

G. Comparison of Alternatives

G.1 Introduction

This section summarizes and compares the environmental advantages and disadvantages of the proposed West of Devers Upgrade Project and the alternatives evaluated in this EIR/EIS. This comparison is based on the assessment of environmental impacts of the Proposed Project and each alternative, as identified in Sections D (Environmental Impacts of Proposed Project and Alternatives), E (Cumulative Impacts), and F (Other CEQA/NEPA Assessment). Section C introduces and describes the alternatives considered in this EIR/EIS; Appendix 5 is the Alternatives Screening Report, which documents all alternatives considered in the screening process. Section C and Appendix 5 include maps and diagrams illustrating all alternatives that have been retained for analysis and are compared within this section. This section is organized as follows:

- Section G.2 describes the regulatory requirements for alternatives comparison and Section G.3 describes the methodology used for comparing alternatives.
- Sections G.4 and G.5 compare route and system alternatives.
- Section G.6 defines the Environmentally Superior Alternative, based on comparison of each alternative with the Proposed Project.
- Section G.7 compares the No Project/Action Alternative with the alternative that is determined in Section G.6 to be overall environmentally superior.

CPUC Conclusion Regarding Environmentally Superior Alternative. The CPUC has identified the Environmentally Superior Alternative, as required by CEQA Guidelines Section 15126.6(d) and (e)(2). The Environmentally Superior Alternative would be the Phased Build Alternative (which incorporates the structure locations defined in the Tower Relocation Alternative). The Environmentally Superior Alternative is illustrated in Figure G-1 (presented at the end of this section). The second preferred alternative would be the combination of the Tower Relocation Alternative, the Iowa Street 66 kV Underground Alternative, and the Proposed Project for the segments unaffected by the Relocation and Iowa Street alternatives. The least environmentally preferred option would be the Proposed Project with no modifications.

Conclusion Regarding BLM Agency Preferred Alternative. BLM planning regulations allow definition of BLM's Agency Preferred Alternative in either the Draft EIS or the Final EIS (BLM Manual 1790-1, Ch. V(B)(4)(c)). The BLM will select a preferred alternative following analysis of public comments on the Draft EIS/EIR and further internal review of the Draft EIS/EIR.

No Project/No Action Alternative. The No Project/No Action Alternative includes transmission system options are considered to be likely to occur in the absence of the Proposed Project. As described in Section G.7, the No Project/No Action Alternative would have more severe environmental impacts than either the Proposed Project or the alternatives considered in this EIR/EIS.

G.2 Regulatory Requirements for Alternatives Comparison

G.2.1 California Environmental Quality Act (CEQA)

CEQA requires the following for alternatives analysis and comparison:

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. Guidelines Section 15126.6(d)

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)].

G.2.2 National Environmental Policy Act (NEPA)

Under NEPA the Draft EIR/EIS should identify the environmentally preferable or superior alternative from a range of alternatives considered if one exists at the draft stage. Commenters from other agencies and the public are also encouraged to address this question. However, in all situations, the environmentally preferable alternative must be identified in the Record of Decision on the Final EIR/EIS [Forty Questions No. 6(a) and 6(b)]. The answer to Forty Questions No. 6(a) states

A. Section 1505.2(b) requires that, in cases where an EIS has been prepared, the Record of Decision (ROD) must identify all alternatives that were considered, "...specifying the alternative or alternatives which were considered to be environmentally preferable." The environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101. Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources.

The Council recognizes that the identification of the environmentally preferable alternative may involve difficult judgments, particularly when one environmental value must be balanced against another. The public and other agencies reviewing a Draft EIS can assist the lead agency to develop and determine environmentally preferable alternatives by providing their views in comments on the Draft EIS. Through the identification of the environmentally preferable alternative, the decision-maker is clearly faced with a choice between that alternative and others, and must consider whether the decision accords with the Congressionally declared policies of the Act.

In addition, the BLM NEPA Handbook (H-1790-1, Chapter 5.B.2.b) requires identification of an agency preferred alternative in either the Draft or Final EIS.

G.3 Comparison Methodology

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

- **Step 1: Identification of Alternatives.** A screening process (described in Section C and Appendix 5) was used to identify 16 alternatives to the Proposed Project. A No Project Alternative was also identified. This range of alternatives is sufficient to foster informed decision-making and public participation. No other feasible alternatives meeting most of the project objectives were identified that would lessen or alleviate significant impacts.

- **Step 2: Determination of Environmental Impacts.** The environmental impacts of the Proposed Project and alternatives were identified in Sections D, E, and F, including the potential impacts of transmission line, subtransmission line, distribution line, telecommunications, and substation upgrades construction and operation, and potential connected actions. For each area of the Proposed Project where an alternative is considered, the comparison in Section G.4 begins with a summary of the significant impacts that cannot be mitigated (Class I impacts). Highlighting these areas of significant impacts identifies whether an alternative would be capable of eliminating significant unavoidable environmental effects of the Proposed Project, and whether an alternative would create new significant impacts. This simplifies identification of the environmentally superior alternatives while considering all issue areas equally.
- **Step 3: Comparison of Proposed Project and Alternatives.** The environmental impacts of the Proposed Project were compared to those of each alternative to determine the environmentally superior alternative. The preferred proposed route was also compared with system alternatives. The overall environmentally superior alternative was then compared to the No Project Alternative (Section G.5).

Determining an environmentally superior alternative requires balancing many environmental factors. In order to identify the environmentally superior alternative, the most important impacts in each issue area were identified and compared in detailed comparison tables in Section G.4. Each of these tables presents a preference ranking and a brief explanation of the ranking for each environmental issue area.

Although this EIR/EIS identifies an environmentally superior alternative, it is possible that the decision-makers could balance the importance of each impact area differently and reach different conclusions. The comparisons presented in this section highlight situations where an alternative would create impacts in one area as a consequence of avoiding impacts to another area.

G.4 Comparison of Alternatives

The following sections summarize the significant impacts that cannot be mitigated (Class I impacts), as well as the advantages and disadvantages of each alternative, and present 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 the summary tables for each area, 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.

Three alternatives to the Proposed Project are addressed in this section. They are described in Section C of this EIR/EIS, and in more detail in Appendix 5 (Alternatives Screening Report). Table G-1 briefly summarizes the characteristics of each alternative and explains how each could combine with the other alternatives analyzed.

Table G-1. Summary of Alternatives Analyzed

Alternative Name	Description	Notes about Combining with Other Alternatives
Tower Relocation Alternative	<ul style="list-style-type: none"> • Moves certain of SCE’s proposed transmission structures further from nearby residences in Segments 4 and 6 only 	<ul style="list-style-type: none"> • This alternative would be used with the Proposed Project and the tower locations are incorporated into the Phased Build Alternative
Iowa Street 66 kV Underground Alternative	<ul style="list-style-type: none"> • Moves 1,600 feet of proposed overhead 66 kV subtransmission line to underground within Iowa Street 	<ul style="list-style-type: none"> • This alternative would be used with the Proposed Project or with the Tower Relocation Alternative • This alternative would not be required with the Phased Build Alternative because the 66 kV subtransmission system would not be relocated

Table G-1. Summary of Alternatives Analyzed

Alternative Name	Description	Notes about Combining with Other Alternatives
Phased Build Alternative	<ul style="list-style-type: none"> Retains existing double-circuit 220 kV structures Removes existing single-circuit 220 kV structures and replaces them with one new double-circuit structure All 220 kV conductors would be Drake 795 ACCR On Morongo land, 220 kV structures would be relocated and rebuilt as TSPs as defined in Morongo Agreement Allows for future increased corridor capacity in phases, as required 	<ul style="list-style-type: none"> This alternative incorporates the structure locations defined in the Tower Relocation Alternative for the closest towers to residences in Segments 4 and 6 This alternative eliminates the need for the Iow Street 66 kV Underground Alternative because SCE's 66 kV system would not be modified as it would in the Proposed Project

G.4.1 Tower Relocation Alternative

The Proposed Project was designed to follow an existing electric utility corridor. Use of the established corridor and many existing access roads would minimize the duration and intensity of construction-related impacts. The Tower Relocation Alternative also uses the existing SCE corridor, but would require moving Proposed Project structures further from residences in Segment 4 (Beaumont) and Segment 6 (Whitewater). Following is a comparison of the **Tower Relocation Alternative** with the Proposed Project.

Summary of Significant Unavoidable (Class I) Impacts

The **Proposed Project** would have 5 significant (Class I) impacts.¹ The first 4 impacts cannot be mitigated with any alternatives. Impact VR-8 is the impact that drove the consideration of the Tower Relocation Alternative because this alternative would mitigate Impact VR-8 to less than significant levels. The significant impacts of the Proposed Project are:

- **Impact AQ-1:** Construction would generate dust and exhaust emissions of criteria pollutants.
- **Impact CL-2:** Construction, operation and maintenance, and restoration would cause an adverse change to unknown buried prehistoric and historical archaeological sites or buried Native American human remains.
- **Impact N-1:** Construction noise could substantially disturb sensitive receptors or violate local rules, standards, and/or ordinances.
- **Impact VR-2:** Construction would result in visual contrast due to vegetation removal.
- **Impact VR-8:** Long-term presence of the project would result in landscape changes that degrade existing visual character or quality.

Under the Proposed Project, Impact VR-8 as Class I (significant and unmitigable) applies specifically to the 220 kV transmission line upgrades in the following locations:

- **Segment 4** for approximately 16 percent of the residences on the south side of the ROW between Palmer Avenue and Mockingbird Lane.

¹ Impacts are classified as follows: Class I (significant and unmitigable), Class II (less than significant with mitigation), Class III (less than significant), and Class IV (beneficial).

- **Segment 5** when viewed from residences on North Hathaway Street, North Allen Street, North Evans Street, and North Cherry Street in eastern Banning.
- **Segment 6** when viewed from several residences along the north sides of Amethyst Drive and Haugen-Lehmann Way in the central portion of the Community of Whitewater.

The **Tower Relocation Alternative** would reduce Impact VR-8 (Long-term presence of the project would result in landscape changes that degrade existing visual character or quality) in Segments 4 and 6 from the most adversely affected residences (those closest to a structure pair) from Class I (significant and unmitigable) to Class II (less than significant with mitigation).²

Comparison of Impacts

Table G-2 compares the Tower Relocation Alternative with the Proposed Project for each environmental issue area.

The Tower Relocation Alternative is preferred because it would produce a less severe visual impact (compared to the Proposed Project) by relocating various tower pairs approximately 50 feet to the north of the proposed tower locations in Segments 4 and 6. By shifting structures farther away from the closest residences, the Tower Relocation Alternative would achieve structure placements within the ROW that would appear more similar to the existing structure locations. As a result, the Tower Relocation Alternative would cause less incremental visual contrast, structure prominence, and view blockage compared to the Proposed Project when viewed from residential locations along the south side of the ROW.

Likewise, the Tower Relocation Alternative would reduce construction-related disturbance associated with the upgraded 220 kV lines by ensuring that relocated towers would be no closer to residences than the existing structures.

Due to a reduction in significant visual impacts and an increased distance of construction disturbances from residences and other sensitive receptors, **the Tower Relocation Alternative has been found to be environmentally superior** compared to the Proposed Project in Segments 4 and 6.

Table G-2. Comparison of the Proposed Project to Tower Relocation Alternative

Issue Area	Proposed Project	Tower Relocation Alternative
Agriculture	No preference	No preference
Air Quality	No preference	No preference
Biological Resources – Vegetation	No preference	No preference
Biological Resources – Wildlife	No preference	No preference
Climate Change	No preference	No preference
Cultural Resources	No preference	No preference
Socioeconomics and Environmental Justice	No preference	No preference
Geology and Soils	No preference	No preference
Hazards and Hazardous Materials	No preference	No preference
Land Use and BLM Realty	Greater disturbance of sensitive receptors (residences) during both construction and operation	Preferred Even though construction timeframe would be longer

² The significant (Class I) visual impact in Segment 5 on Morongo Tribal Lands (when viewed from North Hathaway Street, North Allen Street, North Evans Street, and North Cherry Street in eastern Banning) would remain significant as the Morongo Band of Mission Indians opted not to consider tower relocation on tribal land.

Table G-2. Comparison of the Proposed Project to Tower Relocation Alternative

Issue Area	Proposed Project	Tower Relocation Alternative
Mineral Resources	No preference	No preference
Noise	More severe noise effects on sensitive receptors (residences) during both construction and operation	Preferred Noise impacts remain significant, but would be reduced due to greater distance of structures to residences
Paleontological Resources	No preference	No preference
Recreation	No preference	No preference
Transportation and Traffic	No preference	No preference
Utilities and Public Services	No preference	No preference
Visual Resources	Significant and unmitigable visual impacts on sensitive receptors (residences) during both construction and operation	Preferred Visual impacts less than significant due to greater distance of towers from residences
Water Resources and Hydrology	No preference	No preference
Wildland Fire	No preference	No preference
Electrical Interference and Safety	No preference	No preference

G.4.2 Iowa Street 66 kV Underground Alternative

The following sections compare the **Iowa Street 66 kV Underground Alternative** with the overhead 66 kV San Bernardino–Redlands–Tennessee subtransmission line component of the Proposed Project along a segment of Iowa Street in the City of Redlands. This alternative would require installation of 1,600 feet of 66 kV subtransmission line underground, rather than overhead on wood poles as defined in the Proposed Project.

Summary of Significant Unavoidable (Class I) Impacts

The **Proposed Project** would have 4 significant (Class I) impacts for the 66 kV subtransmission line component. The first 3 impacts would occur for all proposed or alternative segments, but Impact VR-8 results specifically from the 1,600 feet of proposed overhead 66 kV subtransmission along Iowa Street in the City of Redlands. The Iowa Street 66 kV Underground Alternative would mitigate Impact VR-8 to less than significant levels. The 4 Class I impacts are:

- **Impact AQ-1:** Construction would generate dust and exhaust emissions of criteria pollutants.
- **Impact CL-2:** Construction, operation and maintenance, and restoration would cause an adverse change to unknown buried prehistoric and historical archaeological sites or buried Native American human remains.
- **Impact N-1:** Construction noise could substantially disturb sensitive receptors or violate local rules, standards, and/or ordinances.
- **Impact VR-8:** Long-term presence of the project (in the Iowa Street segment) would result in landscape changes that degrade existing visual character or quality

The significant (Class I, significant and unmitigable) determination for Impact VR-8 applies specifically along the Iowa Street subtransmission line segment when viewed from the Cottage Lane residential subdivision on Iowa Street and Orange Avenue in the City of Redlands.

The **Iowa Street 66 kV Underground Alternative** would place the 66 kV subtransmission line underground (resulting in no operational visibility or lighting) along an existing paved road in an urban setting, which would eliminate Impact VR-8 (Long-term presence of the project would result in landscape changes that degrade existing visual character or quality).

Comparison of Impacts

Table G-3 compares the Iowa Street 66 kV Underground Alternative with the Proposed Project for each environmental issue area.

Although an underground route would have greater ground disturbance, traffic impacts and longer construction time, the Iowa Street 66 kV Underground Alternative is preferred because it would eliminate the long-term significant and unmitigable visual impacts associated with the new overhead 66 kV subtransmission route along Iowa Street, adjacent to the Cottage Lane residential subdivision in Redlands.

This alternative would have more severe short-term impacts during construction in a number of resource areas (air quality, noise, traffic, water resources, and utilities). Construction of the alternative would also increase the likelihood of encountering cultural or paleontological resources. However, due to the elimination of the long-term Class I significant visual impacts, **the Iowa Street 66 kV Underground Alternative has been found to be the environmentally superior alternative** in this segment of the 66 kV subtransmission line component.

Table G-3. Comparison of the Proposed Project to Iowa Street 66 kV Underground Alternative

Issue Area	Proposed Project	Iowa Street 66 kV Underground Alternative
Agriculture	No preference	No preference
Air Quality	Preferred	Greater construction impacts due to need for trenching
Biological Resources – Vegetation	No preference	No preference
Biological Resources – Wildlife	No preference	No preference
Climate Change	No preference	No preference
Cultural Resources	Preferred	Greater likelihood of encountering unknown resources or human remains
Socioeconomics and Environmental Justice	No preference	No preference
Geology and Soils	Preferred	More extensive construction results in greater potential for erosion
Hazards and Hazardous Materials	Preferred	More extensive construction results in greater likelihood of encountering contaminated soils
Land Use and BLM Realty	No preference	No preference
Mineral Resources	No preference	No preference
Noise	Preferred	Underground construction would have more severe short-term noise impacts
Paleontological Resources	Preferred	Greater likelihood of encountering unknown resources
Recreation	No preference	No preference
Transportation and Traffic	Preferred	More intense construction in road would increase likelihood of traffic congestion
Utilities and Public Services	Preferred	Trenching for underground segment increases likelihood of affecting existing underground utilities. Greater maintenance and restoration time in the event of an outage

Table G-3. Comparison of the Proposed Project to Iowa Street 66 kV Underground Alternative

Issue Area	Proposed Project	Iowa Street 66 kV Underground Alternative
Visual Resources	Significant and unmitigable long-term visual impacts from the Cottage Lane residential subdivision on Iowa Street and Orange Avenue in the City of Redlands	Preferred Elimination of overhead segment in residential neighborhood reduces long-term impact to less than significant levels
Water Resources and Hydrology	Preferred	More extensive construction results in greater potential for erosion
Wildland Fire	No preference	No preference
Electrical Interference and Safety	No preference	No preference

G.4.3 Phased Build Alternative

As defined in Section C.4.3, the Phased Build Alternative would retain the existing 220 kV double-circuit structures, require demolition of the existing single-circuit structures and construction of one new set of double-circuit, and install high-capacity conductors (Drake ACCR) on all 4 circuits. For the new double-circuit towers in Segments 4 and 6, the Phased Build Alternative incorporates the structure locations proposed in the Tower Relocation Alternative. Relocation of the 66 kV subtransmission lines would not be required, because the Phased Build Alternative would utilize the existing 220 kV structures in Segment 1, and the existing 66 kV poles would be unaffected.

In Segment 5 on Morongo land, all transmission facilities in the westernmost 3 miles would be removed and relocated south to the new ROW closer to I-10. In this segment, 19 pairs of new double-circuit tubular steel poles would be installed and the high-capacity conductor would be installed on the new poles. On the eastern portion of the Morongo land, 30 pairs of new double-circuit lattice steel towers would replace the existing single-circuit towers (same as for the Proposed Project), and high-capacity conductors would be installed on these new towers as well as the existing double-circuit towers.

Summary of Significant Unavoidable (Class I) Impacts

The **Proposed Project** would have 5 significant (Class I) impacts affecting the 220 kV segment. The **Phased Build Alternative** would reduce the severity of impacts AQ-1 and N-1 as perceived at nearby residences, but the impacts would remain significant. However, the alternative would reduce the significance of Impact VR-8 in Segments 4 and 6 to less than significant levels. The 5 Class I impacts are:

- **Impact AQ-1:** Construction would generate dust and exhaust emissions of criteria pollutants.
- **Impact CL-2:** Construction, operation and maintenance, and restoration would cause an adverse change to unknown buried prehistoric and historical archaeological sites or buried Native American human remains.
- **Impact N-1:** Construction noise could substantially disturb sensitive receptors or violate local rules, standards, and/or ordinances.
- **Impact VR-2:** Construction would result in visual contrast due to vegetation removal.
- **Impact VR-8:** Long-term presence of the project would result in landscape changes that degrade existing visual character or quality.

Comparison of Impacts

Table G-4 compares the Phased Build Alternative with the Proposed Project for each environmental issue area. The Phased Build Alternative is preferred over the Proposed Project because it would reduce, but not render less-than-significant, the AQ-1 and N-1 construction impacts (eliminating the removal and reconstruction of the existing 220 kV structures and relocation of the 66 kV subtransmission lines). The Phased Build Alternative is preferred over the Proposed Project because it would mitigate operational impacts (visual presence of the Proposed Project closer to the south edge of the ROW in Segments 4 and 6 and from the 66 kV line along Iowa Street) to less than significant levels. As a result, ***the Phased Build Alternative has been found to be environmentally superior to the Proposed Project.***

Table G-4. Comparison of the Proposed Project to Phased Build Alternative

Issue Area	Proposed Project	Phased Build Alternative
Agriculture	No preference	No preference
Air Quality	More extensive demolition and construction	Preferred
Biological Resources – Vegetation	No preference	No preference
Biological Resources – Wildlife	No preference	No preference
Climate Change	No preference	No preference
Cultural Resources	More extensive demolition and construction	Preferred
Socioeconomics and Environmental Justice	No preference	No preference
Geology and Soils	More extensive demolition and construction	Preferred
Hazards and Hazardous Materials	No preference	No preference
Land Use and BLM Realty	More extensive demolition and construction	Preferred
Mineral Resources	No preference	No preference
Noise	More extensive demolition and construction	Preferred
Paleontological Resources	More extensive demolition and construction	Preferred
Recreation	No preference	No preference
Transportation and Traffic	More extensive demolition and construction	Preferred
Utilities and Public Services	No preference	No preference
Visual Resources	Significant and unmitigable visual impacts on sensitive receptors (residences) during both construction and operation	Preferred Visual impacts less than significant due to greater distance of towers from residences and elimination of 66 kV line relocation along Iowa Street
Water Resources and Hydrology	More extensive demolition and construction	Preferred
Wildland Fire	No preference	No preference
Electrical Interference and Safety	No preference	No preference

G.5 Definition of the CPUC Environmentally Superior Alternative

All three alternatives discussed in Section G.4 are considered to be environmentally superior to the Proposed Project. The Phased Build Alternative incorporates the tower locations of the Tower Relocation Alternative. Also, under the Phased Build Alternative, the Iowa Street 66 kV Underground Alternative would not be necessary, because relocation of the 66 kV subtransmission lines would not be required in Segment 1. As a result, ***the Phased Build Alternative is considered environmentally superior overall.*** This alternative would not require any 66 kV subtransmission system modifications, but the distribution, telecommunications, and substation upgrades would be the same as for the Proposed Project. The Environmentally Superior Alternative is illustrated in Figure G-1.

The second preferred alternative would be the combination of the Tower Relocation Alternative, the Iowa Street 66 kV Underground Alternative, and the Proposed Project for the segments unaffected by those two alternatives. The least environmentally preferred would be the Proposed Project.

G.6 No Project / No Action Alternative Compared to the Environmentally Superior Alternative

The No Project Alternative is described in Section C.6, and its impacts are presented for each discipline in Section D. The No Project Alternative defines the transmission system that may be required in the absence of the Proposed Project, defining transmission options that SCE or other developers may pursue to achieve the objectives of the Proposed Project. The events or actions that are reasonably expected to occur in the foreseeable future without the West of Devers Upgrade Project include the following:

- **No Project Alternative Option 1:** In SCE's response to Data Request 7, SCE states, "...it is unlikely that SCE and the Morongo could reach an agreement for SCE's facilities to remain on the reservation in the absence of the WOD Upgrade Project." As a result of this stated expectation, this No Project option would include removal of all SCE facilities from Morongo land, and require the development of a transmission route from the Devers Substation to the El Casco Substation that would not use Morongo land. This No Project option would require the following components:
 - Installation of about 27 miles of additional new 500 kV circuit in the Devers-Valley corridor;
 - A new Beaumont Substation (500/220 kV) that would be located southwest of Beaumont;
 - Addition of 4 new 220 kV circuits from Beaumont Substation to El Casco Substation, using 1590 ACSR conductors as proposed by SCE; and
 - West of the El Casco Substation, this option would be the same as proposed by SCE.
- **No Project Alternative Option 2:** SCE's System Alternative 2 includes the addition of a new 500 kV circuit from SCE's existing Valley Substation to its Serrano Substation, as follows:
 - **No Major Upgrades to 220 kV System West of Devers.** The SCE WOD 220 kV system would be unchanged from the current system (4 circuits with current capacity; no removal of single-circuit towers; no construction of new towers). However, as defined in the approved Morongo agreement, the 220 kV segment between the Outlet Mall and the eastern border of the City of Banning would move south from its current location to be adjacent to I-10 and would be installed on new tubular steel poles (TSPs).
 - **Retain the WOD Interim Project.** Just west of the Devers Substation, SCE has installed series reactors on the four 220 kV transmission lines that extend west of Devers Substation and a Special Protection System (SPS) to prevent overloading of the existing WOD transmission lines. This equipment would be retained in the No Project Alternative Option 2.

- **No upgrades to 500 kV Devers-Valley System and no new substation.** The existing Devers-Valley No. 1 and No. 2 circuits are currently operating well below capacity, as shown in the power flow modeling attached to Appendix 5 (Alternatives Screening Report, Attachment 2). As shown in modeled Case 2 (CAISO 2024 Reliability Base Case with an added 1,400 MW imported from the Imperial Irrigation District), each Devers-Valley 500 kV circuit would use only 44% of its capacity, leaving over 2,000 MW available.
- **New 500 kV Line from Valley to Serrano Substations.** A new single-circuit 500 kV transmission line would be constructed along approximately 40.4 miles of existing transmission corridor from SCE’s Valley Substation in the City of Romoland to its Serrano Substation in the City of Orange. The existing Valley-Serrano No. 1 transmission line occupies this corridor, and was constructed in 1986. The route includes about 9 miles within the Cleveland National Forest, in a designated utility corridor, where construction would have to be completed via helicopter. Upgrades would be required at the Valley and Serrano Substation.

G.6.1 Comparison of No Project Alternative Option 1 with Proposed Project

The environmental impacts of the No Project Alternative are presented in Section D for each environmental discipline. Impacts would primarily result from the requirement to construct a third 500 kV circuit, in addition to the Devers-Valley No. 1 and No. 2 lines, between Devers and a new Beaumont Substation. The most severe impacts would be the following:

- **Visual Resources.** The 500 kV line would cross the Pacific Crest Trail, pass through the San Jacinto and Santa Rosa National Monument, and pass through the San Bernardino National Forest within a designated wilderness area (in a transmission corridor). On Forest lands, the new circuit would have to be installed on newly constructed double-circuit towers (after removal of one existing single-circuit tower), which would be highly visible due to their height. In addition, the additional circuit would pass through the community of Cabazon, and the Cities of Banning and Beaumont.
- **Biological Resources.** The route passes through sensitive desert, mountain, and inland environments, with potential to affect listed plants, Peninsular bighorn sheep, and Stevens kangaroo rat, as well as other species.
- **Land Use and Recreation.** As described for visual resources, the new line would be highly visible in several valuable recreation areas. In addition, the proximity of both construction activities and the new circuit itself, to existing residences, would result in significant impacts to sensitive receptors between Cabazon and Beaumont.

Additional significant impacts to visual and biological resources would result from the construction and operation of the new 40-acre Beaumont Substation, just southeast of the city of Beaumont.

In conclusion, No Project Option 1 would create impacts substantially more severe than those of the Proposed Project.

G.6.2 Comparison of No Project Alternative Option 2 with Proposed Project

The environmental impacts of the No Project Alternative are presented in Section D for each environmental discipline. No Project Alternative Option 2 would not require the construction and operation of a new 500 kV circuit along 25 miles of the Devers-Valley corridor (as would be required for No Project Option 1). The first option would pass through designated wilderness, residential areas, and sensitive habitats. Impacts of No Project Option 2 would primarily result from the requirement to construct a

second 500 kV circuit adjacent to the Valley-Serrano No. 1 lines, between the Valley Substation and Serrano Substation. The most severe impacts would be the following:

- **Visual Resources.** The 500 kV line would cross a number of parks and recreational areas. On Forest lands, the new circuit would have to be installed on newly constructed single-circuit towers. While one circuit already exists in the utility corridor, this area is remote and undeveloped, and the addition of a second high-voltage line would be highly visible. In addition, the new line would pass through Weir Canyon Regional Park, the community of Romoland, and the City of Orange, where visibility of a new 500 kV circuit would likely be significant.
- **Biological Resources.** The route passes through sensitive mountain and inland environments, with potential to affect listed plants, birds, and Stevens kangaroo rat, as well as other species.
- **Land Use and Recreation.** As described for visual resources, the new line would be highly visible in several important recreation areas. In addition, the proximity of both construction activities and the new circuit itself, to existing residences, would result in significant impacts to sensitive receptors in both Riverside County and the City of Orange.

In conclusion, No Project Option 2 would create impacts substantially more severe than those of the Proposed Project.

G.6.3 Conclusion Regarding No Project/No Action Alternatives

Therefore, because both of the No Project Alternative would likely require construction of transmission lines with more severe impacts than those described for the Environmentally Superior Alternative defined in Section G.5, the No Project Alternative is not found to be preferred to the Environmentally Superior Alternative as defined in Section G.5.

In Segment 1:
 Re-use existing double-circuit towers and install new 795 Drake ACCR for two circuits from El Casco and Devers.

In Segment 2:
 Re-use existing double-circuit towers and install new 795 Drake ACCR for two circuits from Devers.

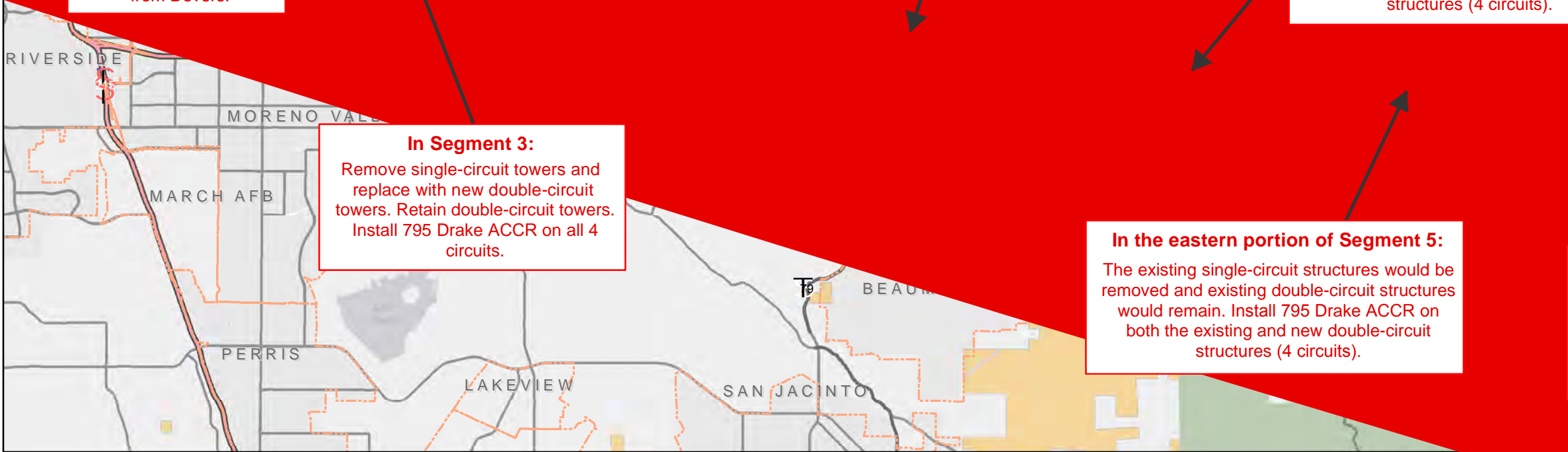
In Segment 3:
 Remove single-circuit towers and replace with new double-circuit towers. Retain double-circuit towers. Install 795 Drake ACCR on all 4 circuits.

In Segment 4:
 Remove single-circuit towers and replace with new double-circuit towers. Retain double-circuit towers. Install 795 Drake ACCR on all towers.

In the western portion of Segment 5:
 Where on Morongo land, all existing structures would be removed and the ROW would be relocated to the location shown. Two sets of new tubular steel poles would be constructed, and 795 Drake ACCR would be installed on all structures (4 circuits).

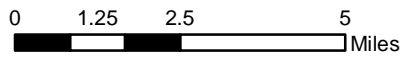
In the eastern portion of Segment 5:
 The existing single-circuit structures would be removed and existing double-circuit structures would remain. Install 795 Drake ACCR on both the existing and new double-circuit structures (4 circuits).

In Segment 6:
 Remove single-circuit towers and replace with new double-circuit towers. Retain double-circuit towers. Install 795 Drake ACCR on all 4 circuits.



Sources: SCE 2014

2



- (Substation
- " Milepost
- City Boundary
- Segment 1
- Segment 2
- Segment 3
- Segment 4
- Segment 5
- Segment 6
- Major Highways
- Highways
- Major Roads
- County Boundary
- BLM Land
- Forest Service Land
- Morongo Reservation

Figure 2
Environmentally Superior Alternative

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