures in Segment 5.

SCE also submitted a Proponent’s Environmental Assessment (“PEA”) along with the Application.

Project Description: As discussed in greater detail in the PEA, SCE has identified a variety of ways to accomplish the CSP Project. For purposes of a conservative and complete analysis of all potential environmental impacts associated with the CSP Project, the PEA filed with the Application describes and analyzes the environmental impacts associated with a scope of work for the CSP Project. The proposed scope of work for the CSP Project consists of the following components¹:

- Subtransmission
 - In Segments 2 and 3 remediate discrepancies by rebuilding approximately 39 miles of existing 55 kV subtransmission lines by:
 - Removing existing subtransmission poles and H-frames and replacing them with tubular steel poles (“TSPs”), wood-equivalent poles, lightweight steel (“LWS”) poles, and TSP H-frames.
 - Removing existing conductor and installing new Aluminum Conductor Composite Core (“ACCC”) or Aluminum Conductor Steel Reinforced (“ACSR”) conductor.
 - Installing overhead groundwire (“OHGW”) on some replacement structures.
 - In Segments 4 and 5, remediate discrepancies by:
 - Replacing select existing subtransmission structures with DI or equivalent poles
- Distribution
 - In Segment 3, topping approximately three poles after removal of subtransmission infrastructure.
 - In Segments 3, 4, and 5 transferring distribution circuitry to replacement poles.
- Telecommunications/System Protection
 - In Segments 1, 2, and 3 installing approximately 42 miles of OPGW and/or All-Dielectric Self-Supporting (“ADSS”) fiber optic cable overhead on new and existing structures.
 - In Segments 1 and 3 installing approximately 1,005 feet of fiber optic cable underground within and adjacent to the existing Control Substation and Fish Lake Valley Metering Station.
 - Installing system protection and telecommunications-associated equipment at Control, Deep Springs, White Mountain, and Zack Substations, and at the Fish Lake Valley Metering Station.

¹ The CSP Project description is based on planning level assumptions. Actual work scope would be refined following completion of final engineering, further identification of field conditions, and compliance with applicable environmental and permitting requirements.

- Substations
 - Disconnect existing conductor from existing positions at the White Mountain Substation and connect new conductor to existing positions.
 - Install new OPGW and OHGW and make minor modifications to the existing terminal racks at White Mountain Substation to accommodate the new OPGW and OHGW.
 - Install telecommunication equipment on existing rack structures, install cable in new or existing underground cable raceways, and install new or replacement telecommunications infrastructure within existing cabinets, control buildings, or Mechanical and Electrical Equipment Rooms (MEERs) within the Control Substation and at the Fish Lake Valley Metering Station.
 - Update relay settings at Control, Deep Springs, White Mountain, and Zack substations.
 - Install a capacitor bank and circuit breaker at Fish Lake Valley Metering Station.

Electric and Magnetic Fields (EMF) Compliance: The CPUC requires utilities to employ “no-cost” and “low-cost” measures to reduce public exposure to magnetic fields. In accordance with “EMF Design Guidelines” (Decisions 93-11-013 and 06-01-042.), the CSP Project would implement a combination of the following recommended measures:

1. Utilize double-circuit construction that reduces spacing between circuits as compared with single-circuit construction;
2. Utilize subtransmission line construction that reduces the space between conductors compared with other designs;
3. Utilize pole heights that meet or exceed SCE’s preferred EMF design criteria

Environmental Review: As noted above, SCE’s PEA assesses the potential environmental impacts created by the construction and operation of the CSP Project scope. The PEA concludes that with the implementation of Applicant Proposed Measures, the CSP Project would not result in any significant and unavoidable environmental impacts for all resources except cultural resources. The cultural resources technical reports are still in process and the information to be described therein would be informative as to whether there are any potentially significant impacts related to cultural resources as a result of the Proposed Project.

Pursuant to the California Environmental Quality Act (“CEQA”), the CPUC’s Energy Division will conduct an independent review of the Proposed Project’s environmental impacts. Depending on the results of its review, the Energy Division may issue a Negative Declaration that the Proposed Project will not result in any significant environmental impacts, a Mitigated Negative Declaration that the Proposed Project will not result in any significant environmental impacts after mitigation, or an environmental impact report (“EIR”) identifying the significant environmental impacts and mitigation measures and alternatives to avoid or reduce them.

Public Participation:

The public may participate in the environmental review by submitting comments on the Notice of Intent to Approve a Negative Declaration, or on the Notice of Preparation of the EIR and draft EIR, and by participating in any scoping meetings or public meetings that may be conducted. For information on the environmental review, contact the CPUC’s Energy division at enviroteam@cpuc.ca.gov or (415) 703-2126.

Persons wishing to present testimony in evidentiary hearings and/or legal briefing on all other issues, including EMF compliance, require party status. Persons may obtain party status by filing a protest to the application by **September 13, 2021**, in compliance with CPUC General Order 131-D and the CPUC's Rules of Practice and Procedure Rule 2.6, or by making a motion for party status at any time in compliance with Rule 1.4 (posted at www.cpuc.ca.gov).

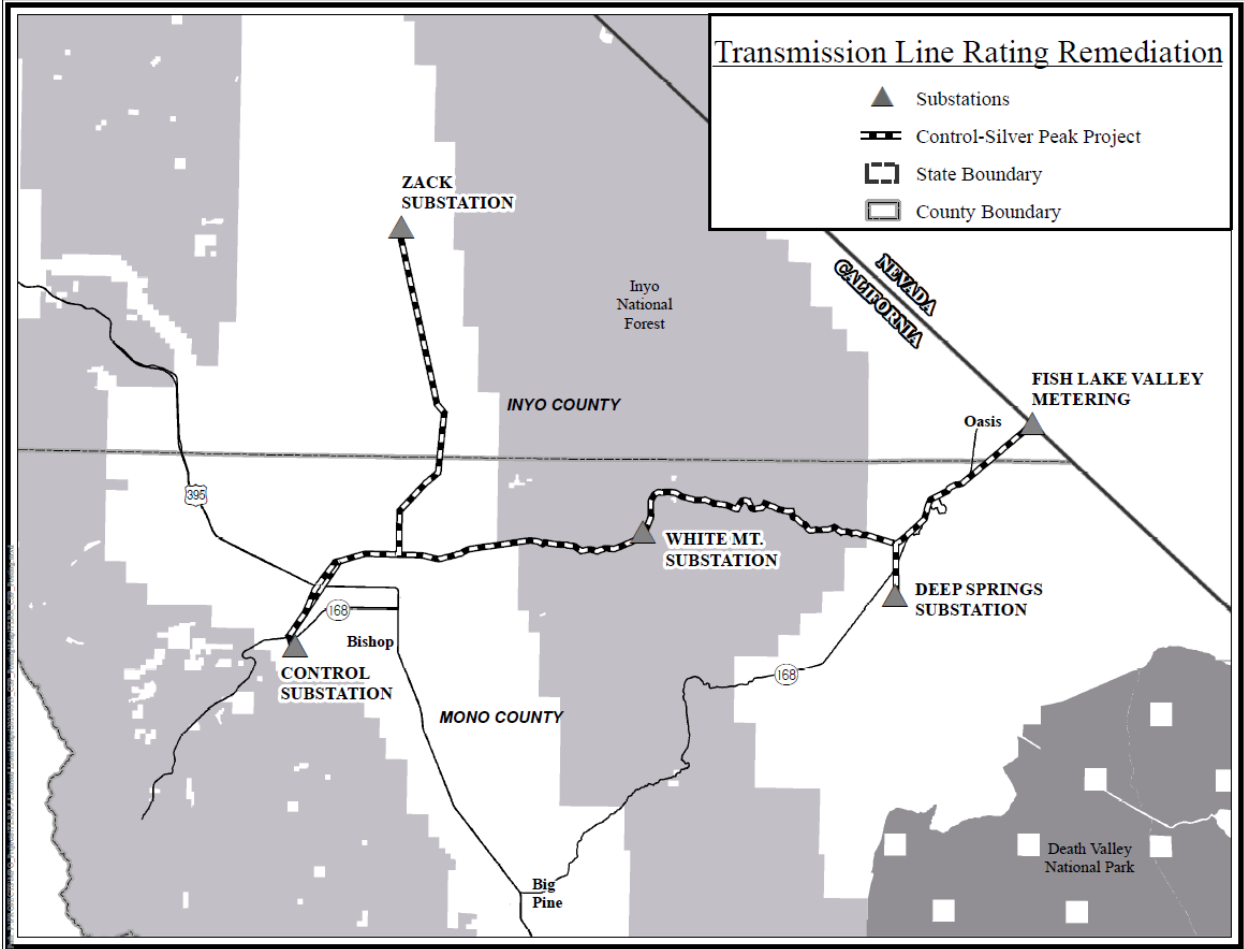
The public may communicate their views regarding the application by writing to the CPUC at 505 Van Ness Avenue, San Francisco, CA 94102, or by emailing the Public Advisor at public.advisor@cpuc.ca.gov. In addition, the CPUC may, at its discretion, hold a public participation hearing in order to take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

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

Contacts: For assistance from the CPUC, please contact the Public Advisor in San Francisco at (415) 703-2074 (public.advisor@cpuc.ca.gov) or toll free at (866) 849-8391.

To review a copy of SCE's application, or to request further information about the proposed project, please contact the SCE Government Affairs representatives listed below. You can also visit the Project website at www.sce.com/CSPPProject.

Cal Rossi
SCE Government Affairs
Inyo and Kern Counties
421 J Street
Tehachapi, CA 93561
Calvin.Rossi@sce.com
(559) 331-4555



List of Newspapers With Which Publication Of Notice Was Arranged by SCE

Mammoth Times

PO Box 3929
645 Old Mammoth Road, Suite A
Mammoth Lakes, CA 93546
(760) 934-3929

The Sheet

3343 Main St.
P.O. Box 8088
Mammoth Lakes, CA 93546
(760) 924-0048

Inyo Register

407 W. Line Street, #8
Inyo, CA 93514
(760) 873-3535

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

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA**

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

A.21-08-XXX

CERTIFICATE OF SERVICE

I hereby certify that, pursuant to the Commission's Rules of Practice and Procedure, I have this day served a true copy of the **NOTICE OF APPLICATION OF SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) FOR A PERMIT TO CONSTRUCT ELECTRICAL FACILITIES WITH VOLTAGES BETWEEN 50 kV AND 200 kV: CONTROL-SILVER PEAK PROJECT**, on all parties identified on the attached lists.

Service was effected by one or more means indicated below:

- Placing the copies in sealed envelopes and causing such envelopes to be delivered via USPS First Class Mail.

Lists: Control-Silver Peak Project Agency and Interested Parties List
Control-Silver Peak Project 300 Foot List

Executed this **August 13, 2021**, at Rosemead, California.

/s/ Kelly Morikawa Kwong

Kelly Morikawa Kwong
Legal Administrative Assistant
SOUTHERN CALIFORNIA EDISON COMPANY
2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770

Control-Silver Peak Project
Agency/Interested Party Mailing List for Notice of Application

City of Bishop		
Stephen Muchovej, Mayor City of Bishop P.O. Box 1236 Bishop, CA 93515	Ron Phillips, City Administrator City of Bishop P.O. Box 1236 Bishop, CA 93515	Elaine Kabala, Associate Planner Department of Public Works City of Bishop P.O. Box 1236 Bishop, CA 93515
Erik Leitch, Chairman Planning Commission City of Bishop P.O. Box 1236 Bishop, CA 93515		
Inyo County		
Matt Kingsley Fifth District Supervisor Inyo County 210 Lasky Lane P. O. Box 110 Lone Pine, CA 93545	Jeff Griffiths, Chairperson Second District Supervisor Inyo County 199 Edwards Street Bishop, CA 93514	Jennifer Roeser Fourth District Supervisor Inyo County 215 N. School Street P.O. Box 612 Big Pine, CA 93513
Clint G. Quilter County Administrative Officer Inyo County P.O. Drawer N Independence, CA 93526	Caitlin "Kate" Moreley, Chair Planning Commission Inyo County P.O. Drawer L Independence, CA 93526	Cathreen Richards Planning Director Inyo County Planning Department P.O. Drawer L 168 N. Edwards Street Independence, CA 93526
Mono County		
Stacy Corless Fifth District Supervisors Mono County PO Box 715 Bridgeport, CA 93517	Rhonda Duggan Second District Supervisors Mono County PO Box 715 Bridgeport, CA 93517	Jennifer Kreitz Chair, Planning Commission Mono County 25 Bryant Street Annex II Bridgeport, CA 93517
Bob Lawton Administrative Officer Mono County PO Box 696 Bridgeport, CA 93517	Wendy Sugimura, Director, Mono County Planning Commission PO Box 347 Mammoth Lakes, CA 93546	
Tribes		
Tilford Denver, Chairman Bishop Paiute Tribe 50 Tu Su Lane Bishop, CA 93514	Gloriana Bailey, Tribal Administrator Bishop Paiute Tribe 50 Tu Su Lane Bishop, CA 93514	Peter Bernasconi, Director Department of Public Works Bishop Paiute Tribe 630 Brockman Lane Bishop, CA 93514
Amber Torres, Chairperson Walker River Reservation PO Box 220 Schurz, NV 89427	James Rambeau, Chairperson Big Pine Paiute Tribe of Owens Valley P.O. Box 700 Big Pine, CA, 93513	Monty Bengochia, Tribal Historic Preservation Officer Bishop Paiute Tribe 50 Tu Su Lane Bishop, CA 93514

Sally Manning, Environmental Director Big Pine Paiute Tribe of Owens Valley P.O. Box 700 Big Pine, CA 93513	Danelle Gutierrez, Tribal Historic Preservation Officer Big Pine Paiute Tribe of Owens Valley P.O. Box 700 Big Pine, CA, 93513	Charlotte Lange, Chairperson Mono Lake Kutzadika'a Paiute Indian Community P.O. Box 237 Lee Vining, CA 93541
Raymond Andrews, President Cultural Preservation Association Mono Lake Kutzadika'a Paiute Indian Community P.O. Box 237 Lee Vining CA, 93541	Carl Dahlberg, Chairperson Fort Independence Band of Paiute Indians P.O. Box 67 Independence, CA 93526	Sean Scruggs, Tribal Historic Preservation Officer Fort Independence Band of Paiute Indians P.O. Box 67 Independence, CA 93526
Mary Wuester, Chairperson Lone Pine Paiute-Shoshone Tribe P.O. Box 747 Lone Pine, CA, 93545	Kathy Bancroft, Cultural Resources Lead Lone Pine Paiute-Shoshone Tribe P.O. Box 747 Lone Pine, CA 93545	George Gholoson, Chairperson Death Valley Timbi-sha Shoshone Tribe 900 Indian Village Rd P.O. Box 206 Death Valley, CA 92328
Sookaaki (Charlie) Charley, Tribal Administrator Timbi-sha Shoshone Tribe 621 W Line St., Suite 109 Bishop, CA 93514	Shane Saulque, Interim Chairperson Utu Gwaitu Paiute Tribe (Benton Paiute Reservation) 25669 Highway 6 PMBI Benton, CA 93512	
Interested Parties		
Tawni Thomson, Executive Director Bishop Area Chamber of Commerce and Visitors Bureau 690 North Main Street Bishop, CA 93514	Padraic MacLeish Director of Operations Deep Springs College HC72 Box 45001 Dyer, NV 89010	Jackson Hurst 4216 Cornell Crossing Kennesaw, GA 30144
State and Federal Agencies		
Edward Randolph, Energy Div. Dir California Public Utilities Commission 505 Van Ness Avenue San Francisco, CA 94102	Allison Brown, CPUC Public Advisor California Public Utilities Comm. 505 Van Ness Avenue San Francisco, CA 94102	Drew Bohan, Executive Director California Energy Commission 1516 Ninth Street Sacramento, CA 95814
Wade Crowfoot, Secretary California Resources Agency 1416 Ninth St. - Suite 1311 Sacramento, CA 95814	Charlton H. Bonham, Director California Dept. of Fish and Wildlife 1416 9th Street, 12th Floor Sacramento, CA 95814	Patricia Moyer California Department of Fish and Wildlife, Inland Deserts Region, Bishop Field Office 787 North Main Street, Suite 220 Bishop, CA 93514
Paul Souza Regional Director USFWS, Pacific Southwest Region Federal Bldg. - Dept. Fish & Wildlife 2800 Cottage Way, Room W-2606 Sacramento, CA 95825-1846	Kim Freeburn California Department of Fish and Wildlife Region 6 Inland Deserts Region 3602 Inland Empire Blvd Suite C-220 Ontario, CA 91764	Phillip L. Kiddoo Air Pollution Control Officer Great Basin Unified Air Pollution Control District 157 Short St. Bishop, CA 93514
Jan Zimmerman Lahotan Regional Water Quality Control Board Victorville Branch Office 15095 Amargosa Rd, Bldg. 2, Ste 210 Victorville, CA 92394	Eileen Sobeck, Executive Director State Water Resources Control Brd. P.O. Box 100 Sacramento, CA 95812-0100	Richard Corey, Executive Officer California Air Resources Board P.O. Box 2815 Sacramento, CA 95812

Gayle Rosander External Project Liaison California Department of Transportation - District 9 500 South Main Street Bishop, CA 93514	Amy Choi, Chief California Dept of Transportation Div. of Aeronautics MS 40 P.O. Box 942874 Sacramento, CA 94274-0001	Toks Omishakin, Director California Dept of Transportation P.O. Box 942873 Sacramento, CA 94273-0001
Sheila Irons, Lands Specialist United States Forest Service Mammoth and Mono Lake Ranger Districts PO Box 148 Mammoth Lakes, CA 93546	Adam Barnett Public Services Staff Officer United States Forest Service Inyo National Forest 351 Pacu Lane, Suite 200 Bishop, CA 93514	Ray Bransfield USFWS, Pacific Southwest Region Ventura Fish and Wildlife Office 2493 Portola Road, Suite B Ventura, CA 93003
Joan Patrovsky, Project Manager Bureau of Land Management California Desert District Office Barstow Field Office 2601 Barstow Road. Barstow, CA 92311	Lawrence Primosch, Realty Specialist Bureau of Land Management 351 Pacu Lane Bishop, CA 93514	Brandon G Anderson, Assistant District Manager, Project Support Bureau of Land Management California Desert District, Department of the Interior Regions 8 & 10 22835 Calle San Juan De Los Lagos Moreno Valley, CA 92553
Jennifer Lucchesi, Executive Director California State Lands Commission 100 Howe Avenue, Suite 100 South Sacramento, CA 95825	Will Lightbourne Director, California Department of Health Care Services P.O. Box 997413, MS 0000 Sacramento, CA 95899-7413	Julianne Polanco, SHPO Calif. Office of Historic Preservation 1725 23rd Street, Suite 100 Sacramento, CA 95816-7100
Victor Globa, Compliance Officer Federal Aviation Administration FAA Western-Pacific Region 777 S. Aviation Blvd., Suite 150 El Segundo, CA 90245	Donald S. McGhie, Sr. Real Estate Officer LADWP Real Estate Group 300 Mandich Street Bishop, CA 93514	Antal Szijj, Section Chief U.S. Army Corps of Engineers Regulatory Division 2151 Alessandro Dr. Ste. 110 Ventura, CA 93001
Paul Rodriguez, Realty Specialists Bureau of Land Management Ridgecrest Field Office 300 South Richmond Road Ridgecrest, CA 93555		

CONTROL-SILVER PEAK PROJECT 300 FOOT LIST

APN	OWNER	ADDRESS	CITY	STATE	ZIP
026-040-005-000	SO CALIFORNIA EDISON COMPANY				
027-170-004-000	DOWERS ROD & MARIA	P.O. BOX 130	DYER	NV	89010
026-440-001-000	WOFFORD FAMILY TR 12-17-07 DONALD & KAREN WOFFO	119 MAC IVER ST #G	BISHOP	CA	93514
027-170-015-000	BUREAU OF LAND MANAGEMENT	300 S. RICHMOND RD	RIDGECREST	CA	93555
027-170-014-000	BUREAU OF LAND MANAGEMENT	300 S. RICHMOND RD	RIDGECREST	CA	93555
027-170-007-000	SO CALIFORNIA EDISON COMPANY				
026-440-007-000	WOFFORD FAMILY TRUST 12-17-07 DONALD & KAREN WOFFO	119 MAC IVER ST #G	BISHOP	CA	93514
027-170-017-000	BUREAU OF LAND MANAGEMENT	300 S. RICHMOND RD	RIDGECREST	CA	93555
026-200-003-000	CITY OF LOS ANGELES REAL ESTATE SECTION	DEPARTMENT OF WATER AND POWER 215 VALLEY ROAD	BISHOP	CA	93514
026-200-003-000	CITY OF LOS ANGELES REAL ESTATE SECTION	DEPARTMENT OF WATER AND POWER 215 VALLEY ROAD	BISHOP	CA	93514
026-230-003-000	CITY OF LOS ANGELES REAL ESTATE SECTION	DEPARTMENT OF WATER AND POWER 215 VALLEY ROAD	BISHOP	CA	93514
026-440-002-000	WOFFORD FAMILY TRUST 12-17-07 DONALD & KAREN WOFFO	P.O. BOX 575	BISHOP	CA	93515
026-090-016-000	BUREAU OF LAND MANAGEMENT	351 PACU LANE, SUITE 100	BISHOP	CA	93514
026-440-013-000	TOOMEY STEVE	3805 E POND VIEW CT	MERIDIAN	ID	83642
026-030-012-000	BUREAU OF LAND MANAGEMENT	351 PACU LANE, SUITE 100	BISHOP	CA	93514
027-170-006-000	SMITH SEP PROPERTY TRUST 10-25-18 LARRY W. SMITH TRS	P.O. BOX 807	PERRIS	CA	92572
026-440-004-000	TOOMEY STEVE	3805 E POND VIEW CT	MERIDIAN	ID	83642
026-090-003-000	BUREAU OF LAND MANAGEMENT	351 PACU LANE, SUITE 100	BISHOP	CA	93514
026-230-002-000	CITY OF LOS ANGELES REAL ESTATE SECTION	DEPARTMENT OF WATER AND POWER 215 VALLEY ROAD	BISHOP	CA	93514

CONTROL-SILVER PEAK PROJECT 300 FOOT LIST

026-260-005-000	CITY OF LOS ANGELES REAL ESTATE SECTION	DEPARTMENT OF WATER AND POWER 215 VALLEY ROAD	BISHOP	CA	93514
026-260-005-000	CITY OF LOS ANGELES REAL ESTATE SECTION	DEPARTMENT OF WATER AND POWER 215 VALLEY ROAD	BISHOP	CA	93514
026-440-012-000	WOFFORD FAMILY TRUST 12-17-07 DONALD & KAREN WOFFO	119 MAC IVER ST #G	BISHOP	CA	93514
026-440-005-000	TOOMEY STEVE	3805 E POND VIEW CT	MERIDIAN	ID	83642
026-440-010-000	WOFFORD FAMILY TRUST 12-17-07 DONALD & KAREN WOFFO	119 MAC IVER ST #G	BISHOP	CA	93514
026-440-006-000	ABBOTT JASON & ROXANNE	7438 ALPINE WAY	TUJUNGA	CA	91042
026-200-001-000	CITY OF LOS ANGELES REAL ESTATE SECTION	DEPARTMENT OF WATER AND POWER 215 VALLEY ROAD	BISHOP	CA	93514
026-090-018-000	BUREAU OF LAND MANAGEMENT	351 PACU LANE, SUITE 100	BISHOP	CA	93514
026-040-008-000	SIERRA ALFALFA LLC ZACK RANCH	PO BOX 1268	BISHOP	CA	93515
026-040-008-000	SIERRA ALFALFA LLC ZACK RANCH	PO BOX 1268	BISHOP	CA	93515
027-170-016-000	BUREAU OF LAND MANAGEMENT	300 S. RICHMOND RD	RIDGECREST	CA	93555
026-230-005-000	CITY OF LOS ANGELES REAL ESTATE SECTION	DEPARTMENT OF WATER AND POWER 215 VALLEY ROAD	BISHOP	CA	93514
026-260-003-000	CITY OF LOS ANGELES REAL ESTATE SECTION	DEPARTMENT OF WATER AND POWER 215 VALLEY ROAD	BISHOP	CA	93514
027-170-005-000	SMITH SEP PROPERTY TRUST 10-25-18 LARRY W. SMITH TRS	P.O. BOX 807	PERRIS	CA	92572
026-440-011-000	WOFFORD FAMILY TRUST 12-17-07 DONALD & KAREN WOFFO	119 MAC IVER ST #G	BISHOP	CA	93514
026-050-007-000	BUREAU OF LAND MANAGEMENT	351 PACU LANE, SUITE 100	BISHOP	CA	93514

CONTROL-SILVER PEAK PROJECT 300 FOOT LIST

026-440-003-000	RUSSELL ANDREW & TRINA	P.O. BOX 383	BISHOP	CA	93515
-----------------	------------------------	--------------	--------	----	-------

APN	OWNER	ADDRESS	CITY	STATE	ZIP
016-060-01-00	USA U S FOREST SERVICE	351 PACU LN #200	BISHOP	CA	93514
016-040-30-00	USA U S FOREST SERVICE	351 PACU LN #200	BISHOP	CA	93514
016-070-05-00	USA U S FOREST SERVICE	351 PACU LN #200	BISHOP	CA	93514
016-100-02-00	USA BUREAU OF LAND MGMT	2800 COTTAGE WAY	SACRAMENTO	CA	95825
016-010-02-00	USA U S FOREST SERVICE	351 PACU LN #200	BISHOP	CA	93514
016-030-01-00	USA U S FOREST SERVICE	351 PACU LN #200	BISHOP	CA	93514
016-030-02-00	USA U S FOREST SERVICE	351 PACU LN #200	BISHOP	CA	93514
016-050-11-00	USA U S FOREST SERVICE	351 PACU LN #200	BISHOP	CA	93514
016-080-07-00	USA BUREAU OF LAND MGMT	2800 COTTAGE WAY	SACRAMENTO	CA	95825
016-080-06-00	USA BUREAU OF LAND MGMT	2800 COTTAGE WAY	SACRAMENTO	CA	95825
016-070-06-00	USA BUREAU OF LAND MGMT	2800 COTTAGE WAY	SACRAMENTO	CA	95825
016-040-31-00	USA U S FOREST SERVICE	351 PACU LN #200	BISHOP	CA	93514
010-160-09-00	USA U S FOREST SERVICE	351 PACU LN #200	BISHOP	CA	93514
012-090-12-00	USA BUREAU OF LAND MGMT	2800 COTTAGE WAY	SACRAMENTO	CA	95825
010-160-08-00	USA BUREAU OF LAND MGMT	2800 COTTAGE WAY	SACRAMENTO	CA	95825
012-080-39-00	USA BUREAU OF LAND MGMT	2800 COTTAGE WAY	SACRAMENTO	CA	95825
010-140-10-00	USA BUREAU OF LAND MGMT	2800 COTTAGE WAY	SACRAMENTO	CA	95825
010-060-01-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
012-080-29-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-060-19-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-140-11-00	USA BUREAU OF LAND MGMT	2800 COTTAGE WAY	SACRAMENTO	CA	95825
010-060-20-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-140-12-00	USA BUREAU OF LAND MGMT	2800 COTTAGE WAY	SACRAMENTO	CA	95825
010-060-21-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-150-04-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-170-14-00	USA BUREAU OF LAND MGMT	2800 COTTAGE WAY	SACRAMENTO	CA	95825
010-140-05-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-120-09-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514

CONTROL-SILVER PEAK PROJECT 300 FOOT LIST

016-070-03-00	DEEP SPRINGS COLLEGE	HC 72 BOX 45001	DYER	NV	89010
010-170-10-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
012-090-15-00	SCE				
010-270-07-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-150-01-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-150-07-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-150-07-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-270-04-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-270-05-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-270-14-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
016-170-02-00	LL NUNN LLC	HC 72 BOX 45001	DYER	NV	89010
010-150-10-00	USA BUREAU OF LAND MGMT	2800 COTTAGE WAY	SACRAMENTO	CA	95825
012-080-35-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-270-06-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
012-080-40-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-170-13-00	USA BUREAU OF LAND MGMT	2800 COTTAGE WAY	SACRAMENTO	CA	95825
010-270-14-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
016-070-01-00	DEEP SPRINGS TRUSTEES	HC 72 BOX 45001	DYER	NV	89010
016-040-30-00	USA U S FOREST SERVICE	351 PACU LN #200	BISHOP	CA	93514
016-040-24-00	USA U S FOREST SERVICE	351 PACU LN #200	BISHOP	CA	93514
012-080-09-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
011-400-01-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-270-15-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
012-090-06-00	SCE				
016-040-22-00	USA U S FOREST SERVICE	351 PACU LN #200	BISHOP	CA	93514
010-170-10-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-120-09-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
012-090-10-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-170-10-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-170-13-00	USA BUREAU OF LAND MGMT	2800 COTTAGE WAY	SACRAMENTO	CA	95825
016-040-23-00	USA U S FOREST SERVICE	351 PACU LN #200	BISHOP	CA	93514
010-200-01-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-230-01-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514

CONTROL-SILVER PEAK PROJECT 300 FOOT LIST

012-080-30-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
016-070-02-00	DEEP SPRINGS COLLEGE CORP	HC 72 BOX 45001	DYER	NV	89010
010-241-03-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-250-03-00	COUNTY OF INYO	PO BOX N	INDEPENDENCE	CA	93526
010-270-06-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-212-03-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-220-09-00	HARMON RICHARD 51/100	PO BOX 303	BISHOP	CA	93515
010-170-08-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-260-01-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-260-02-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-261-01-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-262-01-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-261-02-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-160-08-00	USA BUREAU OF LAND MGMT	2800 COTTAGE WAY	SACRAMENTO	CA	95825
010-270-02-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-220-13-00	HERITAGE PROPANE LLC	PO BOX 965	VALLEY FORGE	PA	19482
010-252-02-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-251-02-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-241-01-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-241-02-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-243-03-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-212-01-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-212-02-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-252-01-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-252-03-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-243-01-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-251-01-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-220-10-00	BISHOP MUSEUM/HISTORICAL SOC	PO BOX 363	BISHOP	CA	93515
010-264-01-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-263-08-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-243-02-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-213-06-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-263-01-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514

CONTROL-SILVER PEAK PROJECT 300 FOOT LIST

010-220-06-00	WILLIAMS, MARTY	2434 SUNRISE DR	BISHOP	CA	93514
010-220-05-00	WILLIAMS, MARTY	2434 SUNRISE DR	BISHOP	CA	93514
010-213-03-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-213-01-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-262-02-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-264-03-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-263-06-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-263-05-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-213-04-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-264-02-00	SCE				
010-263-07-00	SCE				
010-263-03-00	CITY OF LOS ANGELES DWP	300 MANDICH ST	BISHOP	CA	93514
010-263-04-00	SCE				
010-263-02-00	NEUFELD TRUST JIMMY R	PO BOX N	WASCO	CA	93280
010-213-02-00	FREY RICHARD D	2610 GLENBROOK WAY	BISHOP	CA	93514
010-213-05-00	CORE TRUST JERRY & DEBORAH	216 S MOUNTAIN VIEW RD	BISHOP	CA	93514

APPENDIX F

FIELD MANAGEMENT PLAN

Southern California Edison

EMF FIELD MANAGEMENT PLAN FOR THE SCE TLRR CONTROL–SILVER PEAK PROJECT

Issue 5 – June 8, 2020

[Signature 1 Name]

[Title]

[Signature 2 Name]

[Title]

[Signature 3 Name]

[Title]

Prepared for:

Kevin Garrity, PE
Southern California Edison
2 Innovation Way
Pomona, CA 91768

cc: Warnetta Logan
Phil Hung

Prepared by:

Arcadis U.S., Inc./Mesa Associates
320 Commerce, Suite 200
Irvine, CA 92602

Our Ref.:
30002905

Date:
June 8, 2020

This document is intended only for the use of the individual or entity for which it was prepared and may contain information that is privileged, confidential and exempt from disclosure under applicable law. Any dissemination, distribution or copying of this document is strictly prohibited.

VERSION CONTROL

Issue	Date Issued	Page No.	Description	Reviewed by
1	11/22/2019	All pages.	Initial submittal.	B. Wanex
2	4/7/2020	6, 9, and all EMF tables and figures.	Updated to incorporate SCE comments.	B. Wanex
3	4/17/2020	All EMF tables and figures.	Updated to incorporate 2008 CAISO amperages for calculations.	B. Wanex
4	5/1/2020	1-4, 8-23	Changed ROW on graphs, used 280A for existing 'C' circuit, incorporated SCE comments.	B. Wanex
5	6/8/2020	15-23	Combined effects of 'A' and 'C' circuits onto one graph.	B. Wanex

CONTENTS

- Acronyms and Abbreviations v**
- Executive Summary 1**
- Codes and Standards 3**
- Magnetic Field Reduction Measures..... 3**
 - “No-Cost” Magnetic Field Reduction Design Options 3*
 - “Low-Cost” Magnetic Field Reduction Design Options 3*
- EMF Background and Public Research 4**
- Application of CPUC EMF Policy..... 6**
- Project Description And Existing Conditions 8**
- Geographic Segments 9**
- Summary of Project Components by Segment 10**
- Evaluation of Magnetic Field Reduction Design Options 11**
- Magnetic Field Assumptions 11**
- Final Recommendations For Magnetic Field Reduction Design..... 12**
- Notes To The Following EMF Graphs, Tables, And Sketches 12**
- Segment Graphs 13**
 - Segment 2..... 13*
 - Segment 3 Section 1 16*
 - Segment 3 Section 2 18*
 - Segment 3 Section 3 20*
- Residential Graphs 22**
 - Segment 3 Section 2, Str. 187 – 190 22*

List of Tables

- Table 1 – “Low Cost and No Cost” Options Considered & Adopted for Project 4
- Table 2 – CSP Project Approximate Section Lengths 9
- Table 3 – Comparison of Magnetic Fields at Edge of ROW for Segment 2 – Circuit ‘C’ (typical) 13
- Table 4 - Comparison of Magnetic Fields at Edge of ROW for Segment 2 – Circuit ‘A’ (typical) 14
- Table 5 - Comparison of Magnetic Fields at Edge of ROW for Segment 3 - Section 1 (typical) 16
- Table 6 - Comparison of Magnetic Fields at Edge of ROW for Segment 3 - Section 2 (typical) 18
- Table 7 - Comparison of Magnetic Fields at Edge of ROW for Segment 3 - Section 3 (typical) 20
- Table 8 - Comparison of Magnetic Fields at Edge of ROW for Segment 3 - Section 2 (typical) 22

List of Figures

Figure 1 - Control–Silver Peak: 55 kV Proposed Subtransmission Line Route Segments 9

Figure 2 - Typical Magnetic Field Levels representing Segment 2 - Circuit ‘C’, showing span at Str. 68-70 at 280 Amps 13

Figure 3 - Typical Magnetic Field Levels representing Segment 2 - Circuit ‘A’, showing span at Str. 70-72 at 405 Amps 14

Figure 4 - Tower and Insulator Dimensions and Phasing representing Segment 2 - Circuit ‘A’, showing Str. 70-72 15

Figure 5 - Typical Magnetic Field Levels representing Segment 3 - Section 1, showing span at Str. 105-107 at 405 Amps for ‘A’ Circuit and 280 Amps for ‘C’ Circuit. 16

Figure 6 - Tower and Insulator Dimensions and Phasing representing a structure in Segment 3 -Section 1 17

Figure 7 - Typical Magnetic Field Levels representing Segment 3 - Section 2, showing span at Str. 259-260 at 405 Amps for ‘A’ Circuit and 280 Amps for ‘C’ Circuit. 18

Figure 8 - Tower and Insulator Dimensions and Phasing representing a structure in Segment 3 - Section 2 19

Figure 9 - Typical Magnetic Field Levels representing Segment 3 - Section 3, showing span at Str. 759-760 at 405 Amps for ‘A’ Circuit and 280 Amps for ‘C’ Circuit. 20

Figure 10 - Tower and Insulator Dimensions and Phasing representing a structure in Segment 3 - Section 3 21

Figure 11 - Typical Magnetic Field Levels representing Segment 3 - Section 2, showing span at Str. 188-190 at 405 Amps for ‘A’ Circuit and 280 Amps for ‘C’ Circuit. 22

Figure 12 - Tower and Insulator Dimensions and Phasing representing a structure in Segment 3 - Section 2 23

ACRONYMS AND ABBREVIATIONS

A, Amps	Amperes, a unit of measure for electrical current
AC	Alternating current
AAC	All aluminum conductor, a type of overhead power line conductor
ACCC	Aluminum conductor composite core, a type of "high-temperature low-sag" overhead power line conductor
ACSR	Aluminum conductor steel reinforced, a type of overhead power line conductor
CAISO	California Independent System Operator
CDHS	California Department of Health Services
CPCN	Certificate of Public Convenience and Necessity
CPUC	California Public Utilities Commission
CSP	Control – Silver Peak transmission line
D/C	Double Circuit line construction
DI	Ductile Iron, a type of transmission structure
ELF	Extremely low frequency
EMF	Electric and magnetic fields
EPRI	Electric Power Research Institute
FMP	Field Management Plan
Ft	Feet, a unit of measure for distance
GO	General Order
HTLS	High-temperature low-sag, a type of overhead conductor
Hz	Hertz, a unit of measure for electrical frequency
IARC	International Agency for Research on Cancer
IEEE	Institute of Electrical and Electronics Engineers
IEC	International Electrotechnical Commission
kcmil	Kilo (thousand) circular mils, a unit of conductor size and measurement
kV	Kilovolt, a unit of measure for electrical potential
LWS	Light weight steel, a type of transmission structure
mG	milliGauss, a unit of measure for magnetic fields
NIEHS	National Institute of Environmental Health Sciences (USA)
NRBB	National Radiological Protection Board (UK)
°	Degrees, a unit of measure for electric phasors
OHGW	Overhead ground wire

OPGW	Optical ground wire
PEA	Proponent's Environmental Assessment
PTC	Permit to Construct
PLS-CADD	A software program for transmission line design
ROW	Right of way
SCE	Southern California Edison
Str	Structure
TLRR	Transmission Line Rating and Remediation
T/L	Transmission Line
TSP	Tubular steel pole, a type of transmission structure
μT	Microtesla, a unit of measure for magnetic fields
WHO	World Health Organization

EXECUTIVE SUMMARY

The Field Management Plan (FMP) presented in this report describes the magnetic field reduction design options incorporated into the design of the Southern California Edison Company (SCE) Transmission Line Rating and Remediation (TLRR) for the Control-Silver Peak (CSP) Project. The existing CSP subtransmission line consists of two separate 55 kV circuits, identified as the 'A' and 'C' circuits. The proposed project will retain both circuits in the final construction. The CSP project was divided into five separate segments which are presented graphically in Figure 1 below. The purpose of this project is to remediate clearance discrepancies by replacing existing structures and utilizing new conductor as needed throughout the 55 kV line. Details pertaining to the project's 55 kV transmission line infrastructure are provided in the Proponent's Environmental Assessment (PEA).

The CSP Project consists of installing optical ground wire, (OPGW) on existing and replacement structures in Segments 1, 2, and 3; replacing two existing single-circuited 55 kV subtransmission wood pole lines with two single circuited pole lines in Segment 2; replacing two existing single-circuited 55 kV subtransmission wood pole lines with a new double-circuited 55 kV subtransmission pole line in Segment 3; and replacing selected individual poles with new poles along the Zack Tap in Segment 4 and along the Deep Springs Tap in Segment 5. No new substations would be constructed as part of the CSP Project. The purpose of the CSP Project is to ensure compliance with standards in California Public Utilities Commission (CPUC) General Order (GO) 95 by remediating discrepancies identified through SCE's TLRR Program. The CSP Project is not proposed to expand electrical service to areas not currently served by SCE or increase the capacity of the existing lines. The CSP Project includes the following elements:

In Segment 1, there is no proposed subtransmission or transmission line work in segment 1, however, telecommunication wire will be installed.

In Segment 2, replace the existing two, single-circuited pole lines that support the Control Silver Peak 'A' and 'C' circuits with two, single-circuited pole lines that will support the circuits by:

- Installing approximately 25 single-circuited ductile iron (DI) poles or equivalents.
- Modifying approximately 2 existing single-circuited TSPs (tubular steel pole).
- Removing approximately 49 existing poles.
- Removing existing conductor and installing new aluminum conductor composite core (ACCC) 350 kcmil or aluminum conductor steel reinforced (ACSR) 336 kcmil conductor on the new single-circuited DI poles and TSPs along the 1.35-mile length of Segment 2.
- Installing overhead ground wire (OHGW) on replacement DI poles and TSPs. OHGW will be installed on replacement DI poles and TSPs in either the 'A' or 'C' circuit pole line; OPGW will be installed on the replacement DI poles and TSPs in the pole line where OHGW is not installed.

In Segment 3, replace the existing two, single-circuited pole lines that support the Control Silver Peak 'A' and 'C' circuits with one, double-circuited pole line that will support both circuits by:

- Installing approximately 500 double-circuited DI poles, approximately 137 double circuited TSPs, approximately 29 LWS poles, and approximately 8 single-circuited TSP H-frames.
- Removing approximately 1,508 existing poles.
- Removing existing conductor and installing new ACCC 350 kcmil or ACSR 336 kcmil conductor on the new double-circuited and single-circuited structures along the 37.3-mile length of Segment 3.

There is limited pole replacement that is proposed for segments 4 and 5.

Segment 4 is approximately 16 miles in length. No subtransmission conductor or cable will be installed in Segment 4 under the CSP Project. Existing subtransmission conductor will be transferred to replacement poles. The proposed construction activities within Segment 4 include:

- Install approximately 2 single-circuited DI poles.
- Remove approximately 2 existing single-circuited wood poles.
- Transfer existing subtransmission and distribution conductor to the replacement poles.

Segment 5 is approximately 2.4 miles in length. No subtransmission conductor or cable will be installed in Segment 5 under the CSP Project. Existing subtransmission conductor will be transferred to replacement poles. The proposed construction activities within Segment 5 include:

- Install approximately 8 single-circuited DI poles.
- Remove approximately 8 existing single-circuited wood poles.
- Transfer existing subtransmission conductor to the replacement poles.

CODES AND STANDARDS

The FMP for the proposed project has been prepared in accordance with the CPUC Interim electric and magnetic field (EMF) Decision No. 06-01-042 (“2006 CPUC Decision”) and general recommendations supported by the U.S. National Institute of Environmental Health Sciences and also satisfies the CPUC approved EMF Design Guidelines as well as all national and state safety standards for reconductoring and new electric facilities.

MAGNETIC FIELD REDUCTION MEASURES

SCE provides this FMP to inform all interested parties of the evaluation of “no-cost and low-cost” magnetic field reduction design options being considered and the proposed application of these design options to this project. The FMP also provides a summary of background information regarding current scientific research related to possible health effects of EMF and the CPUC EMF Policy.

“No-Cost” Magnetic Field Reduction Design Options

The “no-cost” magnetic field reduction design options that are incorporated into the design of the Project include the following utilization of structure types and characteristics which reduce and minimize EMF. Vertical and delta conductor configurations are used to reduce EMF in locations outside the Right of Way. Double circuit monopole structure configurations were also used to minimize EMF. Lastly taller structure heights were used in areas with potential overhead discrepancies, increasing ground clearance and minimizing EMF.

“Low-Cost” Magnetic Field Reduction Design Options

The only “low-cost” magnetic field reduction measure incorporated into the design of the Project is the utilization of post-construction phasing arrangement to minimize EMF.

The “no-cost and low-cost” magnetic field reduction design options implemented for this project are described in Table 1. Several portions of the project which are of specific interest for the EMF study are noted in the table and further addressed in the EMF study for safety concerns. The most significant EMF conditions in each residential area will be modeled and graphed.

Table 1 – “Low Cost and No Cost” Options Considered & Adopted for Project

Segment & Section	Start Structure	End Structure	EMF Reduction Design Options	Estimated Cost	Structures in Residential Area
CSP Segment 1	Control Substation	Structure 60	No subtransmission-related components will be installed in Segment 1. Therefore, we are not changing the existing EMF conditions.		
CSP Segment 2	Structure 60	Structure 85	Vertical Double Circuit Compact Pole Top Structure Heights	No cost No cost No cost	N/A
CSP Segment 3	Structure 85	Structure 882	Vertical Double Circuit Compact Pole Top Structure Heights	No cost No cost No cost	187 -190
CSP Segment 4	Structure 135	Zack Sub	In Segment 4, selected existing single-circuited poles would be replaced with single-circuited DI poles or equivalents. No new conductor would be installed. Since the new poles (in limited locations) would be equal to or greater than the height of the existing poles, and the conductor remains the same, the overall effect would be to reduce the EMF. Therefore, further EMF analysis is not required.		
CSP Segment 5	Structure 711	Deep Springs Sub	In Segment 5, selected existing single-circuited poles would be replaced with single-circuited DI poles or equivalents. No new conductor would be installed. Since the new poles (in limited locations) would be equal to or greater than the height of the existing poles, and the conductor remains the same, the overall effect would be to reduce the EMF. Therefore, further EMF analysis is not required.		

EMF BACKGROUND AND PUBLIC RESEARCH

There are many sources of power frequency¹ 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.²

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

¹ In U.S., it is 60 Hertz (Hz).

² CPUC Decision 06-01-042, p. 6, footnote 10.

following published reports: the National Institute of Environmental Health Sciences (NIEHS) 1999³, the National Radiation Protection Board (NRPB) 2001⁴, the International Commission on non-Ionizing Radiation Protection (ICNIRP) 2001, the California Department of Health Services (CDHS) 2002⁵, the International Agency for Research on Cancer (IARC) 2002⁶ and the World Health Organization (WHO) 2007⁷. 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.”⁸
- “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.”⁹
- “The NIEHS suggests that the level and strength of evidence supporting ELF-EMF exposure as a human health hazard are insufficient to warrant aggressive regulatory actions; thus, we do not recommend actions such as stringent standards on electric appliances and a national program to bury all transmission and distribution lines. Instead, the evidence suggests passive measures such as a continued emphasis on educating both the public and the regulated community on means aimed at reducing exposures. NIEHS suggests that the power industry continue its current practice of siting power lines to reduce exposures and continue to explore ways to reduce the creation of magnetic fields around transmission and distribution lines without creating new hazards.”¹⁰

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

“After a wide-ranging and thorough review of scientific research, an independent Advisory Group to the Board of NRPB has concluded that the power frequency electromagnetic fields that exist in the vast majority of homes are not a cause of cancer in general. However, some epidemiological studies do indicate a possible small risk of childhood leukemia associated with exposures to unusually high levels of power frequency magnetic fields.”¹¹

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

³ 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.

⁴ National Radiological Protection Board, Electromagnetic Fields and the Risk of Cancer, Report of an Advisory Group on Non-ionizing Radiation, Chilton, U.K. 2001.

⁵ 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.

⁶ World Health Organization / International Agency for Research on Cancer, IARC Monographs on the evaluation of carcinogenic risks to humans (2002), Non-ionizing radiation, Part 1: Static and extremely low frequency (ELF) electric and magnetic fields, IARC Press, Lyon, France: International Agency for Research on Cancer, Monograph, vol. 80, p. 338, 2002.

⁷ WHO, Environmental Health Criteria 238, EXTREMELY LOW FREQUENCY FIELDS, 2007.

⁸ 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.

⁹ *Ibid.*, p. iii.

¹⁰ *Ibid.*, p. 37 – 38

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

increased risk of suicide. For adult leukemia, two of the scientists are 'close to the dividing line between believing or not believing' and one was 'prone to believe' that EMFs cause some degree of increased risk."¹²

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

"EMF magnetic fields are possibly carcinogenic to humans"¹³, 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 EMF 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 EMF electric and magnetic fields."¹⁴

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 μ T [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 leukemia."¹⁵ "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."¹⁶

"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"¹⁷

"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."¹⁸

APPLICATION OF CPUC EMF POLICY

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

¹² 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.

¹³ IARC, Monographs, Part I, Vol. 80, p. 338.

¹⁴ *Ibid.*, p. 332 – 334.

¹⁵ WHO, Environmental Health Criteria 238, EXTREMELY LOW FREQUENCY FIELDS, p. 11 - 13, 2007.

¹⁶ *Ibid.*, p. 12.

¹⁷ *Ibid.*, p. 12.

¹⁸ *Ibid.*, p. 13.

link between exposure to EMF and human health effects,¹⁹ and the policy direction that (1) use of numeric exposure limits was not appropriate in setting utility design guidelines to address EMF,²⁰ 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.²¹

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.

“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]...”²²

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.”²³

3. The CPUC provided further policy direction in Decision 06-01-042, stating that, “although equal mitigation for an entire class is a desirable goal, we will not limit the spending of EMF mitigation to

¹⁹ 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.”)

²⁰ CPUC Decision 06-01-042, mimeo. p. 17 - 18 (“Furthermore, we do not request that utilities include nonroutine 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.”).

²¹ 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.”).

²² CPUC Decision 06-01-042, p. 10.

²³ CPUC Decision 93-11-013, § 3.3.2, p.10.

zero on the basis that not all class members can benefit.”²⁴ While Decision 06-01-042 directs the utilities to favor schools, day-care facilities and hospitals over residential areas when applying low-cost magnetic field reduction measures, prioritization within a class can be difficult on a project case-by-case basis because schools, day-care facilities, and hospitals are often integrated into residential areas, and many licensed day-care facilities are housed in private homes, and can be easily moved from one location to another. Therefore, it may be practical for public schools, licensed day-care centers, hospitals, and residential land uses to be grouped together to receive highest prioritization for low-cost magnetic field reduction measures.

Commercial and industrial areas may be grouped as a second priority group, followed by recreational and agricultural areas as the third group. Low-cost magnetic field reduction measures will not be considered for undeveloped land, such as open space, state and national parks, and Bureau of Land Management and U.S. Forest Service lands. When spending for low-cost measures would otherwise disallow equitable magnetic field reduction for all areas within a single land-use class, prioritization can be achieved by considering location and/or density of permanently occupied structures on lands adjacent to the projects, as appropriate.

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 at the edges of the right-of-way. 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 Decision 06-01-042 stating:

“Our [CPUC] review of the modeling methodology provided in the utility [EMF] design guidelines indicate 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.”²⁵

Project Description And Existing Conditions

The Control – Silver Peak Transmission Line Rating and Remediation project design seeks to remediate clearance discrepancies present on the existing pole lines. The original lines were constructed in 1913 and 1930 with some modifications implemented throughout the service years. The CSP project replaces existing structures, and utilizes new conductor as needed throughout the 55 kV line. The CSP project’s subtransmission pole lines originate at SCE’s Control Substation, located 5 miles southwest of the City of Bishop, and extend approximately 40 miles east-northeast to the Fish Lake Valley metering station located just west of the California/Nevada State Line. The existing pole lines are predominantly comprised of wood monopole delta structures with no overhead shield wire to protect from lightning strikes. The existing pole lines support predominately 2/0 copper conductor and 4/0 All Aluminum Conductor (AAC) type “Oxlip”.

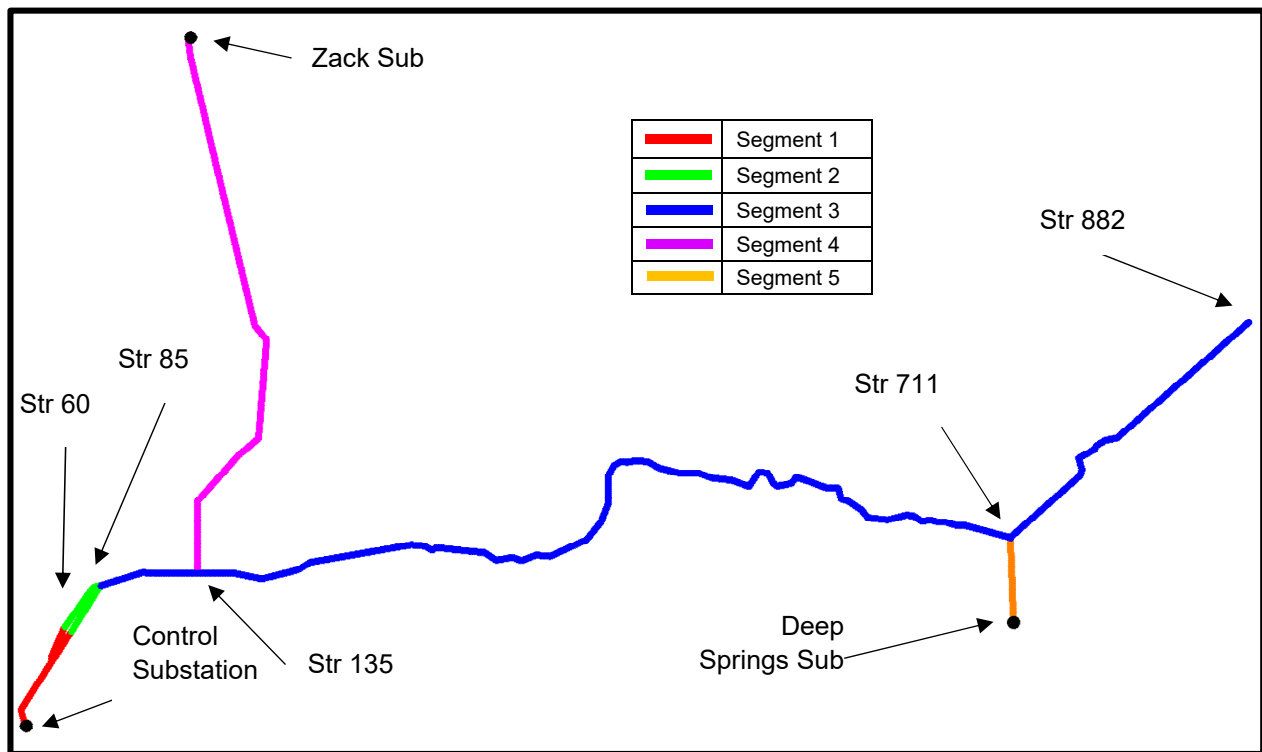
²⁴ CPUC Decision 06-01-042, p. 10.

²⁵ CPUC Decision 06-01-042, p. 11.

GEOGRAPHIC SEGMENTS

The construction activities proposed by the CSP project design are described in detail for each geographic segment, including the planned structure and conductor removals and installations, and approximate line lengths values. For visual reference, Figure 1 depicts the location of each segment along the project alignment.

Figure 1 - Control–Silver Peak: 55 kV Proposed Subtransmission Line Route Segments



The project has been divided into the following segments with specific sections that are defined below.

Table 2 – CSP Project Approximate Section Lengths

Segment & Section	Start Structure	End Structure	Approx. Length
CSP Segment 1	Control Substation	Structure 60	3.3 miles
CSP Segment 2	Structure 60	Structure 85	1.4 miles
CSP Segment 3 – Section 1	Structure 85	Structure 135	2.8 miles
CSP Segment 3 – Section 2	Structure 135	Structure 711	26.2 miles
CSP Segment 3 – Section 3	Structure 711	Structure 882	9.2 miles
CSP Segment 4	Structure 135	Zack Sub	16.3 miles
CSP Segment 5	Structure 711	Deep Springs Sub	2.4 miles

SUMMARY OF PROJECT COMPONENTS BY SEGMENT

CSP Project Segment 1, Control Substation Str. 60

- No subtransmission-related components will be installed.

CSP Project Segment 2, Str. 60 - Str. 85

- Remove all existing structures.
- Install LWS Structures.
- Reconductor the Project 55 kV transmission lines by removing all existing conductor and installing 336.4 kcmil Merlin Aluminum Conductor Steel-Reinforced (ACSR) along the 1.4-mile segment.

CSP Project Segment 3 Section 1, Str. 85 - Str. 135

- Remove all existing structures.
- Install TSP and LWS Structures.
- Reconductor the Project 55 kV transmission lines by removing all existing conductor and installing 336.4 kcmil Merlin Aluminum Conductor Steel-Reinforced (ACSR) along an approximately 3-mile segment.

CSP Project Segment 3 Section 2, Str. 135 - Str. 711

- Remove all existing structures.
- Install TSP and LWS Structures.
- Reconductor the Project 55 kV transmission lines by removing all existing conductor and installing 336.4 kcmil Merlin Aluminum Conductor Steel-Reinforced (ACSR) along an approximately 26-mile segment.

CSP Project Segment 3 Section 3, Str. 711 - Str. 882

- Remove all existing structures.
- Install TSP and LWS Structures.
- Reconductor the Project 55 kV transmission lines by removing all existing conductor and installing 336.4 kcmil Merlin Aluminum Conductor Steel-Reinforced (ACSR) along an approximate 9-mile segment.

CSP Project Segment 4, Str. 135 DI (Ductile Iron) - Zack Substation

- Selected existing single-circuited poles would be replaced with single-circuited DI poles or equivalents.
- No new conductor would be installed.

CSP Project Segment 5, Str. 711 DI - Deep Springs Substation

- Selected existing single-circuited poles would be replaced with single-circuited DI poles or equivalents.
- No new conductor would be installed.

EVALUATION OF MAGNETIC FIELD REDUCTION DESIGN OPTIONS

A series of EMF analyses were completed on the CSP project and a calculated typical EMF profile is shown for each segment as well as an existing conditions calculation. The calculated magnetic fields can be found in Figure 2 through Figure 10 and Table 3 through Table 7. The magnetic field calculations were obtained using a PLS-CADD model at the designed line amperage. For the CSP line graphs and data, the 'A' circuit is evaluated at 405A for both the proposed design and the existing lines. For CSP's 'C' circuit, the proposed design is evaluated at 280A and the existing line is evaluated at 405A. Values shown in this report are not meant to be predictive of any date or any time but are to be used for a comparison of structure arrangements.

MAGNETIC FIELD ASSUMPTIONS

- Magnetic field characteristics were modeled using PLS-CADD software.
- Magnetic field models and the calculated results of magnetic field levels present in this document are intended only for the purposes of identifying relative differences in the magnetic field levels for the purpose of comparison and discussion of design alternatives to determine if a 15% or more reduction of magnetic field levels at the edges of the right-of-way can be achieved. These calculated results are not intended to be applied as actual predictions of magnetic fields at any specific time or location during or following project construction.
- All lines were modeled with balanced line currents and standard phases. Variation of phasing between the report and field conditions is nonconsequential, so long as the opposite circuit was modeled appropriately.
- This report is based on the CAISO 2008 amperages and phasing furnished by SCE.
- Existing conductor heights were based on transmission line models.
- Wire height used is the height of the wire where the target point is projected upon it.
- Wire position is determined by the currently displayed weather case.
- Magnetic field strength was calculated at a height of 3 feet above the terrain surface.
- Calculations were made at mid span.
- All calculations based on the EPRI Red Book methods (2nd Edition, 1982 - infinite straight wire with flat earth approximation), assuming flat terrain.
- These approximations are only valid for low frequency (50-60 Hz) AC transmission lines.
- The effects of earth return currents (earth resistivity) are ignored when calculating the magnetic field.
- For Segment 3 by eliminating Circuit 'A' near the project corridor, the EMF will be significantly reduced along the existing 'A' alignment.

FINAL RECOMMENDATIONS FOR MAGNETIC FIELD REDUCTION DESIGN

The CSP project design can benefit from double circuit construction, vertical and delta conductor arrangement. Implementing both low cost and no cost measures would significantly reduce the magnetic field and potential exposure risk well below CPUC approved EMF Design Guidelines as well as all national and state safety standards for reconductoring or new electric facilities.

Reduction Measures:

1. Arrange subtransmission conductors in a vertical or delta configuration for magnetic field reduction. This is considered a no cost measure as the entire line maintains the recommended phase arrangement.
2. Utilize double-circuit construction that reduces spacing between circuits as compared to single-circuit construction.
3. Utilize taller structure heights for magnetic field reduction.

NOTES TO THE FOLLOWING EMF GRAPHS, TABLES, AND SKETCHES

Throughout the proposed CSP project, the segments implemented “span doubling” construction, where alternate existing poles are removed and not replaced. This will lead to increased EMF values (compared to the existing) due to the increased sag at mid-span as compared to the existing.

The proposed ACSR lines would be spaced wider between phases. This will lead to a slight increase in the EMF values, as compared to the existing phase spacing.

Some segments and sections will incorporate a vertical, compact pole top, double-circuit construction whereby both ‘A’ and ‘C’ circuits are located on one monopole along the existing ‘C’ alignment, as opposed to the existing construction where the two circuits are on separate poles. This will produce increased EMF values along the ‘C’ alignment (as compared to the existing construction), but significantly reduce the EMF along the ‘A’ alignment.

For the proposed double-circuit monopole construction, ideally the phases would be arranged as ABC-CBA top to bottom on the pole tops to minimize the EMF values. However, due to switches located along the CSP lines that are required for maintenance purposes, the phases need to be arranged as ABC-ABC, which will lead to increased EMF values, as compared to the existing.

SEGMENT GRAPHS

These graphs are based on calculations that occur on spans that are at the lowest height above ground within each segment or section.

Segment 2

Figure 2 - Typical Magnetic Field Levels representing Segment 2 - Circuit 'C', showing span at Str. 68-70 at 280 Amps

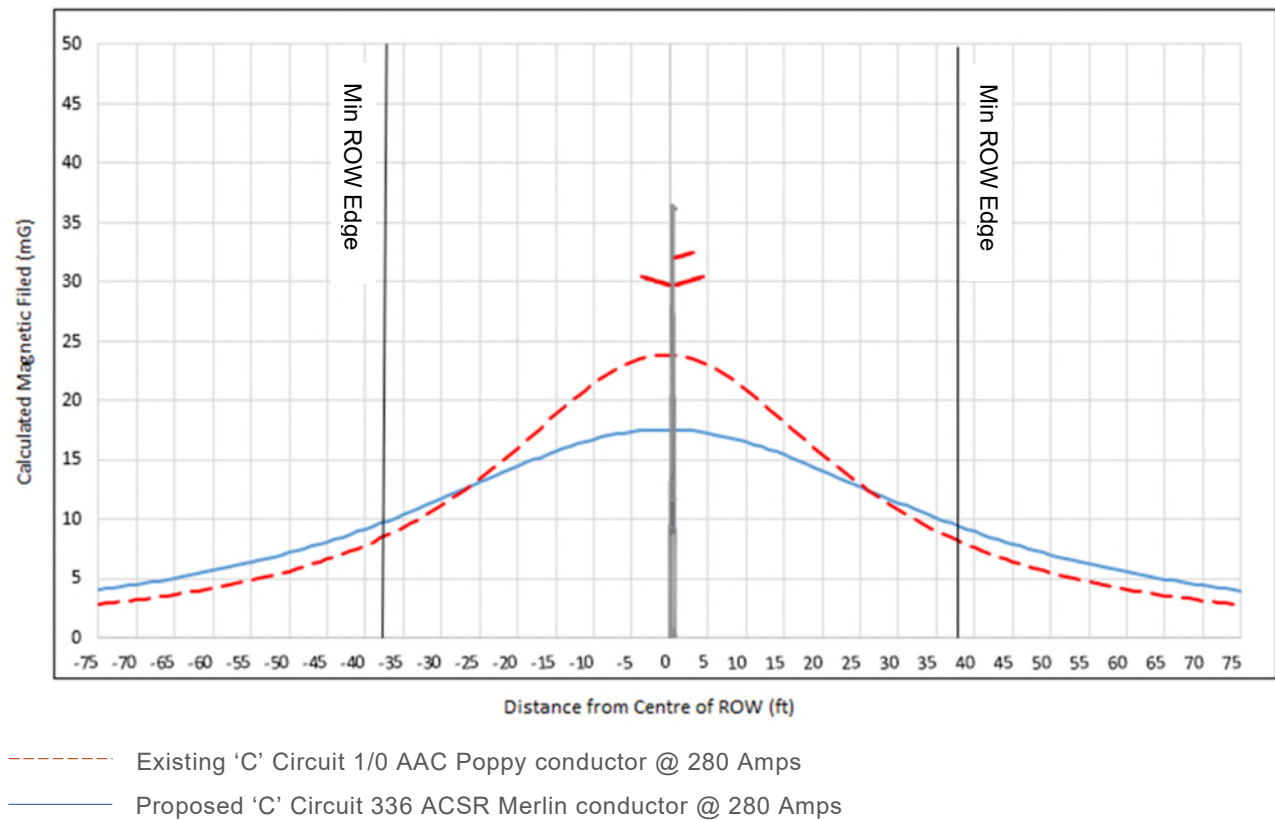


Table 3 – Comparison of Magnetic Fields at Edge of ROW for Segment 2 – Circuit 'C' (typical)

Design Options	Left Edge (mG)	% Change ²⁶	Right Edge (mG)	% Change ²⁶
Projected Peak Values without Proposed Project 55 kV T/L	8.5295	NA	8.2465	NA
Proposed Project Peak Values with ACSR 55 kV T/L	9.754	14 Increase	9.5035	15 Increase

All calculations were made at a height of 3 feet across the ROW.

²⁶Data in Percent Change column is the difference between the new proposed project value and the existing line value as percent of the existing line value.

Figure 3 - Typical Magnetic Field Levels representing Segment 2 - Circuit 'A', showing span at Str. 70-72 at 405 Amps

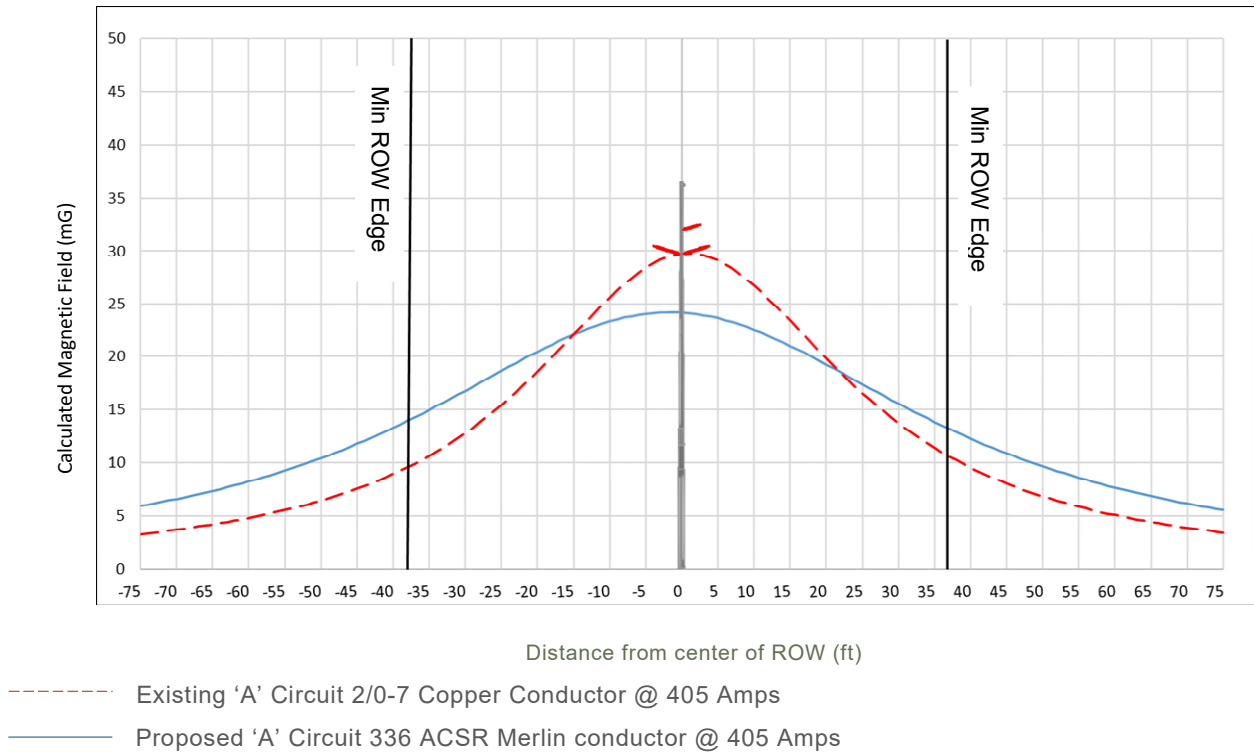


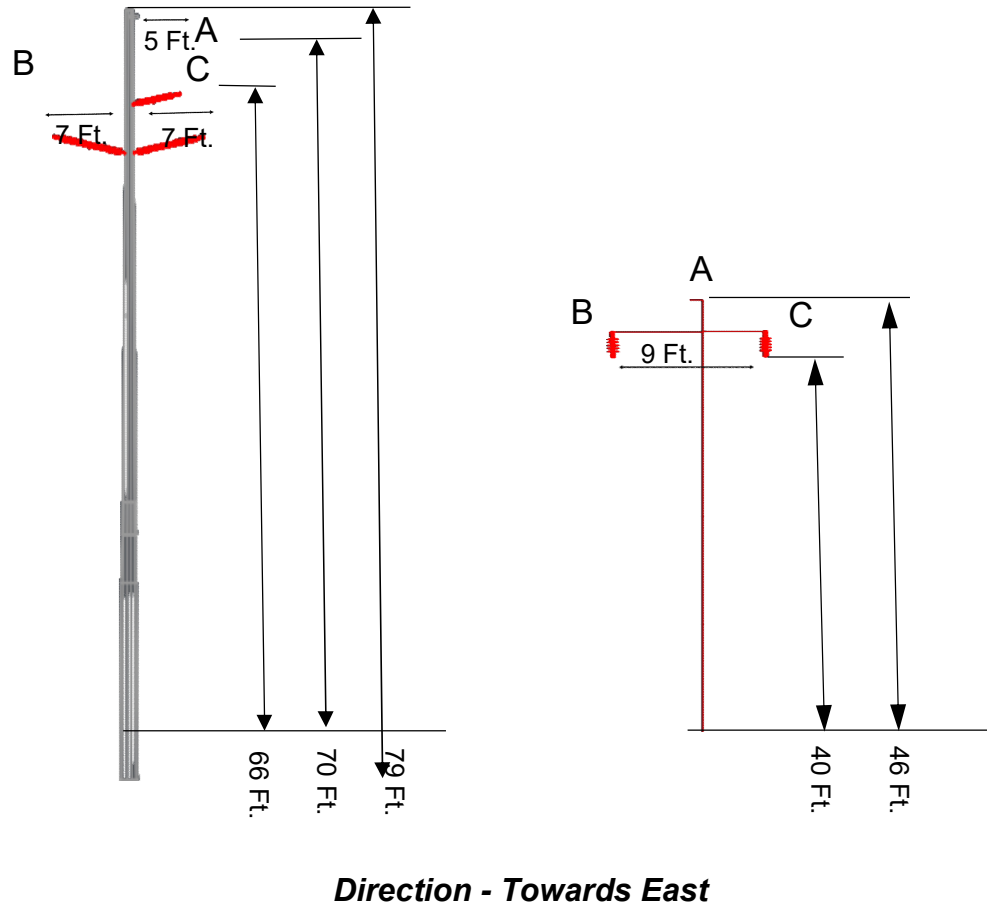
Table 4 - Comparison of Magnetic Fields at Edge of ROW for Segment 2 – Circuit 'A' (typical)

Design Options	Left Edge (mG)	% Change ²⁷	Right Edge (mG)	% Change ²⁷
Projected Peak Values without Proposed Project 55 kV T/L	9.747	NA	10.4185	NA
Proposed Project Peak Values with ACSR 55 kV T/L	14.105	45 Increase	13.0305	25 Increase

All calculations were made at a height of 3 feet across the ROW.

²⁷Data in Percent Change column is the difference between the new proposed project value and the existing line value as percent of the existing line value.

Figure 4 - Tower and Insulator Dimensions and Phasing representing Segment 2 - Circuit 'A', showing Str. 70-72

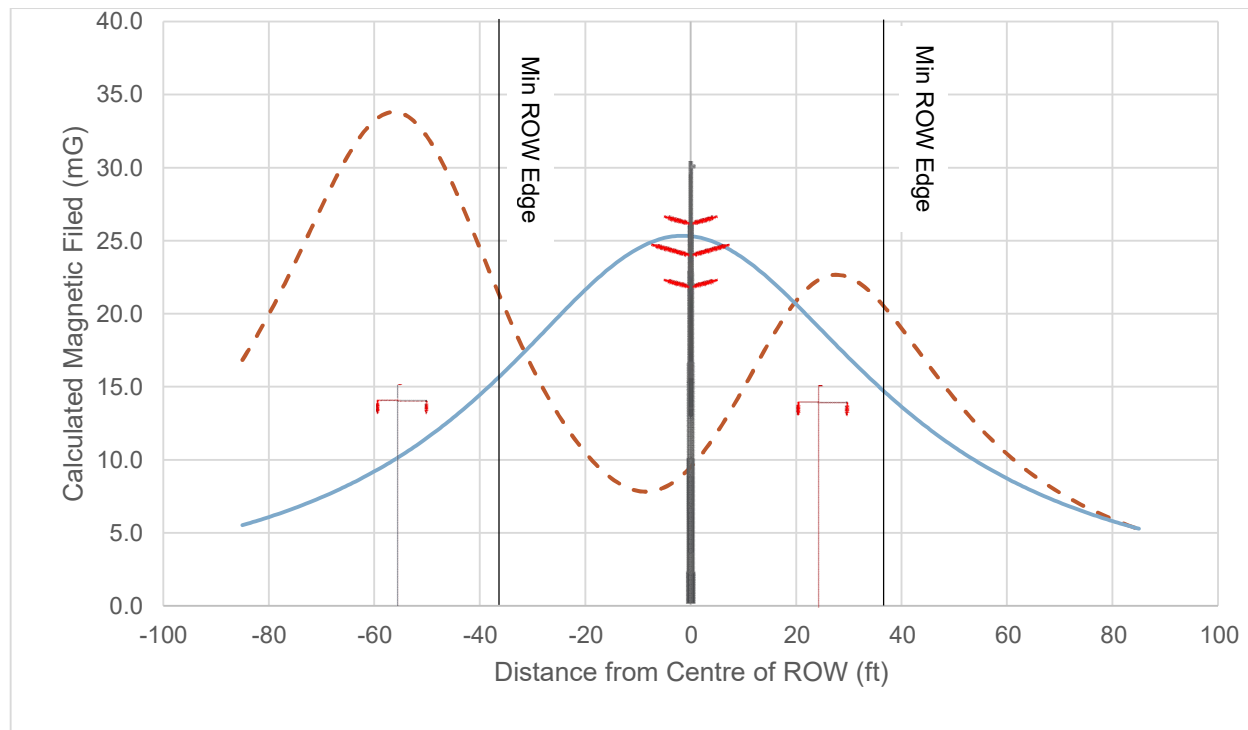


**Proposed A and C Circuits With ACSR:
Single Circuit – Monopole
Figure not to Scale**

**Existing:
Single circuit - Monopole
Figure not to Scale**

Segment 3 Section 1

Figure 5 - Typical Magnetic Field Levels representing Segment 3 - Section 1, showing span at Str. 105-107 at 405 Amps for 'A' Circuit and 280 Amps for 'C' Circuit.



----- Existing A Circuit Penguin ACSR @405 Amps; 'C' Circuit 2/0 Copper conductor @ 280 Amps
 ——— Proposed D/C 336 ACSR Merlin conductor "A "circuit @ 405 Amps and 'C' circuit @ 280 Amps

Table 5 - Comparison of Magnetic Fields at Edge of ROW for Segment 3 - Section 1 (typical)

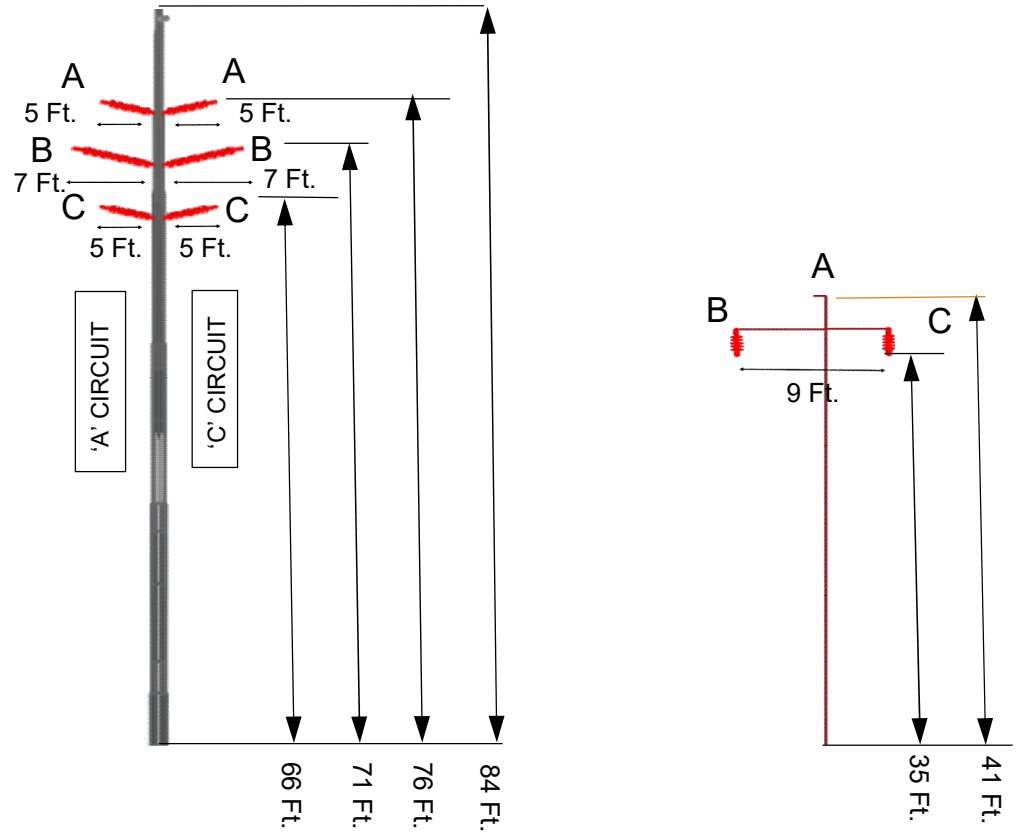
Design Options	Left Edge (mG)	% Change ²⁸	Right Edge (mG)	% Change ²⁸
Projected Peak Values without Proposed Project 55 kV T/L	22.30	NA	20.15	NA
Proposed Project Peak Values with ACSR 55 kV T/L	15.25	32 Decrease	14.45	28 Decrease

Data for Figure 4 and table 5 were obtained from SCE to account for the combined effect of existing circuits magnetic fields

All calculations were made at a height of 3 feet across the ROW.

²⁸ Data in Percent Change column is the difference between the new proposed project value and the existing line value as percent of the existing line value.

Figure 6 - Tower and Insulator Dimensions and Phasing representing a structure in Segment 3 - Section 1



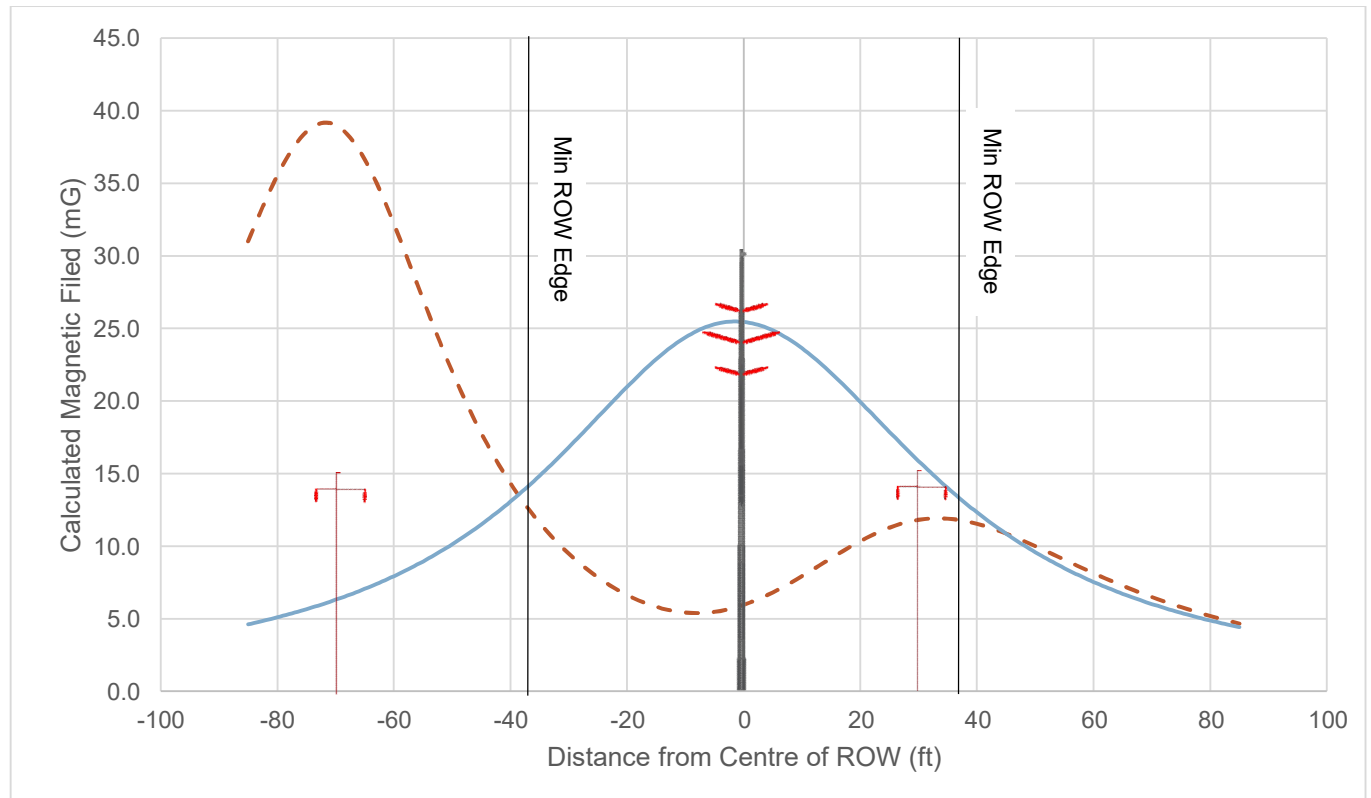
Direction - Towards East

**Proposed With ACSR:
Double Circuit – Monopole
Figure not to Scale**

**Existing:
Single circuit – Monopole
Figure not to Scale**

Segment 3 Section 2

Figure 7 - Typical Magnetic Field Levels representing Segment 3 - Section 2, showing span at Str. 259-260 at 405 Amps for 'A' Circuit and 280 Amps for 'C' Circuit.



----- Existing A Circuit Oxlip AAC @405 Amps; 'C' Circuit 2/0 Copper conductor @ 280 Amps
 ——— Proposed D/C 336 ACSR Merlin conductor "A "circuit @ 405 Amps and 'C' circuit @ 280 Amps

Table 6 - Comparison of Magnetic Fields at Edge of ROW for Segment 3 - Section 2 (typical)

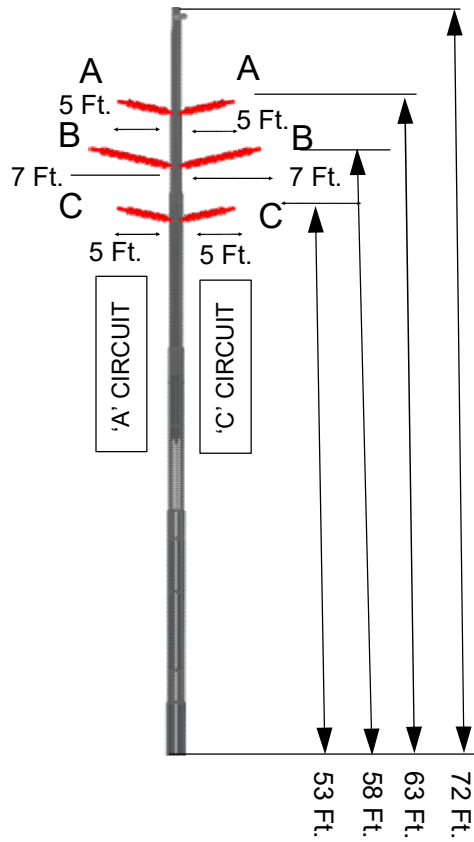
Design Options	Left Edge (mG)	% Change ²⁹	Right Edge (mG)	% Change ²⁹
Projected Peak Values without Proposed Project 55 kV T/L	12.85	NA	11.75	NA
Proposed Project Peak Values with ACSR 55 kV T/L	13.95	9 Increase	13.15	12 Increase

Data for Figure 4 and table 5 were obtained from SCE to account for the combined effect of existing circuits magnetic fields.

All calculations were made at a height of 3 feet across the ROW.

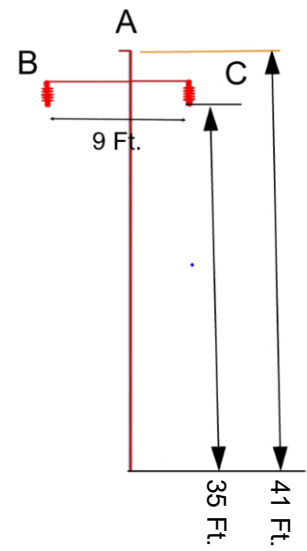
²⁹ Data in Percent Change column is the difference between the new proposed project value and the existing line value as percent of the existing line value.

Figure 8 - Tower and Insulator Dimensions and Phasing representing a structure in Segment 3 - Section 2



Direction - Towards East

**Proposed With ACSR:
Double Circuit – Monopole
Figure not to Scale**



**Existing:
Single circuit - Monopole
Figure not to Scale**

Segment 3 Section 3

Figure 9 - Typical Magnetic Field Levels representing Segment 3 - Section 3, showing span at Str. 759-760 at 405 Amps for 'A' Circuit and 280 Amps for 'C' Circuit.

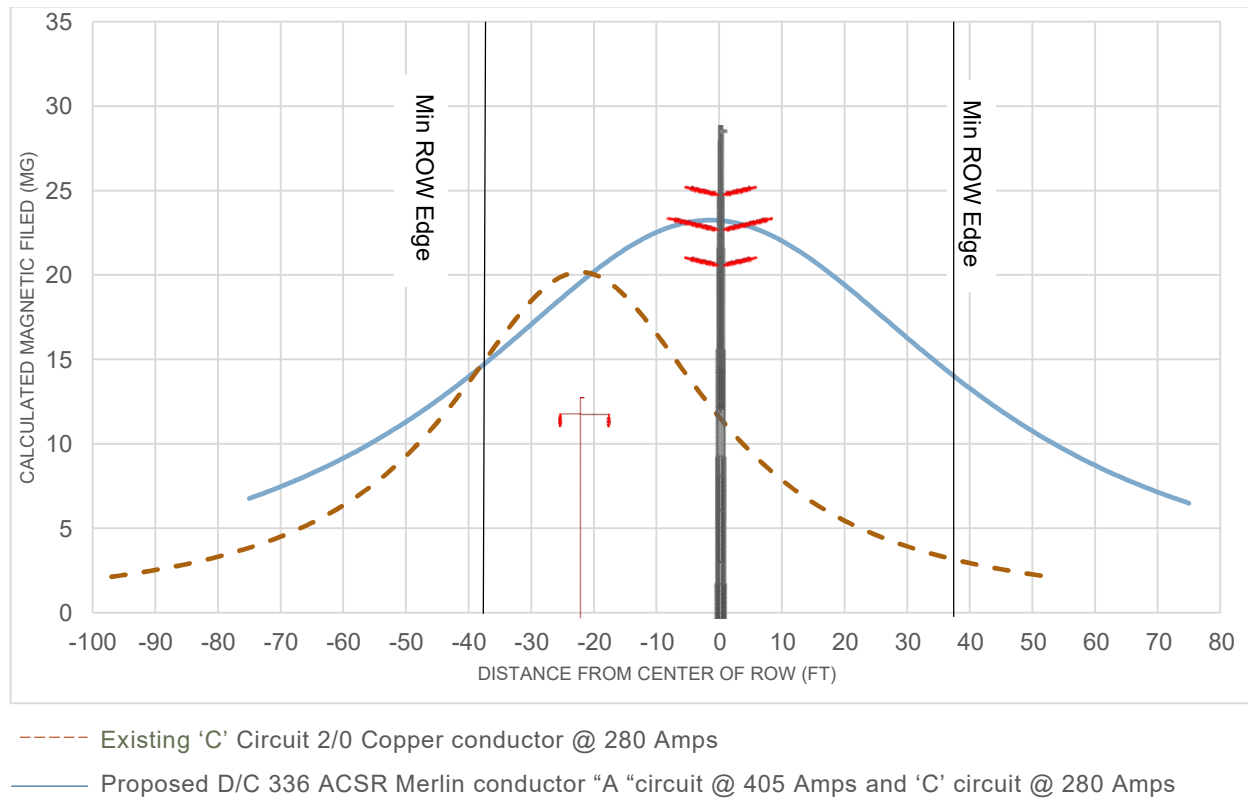


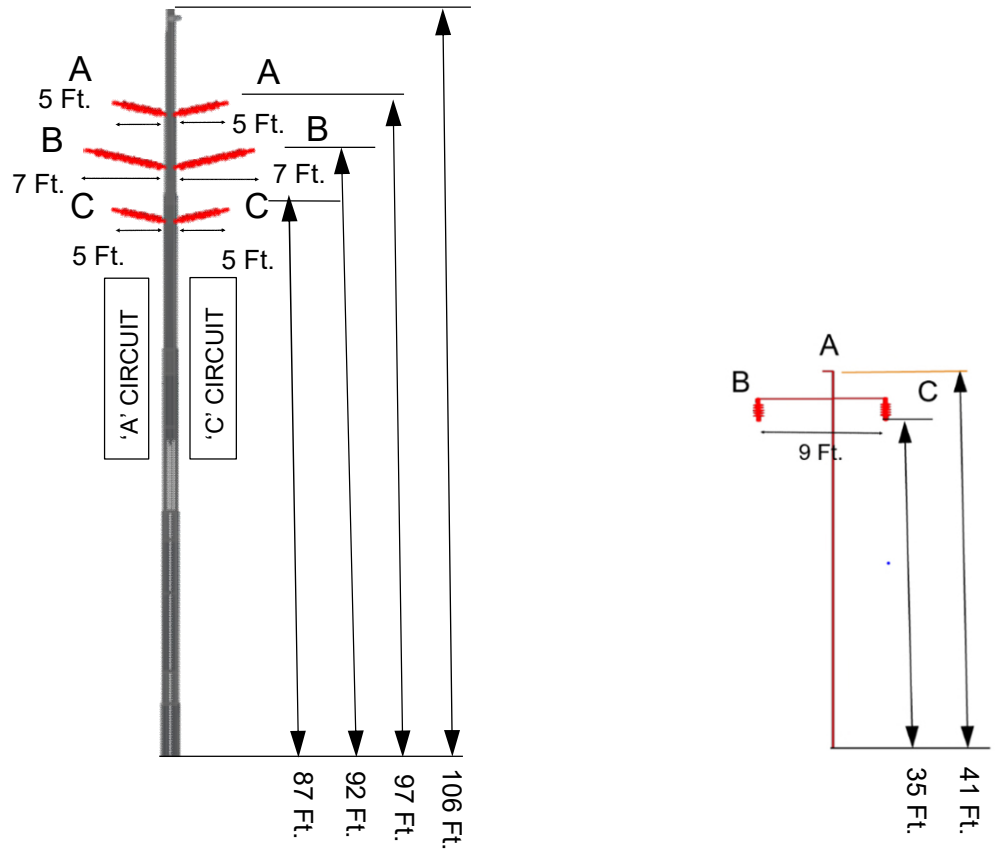
Table 7 - Comparison of Magnetic Fields at Edge of ROW for Segment 3 - Section 3 (typical)

Design Options	Left Edge (mG)	% Change ³⁰	Right Edge (mG)	% Change ³⁰
Projected Peak Values without Proposed Project 55 kV T/L	14.89	NA	3.15	NA
Proposed Project Peak Values with ACSR 55 kV T/L	14.72	1 Decrease	14.00	344 Increase

All calculations were made at a height of 3 feet across the ROW.

³⁰ Data in Percent Change column is the difference between the new proposed project value and the existing line value as percent of the existing line value.

Figure 10 - Tower and Insulator Dimensions and Phasing representing a structure in Segment 3 - Section 3



Direction - Towards East

**Proposed With ACSR:
Double Circuit - Monopole
Figure not to Scale**

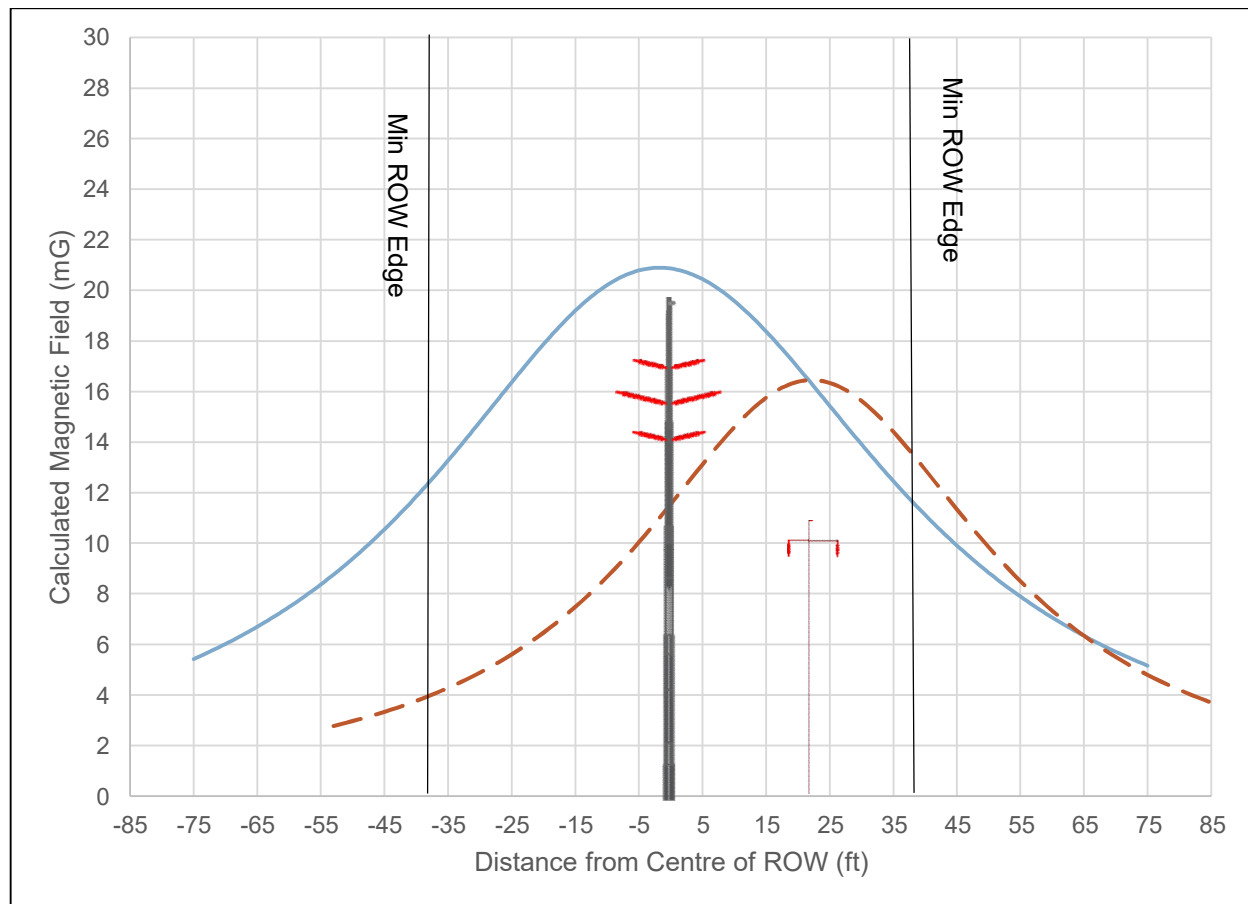
**Existing :
Single circuit - Monopole
Figure not to Scale**

RESIDENTIAL GRAPHS

These graphs represent calculations for EMF effects that occur on spans that are the lowest near residential areas. The magnetic fields created by these spans are not expected to generate the highest mG in each segment but are presented to provide more detail for residents that live near the ROW.

Segment 3 Section 2, Str. 187 – 190

Figure 11 - Typical Magnetic Field Levels representing Segment 3 - Section 2, showing span at Str. 188-190 at 405 Amps for 'A' Circuit and 280 Amps for 'C' Circuit.



----- Existing 'C' circuit 2/0 Copper conductor @ 280 Amps

— Proposed D/C 336 ACSR Merlin conductor "A" circuit @ 405 Amps and 'C' circuit @ 280 Amps

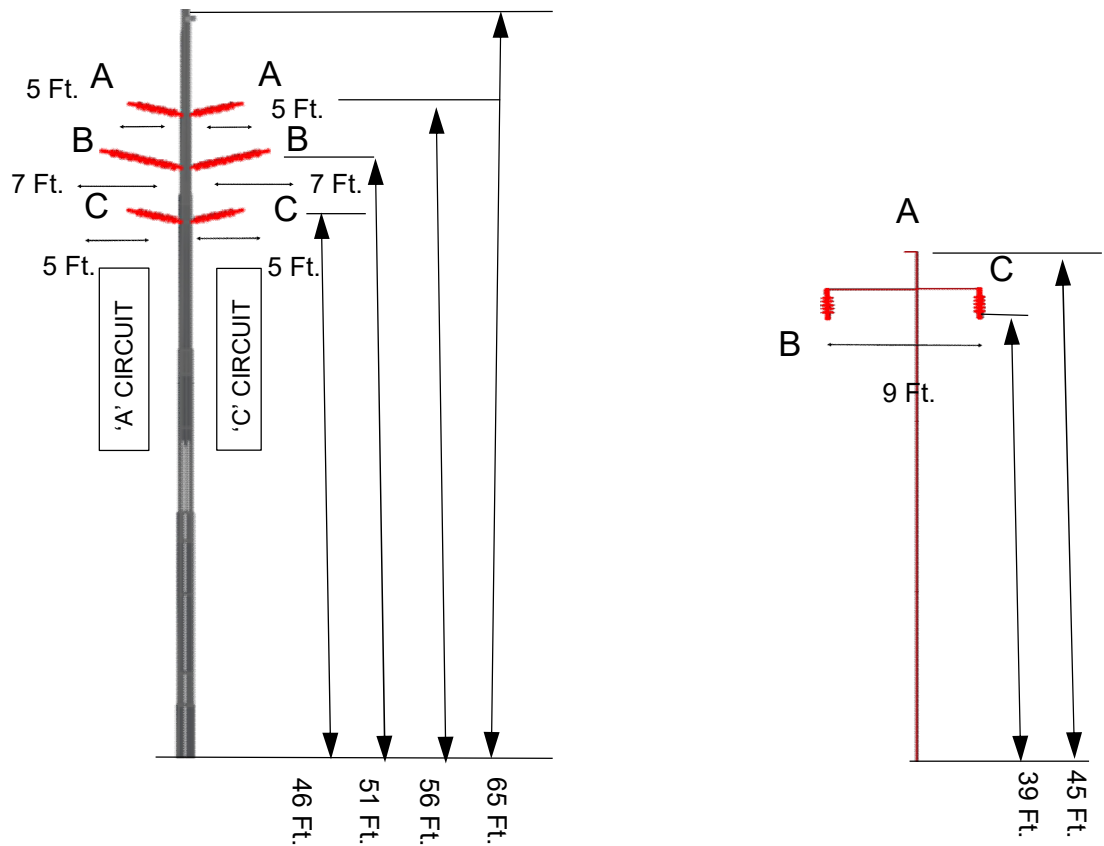
Table 8 - Comparison of Magnetic Fields at Edge of ROW for Segment 3 - Section 2 (typical)

Design Options	Left Edge (mG)	% Change ³¹	Right Edge (mG)	% Change ³¹
Projected Peak Values without Proposed Project 55 kV T/L	4.01	NA	13.65	NA
Proposed Project Peak Values with ACSR 55 kV T/L	12.542	213 Increase	11.78	14 Decrease

All calculations were made at a height of 3 feet across the ROW.

³¹ Data in Percent Change column is the difference between the new proposed project value and the existing line value as percent of the existing line value.

Figure 12 - Tower and Insulator Dimensions and Phasing representing a structure in Segment 3 - Section 2



Direction - Towards East

**Proposed With ACSR:
Double Circuit - Monopole
Figure not to Scale**

**Existing:
Single circuit - Monopole
Figure not to Scale**

PROPONENT'S ENVIRONMENTAL ASSESSMENT
Archival Grade DVD
Submitted Separately