

CHAPTER 5

Detailed Discussion of Significant Impacts

In accordance with the Working Draft Proponent's Environmental Assessment (PEA) Checklist for Transmission Line and Substation Projects, November 2008 (PEA Checklist) issued by the California Public Utilities Commission (CPUC) and with Section 15126.2 of the State California Environmental Quality Act (CEQA) Guidelines, this section:

1. Discusses the applicant proposed measures (APMs) proposed by SCE to avoid, minimize, or mitigate potentially significant effects.
2. Summarizes the Proposed Project alternatives and the benefits of each alternative.
3. Describes any growth-inducing impacts associated with the Proposed Project.
4. Identifies the measures that SCE has incorporated into the Proposed Project to address greenhouse gas (GHG) emissions.
5. Affirms that the Proposed Project would not have the potential to result in significant environmental effects.

5.1 Applicant Proposed Measures to Minimize Significant Effects

Based on the findings discussed in Chapter 4, Environmental Impact Assessment, the Proposed Project is not likely to result in significant impacts to any resource areas after implementation of the APMS. SCE has identified seven APMS that it plans to implement during construction and/or operation of the Proposed Project to reduce or avoid impacts. Table 5.1: Applicant Proposed Measures lists these APMS.

Table 5.1 Applicant Proposed Measures

Applicant Proposed Measure	Description
APM BIO-1	<p>Pre-construction Surveys and Construction Monitoring. To the extent feasible, biological monitors would monitor construction activities in areas with special-status species, native vegetation, wildlife habitat, or unique resources to ensure such resources are avoided.</p>
APM BIO- 2	<p>Pre-Construction Surveys for Nesting Birds/Raptors. SCE would conduct project-wide nesting bird surveys and remove trees and other vegetation if feasible outside of the nesting season. If a tree or pole containing a raptor nest must be removed during nesting season, or if work is scheduled to take place in close proximity to an active nest on an existing transmission tower or pole, SCE biologists would determine appropriate nesting buffers based on a project specific nesting bird management plan or consultation with the appropriate agencies.</p>
APM BIO- 3	<p>Burrowing Owl. Biologists would conduct a preconstruction burrowing owl survey of the Proposed Project Study Area no more than 30 days prior to construction.</p> <p>Construction activities will be scheduled and planned to avoid burrowing owls and their burrows. A 250-foot buffer will be placed around active nest and the site will be avoided, where feasible. If occupied burrows cannot be avoided, an appropriate relocation strategy would be developed in conjunction with the CDFW and may include collapsing burrows outside of nesting season and using exclusionary devices to reduce impacts to the burrowing owl. Biological monitors would monitor all construction activities that have the potential to impact active burrows.</p>
APM BIO- 4	<p>Tehachapi Slender Salamander. If project activities would be located within oak woodlands and ravines, construction activities would avoid displacement of rocks, logs, bark, and other debris in thick leaf litter, near talus slopes. For these areas, a biologist would be present to ensure that construction activities do not impact this species, particularly during periods of peak activity, such as rainy or wet nights with moderate temperatures.</p>

Applicant Proposed Measure	Description
APM BIO- 5	Avoidance of Sensitive Habitats. SCE would minimize impacts and permanent loss of Big Sagebrush Scrub, oak woodlands, and aquatic features at construction sites by flagging native vegetation to be avoided. If unable to avoid impacts to native vegetation, a project revegetation plan would be prepared in coordination with the appropriate agencies for areas of native habitat temporarily impacted during construction.
APM PA-1	Paleontological Resources Treatment Plan. A Paleontological Resources Treatment Plan shall be developed for construction within areas that have been identified as having a high sensitivity for paleontological resources or in areas where construction activities would exceed 10 feet in depth. The Paleontological Resources Treatment Plan would be prepared by a professional paleontologist in accordance with the recommendations of the SVP.
APM HAZ-1	Fire Management Plan. A Fire Management Plan would be developed by SCE prior to the start of construction.

5.2 Description of Project Alternatives and Impact Analysis

This section compares the construction and operation of SCE's Proposed Project with alternatives to the Proposed Project. Section 15126.6 (d) of the State CEQA Guidelines requires that an environmental impact report (EIR) include "sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the [P]roposed [P]roject." Although a PEA document is not an EIR, this section summarizes the relative impact of each alternative to the preferred alternative for each CEQA environmental issue area.

The Proposed Project objectives are as follows:

- Provide safe and reliable electrical service.
- Add capacity to serve long-term forecasted electrical demand requirements in the Cummings Valley (Bear Valley Springs and Stallions Springs communities) beginning in 2016.
- Maintain system reliability within the Electrical Needs Area (ENA).

- Provide greater operational flexibility to transfer load between circuits and substation(s) within the ENA.
- Alleviate the anticipated service delivery voltage problems as the forecasted demand in the Bear Valley Springs and Stallion Springs areas grows beyond what can be reliably served by the existing 12 kilovolt (kV) distribution circuits from the existing Cummings Substation.
- Meet the Proposed Project needs while minimizing environmental impacts.
- Design and construct the Proposed Project in conformance with SCE's approved engineering, design, and construction standards for substation, transmission, subtransmission, and distribution system projects.

These objectives were used to develop a range of reasonable alternatives to the Proposed Project, or to the location of the Proposed Project, that would feasibly attain most of the objectives.

5.2.1 Electrical System, Substation Site, and Subtransmission Line Route Evaluation Methodology

Electrical System Alternatives

CEQA and the State CEQA Guidelines (Section 15126.6(a)) require consideration of a reasonable range of alternatives to a proposed project, or to the location of a proposed project that would feasibly attain most of the basic project objectives but would avoid or substantially lessen any of the significant effects of the project. In addition, State CEQA Guidelines Section 15126.6(e) requires the evaluation of a “no project” alternative to compare the impacts of implementing the Proposed Project with the impacts of not approving the Proposed Project (No Project Alternative).

SCE first evaluates whether the existing electrical infrastructure can be modified to meet the project objectives; if they cannot be modified, then SCE evaluates what new infrastructure is required (System Alternatives) and where the new infrastructure would be located (Site Alternatives) in order to meet project objectives. The following sections describe the methodology for screening System Alternatives and Site Alternatives. Alternatives developed

using these methodologies are screened for their ability to meet the project objectives. The section concludes with a brief description of the Site Alternatives retained for full analysis in the PEA.

System Alternatives Screening Methodology

System Alternatives are developed using a four-step process:

Step 1: Perform technical engineering analyses to determine whether modifying electrical equipment at existing facilities could accommodate the forecasted peak electrical demand.

Step 2: If the forecasted electrical demand cannot be accommodated by modifying existing electrical facilities, develop System Alternatives upgrades that consider new facilities.

Step 3: Evaluate each System Alternative in consideration of the following criteria:

- The extent to which the System Alternative would substantially meet the forecasted electrical demand.
- The feasibility of a System Alternative, considering capacity limits; the ability to upgrade the system on existing sites; and economic viability.

Step 4: If a System Alternative is not feasible, eliminate it from further consideration. If feasible, the System Alternative is retained for full analysis in the PEA, as required by General Order 131-D (G.O. 131-D).

If it is determined that a new electrical infrastructure upgrade or addition is required, Site Alternatives are considered will be described later in this section.

System Alternatives Considered by SCE

To meet the need in the ENA, SCE considered three System Alternatives:

System Alternative 1: Construction of the new Banducci 66/12 kV Substation, which would incorporate two new 28.0 mega volt-amperes (MVA) banks and three new 12 kV distribution circuit getaways.

System Alternative 2: Expansion of the existing Cummings 66/12 kV Substation, which would incorporate two new 28.0 MVA replacement banks and three additional 12 kV distribution circuit getaways.

System Alternative 3: No Project Alternative

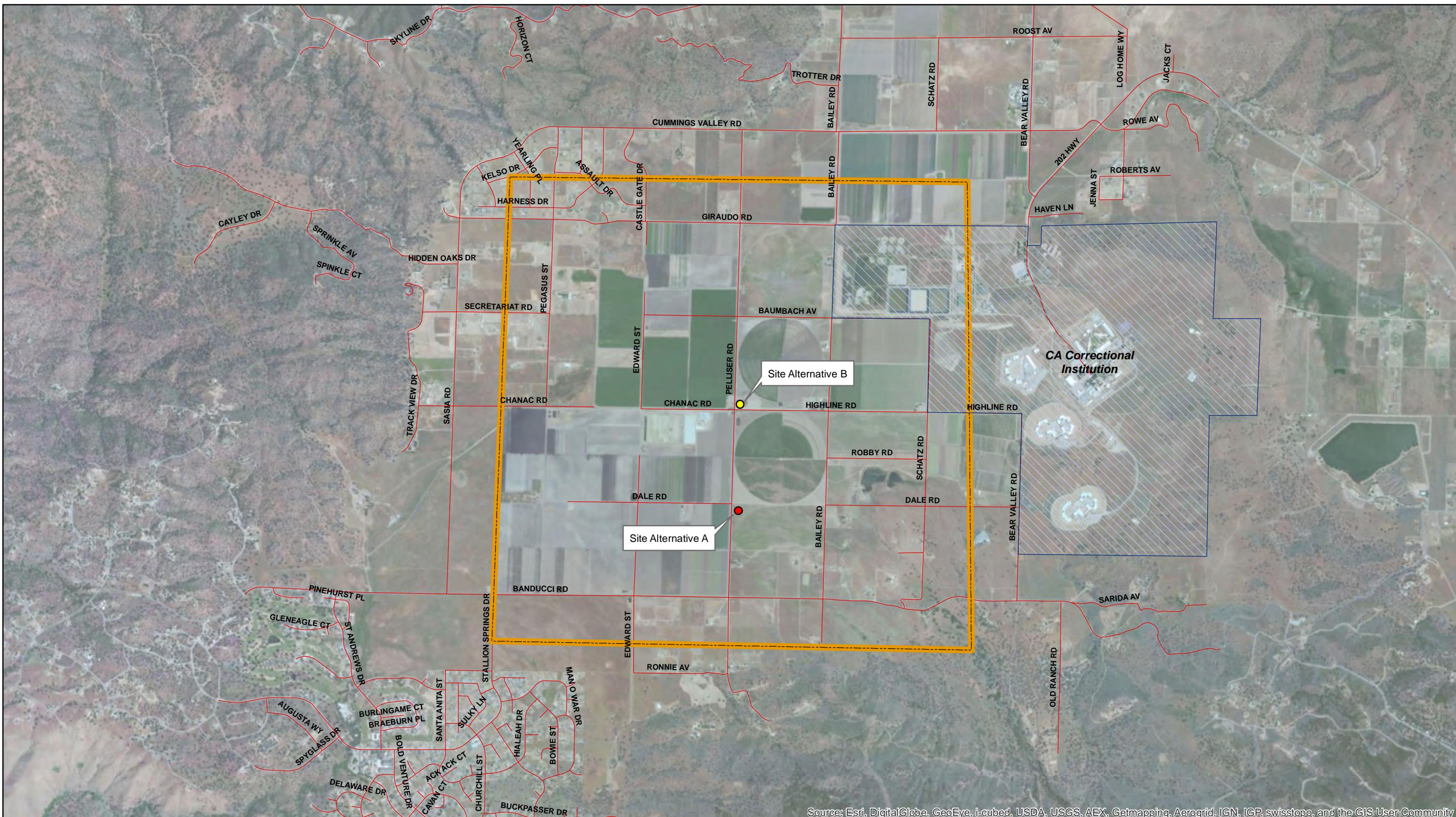
Substation Site and Subtransmission Line Route Alternatives

Because SCE determined that new infrastructure would be required as part of the Proposed Project, SCE also considered alternative locations for that infrastructure. To meet the Proposed Project objectives, a Proposed Project Study Area (shown in Figure 1.2: Electrical Needs Area and Substation Study Area) was determined. The placement of a substation within this area would allow SCE to increase transformer capacity in the ENA and to transfer load between distribution circuits and the existing substations located near the ENA. A new substation operating within the ENA would maximize electrical benefits to serve the purpose and need for the Proposed Project and achieve the basic project objectives.

The Proposed Project Study Area was developed using the following basic requirements:

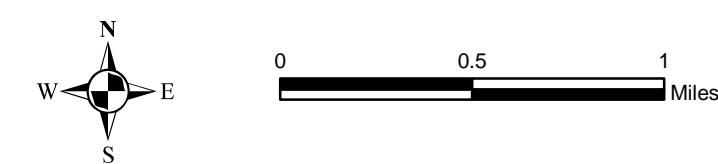
- The substation should be in an area where existing and future electrical demand can be served within the ENA.
- The substation should be located in an area where it would improve operational flexibility with adjacent substations and circuits.

After identifying the Substation Study Area, SCE analyzed potential sites in the Substation Study Area in which to locate the proposed Banducci Substation and the 66 kV subtransmission line routes. Two potential substation sites and one potential 66 kV subtransmission line route that would connect the new substation to SCE's existing electrical system were identified for further consideration. The preferred and alternative substation sites are located in proximity to the existing Correction-Cummings-Kern River 1 66 kV Subtransmission Line. Additional subtransmission line routes were not evaluated because construction of any other source route would cause additional environmental impacts. These alternatives are shown on Figure 5.1: Alternative Substation Sites and Figure 3.5: Subtransmission Source Line Route Description.



Legend

- Site Alternative A
- Substation Study Area
- Site Alternative B
- ▨ CA Correctional Institution



**FIGURE 5.1: ALTERNATIVE SUBSTATION SITES
PROPOSED BANDUCCI SUBSTATION PROJECT**

5.2.2 Alternatives Comparison Summary

The following discussion summarizes the components of each alternative and compares the benefits of each alternative.

Electrical System Alternatives

System Alternative 1 Components

- Construction of a new Banducci 66/12 kV Substation. The Banducci Substation would be an unstaffed, automated, 56 MVA, low-profile substation with a potential capacity of 112 MVA at final build out. The proposed 66/12 kV distribution substation would be located on an approximately 6.3-acre parcel in the unincorporated Cummings Valley area of Kern County.
- Construction of two new 66 kV subtransmission line segments that would loop the existing Correction-Cummings-Kern River 1 66 kV Subtransmission Line: one segment would enter and one segment would exit the proposed Banducci Substation, creating the new Banducci-Kern River 1 66 kV Subtransmission Line and the new Banducci-Correction-Cummings 66 kV Subtransmission Line.
- Construction of three new underground 12 kV distribution getaways.
- Installation of telecommunications facilities to connect the proposed Banducci Substation to SCE's existing telecommunications system.

System Alternative 1 Benefits

System Alternative 1 would mitigate the forecasted substation overloads at the existing Cummings Substation by facilitating a large (approximately 500 amperes) load transfer from Cummings Substation to the new Banducci Substation.

System Alternative 1 would result in shorter 12 kV distribution circuit lengths. The existing 12 kV distribution circuits, one of which exceeds 20 miles in length, would be reconfigured and shortened to approximately 5 to 17 miles. A shorter circuit improves voltage regulation, thereby raising the circuit load capacity beyond the capacity of the original, longer circuit. Shorter circuits also improve short circuit duty protection capabilities enabling the addition of more

customer load. Placing the new Banducci Substation in Cummings Valley and connecting the existing circuit to the new Banducci Substation would reduce the probability of circuit outages on the circuit, improve circuit reliability, and allow one of the existing 12 kV circuits to transfer load to a point below the planned loading limit.

- System Alternative 1 would allow SCE to meet the forecasted increase in electrical demand within the ENA with an increased capacity of 56 MVA.
- System Alternative 1 would provide greater operational flexibility because having two substations in an area allows for greater operability than only having one substation in the area.
- Placing System Alternative 1 in Cummings Valley would allow for shortening of the existing circuitry by placing the new Banducci Substation between Cummings Substation and the end of the existing 12 kV circuits. Reducing the 12 kV circuit length would result in less circuit impedance, thereby improving voltage regulation and mitigating future overloaded automatic reclosers (ARs).
- Operational flexibility of the existing radial circuits would be improved with the addition of three new 12 kV distribution circuits and the accompanying circuit ties.
- Placing System Alternative 1 in Cummings Valley adjacent to the existing 66 kV right-of-way minimizes the need to construct long 66 kV subtransmission line segments.

System Alternative 2 Components

- Expansion of Cummings Substation to include two new 28 MVA replacement banks.
- Construction of three new 12 kV distribution getaways.
- Installation of telecommunications facilities to connect the existing Cummings Substation to SCE's existing telecommunications system.

System Alternative 2 would consist of expanding the existing Cummings Substation, which is approximately 120 feet by 130 feet. In order to add transformer and circuit capacity, the substation property would need to be expanded by approximately 200 feet to the north and

approximately 200 feet to the east onto private property, which SCE would need to purchase. Expansion of the existing Cummings Substation would also require installation of one new 66 kV switchrack, and one new 12 kV switchrack, two new 28 MVA transformer banks, two new 12 kV capacitor banks, and new telecommunication facilities. Cummings Substation is located on a hillside and therefore it is expected to require more substantial grading than typically expected for a level lot.

System Alternative 2 Benefits

System Alternative 2 would mitigate the substation capacity deficit forecasted at the existing Cummings Substation and would be expected to provide the following benefits:

- The expansion of Cummings Substation and installation of a net additional 32 MVA of transformer capacity would allow SCE to meet the forecasted electrical demand within the ENA.
- Provide additional circuit ties and potentially improve reliability or reduce the duration of circuit outages.
- System Alternative 2 would provide for expansion and modification of Cummings Substation, thereby resulting in an electrical substation that is consistent with current substation design standards.

No Project Alternative

Under the No Project Alternative, no action would be taken. The No Project Alternative would involve no construction and no modifications to the existing electrical system. Therefore, there would be no benefits associated with the No Project Alternative.

Electrical System Alternatives Comparison

- System Alternative 1 would provide greater operational flexibility by having two substations in the ENA rather than having only one substation in the area. This flexibility allows SCE to manage the system more efficiently. Service reliability would be improved because the new 12 kV circuits would be shorter in length than the existing circuits emanating from Cummings Substation. Having a second substation would

facilitate scheduled maintenance outages at the other substation without dropping customer load.

- System Alternative 2 would require expansion of the existing Cummings Substation property. This expansion would require the acquisition of additional private property. System Alternative 2 would also require construction of at least two 6-mile-long circuits. Construction of the new circuits may require a new pole line adjacent to or in proximity to residential communities and through undeveloped terrain, potentially resulting in additional environmental impacts. However, System Alternative 2 would not resolve the inherent problems of poor voltage regulation, depressed fault duty, and possible overloaded ARs due to excessively long circuit lengths. In addition, System Alternative 2 would not mitigate the existing poor circuit reliability, which raises the probability of circuit outages due to weather and other causes outside of SCE's control. Accordingly, in addition to its potential to cause greater environmental impacts to undeveloped land, System Alternative 2 would not achieve the project objectives to the same extent as System Alternative 1.¹
- Although it would not cause environmental impacts, the No Project Alternative would provide no electrical benefits to the ENA and would not achieve the project objectives.

¹ The size of the existing Cummings Substation site is not suitable for SCE to permanently increase the substation capacity to accommodate the capacity required to serve the ENA. If a new transformer bank were installed, SCE would need to bring the substation up to existing SCE standards. The existing substation parcel is only 130' X 150', well short of SCE's standard 66/12 kV distribution substation parcel of 350' X 395', making it impossible to construct to SCE's standard design. Although it may be possible to add some transformation capacity within the existing Cummings Substation footprint, the load serving capacity would be significantly limited due to the inability to construct new circuit positions within the same footprint. Therefore, even if additional transformation capacity were to be added at Cummings Substation, the objective of constructing a project that is consistent with SCE's design standards would not be met and such an option should only be considered as temporary mitigation until a new substation that meets SCE's standards (e.g., the Proposed Project) could be constructed.

Substation Site Alternatives

G.O. 131-D requires that an Application for a Permit to Construct (PTC) include the “[r]easons 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.”

SCE has evaluated two site alternatives for the proposed Banducci Substation location: Site Alternative A and Site Alternative B. Site Alternative A includes the preferred location of the proposed Banducci Substation and is analyzed in Chapter 4, Environmental Impact Assessment, of this PEA. SCE also included in Chapter 4 a brief analysis of the Site Alternative B location and the No Project Alternative for each issue area. The two site alternatives and the No Project Alternative are described in this chapter, and a comparison of the impacts that would be associated with the alternative is provided in Table 5.2: Comparison of Alternatives.

Twenty-six additional sites for the 66/12 kV substation were analyzed using the methodology described in Section 5.2.1, Electronic System, Substation Site, and Subtransmission Line Route Evaluation Methodology. The 26 substation sites were all located within the Cummings Valley area in the unincorporated area of Kern County. Most of the sites were located adjacent to the existing Correction-Cummings-Kern River 1 66 kV Subtransmission Line along Banducci, Pelliser, and Highline Roads within the Proposed Project Study Area. These substation sites were eliminated due to SCE’s concerns of significant constraints. Of the 26 substation sites, one was eliminated due to the lack of proximity to subtransmission lines, 10 were eliminated due to physical issues constraining locations for potential distribution getaways, 6 were eliminated due to procedural concerns associated with property acquisitions, and 9 were eliminated after consideration of public input. Additional concerns, such as location of high-pressure gas lines, proximity to Williamson Act contracted land, drainage issues, and excessive street improvements, also played a role in the elimination of the 26 substation sites.

Of the various site alternatives considered, Site Alternatives A and B were compared for the Proposed Project.

Site Alternative A (Preferred Alternative)

Site Alternative A would be located on approximately 6.3 acres situated on the northwesterly portion of an 80-acre parcel. This privately owned parcel is located at the southeast corner of Pelliser Road and the unimproved Dale Road in unincorporated Kern County. The Kern County General Plan land use designation of Site Alternative A is Intensive Agriculture and the site is zoned Exclusive Agriculture. Both the Kern County General Plan and Zoning Ordinance allow for the development of a utility substation within these land use designations. Site Alternative A is surrounded by similar agricultural-type land use designations to the north, west, and east, and a Resource Reserve land use designation to the south. In addition, Site Alternative A is located east of the existing transmission right-of-way (ROW), which contains the existing Correction-Cummings-Kern River 1 66 kV Subtransmission Line. SCE would establish vehicular access to Site Alternative A from Pelliser Road. Site Alternative A is currently vacant and would not require the removal or demolition of any existing structures.

Site Alternative B

Site Alternative B would be located on approximately 5 to 8 acres situated on the southerly portion of a 20-acre parcel. This privately owned parcel is located on the northeast corner of Pelliser Road and the unimproved Highline Road in unincorporated Kern County. Currently, the Kern County General Plan land use designation for Site Alternative B is [Residential] 20 Minimum Gross Acres/Unit and the site is zoned Exclusive Agriculture. Site Alternative B is surrounded by residential and agricultural land use designations. In addition, Site Alternative B is located north of the existing transmission ROW, which contains the existing Correction-Cummings-Kern River 1 66 kV Subtransmission Line. SCE would establish vehicular access to Site Alternative B from Pelliser Road. Unlike Site Alternative A, Site Alternative B would require demolition of an existing residential structure, which is currently used as an office, as well as the appurtenant structures associated with its current use. The appurtenant facilities include an aboveground fuel tank, truck washing rack, and a computer networking room, all of which would require demolition and removal prior to construction of the Proposed Project.

Table 5.2: Comparison of Alternatives provides a summary comparison between the anticipated impacts associated with the Proposed Project and impacts associated with the Proposed Project alternatives for each CEQA issue area.

Table 5.2 Comparison of Alternatives

CEQA Resource Area	Alternatives	
	Site Alternative A (Preferred Alternative)	Site Alternative B
Aesthetics	Construction: Less Than Significant Operation: Less Than Significant	Construction: Less Than Significant Operation: Less Than Significant Comparative Impact: Greater
Agriculture and Forestry Resources	Construction: Less Than Significant Operation: Less than Significant	Construction: Less Than Significant Operation: Less Than Significant Comparative Impact: Less
Air Quality	Construction: Less Than Significant Operation: Less Than Significant	Construction: Less Than Significant Operation: Less Than Significant Comparative Impact: Greater
Biological Resources	Construction: Less Than Significant Operation: Less Than Significant	Construction: Less Than Significant Operation: Less Than Significant Comparative Impact: Similar
Cultural Resources	Construction: Less Than Significant Operation: Less Than Significant	Construction: Less Than Significant Operation: Less Than Significant Comparative Impact: Similar
Geology and Soils	Construction: Less Than Significant Operation: Less Than Significant	Construction: Less Than Significant Operation: Less Than Significant Comparative Impact: Similar
Greenhouse Gas Emissions	Construction: Less Than Significant Operation: Less Than Significant	Construction: Less Than Significant Operation: Less Than Significant Comparative Impact: Greater

CEQA Resource Area	Alternatives	
	Site Alternative A (Preferred Alternative)	Site Alternative B
Hazards and Hazardous Materials	Construction: Less Than Significant Operation: Less Than Significant	Construction: Less Than Significant Operation: Less Than Significant Comparative Impact: Greater
Hydrology and Water Quality	Construction: Less Than Significant Operation: Less Than Significant	Construction: Less Than Significant Operation: Less Than Significant Comparative Impact: Similar
Land Use and Planning	Construction: No Impact Operation: No Impact	Construction: No Impact Operation: No Impact Comparative Impact: Similar
Mineral Resources	Construction: No Impact Operation: No Impact	Construction: No Impact Operation: No Impact Comparative Impact: Similar
Noise	Construction: Less Than Significant Operation: Less Than Significant	Construction: Less Than Significant Operation: Less Than Significant Comparative Impact: Greater
Population and Housing	Construction: No Impact Operation: No Impact	Construction: No Impact Operation: No Impact Comparative Impact: Similar
Public Services	Construction: Less Than Significant Operation: Less Than Significant	Construction: Less Than Significant Operation: Less Than Significant Comparative Impact: Similar
Recreation	Construction: No Impact Operation: No Impact	Construction: No Impact Operation: No Impact Comparative Impact: Similar
Transportation and Traffic	Construction:	Construction:

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CEQA Resource Area	Alternatives	
	Site Alternative A (Preferred Alternative)	Site Alternative B
	Less Than Significant Operation: Less Than Significant	Less Than Significant Operation: Less Than Significant Comparative Impact: Similar
Utilities and Service Systems	Construction: Less Than Significant Operation: Less Than Significant	Construction: Less Than Significant Operation: Less Than Significant Comparative Impact: Similar

NOTES:

1. Impacts based upon the potential impact assessed for each CEQA issue area and alternatives.
2. Comparative Impacts - The anticipated degree to which the environmental impacts of Site Alternative B are compared to the Site Alternative A are described in this table as “greater, similar, or less” for each CEQA issue area. These are referred to as the “comparative impacts.”

Due to the proximity of the site alternative locations, only one subtransmission line route was necessary for consideration as part of the Proposed Project. As such, both Site Alternative A and

Site Alternative B would be connected to Subtransmission Line Route Alternative 1. Subtransmission Line Route Alternative 1 would consist of a 66 kV subtransmission line that would be looped into and out of the new 66/12 kV proposed Banducci Substation through the construction of two new 66 kV subtransmission line segments. This would create a new Banducci-Kern River 1 66 kV Subtransmission Line and a new Banducci-Correction-Cummings 66 kV Subtransmission Line.

5.2.3 Environmental Impacts of the Substation Site Alternatives

Site Alternative A and Site Alternative B would both meet the purpose and need discussed in Chapter 2, Proposed Project Purpose and Need, and each would be a feasible site location. Both alternatives would be expected to result in similar levels of impacts in all CEQA resource categories. However, there are differences in the extent of impacts that would be likely to result from construction and operation of the alternatives.

As shown in Table 5.2, while Site Alternative B would not be expected to result in potentially significant impacts, this alternative would have greater potential than Site Alternative A to result in impacts (despite the conversion of a small amount of Prime Farmland) for the following CEQA issue areas:

- **Aesthetics:** The aesthetic impacts from Site Alternative B would be expected to be greater than those associated with Site Alternative A. In making this determination, various factors were considered, including the fact that Site Alternative B would be located roughly 300 feet slightly northeast of the nearest sensitive receptor (a residence). In comparison, Site Alternative A would be located roughly 0.25 mile (more than 1,300 feet) north of the nearest sensitive receptor (residence). The aesthetic changes that would occur as a result of the construction and operation of the Proposed Project would be more apparent with Site Alternative B than with Site Alternative A.
- **Air Quality:** Site Alternative B would require the demolition of an existing structure, which would require an increased use of equipment and vehicles during construction and, therefore, more air quality emissions than with Site Alternative A. While this increase in emissions would be relatively greater for Site Alternative B than for Site Alternative A, neither alternative would be expected to exceed established air quality emissions thresholds.
- **Greenhouse Gas Emissions:** Construction and operation scenarios, including the equipment, personnel, vehicles, and anticipated activities, employed under Site Alternative B would be similar to those under Site Alternative A. However, Site Alternative B would require the demolition of an existing structure, which would require an increased use of equipment and vehicles during construction and, therefore, greater GHG emissions than with Site Alternative A. While the increase in GHG emissions would be relatively greater for Site Alternative B than Site Alternative A, neither alternative would be expected to exceed applicable GHG emissions thresholds.
- **Hazards and Hazardous Materials:** Potential impacts associated with Site Alternative B would be expected to be less than significant. However, Site Alternative B is listed on the Department of Toxic Substances Control (DTSC) HAZNET database and, therefore, impacts associated with this site alternative would be expected to be greater than impacts associated with Site Alternative A. Currently, Site Alternative B is listed on the DTSC HAZNET database as containing aged or surplus organics, which would be consistent with the current use of the site as a sod farm. (See Section 4.8, Hazards and Hazardous

Materials). Development of Site Alternative B would require consideration for the workers during construction to avoid exposure to potentially harmful chemicals or materials.

- **Noise:** The noise impacts from Site Alternative B would be expected to be greater than those associated with Site Alternative A. In making this determination, SCE considered various factors, including the fact that Site Alternative B would be located roughly 300 feet slightly northeast of the nearest sensitive receptor (a residence). By comparison, Site Alternative A would be located roughly 0.25 mile (more than 1,300 feet) north of the nearest sensitive receptor (a residence). Site Alternative B would be expected to result in higher construction and operational noise levels at the nearest sensitive receptor in comparison to Site Alternative A.

5.2.4 Conclusions Regarding the Substation Site Alternatives

Both of the substation site alternatives under evaluation meet all of SCE's engineering constructability and electrical needs criteria for a 66/12 kV substation. In addition, each site alternative contains General Plan land use and zoning designations that allow for the development of a utility substation.

Site Alternative A and Site Alternative B exhibit several similarities: both sites are located near the source 66 kV subtransmission line and would allow for the proposed Banducci Substation to be screened from Pelliser Road with landscaping. However, development of a utility substation at Site Alternative A would not require the removal of any known or appurtenant facilities or structures.

Overall, Site Alternative A would be expected to result in fewer impacts to the CEQA issue areas when compared to Site Alternative B. Site Alternative A would have fewer environmental impacts in several CEQA categories, such as Aesthetics, Air Quality, GHG Emissions, Hazards and Hazardous Materials, and Noise, whereas Site Alternative A would have greater impacts in only one CEQA category (Agriculture and Forestry Resources). In addition, Site Alternative A would meet the purpose and need for the Proposed Project.

5.3 Growth-Inducing Impacts

Section 15126.2(d) of the CEQA Guidelines states that environmental documents should “...discuss the ways in which the [P]roposed [P]roject could foster economic or population growth, or the construction of additional housing, either directly or indirectly in the surrounding environment...”

5.3.1 Significance Criteria

In this discussion, it must not be assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment. A project could be considered to have growth inducing effects if it:

- Either directly or indirectly fosters economic or population growth or the construction of additional housing in the surrounding area
- Removes obstacles to population growth
- Requires the construction of new community facilities that could cause significant environmental effects
- Encourages and facilitates other activities that could significantly affect the environment, either individually or cumulatively

5.3.2 Impact Analysis

Would the Proposed Project either directly or indirectly foster economic or population growth or the construction of additional housing in the surrounding area?

No Impact. As discussed in Chapter 2.0, Purpose and Need, of this PEA, the purpose of the Proposed Project is to serve an existing need for electricity in the Proposed Project Study Area. As discussed in Chapter 3.0, Project Description, the construction and operation of the Proposed Project would not substantially affect employment in the area. Construction would be performed by either SCE construction crews or contractors, and in general, construction workers would be drawn from the local labor pool. Operation of the Proposed Project would require occasional

electrical switching and routine maintenance; however, it would not require dedicated, full-time personnel.

The Proposed Project is not designed to facilitate growth in the community, either directly or indirectly. It would accommodate growth in the area that is planned or approved by local land use authorities, but it would not, by itself, induce growth.

As further discussed in Section 4.13, Population and Housing, of this PEA, the Proposed Project would not include components that would result in impacts to population, housing, employment, or other aspects that could either directly or indirectly foster economic or population growth or the construction of additional housing in the surrounding area.

Would the Proposed Project remove obstacles to population growth?

No Impact. The Proposed Project would not be expected to remove land use restrictions or other obstacles to population growth. The Proposed Project has been proposed in order to accommodate electrical needs and demands in the area, rather than as a stimulant for development in the area. Although the Proposed Project would increase the reliability with which electricity is made available, the objective of the Proposed Project is not to encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

Obstacles to population growth in the region served by the Proposed Project are primarily due to feasibility of development, economic constraints, permitting, and other development restrictions and regulations administered by local agencies. The Proposed Project would not affect the feasibility of developing in the area, remove an obstacle to growth, or affect development restrictions administered by local agencies.

Would the Proposed Project require the construction of new community facilities that could cause significant environmental effects?

No Impact. As discussed in Section 4.13, Population and Housing of this PEA, the Proposed Project would not include the construction of housing or include residential or community facilities components. However, the Proposed Project would involve the construction of new access roads for construction and ongoing maintenance. The new access roads would not extend

public services to an area not presently served by electricity. The Proposed Project is designed to respond to existing growth and demand trends.

Would the Proposed Project encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively?

No Impact. As discussed in Section 4.18 Cumulative Impacts of this PEA, the Proposed Project would not encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. The Proposed Project is the result of an electrical need and demand in the area rather than a precursor to development in the area. Although the Proposed Project would increase the reliability with which electricity is made available, the Proposed Project would not provide a new source of electricity that would encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

5.4 Suggested Applicant Proposed Measures to Address Greenhouse Gas Emissions

Although not separately identified as APMs, the following measures have been incorporated into the Proposed Project to address GHG emissions in accordance with the CPUC's PEA Checklist:

- Automated substation lighting would be installed. (See Chapter 3, Project Description)
- Material excavated for the Proposed Project would be used as fill or backfill where appropriate. (See Chapter 3, Project Description)
- Idling time of vehicles used at the site would be reduced. (See Section 4.7, Greenhouse Gas Emissions)
- Construction workers would carpool to the work site. (See Section 4.16, Transportation and Traffic)

5.5 Mandatory Findings of Significance

This section of the PEA provides an analysis of the mandatory findings of significance associated with construction and operation of the Proposed Project and its alternatives. In accordance with the State CEQA Guidelines Section 15064 (subdivisions a through h), this PEA

section provides substantial evidence to support the determination of whether the Proposed Project would result in significant environmental impacts.

5.5.1 Significance Criteria

Appendix G of the State CEQA Guidelines provides the criteria used in determining whether project-related impacts would be significant. Impacts resulting from the Proposed Project could be considered significant if they have the potential to create substantial impacts when the following questions are considered:

Would the Proposed Project:

- Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?
- Have impacts that are individually limited, but cumulatively considerable? (*Cumulatively considerable* means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?
- Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

5.5.2 Impact Analysis

Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The Proposed Project would not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the

number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

As discussed in Section 4.4, Biological Resources, although construction of the proposed Banducci Substation would be expected to remove up to 6.3 acres of agricultural land that contains foraging (but not nesting) habitat for several wildlife species, this amount of land would be considered relatively minor when compared to the availability of habitat in the region. In addition, approximately 6.5 acres of foraging habitat would be temporarily impacted by the proposed subtransmission facilities. Since the expected habitat loss is relatively minor compared to the more than 13,000 acres of potential habitat for these species in the region, and because no impacts to nesting habitat would be expected to occur, impacts to these species would be considered adverse but less than significant.

The Proposed Project would not entail components that would otherwise degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal.

As described in Section 4.5, Cultural Resources, potential impacts to cultural resources (including important examples of the major periods of California history or prehistory) would be avoided during construction and operation activities associated with the Proposed Project. The Proposed Project would not be expected to eliminate important examples of the major periods of California history or prehistory. The Proposed Project would be expected to result in less than significant impacts related to these criteria.

Does the project have impacts that are individually limited, but cumulatively considerable? (*Cumulatively considerable* means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

As discussed in Section 4.18, Cumulative Impact Assessment, the Proposed Project would not be expected to increase or create incremental impacts that would contribute to cumulatively considerable impacts.

Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

As discussed in Chapter 2 of this PEA, SCE has specifically designed the Proposed Project to respond to the growth and anticipated electrical demand of the area that is currently served by Cummings Substation. The Proposed Project would result in benefits that would directly increase the service capacity and efficiency of the public service for the existing and anticipated consumers in the vicinity. The Proposed Project is designed to support an existing infrastructure and the existing electrical systems in and around the Proposed Project site.

Indirectly, the Proposed Project would reduce the electrical load demands on the existing systems, which would in turn increase the safety and reliability of the systems through the anticipated growth phase and during unanticipated natural or man-made events. The Proposed Project would not be expected to substantially alter the physical environment or to result in impacts that would cause substantial adverse effects on human beings, either directly or indirectly (see Section 4.19, Growth-Inducing Impacts).