

E. Comparison of Alternatives

This section summarizes and compares the environmental advantages and disadvantages of the Proposed Project and the alternatives evaluated in this EIR. This comparison is based on the assessment of environmental impacts of the Proposed Project and each alternative, as identified in Sections D.2 through D.13, and has been updated to reflect the revised noise analysis provided in Section D.9 of this recirculated EIR. Section C of the December 2007 Draft EIR (Alternatives) introduces and describes the alternatives considered in the EIR, and Appendix 1 of the December 2007 Draft EIR includes the Alternatives Screening Report, which documents all alternatives considered in the initial screening process.

Section E.1 describes the methodology used for comparing alternatives. Section E.2 defines the environmentally superior alternative, based on comparison of each alternative with the Proposed Project as required by CEQA. Section E.3 presents a comparison of the No Project Alternative with the alternative that is determined in Section E.2 to be environmentally superior.

E.1 COMPARISON METHODOLOGY

CEQA does not provide specific direction regarding the methodology of alternatives comparison. Each project must be evaluated for the issues and impacts that are most important; this will vary depending on the project type and the environmental setting. Issue areas that are generally given more weight in comparing alternatives are those with long-term impacts (e.g., visual impacts and permanent loss of habitat or loss of use of recreational facilities). Impacts associated with construction (i.e., temporary or short-term) or those that are easily mitigable to less-than-significant levels are considered to be relatively less important, although are still considered.

This comparison is designed to satisfy the requirements of CEQA Guidelines §15126.6(d), Evaluation of Alternatives, which states that:

The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.

If the environmentally superior alternative is the No Project Alternative, CEQA requires identification of an environmentally superior alternative among the other alternatives (CEQA Guidelines §15126.6[e][2]).

The following methodology was used to compare alternatives in this EIR:

- **Step 1: Identification of Alternatives.** The alternatives screening process (described in the original Draft EIR Section C and in detail in Appendix 1) was used to identify a number of alternatives to the Proposed Project. That screening process identified alternatives ranging from alternative subtransmission line routes and substation site locations, to system upgrade alternatives. The No Project Alternative was also identified. No other feasible alternatives meeting most of the project objectives were identified that would lessen or alleviate the significant impacts of the Proposed Project.
- **Step 2: Determination of Environmental Impacts.** The environmental impacts of the Proposed Project and alternatives have been identified in Sections D.2 through D.13 of the December 2007 Draft EIR, and updated to reflect the revised noise analysis provided in Section D.9 of this recirculated EIR, including the potential impacts of subtransmission line and substation construction and operation. Table E-1 summarizes the significant and unmitigable (Class I) impacts that could occur with the Proposed Project and alternatives.

- **Step 3: Comparison of Proposed Project with Alternatives.** The environmental impacts of the Proposed Project were compared to those of each alternative to determine the environmentally superior alternative. The environmentally superior alternative was then compared to the No Project Alternative.

The comparison of alternatives does not consider the beneficial impacts of any alternative above and beyond its ability to reduce or avoid significant effects of the Proposed Project. This is consistent with constitutional requirement that there be “rough proportionality” between the impacts of the project and the measures identified to reduce or avoid those impacts (*Dolan v. City of Tigard* (1994) 512 U.S. 374) and the constitutional requirement that there be an essential nexus (i.e., connection) between a legitimate governmental interest and the measures identified to further that interest (*Nollan v. California Coastal Commission* [1987] 483 U.S. 825). These requirements are also set forth in CEQA Guidelines §15126.4(a)(4).

Therefore, the environmental superiority of alternatives is based on a comparison of significant impacts that would result from the Proposed Project and the alternatives identified in the EIR; in keeping with the constitutional requirements discussed above, it does not consider whether the Proposed Project or an alternative would improve existing environmental conditions. The language in Table E-2, below, has been revised since the December 2007 Draft EIR to reflect these principles. This has resulted in changes to the preferences assigned to land use and visual impacts. The preference assigned to noise impacts has also been changed based on the updated impact analysis in Section D.9 of this recirculated EIR, which resulted from the new baseline noise information provided by SCE subsequent to the publication of the Final EIR.

Although this comparison focuses on the most important issues (e.g., air quality, land use, visual resources, biological resources, and recreation), determining an environmentally superior alternative is difficult because of the many factors that must be balanced. In order to identify the environmentally superior alternative, the most important impacts in each issue area were identified and compared (see detailed comparison tables in Section E.2). Although this EIR identifies an environmentally superior alternative, it is possible that the ultimate decision makers could balance the importance of each impact area differently and reach a different conclusion. The following comparison highlights situations where an alternative would create impacts in an issue area as an unintended consequence of avoiding impacts to another area.

With respect to electric and magnetic fields (“EMF”), it should be noted that although EMF would be reduced by the Partial Underground Alternative, EMF are not considered in the context of CEQA because there is no agreement among scientists that EMF creates a potential health risk and because there are no defined or adopted CEQA standards for defining health risk from EMF. Accordingly, EMF is not a factor in the comparison of environmental impacts for alternatives. The CPUC recognizes that there is a great deal of public interest and concern regarding potential health effects from EMF exposure from power lines. Therefore, the December 2007 Draft EIR provides information regarding EMF associated with electric utility facilities and the potential effects of the Proposed Project related to public health and safety. As the Draft EIR explains, potential health effects from exposure to electric fields from power lines is typically not of concern since electric fields are effectively shielded by materials such as trees, walls, etc. Therefore, the information in the Draft EIR related to EMF focuses primarily on exposure to magnetic fields from power lines. Disclosure of such information is consistent with the EIR’s role as “an informational document” (Pub. Res. Code §21061). For more information on EMF, please refer to Section D.7 and Appendix 5 in the December 2007 Draft EIR.

E.2 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The comparison begins with a summary of the significant impacts that cannot be mitigated. Highlighting these areas of significant impacts identifies which alternatives would be capable of eliminating significant adverse environmental effects of the Proposed Project. This simplifies identification of the environmentally superior alternatives while considering all issue areas equally. Table E-1 shows a summary of significant unmitigable (Class I) impacts by alternative.

Table E-1. Summary of Significant Unmitigable (Class I) Impacts

Alternative	Significant Impacts (Class I)
Proposed Project	AQ-1: construction emissions would exceed regional significance criteria AQ-2: construction emissions would exceed localized significance criteria AQ-3: emissions contribute to climate change
Class I Impacts Eliminated or Created by Alternatives	
CPUC's Northerly Route Alternative Option 3	AQ-1: construction emissions would exceed regional significance criteria AQ-2: construction emissions would exceed localized significance criteria AQ-3: emissions contribute to climate change CR-4: pole replacement has the potential to indirectly affect historical resources V-13: increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 11 on westbound Summit Drive * Pole replacement would cumulatively impact historical resources
Partial Underground Alternative	AQ-1: construction emissions would exceed regional significance criteria AQ-2: construction emissions would exceed localized significance criteria AQ-3: emissions contribute to climate change LU-2: construction would temporarily disturb the land uses it traverses or adjacent land uses LU-8: construction or operation would disrupt recreational activities such that recreational values would be reduced

* **Note:** For purposes of comparing the impacts of the alternatives to the Proposed Project, only the differences in significant unavoidable (Class I) cumulative impacts are identified in the table, because all cumulative impacts of the Proposed Project and Alternatives are the same level of significance except for one impact. Refer to Draft EIR (December 2007) Section F (Other Considerations) and Section D.9 (Noise) of this recirculated Draft EIR for the complete analysis of cumulative impacts.

The following is a discussion of the advantages and disadvantages of each alternative in more detail, and a determination of whether the Proposed Project or an alternative is considered to be environmentally superior within each area. The preferred alternative is identified for each issue area. In each of the following tables, an alternative shown as “preferred” may still have environmental effects, but when compared with the other alternatives, the environmental effects would be minimized with the preferred alternative.

E.2.1 Subtransmission Line Route Alternatives

The Proposed Project was designed to follow an established utility corridor. Being in the established corridor and using the proposed overhead subtransmission line design to replace the existing 115 kV subtransmission line would minimize the duration and intensity of construction-related impacts. Two alternatives to the Proposed Project are available, mainly to minimize the effects of the proposed subtransmission line on sensitive receptors (in particular residences located between the Maraschino and Banning Substations) adjacent to the Proposed Project route: CPUC’s Northerly Route Alternative Option 3 and the Partial Underground Alternative.

CPUC’s Northerly Route Alternative Option 3 and the Partial Underground Alternative would both generally require more work to install and/or construct the required electrical system facilities in comparison to the Proposed Project because of the following reasons:

- The CPUC's Northerly Route Alternative requires construction of a longer subtransmission line route, which means that although impacts are similar to the Proposed Project, those impacts would occur over a larger geographic area; and
- The Partial Underground Alternative would result in greater ground-disturbing activities in the underground portions of the route and a longer construction schedule, both of which mean that construction-related impacts would be more intense for a longer duration of time.

Because of the trenching and ground disturbance required for underground construction, the Partial Underground Alternative would increase impacts to cultural resources, water quality, air quality, noise, recreation, and traffic during short-term construction activities along the underground portion. The remainder of the route would have impacts identical to the Proposed Project in the same locations.

E.2.1.1 Proposed Project vs. CPUC's Northerly Route Alternative Option 3

The CPUC's Northerly Route Alternative Option 3 would impact a larger number of residential structures when compared to the Proposed Project; approximately 303 residential structures with Route Alternative Option 3 when compared to the approximately 237 residential structures with the Proposed Project. Therefore, the level of severity of impacts associated with Route Alternative Option 3 would be greater than the Proposed Project.

Short-Term and Temporary Construction-Related Impacts

The Proposed Project construction would result in significant unavoidable air quality impacts. During construction of Route Alternative Option 3, an increase in air quality emissions would occur over those generated during Proposed Project construction due to an increase in the overall amount of construction activities and associated longer schedule required to build the longer subtransmission line route. Therefore, no reduction in construction-related air quality impacts would occur with implementation of Route Alternative Option 3.

Long-Term Operation-Related Impacts

One portion of the Route Alternative Option 3 subtransmission line is located on the south side of Summit Drive in the City of Banning and passes through a potential historic district. Currently, this ROW contains a City of Banning distribution line on wood poles. The City of Banning street light poles are tapered metal poles capped with ball finials located on the existing distribution line poles. Replacement of the current wood poles with taller steel poles would have a visual impact on a neighborhood that is potentially eligible for the California Register of Historic Resources (CRHR) as a historic district due to the removal of the existing street lights. The siting of new steel poles for the 115 kV subtransmission line associated with this alternative would result in a significant unavoidable impact resulting from the removal of, or damage to, elements (i.e., street lights and existing mature trees) that could contribute to the integrity of a potential historic district. In comparison, the Proposed Project would not result in any unmitigable impacts to historic resources.

In addition, for the portion of the alternative located between the point at which the route would exit SCE's existing Devers-Vista 220 kV ROW to the Banning Substation, SCE would need to co-locate the subtransmission line with some of the City of Banning's existing distribution lines. In this portion of the route, SCE would need to take out the City's existing wooden distribution poles, and underbuild the City distribution lines onto the 115 kV subtransmission steel poles. SCE may need to obtain additional easement rights (or franchise rights) within this area. In comparison, since the Proposed Project subtransmission line route would occur in existing SCE ROWs, new easements (or franchise rights) would not be required.

Along the Route Alternative Option 3 proposed 115 kV subtransmission line, the existing view to the west from Summit Drive, just east of North Alessandro Street in the City of Banning, would be impacted significantly. The replacement of the existing wood pole distribution line with a tubular steel pole

subtransmission line (and the associated distribution underbuild) would be taller, and would have a more industrial metallic gray appearance compared to the more natural, rough-hewn wood poles that would be replaced. The new structures and additional conductors would also result in a slight net increase in view blockage of background hills and sky. The increase in industrial character that would occur is considered significant to residential views of the subtransmission line where a wood pole distribution line would be replaced by a tubular steel pole with a distribution underbuild.

E.2.1.2 Proposed Project vs. Partial Underground Alternative

The Partial Underground Alternative would impact the identical number of residential structures when compared to the Proposed Project (i.e., approximately 237), because it traverses the same exact route as the Proposed Project.

Although the Partial Underground Alternative was developed predominantly in response to the concerns of the citizens of the Sun Lakes community expressed during the public scoping period for the EIR, the EIR preparers did consider potentially undergrounding a longer portion of the 115 kV subtransmission line between the Maraschino and Banning Substations to reduce impacts on the communities adjacent to SCE's existing 115 kV ROW. The majority of the route for the Proposed Project and the Partial Underground Alternative (which is an identical route) traverses adjacent to open space areas.

It should be noted that the most developed portions of the route include the residential developments located immediately to the west of Highland Springs Avenue in the City of Beaumont (the Four Seasons Development), and to the east of Highland Springs Avenue (the Sun Lakes community). The characteristics of the existing 115 kV subtransmission line ROW adjacent to the Four Seasons Development differ greatly from the Sun Lakes Development. For example, cinder block walls separate the Four Seasons' residential development from the ROW, and the residential structures are sited such that the back of the houses are adjacent to the ROW. In addition, the ROW immediately west of Highland Springs Avenue is dedicated to the 115 kV subtransmission line, whereas through the Sun Lakes community, the ROW traverses a recreational use (the Sun Lakes Country Club golf course). As such, the Four Seasons Development would not experience long-term effects of the Proposed Project to the same degree as the Sun Lakes community. In addition, immediately west of Highland Springs Avenue (adjacent to the Four Seasons Development), there are no recreational resources traversed by the ROW. With respect to visual resources, the cinder block wall would block views of the 115 kV subtransmission line. For these reasons, undergrounding the route west of Highland Springs Avenue was not studied in detail, because no significant benefits would be realized.

In addition, the EIR preparers considered the potential of undergrounding the route immediately to the east of the Sun Lakes community. This area is mainly undeveloped open space. As such there are no sensitive receptors or residential land uses along this portion of the ROW. Therefore, undergrounding in this area was not given detailed consideration. In addition, undergrounding the 115 kV subtransmission line east of the Sun Lakes community would significantly impact biological resources. Occupied Los Angeles pocket mouse habitat occurs in the ephemeral Smith Creek drainage just east of the Sun Lakes community (see Draft EIR Figure D.4-2d). A second area of occupied habitat occurs in the Montgomery Creek watershed near the eastern end of the route, and potential habitat for this species occurs in an unnamed drainage half-way between these occupied habitat locations. In addition, an historical record of western spadefoot toads occurs along this route east of the Sun Lakes community (see Draft EIR Figures D.4-2d and D.4-2e). Riversidean alluvial fan sage scrub, considered a sensitive vegetation community type by several agencies including California Department of Fish and Game (CDFG) and California Native Plant Societies (CNPS), is located in several areas along this route (see Draft EIR Figures D.4-1d and D.4-1e). Trenching and associated construction activities for undergrounding along the route east of the Sun Lakes community would significantly, and in some cases irreparably, impact these sensitive biological resources. For these reasons, undergrounding to the east of the Sun Lakes community was not studied in detail.

Short-Term and Temporary Construction-Related Impacts

During construction of the Partial Underground Alternative, an increase in the amount of air quality emissions would occur due to an increase in overall construction activities and intensity required. In addition, due to the longer schedule required for construction of the underground portion (10 months versus 2 months to construct the overhead subtransmission line in the same one-mile area), the duration of exposure to air quality impacts would also be longer with this alternative than that experienced with the Proposed Project. Therefore, no reduction in construction-related air quality impacts would occur as compared to the Proposed Project, and construction-related air quality impacts would actually be greater due to the ground-disturbing activities associated with underground construction.

Construction of the underground segment of the 115 kV subtransmission line replacements would cross Sun Lakes Country Club golf course, requiring extensive excavation and construction and disrupting use of the golf course for up to 10 months. While the Partial Underground Alternative would ultimately remove the existing wooden 115 kV subtransmission poles and lines from the Sun Lakes Country Club golf course, the disruption of the golf course for 10 months is considered a significant and unavoidable land use impact on the recreational resource, which is an impact specific to the Partial Underground Alternative.

Long-Term Operation-Related Impacts

As significant (Class I) long-term operation-related impacts would be the same for the Proposed Project and the Partial Underground Alternative, no further comparison is provided here.

E.2.2 Environmentally Superior Alternative

Table E-1 shows that out of the three options for implementation of the Proposed El Casco System Project, the Proposed Project (as described in detail in Section B of the December 2007 Draft EIR) would result in the least number of significant, unmitigable (Class I) environmental impacts. It should be noted that the only significant and unmitigable impacts of the Proposed Project (air quality impacts) are identical and shared among all three options. As shown in Table E-2, below, out of the 11 environmental resource areas analyzed in detail, the Proposed Project and the Partial Underground Alternative result in identical long-term impacts. Route Alternative Option 3 would result in new long-term cultural resource and visual impacts as compared to either the Proposed Project or Partial Underground Alternative and is not preferred.

Table E-2. Proposed Project vs. CPUC’s Northerly Route Alternative Option 3 and Partial Underground Alternative

Issue Area	Proposed Project	Route Alternative Option 3	Partial Underground Alternative
Air Quality	Preferred. Construction would result in the lowest construction emissions. Operation and maintenance would result in less than significant long-term emissions.	Construction would result in higher NOx and PM10 construction emissions when compared to the Proposed Project. Operation and maintenance would result in similar less than significant long-term emissions in comparison to the Proposed Project.	Construction would result in the highest NOx and PM10 emissions and highest localized impacts to sensitive receptors due to the large amount of grading and extended construction period in the Sun Lakes community. Operation and maintenance would result in similar less than significant long-term emissions in comparison to the Proposed Project.
Land Use	Preferred. Would traverse adjacent to (approximately 237 residential structures) in existing 115 kV subtransmission line ROW resulting in less than significant long term land use impacts.	Would traverse a large amount of residential development (approximately 303 residential structures) within the City of Banning. Operation and maintenance would affect a greater number of residences when compared to the Proposed Project., however all long-term impacts are less than significant	Similar to the Proposed Project, would traverse adjacent to approximately 237 residential structures in existing 115 kV subtransmission line ROW. For the 10-month construction period, land uses would be precluded resulting in a significant and unavoidable land use impact. Although, long-term use of the golf course in Sun Lakes would be

Table E-2. Proposed Project vs. CPUC’s Northerly Route Alternative Option 3 and Partial Underground Alternative

Issue Area	Proposed Project	Route Alternative Option 3	Partial Underground Alternative
Biological Resources	Preferred. Construction would result in the least amount of ground disturbance. Operation and maintenance would result in similar less than significant long-term biological resource impacts.	Reroute of 115 kV subtransmission line would increase total ground disturbance and cross a broad riparian area north of San Timoteo Creek during construction. Operation and maintenance would result in similar less than significant long-term biological resource impacts.	improved when compared to existing conditions, these existing conditions are not considered an impact of the Proposed Project. Extended duration of construction at underground segment would increase wildlife disruption. Operation and maintenance would result in similar less than significant long-term biological resource impacts.
Cultural Resources	Preferred. Construction would have the least potential to impact undiscovered cultural resources. Operation and maintenance would result in no long-term cultural resource impacts.	Not Preferred. Similar construction impacts to cultural resources as the Proposed Project. Operation would result in significant long-term impacts to a potential historic district along Summit Drive in the City of Banning	Increased amount of required grading during construction would result in the highest possibility of encountering undiscovered buried resources. Similar to the Proposed Project, operation and maintenance would result in no long-term cultural resource impacts.
Geology and Soils	Preferred. Construction would result in the least amount of ground disturbance during construction. Operation and maintenance would result in less than significant long-term geology and soils impacts.	Would increase the total number of subtransmission line poles required and amount of ground disturbed during construction. Operation and maintenance would result in similar less than significant long-term geology and soils impacts when compared to the Proposed Project.	Extensive trenching required would increase amount of soil disturbed and risk of erosion during construction. Operation and maintenance would result in similar less than significant long-term geology and soils impacts when compared to the Proposed Project.
Hazards and Hazardous Materials ¹	Preferred. Has fewest identified contaminated sites near construction zones. Operation and maintenance would result in less than significant long-term hazards and hazardous materials impacts.	Has the most identified contaminated sites near construction zones. Operation and maintenance would result in similar less than significant long-term hazards and hazardous materials impacts when compared to the Proposed Project.	Required trenching would increase construction activities and risk of hazardous materials used during construction. Operation and maintenance would result in similar less than significant long-term hazards and hazardous materials impacts when compared to the Proposed Project.
Hydrology and Water Quality	Preferred. Construction would result in the least amount of ground disturbance and potential surface water quality impacts. Operation and maintenance would result in less than significant long-term hydrology and water quality impacts.	Would increase the total amount of ground disturbed thus increasing the risk to surface water quality during construction. Operation and maintenance would result in similar less than significant long-term hydrology and water quality impacts when compared to the Proposed Project.	Extensive trenching required would increase the possibility of impacts to groundwater during construction. Operation and maintenance would result in similar less than significant long-term hydrology and water quality impacts when compared to the Proposed Project.
Noise	Preferred. Construction would result in the least amount of sensitive receptors impacted and would occur over the	Construction would result in the most amount of sensitive receptors impacted. Operation would result in similar less than significant corona noise impacts when compared to the	Construction would result in the same number of sensitive receptors subject to noise as the Proposed Project but would result in the most construction intensity and longest duration of

¹ EMF impacts are not considered in this analysis as EMF is not considered a CEQA issue.

Table E-2. Proposed Project vs. CPUC’s Northerly Route Alternative Option 3 and Partial Underground Alternative

Issue Area	Proposed Project	Route Alternative Option 3	Partial Underground Alternative
	shortest duration. Operation would result in less than significant long-term corona noise impacts.	Proposed Project.	construction to receptors impacted. Operation would result in similar less than significant corona noise impacts when compared to the Proposed Project.
Public Services and Utilities	Preferred. Construction would result in the least amount of generated solid waste and shortest construction schedule. Operation and maintenance would result in less than significant long-term public services and utilities impacts.	Construction would require the removal of more poles during construction, thus increasing solid waste. Operation and maintenance would result in similar less than significant long-term public services and utilities impacts when compared to the Proposed Project.	Construction would result in an increase in soil spoils due to underground construction. Trenching would require an increase in water use for dust suppression. Operation and maintenance would result in similar less than significant long-term public services and utilities impacts when compared to the Proposed Project.
Transportation and Traffic	Preferred. Construction would travel through the least amount of residential development. Operation and maintenance would result in less than significant long-term transportation and traffic impacts.	Construction activities within City of Banning residential neighborhoods would likely result in more traffic delays. Operation and maintenance would result in similar less than significant long-term transportation and traffic impacts when compared to the Proposed Project.	Extended construction duration within the Sun Lakes community would increase roadway delays. However, operation and maintenance would result in similar less than significant long-term transportation and traffic impacts when compared to the Proposed Project.
Visual Resources	Preferred. Construction would result in the least amount of residences impacted. Operation would require mitigation to decrease long-term visual impacts.	Not Preferred. Construction would result in the highest amount of residences impacted. Operation would result in a significant unavoidable visual impact to views from Summit Drive.	Construction would result in the identical number of residences impacted as the Proposed Project. While, the underground segment of subtransmission line would eliminate existing above-ground visible 115 kV subtransmission line wood poles in the Sun Lakes Community, existing conditions are not considered an impact of the Proposed Project.

Note: Impacts associated with construction (i.e., temporary or short-term) or those that are easily mitigable to less- than- significant levels are considered to be less important than the long-term effects when comparing project alternatives.

Conclusion

The Route Alternative Option 3 would result in the greatest significant long-term impacts and is not, therefore, considered environmentally superior to either the Proposed Project or the Partial Underground Alternative. The Proposed Project and the Partial Underground Alternative would result in identical long-term environmental impacts. Although the Partial Underground Alternative would improve existing conditions by removing the existing 115 kV subtransmission line wood poles along a one mile portion of the route through the Sun Lakes Community, the improvement in existing conditions is not considered in the determination of the environmentally superior alternative for the reasons explained above in Section E.1. Because the long-term environmental impacts of the Proposed Project and the Partial Underground Alternative are so similar, the determination of the environmentally superior alternative must also consider short-term construction impacts. The Partial Underground Alternative would result in greater short-term construction impacts in all resource areas analyzed in the EIR over a longer period of time due to the intense construction activities that would occur during the 10 month construction period required to construct this alternative. In addition, short-term construction impacts for the Partial Underground Alternative would be significant and unavoidable with respect to land use.

Based on this comparison, the Proposed Project is determined to be the Environmentally Superior Alternative.

E.3 NO PROJECT ALTERNATIVE VS. THE ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Summary of No Project Alternative and Its Impacts. The No Project Alternative is described in Section C.6 of the original Draft EIR published in December 2007, and would include the following:

- Temporary operating procedures within the Devers and Vista Systems, including contracting local generation, temporarily transferring Vista and Devers Systems Substations to adjacent 115 kV systems, and/or implementing rolling blackouts.
- Overload of existing capacities would occur at five distribution substations that are currently served by the Vista and Devers 115 kV Systems (Crafton Hills, Maraschino, Mentone, Zanja, and Banning Substations).
- Without upgrades to the existing system, as new facilities are added, the system would experience system-wide power flow and reliability problems due to overloading of the existing system, such as curtailed generation, thermal overload, and blackouts.
- The existing single-circuit 115 kV line between Maraschino and Banning Substations would have to carry load at all times and would not be available for emergency overload events, thereby compromising the reliability of the system.
- To accommodate the load growth in the Maraschino Substation service area, SCE has built increasingly longer 12 kV distribution lines at Maraschino Substation, which significantly exceed the maximum preferred distribution line length of approximately four miles. As distribution lines increase in length and the load on those lines continues to grow, the voltage to the end of the line decreases and exposure to outages increases, resulting in reduced reliability to the customers served by those lines.
- Switchrack rebuilds at Banning and Zanja Substations would need to be completed.
- SCE would be required to implement demand-side management (DSM) programs to reduce customer energy consumption and overall electricity use.
- SCE would ultimately be required to either upgrade existing subtransmission infrastructure, or build new subtransmission facilities along a different and unspecified alignment at some point in the immediate future.

Without upgrades to the existing system, to address the overload conditions in the Maraschino Substation service area, SCE would add a third 28 MVA transformer and two 12 kV distribution lines (each approximately 9 miles in length) at Maraschino Substation in 2007. In addition, switchrack rebuilds at Banning and Zanja Substations would need to be completed. These activities would generate short-term temporary construction impacts similar to that of the Proposed Project. Long-term operational impacts include visual impacts from the required new 12 kV distribution lines.

Conclusion: Comparison of Environmentally Superior Alternative with No Project Alternative. The Environmentally Superior Alternative would be located in an existing SCE 115 kV subtransmission line ROW, and would replace an existing single-circuit 115 kV subtransmission line on wood poles with a double-circuit 115 kV subtransmission line on steel poles. Because the main components of the subtransmission line development would occur in existing ROWs, the Environmentally Superior Alternative would have minimal long-term impacts on residences or other sensitive land uses. The Environmentally Superior Alternative would also include development of a new substation, and upgrades to existing substations (within substation boundaries) and associated telecommunications facilities (i.e., fiber optic line in existing underground conduits and on existing SCE subtransmission poles, and upgrades to the Mill Creek Communications Site).

Without upgrades to the existing system, to address the overload conditions in the Maraschino Substation service area, SCE would add a third 28 MVA transformer and two 12 kV distribution lines (each

approximately 9 miles in length) at Maraschino Substation. In addition, switchrack rebuilds at Banning and Zanja Substations would need to be completed. These activities would generate short-term temporary construction impacts similar to those of the Proposed Project (Environmentally Superior Alternative) including significant unavoidable air quality emissions, short-term noise generation, temporary traffic delays and lane closures, impacts to biological resources, and potential cultural resource impacts. Furthermore, because the location of the required new 12 kV distribution lines is unknown under the No Project Alternative scenario, it is assumed that this required improvement to SCE's existing system would result in similar operational visual impacts and land use impacts as the Proposed Project. Therefore, APMs and mitigation similar to those recommended within this EIR to reduce impacts associated with the Proposed Project would need to be implemented by SCE for system upgrades required under the No Project Alternative scenario to reduce environmental impacts.

Electrical infrastructure improvements required for the No Project alternative would likely result in similar environmental impacts as those described in Draft EIR Section D (Environmental Analysis) and Section D.9 (Noise) within this recirculated EIR for the Environmentally Superior Alternative (Proposed El Casco System Project), but these impacts would likely occur in different locations within the project area. Because of the eventual system upgrades needed in the project area, it is unlikely that the No Project Alternative would provide any clear advantage over the Environmentally Superior Alternative in the long-term.

Summary of the Environmentally Superior Alternative and Its Impacts. The Environmentally Superior Alternative as identified in Section E.2.3 would be the Proposed Project. Impacts of the Environmentally Superior Alternative are defined in each issue area's impact analysis as presented in Draft EIR Section D (Environmental Analysis) and Section D.9 (Noise) within this recirculated EIR. As described above in Table E-1, the Proposed Project would result in significant unavoidable construction related air quality and climate based air quality impacts. As described in Draft EIR (December 2007) Sections D.2 through D.8 and D.10 through D.12 and the updated noise analysis in Section D.9 (Noise) of this recirculated EIR, all other impacts associated with construction and operation of the Proposed Project would be less than significant or are mitigable to a less than significant level.