SANTA BARBARA COUNTY RELIABILITY PROJECT
SCREENING REPORT FOR THE
PROPOSED PROJECT ALTERNATIVES AND OPTIONS
FOR THE PAST WORK

APPLICATION NO.: A.12-10-018
SCH NO.: 2013041070

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California Public Utilities Commission
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Table of Contents

List of Tables

List of Figures

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List of Abbreviations and Acronyms

applicant	Southern California Edison Company
Caltrans	California Department of Transportation
CDP	Coastal Development Permit
CEQA	California Environmental Quality Act
CPUC	California Public Utilities Commission
EIR	Environmental Impact Report
ENA	Electrical Needs Area
GIS	geographic information system
GO	General Order
kV	kilovolt
LST	lattice steel tower
LWS	lightweight steel
NMFS	National Marine Fisheries Service
PEA	Proponent's Environmental Assessment
proposed project	Santa Barbara County Reliability Project
PTC	Permit to Construct
ROW	right-of-way
SCE	Southern California Edison Company
SR	State Route
TSP	tubular steel pole

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1 Introduction

Southern California Edison Company (SCE or the applicant) filed an application (A. 12-10-018) with the California Public Utilities Commission (CPUC) for a Permit to Construct (PTC) the Santa Barbara County Reliability Project (the proposed project) on October 26, 2012. The proposed project includes rebuilding and upgrading a portion of SCE's subtransmission infrastructure in Santa Barbara and Ventura counties between the cities of San Buenaventura (Ventura) and Carpinteria (Figure 1).

1.1 Summary of the Proposed Project

The following activities are major components of the proposed project:

- Reconstruction of existing 66-kilovolt (kV) subtransmission facilities, primarily those located within the current utility rights-of-way (ROWs) between the "Y" (i.e., the point along the corridor where Segments 2, 3B, and 4 converge) in Ventura County and the Carpinteria Substation in Santa Barbara County (Segments 4 and 3B);
- Installation of marker balls on overhead wire;
- Modification of subtransmission and substation equipment within the Carpinteria Substation, Casitas Substation, and Santa Clara Substation;
- Replacement of line protection relays within existing substation equipment rooms or cabinets at the Getty Substation, Goleta Substation, Ortega Substation, and Santa Barbara Substation;
- Installation of telecommunications facilities along Segments 1, 2, and 4 and at the Carpinteria Substation, Casitas Substation, Santa Clara Substation, and Ventura Substation;
- Installation of a fault return conductor on subtransmission structures along Segment 3A; and
- Removal of subtransmission infrastructure foundations in Segments 1 and 2.

1.2 Past Work in the Project Area

In 1999, SCE commenced construction in the project area on Segments 1, 2, and 3A and several surrounding substations (Figure 1). At the time, SCE believed that the proposed upgrades to subtransmission lines in Ventura and Santa Barbara counties were exempt from permitting pursuant to CPUC General Order (GO) 131-D and the California Coastal Act (California Public Resources Code Section 30610) because they were considered "equivalent facilities or structures." However, in 2004, residents of the Shepard Mesa area near Carpinteria raised concerns that the new structures in Segment 3A were different in appearance from the previous structures. The California Coastal Commission and County of Santa Barbara Coastal Program staff issued a Stop Work order to SCE after staff determined that work within the Coastal Zone did not qualify for an exemption from a Coastal Development Permit (CDP) and that a California Environmental Quality Act (CEQA) review was required. Similarly, the CPUC determined that the past work should not have been considered exempt from GO 131-D, and similar work conducted by the applicant in the future would require a CEQA review and a PTC.

Insert Figure 1

Between 1999 and 2004, SCE had already conducted the following unpermitted activities:

- Some substation modifications were completed at the Carpinteria, Goleta, Isla Vista, Ortega, and Santa Clara substations;
- New subtransmission structures and a 66-kV conductor were installed in Segment 1 from the Santa Clara Substation to the Casitas Substation, and the existing 66-kV conductor was removed;
- New subtransmission structures and a 66-kV conductor were installed in Segment 2 from Casitas Substation to the "Y" located near Casitas Pass, just west of Lake Casitas in Ventura County, and the existing 66-kV conductor was removed;
- New subtransmission structures and a 66-kV conductor were installed in Segment 3A from the Carpinteria Substation to the Santa Barbara County/Ventura County line, and existing wood subtransmission structures were removed or topped;
- Subtransmission structures in Segments 1 and 2 were partially removed; and
- Two footings for tubular steel poles (TSP), two lightweight steel (LWS) H-frames, one LWS pole, and two switches at the Getty Tap location were installed, and two wood H-frames and one wood pole were removed.

1.3 Scope of the Environmental Impact Report

In accordance with CEQA, the CPUC is serving as the Lead Agency for the environmental review process and is preparing an Environmental Impact Report (EIR) to evaluate the environmental impacts of the proposed project. The EIR will also discuss and analyze a reasonable range of alternatives to the proposed project in order to identify the environmentally superior alternative. The CPUC will rely on the environmental assessment of the proposed project in the EIR for the approval process of SCE's PTC application.

CEQA does not require review of prior unpermitted activity, such as the past work in the project area (*Fat v. County of Sacramento* [2002] 97 Cal.App.4th 1270; *Riverwatch v. County of San Diego* [1999] 76 Cal.App.4th 1428). However, the County of Santa Barbara, as a Responsible Agency under CEQA, has requested that the CPUC EIR include some level of analysis related to past work within the Coastal Zone (Segment 3A). Therefore, the EIR will identify long-term significant impacts that have resulted from the reconductoring of the subtransmission line along Segment 3A by comparing current environmental and regulatory conditions to conditions that existed at the time the work commenced in 1999. The analysis is based on information that was compiled from the Proponent's Environmental Assessment (PEA), the applicant's responses to data requests, previous field investigations conducted by the applicant, and estimates based on available geographic information system (GIS) data. Given the elapsed time between previous activities and the present proposed project, a good faith effort was made to gather a reasonable level of data to characterize impacts; however, environmental conditions prior to the past work along Segment 3A are unknown for many resource areas or would be unreasonably onerous to identify.

The EIR will also discuss and analyze options for reducing any long-term significant impacts that resulted from the past work along Segment 3A. The County of Santa Barbara will rely on the environmental assessment of the proposed project, as well as the limited assessment of impacts that resulted from the past work, in order to approve a retroactive CDP.

1.4 Alternatives versus Options

This section clarifies the difference between the terms "Alternative" and "Option" for the purposes of this Screening Report.

1.4.1 Alternatives

Alternatives were identified to address significant impacts of the proposed project and are required under CEQA Guidelines. CEQA Guidelines Section 15126.6(a) states:

> *An EIR shall describe a reasonable range of alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation.*

The EIR will evaluate and compare alternatives to identify the environmentally superior alternative.

1.4.2 Options

Due to the past work in the project area and its relationship to the proposed project, modifications to the proposed project that could reduce the long-term significant impacts of the past work along Segment 3A have been identified. Project modifications, or "options," are similar to alternatives in that they are identified and screened using similar criteria; however, the term "option" has been used to differentiate them from a CEQA alternative. As discussed in Section 1.3, CEQA does not require the evaluation of unpermitted activities; however, at the request of the County of Santa Barbara, the EIR will evaluate the environmental impacts of proposed project options. The CPUC will not incorporate or implement any of the options. Rather, the options would be implemented at the discretion of the County as part of their CDP issuance.

1.5 Purpose of the Screening Report

This Screening Report documents:

- The range of alternatives/options identified and evaluated;
- The approach and methods used for screening each alternative/option; and
- A description of each alternative/option and the results of the screening evaluation (i.e., the alternatives eliminated from further consideration or carried forward for full analysis in the EIR).

This Screening Report will supplement the information presented in Chapter 3 of the Draft EIR regarding project alternatives. Alternatives to the proposed project were identified by the CPUC, the County of Santa Barbara, the applicant as part of the PEA, and the public during public scoping. The screening process identified and evaluated three potential alternatives to the proposed project, as described in Chapter 3 of this Screening Report.

This Screening Report will also supplement the information presented in Chapter 7 of the Draft EIR regarding project options. Options for modifying the proposed project were identified by the CPUC, the applicant as part of the PEA, the County of Santa Barbara, and the public during public scoping. The screening process identified and evaluated seven potential project options that could mitigate the long-term significant impacts of the past work along Segment 3A, as described in Chapter 4 of this Screening Report.

1.6 Purpose and Objectives of the Proposed Project

1.6.1 Purpose

The purpose of the proposed project is to ensure the availability of safe and reliable electrical service to help meet customer electrical demand within the Electrical Needs Area (ENA) during emergency conditions (Figure 1).

1.6.2 Objectives (Developed by the CPUC)

A project's statement of objectives describes the underlying purpose of the project and the reasons for undertaking the project. To fulfill this requirement, three objectives were developed by the CPUC, with consideration of the objectives presented in the PEA (see Section 1.6.4). The objectives, as defined by the CPUC, were used as a basis for the development of a reasonable range of alternatives, as well as options that would modify the proposed project as described in Section 1.4.2. The basic objectives of the proposed project are to:

1. Provide long-term reliability and continuity of service to the ENA;
2. Enhance operational flexibility by providing the ability to transfer the electric load between local substations and remove existing 220-kV or 66-kV lines from service when needed for maintenance purposes; and
3. Increase energy efficiency of the 66-kV subtransmission line.

1.6.3 County of Santa Barbara Segment 3A Objective

As described in Section 1.4.2, although not required by CEQA, the County of Santa Barbara has an additional objective related to their issuance of a retroactive CDP. In order to be carried forward for consideration, in addition to meeting the majority of the CPUC's project objectives in Section 1.6.2, a project option must:

1. Reduce a long-term significant impact[1] that resulted from the past, unpermitted work along Segment 3A in the Coastal Zone that occurred between 1999 and 2004.

1.6.4 Applicant's Stated Objectives

The objectives listed in Section 1.6.2 and 1.6.3 have been used to screen alternatives and options; however, the applicant also identified the following four objectives in the PEA, which are listed for disclosure purposes:

1. Provide long-term reliability and continuity of service to the ENA in the event of a natural disaster or other occurrence that affects the 220kV transmission system serving the area;
2. Enhance operational flexibility by providing the ability to transfer the electric load between local substations and remove existing 220-kV or 66-kV lines from service when needed for maintenance purposes;
3. To the extent practicable, use existing ROWs and facilities constructed to date to minimize:
   a. Environmental impacts,
   b. Construction schedule, and
   c. Project cost and impact on ratepayers;
4. Design and construct the project in conformance with SCE's current engineering, design, and construction standards for substation, transmission, subtransmission, and distribution system projects (SCE 2012).

[1] Long-term significant impacts based on an independent assessment using CEQA criteria.

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2 Overview of Evaluation Process

2.1 Screen Methodology

The evaluation process for the alternatives and options include a three-step screening process:

- **Step 1:** Clarify the description of the alternative/option to allow for comparative evaluation;
- **Step 2:** Evaluate the alternative/option by comparing it with the proposed project and with the CEQA criteria for alternatives (Sections 2.2 through 2.4, below). In addition, although CEQA Guidelines do not require the consideration of options for reducing impacts of unpermitted work, as described in Section 1.3 and 1.6.3, project options are also evaluated according to the CEQA criteria; and
- **Step 3:** Determine the suitability of each alternative/option for full analysis in the EIR based on the results of Step 2. If the alternative/option is unsuitable, eliminate it from further consideration.

2.2 CEQA Criteria

CEQA Guidelines (Sections 15126.6(a) and (d)) require an EIR to describe a reasonable range of potentially feasible alternatives and to include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. To comply with CEQA requirements for the evaluation of alternatives, each alternative or option identified was evaluated according to the following criteria:

- Would the alternative/option accomplish all or most of the project objectives?
- Would the alternative/option be potentially feasible (from an economic, legal, and technological perspective)?
- Would the alternative avoid or substantially lessen any significant effects of the proposed project (including consideration of whether the alternative, itself, could create significant effects potentially greater than those of the proposed project)? In addition, for project options, would the option reduce any significant long-term effects of past work along Segment 3A?

CEQA Guidelines require the consideration of alternatives capable of eliminating or reducing significant environmental effects even though they may "impede to some degree the attainment of project objectives or would be more costly" (Section 15126.6(b)). In the case of project options, the options would not reduce a significant environmental effect of the proposed project and may in some cases result in a temporary increase in short-term construction-related impacts. However, in order to meet the County of Santa Barbara objective, a temporary, less than significant construction-related impact is considered acceptable if the option would result in a reduction of a long-term significant impact.

2.3 Feasibility

According to CEQA Guidelines (Section 15126.6(f)(1)), among the factors that may be taken into account when addressing the feasibility of alternatives include site suitability, economic viability,

availability of infrastructure, general plan consistency, other plans or other regulatory limitations, jurisdictional boundaries, and proponent control over alternative sites. For the screening analysis, the potential feasibility of alternatives was assessed using the following considerations:

- **Technical Feasibility**. Is the alternative feasible from a technological perspective, considering available technology? Are there any construction, operation, or maintenance constraints that cannot be overcome?
- **Legal Feasibility**. Do legal protections on lands preclude or substantially limit the feasibility of permitting high-voltage transmission lines and substations? Do regulatory restrictions substantially limit the feasibility or successful permitting of high-voltage transmission lines and substations? Is the alternative consistent with regulatory standards for transmission system design, operation, and maintenance?
- **Economic Feasibility**. Is the alternative so costly that its implementation would be prohibitive?

2.4 Potential to Avoid or Lessen Significant Environmental Effects

CEQA requires an EIR to describe alternatives that would "avoid or substantially lessen any of the significant effects of the project" (CEQA Guidelines Section 15126.6(a)).

2.4.1 Significant Environmental Effects of the Proposed Project

At the screening stage, it is not possible to evaluate all of the effects of alternatives in comparison to the proposed project with absolute certainty, and it may not be possible to quantify the effects. However, it is possible to identify elements of an alternative that are likely to create an impact and relate them, to the extent possible, to general conditions in the proposed project area. Table 1 presents a summary of the potentially significant effects of the proposed project. This table was prepared prior to completion of the EIR and does not include the detailed analysis that is included in Chapter 4, "Environmental Analysis."

Table 1: Summary of Potentially Significant Effects of the Proposed Project

Resource	Potentially Significant Effect
Aesthetics	Operation of the project components could result in impacts on visual quality within viewsheds of Segments 3B and 4.
Air Quality	Construction could result in an exceedance of criteria air pollutants above established thresholds.
Biological Resources	Construction of the project could result in impacts on steelhead trout designated critical habitat, arroyo chub, and avian species.
Cultural Resources	Construction of some project elements could result in impacts on cultural resources.
Traffic	Temporary lane closures along Highway 33 and other streets in the project area could result in impacts related to traffic and transportation.

2.4.2 Significant Environmental Effects of the Past Work along Segment 3A

The CPUC has identified significant long-term impacts associated with aesthetics and land use that resulted from SCE construction activities along on Segment 3A between 1999 and 2004. Based on the limited available data, the past work resulted in no other long-term significant impacts. Table 2 shows the long-term significant impacts that resulted from SCE's construction activities.

Table 2: Long-Term Significant Effects of Past Work along Segment 3A

Resource	Long-Term Significant Effect
Aesthetics	The replacement of five wood poles within the viewshed of State Route (SR) 150 with four LWS poles and one TSP resulted in a significant long-term impact on the scenic resources within an eligible state scenic highway from the color and size of the new poles. The replacement of 49 wood poles with 49 LWS poles and one TSP resulted in a significant long-term impact on the visual character of the site and its surroundings and from the color and size of the new poles.
Land Use	Construction and operation of the existing subtransmission line along Segment 3A conflicts with County of Santa Barbara Article II, Coastal Zoning Ordinance, because applicable approvals and permits were not obtained at the time of construction prior to 2004.

2.5 No Project Alternative

CEQA requires that a No Project Alternative be considered in EIRs (CEQA Guidelines Section 15126.6(e)). The purpose of describing and analyzing a No Project Alternative is to allow decision-makers to compare the effects of approving the proposed project with the effects of not approving the proposed project. Because full consideration of a No Project Alternative is required by CEQA, the No Project Alternative will be evaluated in the EIR; however, the No Project Alternative is not evaluated in this Screening Report.

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3 Alternative Descriptions and Determinations

The alternatives screening process identified and evaluated three potential alternatives to the proposed project. This section describes each of the alternatives identified and explains why they were retained for further consideration in the EIR or were eliminated. Each alternative that was determined to meet CEQA or other criteria for alternatives (Sections 2.2 through 2.4) was retained for further consideration in the EIR.

This Screening Report evaluates the following alternatives to the proposed project:

Alternative A. Reduce the Scope of Work along Segments 1, 2, and 3A
Alternative B. Install Some Structures along Segment 4 via Helicopter
Alternative C. Underground Segments 3B and 4

3.1 Alternative A – Reduce the Scope of Work along Segments 1, 2, and 3A

Alternative A was identified by the CPUC. Under this alternative, the existing 30 foundations and 15 topped subtransmission wood poles along Segments 1, 2, and 3A would not be removed. All remaining segments, substations upgrades, and other major work would be constructed as described in the proposed project.

3.1.1 Consideration of CEQA Criteria

Project Objectives

Alternative A would meet all project objectives (Section1.6.2).

Feasibility

Alternative A would be feasible from a technical, legal, and economic perspective.

Environmental Effect

Alternative A would avoid or reduce potentially significant effects of the proposed project (Table 1). Allowing the topped poles and abandoned structures from the past work to remain in place would reduce the amount of ground disturbance that would occur during construction and would reduce the amount of NO_X and PM_{10} emissions produced during construction. Leaving the topped poles and abandoned structures in place would not create any impact to the visual quality, as these structures are part of the 2012 environmental baseline conditions.

3.1.2 Conclusion

RETAINED. Alternative A would be feasible, meet all project objectives, and would avoid or substantially lessen potential significant impacts of the proposed project on air quality. Therefore, this alternative was retained for further consideration in the EIR.

3.2 Alternative B – Install Some Structures along Segment 4 via Helicopter

Alternative B was identified by the CPUC. Under this alternative, equipment, materials, and workers would be delivered to Construction Sites 116 through 125 via helicopter. Subtransmission structures and conductors would be installed with helicopter assistance. This alternative would avoid the need to perform road improvements within National Marine Fisheries Service (NMFS) -designated critical habitat for steelhead trout or within streams that drain into NMFS-designated critical habitat. All remaining segments, substations upgrades, and other major work would be constructed as described in the proposed project.

3.2.1 Consideration of CEQA Criteria

Project Objectives

Alternative B would meet all project objectives (Section1.6.2).

Feasibility

Alternative B would be feasible from a technical, legal, and economic perspective.

Environmental Effect

Alternative B would avoid or reduce potentially significant effects of the proposed project (Table 1). Accessing construction sites 116 through 125 with a helicopter would avoid potentially significant impacts to NMFS-designated critical habitat for steelhead trout from the establishment of access roads. The reduced amount of construction would also lessen potential significant effects to cultural resources. Although this alternative may reduce PM_{10} emissions during construction, it would likely result in greater NO_X emissions from increased helicopter operations.

3.2.2 Conclusion

RETAINED. Alternative B would be feasible, meet all project objectives, and would avoid or substantially lessen potential significant impacts of the proposed project on biological and cultural resources. Therefore, this alternative was retained for further consideration in the EIR.

3.3 Alternative C – Underground Segments 3B and 4

Alternative C was identified by the PEA. Under this alternative, the 66-kV subtransmission line along Segments 3B and 4 would be installed in new underground conduit within the existing ROW. The existing lattice steel towers (LSTs) and wood guy stubs along Segment 3B and 4 would be removed. The applicant may need to obtain new encroachment permits, as many of the existing ROWs only provides overhead access. All remaining segments, substations upgrades, and other major work would be constructed as described in the proposed project.

3.3.1 Consideration of CEQA Criteria

Project Objectives

Alternative C would meet most of the project objectives (Section1.6.2). Project Objective 3 (increase energy efficiency of the 66-kV subtransmission line) would not be met under this alternative.

Feasibility

Alternative C would not be feasible from a technical and economic perspective. The steep, mountainous, and rocky terrain in the project area makes this alternative technically infeasible. In some areas, the current line spans gullies and hilltops where there is currently limited space for laydown areas and equipment. It would be infeasible to position trenching and blasting equipment in these areas. In addition, the cost to underground a subtransmission line is 4 to 14 times the cost of building a transmission line above ground (not including the cost of obtaining ROWs) (PSCW 2011). The cost of undergrounding in such terrain would be prohibitively expensive to SCE.

Environmental Effect

Alternative C would avoid potentially significant long-term impacts on the visual quality from views of Segment 4 along State Route (SR) 192, which is being considered by the City of Carpinteria for future designation as a scenic highway. Additionally, this alternative would avoid creating visual contrast in the area. During construction, this alternative would temporarily increase environmental effects associated with air emissions, noise, agriculture, and biological and cultural resources. Additionally, the hills above Carpinteria contain documented cultural resources. The blasting, trenching, and large amount of vegetation removal that would be required for implementing this alternative would result in a greater risk of impacts to both documented and undocumented cultural resources than the proposed project. In addition, blasting and trenching along steep slopes could lead to greater slope instability issues and geologic hazards in both the short- and long-term. Impacts due to geologic hazards could be considered significant.

3.3.2 Conclusion

ELIMINATED. Alternative C would meet most of the project objectives, and would lessen a significant impact of the proposed project on aesthetics; however, this alternative is economically and technically infeasible and could lead to a significant impact related to geologic hazards. Therefore, this alternative was eliminated from further consideration.

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4 Option Descriptions and Determinations

The screening process identified and evaluated seven project options that would reduce the significant long-term impacts of the past work along Segment 3A via modifications to the proposed project. This section describes each of the options identified and explains why they were retained for further consideration in the EIR or were eliminated. Each option determined to meet the CEQA criteria (Sections 2.2 through 2.4) was retained for further consideration in the EIR.

The Environmental Effect discussion for each option below describes the environmental effects from the removal of the existing subtransmission line, as appropriate, and the construction of the project option. The Environmental Effect discussion does not include impacts from construction of the existing subtransmission line because the environmental effects are the same for every option and are described in Chapter 7 of the EIR.

This Screening Report evaluates the following options for Segment 3A of the proposed project:

Option A. Paint Existing LWS Poles and TSP along Segment 3A
Option B. Replace Existing LWS Poles with Wood Poles along Segment 3A
Option C. Relocate the Portion of Segment 3A that Traverses Agricultural Land in the Shepard Mesa Community to Underground Conduit
Option D. Relocate Segment 3A to Underground Conduit
Option E. Submit Pole Specifications and Plans for Poles 182 and 183 to the County of Santa Barbara
Option F. Reroute a Portion of Segment 3A along Casitas Pass Road on LWS Poles
Option G. Reroute a Portion of Segment 3A along Casitas Pass Road on Wood Poles

4.1 Option A – Paint Existing LWS Poles and TSP along Segment 3A

Option A was identified by the CPUC. Under this option, the existing LWS poles and TSP along Segment 3A would be painted to reduce contrast with the surrounding environmental setting.

4.1.1 Consideration of CEQA Criteria

Project Objectives

Option A would meet all project and County of Santa Barbara objectives (Sections 1.6.2 and 1.6.3).

Feasibility

Option A would be feasible from a technical, legal, and economic perspective.

Environmental Effect

Option A would reduce the significant long-term aesthetic impact that resulted from the replacement of wood poles with taller LWS poles and a TSP along Segment 3A (Table 2). None of the structures installed between 1999 and 2004 along Segment 3A would need to be removed. Only painting activities would need to be conducted to complete this option. Painting activities would have negligible environment effects on air quality, traffic, and biological resources.

4.1.2 Conclusion

RETAINED. Option A would be feasible, meet all project and County of Santa Barbara objectives, and reduce the significant long-term aesthetic impact that resulted from the past work along Segment 3A. Therefore, this option was retained for further consideration in the EIR.

4.2 Option B – Replace Existing LWS Poles ~~and TSP~~ with Wood Poles along Segment 3A

Option B was identified by the CPUC. Under this option, the existing LWS poles along Segment 3A would be replaced one-for-one with comparably sized, new wood poles, similar to the poles that existed prior to the past work completed between 1999 and 2004. The TSP constructed between 1999 and 2004 would not be replaced because a wood pole could not accommodate the weight of the current conductor.

4.2.1 Consideration of CEQA Criteria

Project Objectives

Option B would meet all project and County of Santa Barbara objectives (Sections 1.6.2 and 1.6.3).

Feasibility

Option B would be feasible from a technical, legal, and economic perspective.

Environmental Effect

Option B would reduce the significant long-term aesthetic impacts that resulted from the replacement of wood poles with taller LWS poles along Segment 3A (Table 2). Before installation of the new wood poles, this option would require the removal of TSP and LWS poles that were installed between 1999 and 2004 along Segment 3A. Construction of this option would temporarily increase environmental effects associated with air emissions, noise, agriculture, traffic, and biological and cultural resources.

4.2.2 Conclusion

RETAINED. Option B would be feasible, meet all project and County of Santa Barbara objectives, and reduce the significant long-term aesthetic impacts that resulted from the past work along Segment 3A. Therefore, this option was retained for further consideration in the EIR.

4.3 Option C – Relocate the Portion of Segment 3A that Traverses Agricultural Land in the Shepard Mesa Community to Underground Conduit

Option C was identified by the CPUC, County of Santa Barbara, and public. Under this option, new underground conduit would replace 0.88 mile of existing LWS poles traversing agricultural land in the Shepard Mesa community ~~within the existing ROW~~ (Figure 2). This option would require the construction of approximately 13 new 55-foot-tall wood poles near the underground subtransmission line to distribute power to the surrounding Shepard Mesa community. These poles would also contain third-party lines for continued cable and telecommunications services. This option would require two new TSP riser poles—one at each end of the undergrounded line to transition the line above and below ground. The applicant may need to obtain new encroachment permits as many existing ROWs only provide overhead access, and the current ROW may include existing underground infrastructure that would need to be avoided such as water, sewer, and gas lines. In addition, the distribution poles would need to be offset from the alignment of the underground subtransmission line, which could also require the acquisition of new ROWs. No fault return conductor would be required with this option.

Insert Figure 2:

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4.3.1 Consideration of CEQA Criteria

Project Objectives

Option C would meet all project and County of Santa Barbara objectives (Sections 1.6.2 and 1.6.3).

Feasibility

Undergrounding the transmission line in a flat and developed area is a feasible option. Option C would be feasible from a technical, legal, and economic perspective.

Environmental Effect

Option C would reduce the significant long-term aesthetic impacts that resulted from the replacement of wood poles with taller LWS poles along Segment 3A (Table 2). Construction of this option would include removal of the 12 LWS poles and wood guy stubs that were installed between 1999 and 2004 along Segment 3A. During construction, this option would temporarily increase environmental effects associated with air emissions, noise, agriculture, traffic, and biological and cultural resources.

4.3.2 Conclusion

RETAINED. Option C would be feasible, meet all project and County of Santa Barbara objectives, and reduce the significant long-term aesthetic impacts that resulted from the past work along Segment 3A. Therefore, this option was retained for further consideration in the EIR.

4.4 Option D – Relocate Segment 3A to Underground Conduit

The CPUC and Santa Barbara County- identified Option D. Under this option, Segment 3A would include the installation of new underground conduit to support the subtransmission line mainly ~~entirely~~ within Caltrans ROW along Foothill Road and Casitas Pass Road. No underground conduit would be installed through the center of ~~within~~ the Shepard Mesa community; however, due to the existence of overhead electrical facilities as well as possible underground infrastructure, Option D may require deviating outside of Caltrans ROW and acquiring additional easements on private land, as needed. The applicant would need to obtain new encroachment permits for new ROW as their existing easements only provide overhead access and would likely not contain sufficient space to accommodate both a distribution line and an underground subtransmission line. This options would also require two new TSP riser poles—one at each end of the undergrounded line to transition the line above and below ground. No fault return conductor would be required.

The existing distribution and third party lines located within Segment 3A would remain within the existing overhead ROW. The existing 49 LWS poles located along Segment 3A would be removed and replaced with 55-foot tall wood distribution poles. The existing 35 wood poles located along Segment 3A would be topped or removed and replaced with wood distribution poles as needed. In the Shepard Mesa community, 13 wood distribution poles would be constructed in the existing ROW.

4.4.1 Consideration of CEQA Criteria

Project Objectives

Option D would meet most of the project objectives (Section 1.6.2). Project Objective 3 (increase energy efficiency of the 66-kV subtransmission line) would not be met under this alternative.. This option would meet the County of Santa Barbara objective (Section 1.6.3).

Feasibility

Undergrounding the transmission line in a flat and developed area is a feasible option. Option D would be feasible from a technical, legal, and economic perspective.

Environmental Effect

Option D would reduce the significant long-term aesthetic impacts that resulted from the replacement of wood poles with taller LWS poles and a TSP along Segment 3A (Table 2). Construction of this option would include removal of the 50 LWS poles, one TSP, and wood guy stubs installed during past work along Segment 3A, as well as the removal of 35 existing wood poles that are considered to be in sufficiently good condition and were left in place during the construction activities that occurred between 1999 and 2004. During construction, this option would temporarily increase environmental effects associated with air emissions, noise, agriculture, traffic, and biological and cultural resources.

4.4.2 Conclusion

RETAINED. Option D would be feasible, meet most of the project objectives and meet the County of Santa Barbara objective, and reduce the significant long-term aesthetic impacts that resulted from the past work along Segment 3A. Therefore, this option was retained for further consideration.

4.5 Option E – Reroute a Portion of Segment 3A along Casitas Pass Road on LWS Poles

Option E was identified by the PEA. Under this option, the 66-kV conductor on the existing LWS poles located in the Shepard Mesa community, south of Shepard Mesa Drive and west of Rincon Road/SR 150, would be relocated within the California Department of Transportation (Caltrans) roadside[2] along SR 192/Casitas Pass Road (Figure 2). The new route would diverge from the existing route by following SR 192 from its junction with SR 150 at the eastern terminus of Segment 3A to the SR 192 and Shepard Mesa Road intersection. This new route would install LWS poles on either the north or south side of SR-192. The existing distribution facilities that are presently located along SR 192 would be transferred to the new subtransmission poles if the new LWS poles were installed on the south side of SR 192. If the new LWS poles were installed on the north side of SR 192, the existing distribution facilities would remain in place, thus resulting in pole lines along both sides of the roadway. The applicant would need to obtain new ROWs for this option. The existing topped wood poles in the Shepard Mesa community would remain in place for distribution and third-party lines.

4.5.1 Consideration of CEQA Criteria

Project Objectives

Option E would meet all project and County of Santa Barbara objectives (Sections 1.6.2 and 1.6.3).

Feasibility

Option E would not be feasible from a legal perspective. The width of the Caltrans ROW in the area varies, but generally is 40 feet wide, which is centered over an approximate 24-foot-wide road (Senet 2013); therefore, there is an approximate 7-foot roadside on each side of the road. However, structures would have to be placed at least 20 feet from the outer edge of the roadbed in accordance with Section 309.1(c) of the Highway Design Manual (Caltrans 2013). Therefore, it would not be feasible to build the structures within the Caltrans ROW.

Environmental Effect

The long-term significant aesthetic impact of the existing subtransmission line would not be reduced, as this option would transfer the impact to viewsheds along SR 192/Casitas Pass Road.

[2] A general term denoting the area adjoining the outer edge of the roadbed to the right of way line.

4.5.2 Conclusion

ELIMINATED. Option E would meet all of the project and County of Santa Barbara objectives, but this option would not be feasible and would not reduce a significant impact. Therefore, this option was eliminated from further consideration.

4.6 Option F – Reroute a Portion of Segment 3A along Casitas Pass Road on Wood Poles

Option F was identified by the CPUC. Similar to Option E, under this option, the 66-kV conductor on the existing LWS poles located in the Shepard Mesa community, south of Shepard Mesa Drive and west of Rincon Road/SR 150, would be relocated within the Caltrans roadside along SR 192/Casitas Pass Road (see Figure 2). The new route would diverge from the existing route by following SR 192 from its junction with SR 192 from its junction with SR 150 at the eastern terminus of Segment 3A to the SR 192 and Shepard Mesa Road intersection. This new route would install wood poles on either the north or south side of SR 192. The existing distribution facilities that are presently located along SR 192 would be transferred to the new subtransmission poles if the new wood poles were installed on the south side of SR 192. If the new wood poles were installed on the north side of SR 192, the existing distribution facilities would remain in place, thus resulting in pole lines along both sides of the roadway. The applicant would need to obtain new ROWs for this option. The existing topped wood poles in the Shepard Mesa community would remain in place for distribution and third-party lines.

4.6.1 Consideration of CEQA Criteria

Project Objectives

Option F would meet all project and County of Santa Barbara objectives (Sections 1.6.2 and 1.6.3).

Feasibility

Option F would not be feasible from a legal perspective. The width of the Caltrans ROW in the area varies, but generally is 40 feet wide, which is centered over an approximate 24-foot wide road (Senet 2013); therefore, there is an approximate 7-foot roadside on each side of the road. However, structures would have to be placed at least 20 feet from the outer edge of the roadbed in accordance with Section 309.1(c) of the Highway Design Manual (Caltrans 2013). Therefore, it would not be feasible to build the structures within the Caltrans ROW.

Environmental Effect

Option F would reduce the significant long-term aesthetic impacts that resulted from the past work along Segment 3A. The use of wood poles within the Shepard Mesa area would reduce the impact to visual quality that resulted from the past work along Segment 3A.

4.6.2 Conclusion

ELIMINATED. Option F would meet all of the project and County of Santa Barbara objectives and reduce long-term significant aesthetic impacts, but this option would not be feasible. Therefore, this option was eliminated from further consideration.

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5 Summary of Screening Report

This section presents a summary of the conclusions from Sections 3 and 4. Each alternative and option identified by the applicant, CPUC, the County of Santa Barbara, and public are listed in Table 3 along with a summary of the screening results.

Based on the analysis presented in this Screening Report, the following alternatives will be carried forward for full analysis in Chapter 5 of the EIR:

Alternative A Reduce the Scope of Work along Segments 1, 2, and 3A
Alternative B Install Some Structures along Segment 4 via Helicopter

The following options will be carried forward for analysis in Chapter 7 of the EIR:

Option A: Paint Existing LWS poles and TSP along Segment 3A
Option B: Replace Existing LWS Poles with Wood Poles along Segment 3A
Option C: Relocate the Portion of Segment 3A that Traverses Agricultural Land in the Shepard Mesa Community to Underground Conduit
Option D: Relocate Segment 3A to Underground Conduit

Table 3: Summary of the Screening Report

Alternatives		Carried Forward	In PEA	Project Objectives			County Obj.	Feasible	Environmental Effect of the Proposed Project
				Obj. #1	Obj. #2	Obj. #3			
Proposed Project Alternatives									
A	Reduce the Scope of Work along Segments 1, 2, and 3A	**Yes**	No	✓	✓	✓	N/A	Yes	Would avoid potentially significant impacts on air quality from NO_X and PM_{10} emissions.
B	Install Some Structures along Segment 4 via Helicopter	**Yes**	No	✓	✓	✓	N/A	Yes	Would avoid potentially significant impacts on biological and cultural resources.
C	Underground Segments 3B and 4	No	Yes	✓	✓		N/A	No	Would avoid potentially significant aesthetic impacts.
Options for the Past Work along Segment 3A									
A	Paint Existing LWS Poles and TSP along Segment 3A	**Yes**	No	✓	✓	✓	✓	Yes	Would reduce the significant long-term aesthetic impacts that resulted from the past work along Segment 3A.
B	Replace Existing LWS Poles with Wood Poles along Segment 3A	**Yes**	No	✓	✓	✓	✓	Yes	Would reduce the significant long-term aesthetic impacts that resulted from the past work along Segment 3A.
C	Relocate the Portion of Segment 3A that Traverses Agricultural Land in the Shepard Mesa Community to Underground Conduit	**Yes**	No	✓	✓	✓	✓	Yes	Would reduce the significant long-term aesthetics impacts that resulted from the past work along Segment 3A.
D	Relocate Segment 3A to Underground Conduit	**Yes**	No	✓	✓		✓	Yes	Would reduce the significant long-term aesthetic impacts that resulted from the past work along Segment 3A.
E	Reroute a Portion of Segment 3A along Casitas Pass Road on LWS Poles	No	Yes	✓	✓	✓	✓	No	Would not reduce a significant long-term that resulted from the past work along Segment 3A.
F	Reroute a Portion of Segment 3A along Casitas Pass Road on Wood Poles	No	No	✓	✓	✓	✓	No	Would reduce the significant long-term aesthetic impacts that resulted from the past work along Segment 3A.

6 References

Caltrans (California Department of Transportation). 2013. Highway Design Manual. Website: http://www.dot.ca.gov/hq/oppd/hdm/hdmtoc.htm. Accessed September 3, 2013.

PSCW (Public Service Commission of Wisconsin). 2011. Underground Electric Transmission Line. May

SCE (Southern California Edison Company). 2012. Proponent's Environmental Assessment: Santa Barbara County Reliability Project (October 26), as amended by responses from SCE to CPUC requests for additional information.

Senet, Steve. 2013. California Department of Transportation District 5 Encroachment Permit Engineer. Personal Conversation with Bonny O'Connor of Ecology and Environment, Inc., on September 3, 2013.

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