

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. Section C (Alternatives) introduces and describes the alternatives considered in this EIR, and Appendix 1 includes the Alternatives Screening Report, which documents all alternatives considered in the 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 less important.

This comparison is designed to satisfy the requirements of CEQA Guidelines Section 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 Section 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 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, 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.

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.

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 N-3: noise from operation of the overhead subtransmission line would increase ambient levels
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 N-3: noise from operation of the overhead subtransmission line would increase ambient levels 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 N-3: noise from operation of the overhead subtransmission line would increase ambient levels LU-2: construction would temporarily disturb the land uses it traverses or adjacent land uses (short-term effect) LU-8: construction or operation would disrupt recreational activities such that recreational values would be reduced (short-term effect)

* **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 Section F (Other Considerations) for the complete analysis of cumulative impacts and all identified significant unavoidable (Class I) 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 the majority of 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 during construction 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. However, the Partial Underground Alternative would substantially reduce long-term land use conflicts (e.g., noise), and impacts to visual and recreational resources in the portion where the route would be undergrounded. These reductions in land use conflicts and visual impacts would apply to the approximate one-mile portion of the route that would be undergrounded. The remainder of the route would have impacts identical to the Proposed Project in the same locations. Note that while EMF is not considered in the comparison, because it is not a CEQA issue, EMF impacts would be least with implementation of the Partial Underground Alternative.

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. Once operational, a permanent new source of corona noise would increase ambient noise within areas containing sensitive residential receptors. During construction of Route Alternative Option 3, an increase in air quality emissions would occur due to an increase in overall 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 when compared to the Proposed Project. Several segments of the proposed 115 kV subtransmission line reroute associated with Route Alternative Option 3 would be impacted by operational corona noise. Sensitive receptors along the new El Casco to Banning subtransmission line Segment 2, the existing Banning to Maraschino subtransmission line, and the existing Banning to Maraschino subtransmission line segments of Route Alternative Option 3 would be exposed to an increase in corona noise over existing conditions resulting in significant unavoidable impacts of the 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. However, because a one-mile portion of the 115 kV route would be undergrounded, the long-term effects of implementing the Partial Underground Alternative would be less when compared to the Proposed Project.

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 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 be more intense due to the ground-disturbing activities associated with underground construction. These impacts are short-term for the duration of construction activities.

Long-Term Operation-Related Impacts

However, the placement of a portion of the 115 kV subtransmission line underground through the Sun Lakes community would eliminate visual impacts along this segment from adjacent viewpoints. In addition, the long-term use of the Sun Lakes Country Club golf course would be improved, because the existing 115 kV subtransmission line wood poles would be removed with implementation of the Partial Underground Alternative. Another environmental benefit along the underground segment would be the elimination of corona noise generated by subtransmission line operation, and the associated impacts to sensitive residential receptors located adjacent to the underground segment. Implementation of the Partial Underground Alternative would reduce the total number of receptors exposed to corona noise when compared to the Proposed Project, because an approximate one-mile portion of the subtransmission line route would be underground.

E.2.2 Environmentally Superior Alternative

Table E-1 shows that the significant and unmitigable long-term impacts of the Proposed Project are identical and shared amongst all three options, with the CPUC's Northerly Route Alternative Option 3 resulting in two additional significant long-term historic, visual, and cumulative impacts.

As shown in Table E-2, out of the 11 environmental resource areas analyzed in detail, the Partial Underground Alternative is the preferred alternative in three issue areas. With respect to the remaining eight issue areas, there are no significant preferences. Out of the three options for project implementation, the Partial Underground Alternative would have the least long-term impacts, and the majority of short-term impacts can be mitigated to less-than-significant levels.

The Partial Underground Alternative is preferred over the Proposed Project in three issue areas (land use, noise, and visual) along the approximate one-mile portion of the route through the Sun Lakes community. Any benefits along the one-mile underground portion would only be experienced in the long-term once the project is implemented.

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	No Preference. Construction would result in the lowest construction emissions. Operation and maintenance would result in less than significant long-term emissions.	No Preference. 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.	No Preference. 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	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 have significant long-term impacts on a greater number of residences when compared to the Proposed Project.	Preferred. Similar to the Proposed Project, would traverse adjacent to (approximately 237 residential structures) in existing 115 kV subtransmission line ROW. For duration of 10-month construction activities, land uses would be precluded. However, when compared to the Proposed Project, long-term use of the golf course in Sun Lakes would be improved.
Biological Resources	No Preference. 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.	No Preference. 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.	No Preference. 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.	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	No Preference. 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.	No Preference. 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.	No Preference. 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	No Preference. Has fewest identified contaminated sites near construction zones. Operation and maintenance would result in less than significant long-term hazards and hazardous materials impacts.	No Preference. 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.	No Preference. 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.

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
Hydrology and Water Quality	No Preference. 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.	No Preference. 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.	No Preference. 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	Construction would result in the least amount of residences impacted. Operation would result in significant long-term corona noise impacts.	Construction would result in the most amount of residences impacted. Operation would result in more residential receptors exposed to significant long-term corona noise impacts when compared to the Proposed Project.	Preferred. Construction would result in the identical number of residences impacted as the Proposed Project. However, extensive construction noise for 10 months would occur at underground segment. Once operational, the underground subtransmission line would reduce corona noise impacts on residential receptors in the Sun Lakes Community when compared to the Proposed Project.
Public Services and Utilities	No Preference. 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.	No Preference. 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.	No Preference. Construction would result in an increase in soil spoils due to underground construction. Trenching would require an increase in water use for dust suppression. However, 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	No Preference. 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.	No Preference. 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.	No Preference. 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	Construction would result in the least amount of residences impacted. Operation would require mitigation to decrease long-term visual impacts.	Construction would result in the most amount of residences impacted. Operation would result in a significant unavoidable visual impact to views from Summit Drive.	Preferred. Construction would result in the identical number of residences impacted as the Proposed Project. However, the underground segment of subtransmission line would eliminate existing above-ground visible 115 kV subtransmission line wood poles in the Sun Lakes Community.

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.

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 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 Figures D.4-2d and D.4-2e). Riversidean alluvial fan sage scrub, considered a sensitive vegetation community type by several agencies including CDFG and CNPS, is located in several areas along this route (see 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.

Conclusion

The Partial Underground Alternative is feasible and meets most of the project objectives, and would result in permanent beneficial visual impacts by removing the existing H-frame wood poles through the Sun Lakes community, and placing the new 115 kV double-circuit line underground. Furthermore, this alternative would remove the subtransmission line, such that it would no longer obstruct activities associated with the golf course resulting in permanent beneficial impacts to an existing recreational facility. The new adverse environmental impacts that would be created by this alternative predominantly would be short-term construction-related impacts associated with underground trenching activities. These impacts are both temporary (once construction ends the impacts go away) and in many respects are mitigable. Therefore, the Environmentally Superior Alternative would be the Partial Underground Alternative.

Impacts of the Environmentally Superior Alternative are defined in each issue area's impact analysis as presented in Section D (Environmental Analysis) within this EIR.

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, 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 and corona noise from the required new 12 kV distribution lines.

Summary of the Environmentally Superior Alternative and Its Impacts. The Environmentally Superior Alternative as defined in Section E.2.2 would be the Partial Underground Alternative. Impacts of the Environmentally Superior Alternative are defined in each issue area's impact analysis as presented in Section D (Environmental Analysis) within this EIR. As described above in Table E-1, the Partial Underground Alternative would result in significant unavoidable air quality impacts, and noise impacts in the overhead portions. As described in Section D (Environmental Analysis), all other impacts associated with construction and operation of the Partial Underground Alternative would be short-term, less than significant, or mitigable to a less-than-significant level.

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 and underground for a one-mile portion. Because the main components of the subtransmission line development would occur in existing ROWs, the Environmentally Superior Alternative would have minimal or improved 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 Partial Underground Alternative (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, noise impacts, and land use impacts as the Environmentally Superior Alternative. Therefore, APMs and mitigation similar to those recommended within this EIR to reduce impacts associated with the Partial Underground Alternative 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 Section D (Environmental Analysis) for the Environmentally Superior Alternative (the proposed El Casco System Project with partial undergrounding of the route for one-mile), 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.