# 4. Revisions to the Draft Environmental Impact Report

# 4.1 REVISIONS TO THE RECIRCULATED DRAFT EIR

In accordance with §15132 of the State CEQA Guidelines, this section presents the changes and revisions that were made to the Recirculated Draft EIR in response to comments received on that document. These revisions clarify, amplify, or make insignificant modifications to information presented in the Recirculated Draft EIR. In general, changes made to the original Draft EIR (December 2007) as a result of comments received on that document are included in the original Final EIR (April 2008). Additional revisions to the original Draft EIR are included below, in Section 4.2 (Revisions to the Original Draft EIR).

A compilation of revisions to the Recirculated Draft EIR is presented below. Changes in text reflect revisions, additions, or replacements to existing text. Revisions to existing text are denoted by strikethrough (strikethrough), where existing text is removed, and by underline (underline), where text is added for clarification. The following revisions are organized sequentially as they appear in the Recirculated Draft EIR.

# **Executive Summary**

• Page ES-14:

# ES.4.3 Environmentally Superior Alternative

As presented above, Table ES-21 shows that out of the three options for implementation of the Proposed El Casco System Project, the Proposed Project would result in the least number of significant unavoidable environmental impacts.

# Section D.9 – Noise

• Page D.9-13 (Subsection D.9.3.3, Proposed Project Impact Analysis):

Construction of the Project would require short-term use of cranes, augers, compressors, air tampers, generators, trucks, and other equipment, as identified in Section B (Project Description). As helicopters Helicopters would could be used at SCE's existing Mill Creek Communications Site within the San Bernardino National Forest for construction of the microwave system, and would be used during installation of fiber optic cable at locations between the Cities of Redlands and Banning, to ensure that construction noise impacts associated with helicopter construction are considered, helicopter use is evaluated for all possible locations where they may and would be used.

# Section E – Comparison of Alternatives

• Page E-3 (Subsection E.2, Environmentally Superior Alternative):

Table E-1. Summary 01 S	ignificant orinnitigable (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	AQ-1: construction emissions would exceed regional significance criteria			
Alternative Option 3	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	AQ-1: construction emissions would exceed regional significance criteria			
Alternative	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			

# Table F 1. Community of Circuition and Linewithmethics (Classes) increased

#### 4.2 **REVISIONS TO THE ORIGINAL DRAFT EIR**

This section presents changes and revisions that were made to the original Draft EIR (December 2007) subsequent to the publication of the original Final EIR (April 2008). The revisions shown herein reflect only the changes made subsequent to the original Final EIR, and therefore changes made between the original Draft EIR and the original Final EIR have been accepted in this Recirculated Final EIR. The additional revisions shown herein clarify, amplify, or make insignificant modifications to information presented in the original Draft EIR, specifically to address updated project schedule information and additional critical review of the mitigation measures. All previous changes made to the original Draft EIR as a result of comments received on that document are included in the original Final EIR (April 2008). Revisions to existing text are denoted by strikethrough (strikethrough), where existing text is removed, and by underline (underline), where text is added for clarification. The following revisions are organized sequentially as they appear in the original Draft EIR.

# Section ES – Executive Summary

Page ES-27 (Subsection ES.3.6.3, EMF Issues – Proposed Project):

Mitigation proposed within the EMF analysis for reducing magnetic fields for the Proposed Project is consistent with the CPUC's Interim EMF Opinion Decision No. 93-11-013 ("1993 CPUC Decision") and also with recommendations made by the U.S. National Institute of Environmental Health Sciences. The recommendations presented in the analysis meet CPUC-approved EMF Design Guidelines as well as all national and State safety standards for new electric facilities. Furthermore, the EMF Analysis presents mitigation to reduce impacts resulting from potential high frequency radio and television interference, and induced currents and voltages on conducting objects near the proposed subtransmission line to a less-than-significant (Class II) level. EMF impacts to the operation of cardiac pacemakers and radio and television interference; as well as wind, earthquake, and fire hazards, was were found to be less-than-significant (Class III).

• Page ES-28 (Subsection ES.3.6.3, EMF Issues – CPUC's Northerly Route Alt Option 3):

As shown in the EMF analysis, there are no noticeable changes in magnetic fields by adding the Route Alternative Option 3 line within the existing SCE Devers-Vista 220 kV ROW. The reconductoring activities of 115 kV substransmission line proposed for Route Alternative Option 3 are limited in scope and do not provide significant opportunities to implement magnetic field reduction measures. However, implementation of the Route Alternative Option 3 would result in higher magnetic fields compared to the Proposed Project for Segment 5. The Proposed Project design has lower magnetic fields mainly due to the following design differences: the double circuit design of the Proposed Project has less phase-to-phase distance, is taller, and has phasing arrangements that reduce magnetic fields. The EMF Analysis presents mitigation to reduce <del>potential high frequency radio and television interference and</del> induced currents and voltages on conducting objects near the proposed subtransmission lines impacts to a less-than-significant (Class II) level. EMF impacts to the operation of cardiac pacemakers and radio and television interference; as well as wind, earthquake, and fire hazards, was-were found to be less-than-significant (Class III).

• Page ES-28 (Subsection ES.3.6.3, EMF Issues –Partial Underground Alternative):

As discussed in the EMF analysis, EMF levels along the underground portion of the ROW within the Sun Lakes Community would be reduced compared to the Proposed Project. However, the remainder of the subtransmission line route would result in identical EMF levels as presented above in Table ES-1. The EMF Analysis presents mitigation to reduce potential high frequency radio and television interference and induced currents and voltages on conducting objects near the proposed subtransmission lines impacts to a less-than-significant (Class II) level. EMF-related impacts to the operation of cardiac pacemakers and radio and television interference; as well as wind, earthquake, and fire hazards, was-were found to be less-than-significant (Class III).

# ES.3.9 Public Services and Utilities

• Page ES-33 (Subsection ES.3.9.1, Proposed Project):

*Cumulative Impacts.* During construction, should construction activities from identified cumulative projects occur at the same time as Proposed Project construction, cumulative impacts could occur to public services as a result of combined demand during construction. However, as Proposed Project construction would be short-term and temporary in nature; the only however, cumulative demands that could be significant would be temporary disruptions in utility service, and areas limiting emergency service access. However, the inclusion of mitigation presented within the public services and utilities and transportation and traffic analysis analyses ensuring ensures notification of those affected by any temporary disruption in utility service during construction of the Proposed Project, and also ensures emergency access would be provided through construction zones. These mitigation measures would reduce the Proposed Project's cumulative contribution to this these impacts to a less-than-significant level (Class II).

• Page ES-34 (Subsection ES.3.9.2, Alternatives – CPUC's Northerly Route Alt Option 3):

*Cumulative Impacts.* Cumulative impacts associated with Route Alternative Option 3 would be identical to those presented above for the Proposed Project. Because construction would be short-term and temporary in nature, the only cumulative public service or utility impacts that could be significant would be temporary disruptions in utility service and areas limiting emergency service access. However, the inclusion of mitigation presented within the <u>public services and utilities and</u> transportation and traffic analysis analyses ensuring ensures notification of those affected by any temporary disruption in utility service during construction of the Proposed Project and also ensures emergency access would be provided through construction zones. These mitigation measures would reduce the Route Alternative Option 3 cumulative contribution to this these impacts to a less-than-significant level (Class II).

• Page ES-34 (Subsection ES.3.9.2, Alternatives – Partial Underground Alternative):

*Cumulative Impacts.* Cumulative impacts associated with Route Alternative Option 3 the Partial Underground Alternative would be identical to those presented above for the Proposed Project.

# ES.3.11 Visual Resources

• Page ES-38 (Subsection ES.3.11.1, Proposed Project):

*Cumulative Impacts.* To the extent that the Proposed Project would be visible during construction within the same field of view as one or more of the cumulative projects, which are also under construction, adverse visual impacts would occur with the visible presence of construction equipment, vehicles, materials, and personnel. However, these visual impacts would be temporary and would not create significant cumulative effects, particularly along the linear components of the project where construction activities are transient. No additional mitigation measures are recommended beyond Measures V-1 (reduce visibility of construction activities and equipment) and V-2 (reduce visibility of land scarring). Therefore, because construction related visual impacts are short-term and temporary, the Proposed Project cumulative contribution would be less than significant after mitigation (Class II).

There are six identified residential cumulative projects that, when constructed, would be visible within the same field of view as the Proposed Project. All six of these residential development projects would (a) be consistent with other residential uses in the immediate area and region; (b) not appreciably change the character of the existing, rapidly developing suburban/urban landscape; and (c) not share the same or similar industrial character as the Proposed Project. On that basis, the Proposed Project would not result in cumulative visual impacts with the six residential projects. However, in all six cases, substantial view blockage of background hills and sky would occur when seen from viewpoints north of the developments. On its own, view blockage impacts caused by the Proposed Project would be adverse but less than significant. However, in conjunction with the substantial view blockage that would occur in combination with the residential projects, the resulting cumulative visual impact (Class I).

Although the Proposed Project is replacing existing wood-pole structures along the subtransmission line ROW, the new steel-pole structures would have a stronger industrial character. On its own, the increase in industrial character and view blockage caused by the proposed subtransmission line

would result in adverse but less than significant impacts. However, the Proposed Project in conjunction with the highly industrial character of the identified nearby DPV2 500 kV Transmission Line Project (the Devers-Valley portion) would increase the combined industrial character and view blockage, resulting in a significant (Class I) cumulative visual impact.

The increase in industrial character associated with the Proposed Project's new steel-pole subtransmission towers connecting to Banning Substation and the required modifications to the substation would result in adverse but less than significant (Class III) visual impacts. The Liberty Project (No. E1) would be located approximately 1.75 miles east-southeast of Banning Substation and would exhibit considerable industrial character similar to the concentration of industrial features at Banning Substation, only more extensive. However, given the separation distance between these two projects and the slight increase in industrial character associated with the Proposed Project, it is likely that few people would make such a connection between the two projects. A similar situation would exist between the Proposed Project and the Sunset Project (No. E2) except that the Sunset Project would be located slightly closer to Banning Substation at a distance of just over one mile. As with the Liberty Project, the distance between the two projects is such that people would not perceive a significant increase in industrialization. Therefore, the resulting cumulative visual impact would be adverse but less than significant (Class III).

• Page ES-48 (Note: The following is an excerpt from Table ES-4 that identifies only the issue areas for which changes were made):

Impact	Impact Class <sup>a</sup>	Mitigation Measure(s) <sup>b</sup>
Hazards and Hazardous Materials		
Impact HAZ-1: The project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	Class II	HAZ-1a: Environmental Training and Monitoring Program HAZ-1b: Proper Disposal of Construction Waste HAZ-1c: Emergency Spill Supplies and Equipment APM HAZ-1
Impact HAZ-2: The project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment	Class II	HAZ-1a: Environmental Training and Monitoring Program HAZ-1b: Proper Disposal of Construction Waste HAZ-1c: Emergency Spill Supplies and Equipment
Impact HAZ-3: The project would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	Class II	HAZ-1a: Environmental Training and Monitoring Program HAZ-1b: Proper Disposal of Construction Waste HAZ-1c: Emergency Spill Supplies and Equipment
Impact HAZ-4: The project would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment	Class III	None
Impact HAZ-5: For a project located within two miles of a public airport, would the project result in a safety hazard for people residing or working in the Project area	No Impact	None
Impact HAZ-6: The project would result in a safety hazard related to a private airstrip for people residing or working in the Project area	No Impact	None
Impact HAZ-7: The project would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Class II	T-3: Ensure Emergency Response Access
Impact HAZ-8: The project would expose people or structures to a significant risk of loss, injury or death involving wildland fires	Class II	HAZ-8a: Prepare and Implement Fire Management Plan HAZ-8b: County Fire Department Review of Construction Methods HAZ-8c: Practice Safe Welding Procedures HAZ-8d: Fire Preventive Construction Equipment Requirements APM HAZ-1
Impact HAZ-9: Radio and television interference	Class III	None
Impact HAZ-10: Induced currents and shock hazards in joint use corridors	<u>Class II</u>	HAZ-10: Prevent Induced Currents
Impact HAZ-11: Effects on cardiac pacemakers	Class III	None
Impact HAZ-12: Wind, earthquake, and fire hazards	Class III	None

Table ES-4. Summary of Impacts and Mitigation for the Propos	ed Project	
Impact	Impact Class <sup>a</sup>	Mitigation Measure(s) <sup>b</sup>
Noise		
Impact N-1: Construction activities would temporarily increase local noise levels, impacting sensitive receptors and exceeding applicable noise regulations	Class III	APM NOI-1; APM NOI-2; APM NOI-3
Impact N-2: Ground-borne vibration could cause a temporary nuisance during construction	Class III	APM NOI-1; APM NOI-2; APM NOI-3
Impact N-3: Noise from operation of the overhead subtransmission line	<del>Class I <u>Class</u> III</del>	None
Visual Resources		
Impact V-1: Short-term visibility of construction activities, equipment, and night lighting	Class II	V-1a: Reduce Visibility of Construction Activities and Equipment V-1b: Reduce Construction Night Lighting Impacts
Impact V-2: Long-term visibility of land scars and vegetation clearance in arid and semi-arid landscapes	Class II	V-2a: Reduce In-Line Views of Land Scars V-2b: Reduce Visual Contrast from Unnatural Vegetation Lines
Impact V-3: Increased structure contrast, industrial character, view blockage, skylining, and glare when viewed from Key Viewpoint 1 on eastbound San Timoteo Canyon Road	Class II	V-3a: Reduce Visibility of the El Casco Substation Site V-3b: Reduce Operation Night Lighting Impacts
Impact V-4: Increased structure contrast, industrial character, view blockage, skylining and glare when viewed from Key Viewpoint 2 in Norton Younglove Reserve	Class II	V-3a: Reduce Visibility of the El Casco Substation Site V-3b: Reduce Operation Night Lighting Impacts
Impact V-5: Increased structure contrast, industrial character, view blockage and glare when viewed from Key Viewpoint 3 in the new residential development north of San Timoteo Canyon Road	Class II <u>Class II</u>	V-3a: Reduce Visibility of the El Casco Substation Site V-3b: Reduce Operation Night Lighting Impacts None
Impact V-6: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 4 on eastbound SR-60	Class III	None
Impact V-7: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 5 on Faircliff Street	Class III	None
Impact V-8: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 6 on Pine Valley Road in the Sun Lakes development	Class III	None
Impact V-9: Increased structure contrast and industrial character when viewed from Key Viewpoint 7 on East Lincoln Street in the City of Banning	Class III	None
Impact V-10: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 8 on North Juniper Avenue in the City of Yucaipa	<del>Class II <u>Class</u> II</del>	V 10 Reduce Visibility of the Zanja Substation Modifications None

able ES-4. Summary of Impacts and Mitigation for the Proposed Project					
Impact	Impact Class <sup>a</sup>	Mitigation Measure(s) <sup>b</sup>			
Impact V-11: Increased structure contrast, view blockage, and skylining when viewed from Key Viewpoint 9 on Carter Street in the City of Yucaipa	Class III	None			
Impact V-12: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 10 on southbound Live Oak Canyon Road	Class III	None			

• Page ES-57: (Note: The following is an excerpt from Table ES-5 that identifies only the issue areas for which changes were made):

Impact	Impact Class <sup>a</sup>	Mitigation Measure(s) <sup>b</sup>
Hazards and Hazardous Materials		
Impact HAZ-1: The project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	Class II	HAZ-1a: Environmental Training and Monitoring Program HAZ-1b: Proper Disposal of Construction Waste HAZ-1c: Emergency Spill Supplies and Equipment APM HAZ-1
Impact HAZ-2: The project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment	Class II	HAZ-1a: Environmental Training and Monitoring Program HAZ-1b: Proper Disposal of Construction Waste HAZ-1c: Emergency Spill Supplies and Equipment
Impact HAZ-3: The project would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	Class II	HAZ-1a: Environmental Training and Monitoring Program HAZ-1b: Proper Disposal of Construction Waste HAZ-1c: Emergency Spill Supplies and Equipment
Impact HAZ-4: The project would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment	Class III	None
Impact HAZ-5: For a project located within two miles of a public airport, would the project result in a safety hazard for people residing or working in the Project area	No Impact	None
Impact HAZ-6: The project would result in a safety hazard related to a private airstrip for people residing or working in the Project area	No Impact	None
Impact HAZ-7: The project would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Class II	T-3: Ensure Emergency Response Access
Impact HAZ-8: The project would expose people or structures to a significant risk of loss, injury or death involving wildland fires	Class II	HAZ-8a: Prepare and Implement Fire Management Plan HAZ-8b: County Fire Department Review of Construction Methods HAZ-8c: Practice Safe Welding Procedures HAZ-8d: Fire Preventive Construction Equipment Requirements APM HAZ-1
Impact HAZ-9: Radio and television interference	Class III	None
Impact HAZ-10: Induced currents and shock hazards in joint use corridors	<u>Class II</u>	HAZ-10: Prevent Induced Currents
Impact HAZ-11: Effects on cardiac pacemakers	<u>Class III</u>	None
Impact HAZ-12: Wind, earthquake, and fire hazards	Class III	None

	Northerry Rou	
Impact	Impact Class <sup>a</sup>	Mitigation Measure(s) <sup>b</sup>
Noise		
Impact N-1: Construction activities would temporarily increase local noise levels, impacting sensitive receptors and exceeding applicable noise regulations	Class III	APM NOI-1; APM NOI-2; APM NOI-3
Impact N-2: Ground-borne vibration could cause a temporary nuisance during construction	Class III	APM NOI-1; APM NOI-2; APM NOI-3
Impact N-3: Noise from operation of the overhead subtransmission line	<u>Class I Class III</u>	None
Visual Resources		
Impact V-1: Short-term visibility of construction activities, equipment, and night lighting	Class II	V-1a: Reduce Visibility of Construction Activities and Equipment V-1b: Reduce Construction Night Lighting Impacts
Impact V-2: Long-term visibility of land scars and vegetation clearance in arid and semi-arid landscapes	Class II	V-2a: Reduce In-Line Views of Land Scars V-2b: Reduce Visual Contrast from Unnatural Vegetation Lines
Impact V-3: Increased structure contrast, industrial character, view blockage, skylining, and glare when viewed from Key Viewpoint 1 on eastbound San Timoteo Canyon Road	Class II	V-3a: Reduce Visibility of the El Casco Substation Site V-3b: Reduce Operation Night Lighting Impacts
Impact V-4: Increased structure contrast, industrial character, view blockage, skylining and glare when viewed from Key Viewpoint 2 in Norton Younglove Reserve	Class II	V-3a: Reduce Visibility of the El Casco Substation Site V-3b: Reduce Operation Night Lighting Impacts
Impact V-5: Increased structure contrast, industrial character, view blockage and glare when viewed from Key Viewpoint 3 in the new residential development north of San Timoteo Canyon Road	<del>Class II <u>Class</u> II</del>	V-3a: Reduce Visibility of the El Casco Substation Site V-3b: Reduce Operation Night Lighting Impacts None
Impact V-6: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 4 on eastbound SR-60	Class III	None
Impact V-7: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 5 on Faircliff Street	Class III	None
Impact V-8: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 6 on Pine Valley Road in the Sun Lakes development	Class III	None
Impact V-9: Increased structure contrast and industrial character when viewed from Key Viewpoint 7 on East Lincoln Street in the City of Banning	Class III	None
Impact V-10: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 8 on North Juniper Avenue in the City of Yucaipa	<del>Class II <u>Class II</u></del>	V 10: Reduce Visibility of the Zanja Substation Modifications None

# Table ES.5. Summary of Impacts and Mitigation for the CDLIC's Northerly Poute Alternative Ontion 2

#### Table ES-5. Summary of Impacts and Mitigation for the CPUC's Northerly Route Alternative Option 3

Impact	Impact Class <sup>a</sup>	Mitigation Measure(s) <sup>b</sup>
Impact V-11: Increased structure contrast, view blockage, and skylining when viewed from Key Viewpoint 9 on Carter Street in the City of Yucaipa	Class III	None
Impact V-12: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 10 on southbound Live Oak Canyon Road	Class III	None
Impact V-13: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 11 on westbound Summit Drive	Class I	None
Impact V-14: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 12 on Cedar Hollow Road	Class III	None
Impact V-15: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 13 on San Timoteo Canyon	Class III	None

• Page ES-67: (Note: The following is an excerpt from Table ES-6 that identifies only the issue areas for which changes were made):

Impact	Impact Class <sup>a</sup>	Mitigation Measure(s) <sup>b</sup>
Hazards and Hazardous Materials		
Impact HAZ-1: The project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	Class II	HAZ-1a: Environmental Training and Monitoring Program HAZ-1b: Proper Disposal of Construction Waste HAZ-1c: Emergency Spill Supplies and Equipment APM HAZ-1
Impact HAZ-2: The project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment	Class II	HAZ-1a: Environmental Training and Monitoring Program HAZ-1b: Proper Disposal of Construction Waste HAZ-1c: Emergency Spill Supplies and Equipment
Impact HAZ-3: The project would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	Class II	HAZ-1a: Environmental Training and Monitoring Program HAZ-1b: Proper Disposal of Construction Waste HAZ-1c: Emergency Spill Supplies and Equipment
Impact HAZ-4: The project would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment	Class III	None
Impact HAZ-5: For a project located within two miles of a public airport, would the project result in a safety hazard for people residing or working in the Project area	No Impact	None
Impact HAZ-6: The project would result in a safety hazard related to a private airstrip for people residing or working in the Project area	No Impact	None
Impact HAZ-7: The project would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Class II	T-3: Ensure Emergency Response Access
Impact HAZ-8: The project would expose people or structures to a significant risk of loss, injury or death involving wildland fires	Class II	HAZ-8a: Prepare and Implement Fire Management Plan HAZ-8b: County Fire Department Review of Construction Methods HAZ-8c: Practice Safe Welding Procedures HAZ-8d: Fire Preventive Construction Equipment Requirements APM HAZ-1
Impact HAZ-9: Radio and television interference	Class III	None
Impact HAZ-10: Induced currents and shock hazards in joint use	<u>Class II</u>	HAZ-10: Prevent Induced Currents
Impact HA7-11: Effects on cardiac nacemakers		Nono
Impact HAZ-12: Wind, earthquake, and fire hazards	Class III	None

#### Table ES-6. Summary of Impacts and Mitigation for the Partial Underground Alternative

Table ES-6. Summary of Impacts and Mitigation for the Partial Underground Alternative				
Impact	Impact Class <sup>a</sup>	Mitigation Measure(s) <sup>b</sup>		
Noise				
Impact N-1: Construction activities would temporarily increase local noise levels, impacting sensitive receptors and exceeding applicable noise regulations	Class III	APM NOI-1; APM NOI-2; APM NOI-3		
Impact N-2: Ground-borne vibration could cause a temporary nuisance during construction	Class III	APM NOI-1; APM NOI-2; APM NOI-3		
Impact N-3: Noise from operation of the overhead subtransmission line	<del>Class I</del> <u>Class III</u>	None		
Visual Resources				
Impact V-1: Short-term visibility of construction activities, equipment, and night lighting	Class II	V-1a: Reduce Visibility of Construction Activities and Equipment V-1b: Reduce Construction Night Lighting Impacts		
Impact V-2: Long-term visibility of land scars and vegetation clearance in arid and semi-arid landscapes	Class II	V-2a: Reduce In-Line Views of Land Scars V-2b: Reduce Visual Contrast from Unnatural Vegetation Lines		
Impact V-3: Increased structure contrast, industrial character, view blockage, skylining, and glare when viewed from Key Viewpoint 1 on eastbound San Timoteo Canyon Road	Class II	V-3a: Reduce Visibility of the El Casco Substation Site V-3b: Reduce Operation Night Lighting Impacts		
Impact V-4: Increased structure contrast, industrial character, view blockage, skylining and glare when viewed from Key Viewpoint 2 in Norton Younglove Reserve	Class II	V-3a: Reduce Visibility of the El Casco Substation Site V-3b: Reduce Operation Night Lighting Impacts		
Impact V-5: Increased structure contrast, industrial character, view blockage and glare when viewed from Key Viewpoint 3 in the new residential development north of San Timoteo Canyon Road	<del>Class II <u>Class II</u></del>	L V-3a: Reduce Visibility of the El Casco Substation Site V-3b: Reduce Operation Night Lighting Impacts None		
Impact V-6: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 4 on eastbound SR-60	Class III	None		
Impact V-7: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 5 on Faircliff Street	Class III	None		
Impact V-8: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 6 on Pine Valley Road in the Sun Lakes development	Class III	None		
Impact V-9: Increased structure contrast and industrial character when viewed from Key Viewpoint 7 on East Lincoln Street in the City of Banning	Class III	None		
Impact V-10: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 8 on North Juniper Avenue in the City of Yucaipa	<del>Class II <u>Class II</u></del>	L V 10: Reduce Visibility of the Zanja Substation Modifications-None		

#### Table ES-6. Summary of Impacts and Mitigation for the Partial Underground Alternative

Impact	Impact Class <sup>a</sup>	Mitigation Measure(s) <sup>b</sup>
Impact V-11: Increased structure contrast, view blockage, and skylining when viewed from Key Viewpoint 9 on Carter Street in the City of Yucaipa	Class III	None
Impact V-12: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 10 on southbound Live Oak Canyon Road	Class III	None
Impact V-16: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 14 on northbound South Highland Home Road	Class III	None

# Section B – Project Description

• Page B-2:

# B.3 PROJECT PHASING

The Proposed Project would be constructed and operational in two phases (Phase 1 and Phase 2) from approximately June 2008 to June 2010 January 2009 to August 2010.

# B.3.1 Phase 1

The 115 kV portion of the proposed El Casco Substation would be constructed as part of Phase  $1_{\overline{7}}$  and would be operational by June 2009. Phase 1 would include construction of the following elements at El Casco Substation:

# B.3.2 Phase 2

The 220/115 kV portion of the proposed El Casco Substation and remaining components of the Project would be constructed as part of Phase 2, and would be operational by June 2010. Phase 2 would include construction of the following elements at El Casco Substation:

• Page B-14:

#### B.4.1.2.9 Construction Schedule

Construction of the proposed El Casco Substation would take a total of approximately 24 <u>20</u> months (for both Phase 1 and Phase 2 construction), commencing in approximately June 2008 January 2009 and concluding in June <u>August</u> 2010, including testing and energizing the substation. The planned operating date for Phase 1 is June 2009, and the planned operating date for Phase 2 is June is <u>October</u> 2010.

• Page B-19:

#### B.4.2.2.8 Construction Schedule

Construction at Zanja Substation would take approximately six months, commencing in late the fourth quarter of 2009 and concluding in early the second quarter of 2010, including testing and energizing the substation.

• Page B-22:

#### B.4.3.2.8 Construction Schedule

Construction at Banning Substation would take approximately <u>eight 12</u> months, commencing in <u>mid</u> the second quarter of 2009 and concluding in <u>early the second quarter of 2010</u>, including testing and energizing the substation.

• Page B-25:

#### B.5.2.9 Construction Schedule

Construction of the proposed 220 kV transmission line loop-in would take approximately 90 days, and is scheduled to begin in early the second quarter of 2010 and finish in the third quarter of 2010.

• Page B-36:

#### B.6.2.9 Construction Schedule

Construction of the 115 kV subtransmission line work for Phase 1 would require approximately 30 days to complete and is scheduled to begin in early January 2009 and end in July 2010. Construction of the 115 kV subtransmission line work for Phase 2 would require approximately 180 days to complete and is scheduled to begin in late 2009.

• Page B-38:

#### B.7.2.4 Construction Schedule

Installation of the HDD work would require <del>15 days</del> three to four weeks to complete. This work is scheduled for early <u>October/November</u> 2009. To the extent possible, HDD work would not be performed during periods of heavy rainfall (typically November through March) (SCE, 2007c).

• Page B-43:

#### B.8.1.2.7 Construction Schedule

During Phase 1 of construction, each antenna tower would require 30 days to assemble, and an additional 15 days would be necessary at each site to attach the microwave antennas and install the other required equipment inside the communication buildings. This work is scheduled for early <u>Fall</u> 2009. The additional work necessary during Phase 2 of construction would require 10 days to complete and is scheduled for early 2010.

• Page B-51:

#### B.8.2.2.6 Construction Schedule

Construction of the proposed fiber optic system would take approximately 130 days and is scheduled to begin in late June 2009. In order to connect the fiber optic circuit to M30-T3, the use of one light-duty helicopter will be required for one day.

# Section D – Environmental Analysis

#### Section D.2 – Air Quality

• Page D.2-13 (Subsection D.2.2.4, Climate Change Policies and Regulations):

California Global Warming Solutions Act of 2006 (AB32). This law requires CARB to adopt a statewide greenhouse gas emissions limit equivalent to the statewide GHG emissions levels in 1990

to be achieved by 2020, or approximately a 30 percent reduction from business-as-usual emission levels projected for 2020. To achieve this, CARB has a mandate to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions.

• Page D.2-23 (Subsection D.2.3.3, Proposed Project Impact Analysis):

An unquantifiable direct air quality impact of subtransmission system operation would be the potential escape of SF<sub>6</sub>, a potent greenhouse gas, used in operation of the electrical switchgear equipment and circuit breakers. Because of the high global warming potential of SF<sub>6</sub> even small quantities of emissions are a concern. Any increase in SF<sub>6</sub> emissions absent a commensurate GHG emission reduction would result in an increase of GHG emissions and a significant and unavoidable impact. SCE currently takes voluntary steps to address this issue by participating in the U.S. EPA SF<sub>6</sub> Emissions Reduction Partnership for Electric Power Systems, hHowever, to ensure that all feasible SF<sub>6</sub> reduction strategies are implemented, Mitigation Measure AQ-3 would be required to minimize the impact of SF<sub>6</sub> escape. The measure would require the new equipment to achieve a performance standard for  $SF_6$  leakage of 0.5 percent per year, which is an achievable industry standard,<sup>1</sup> and well below the historic system-wide leakage rates for SCE (ranging from 8 to 12 percent per year over 1999 to 2003, according to the SCE presentation for the U.S. EPA 3rd International Conference on  $SF_6$  and the Environment, 2004). By achieving a leak rate that is more than 30 percent lower than the historic leak rate, this measure would conform with the emission reduction goals of AB32. The measure would require annual reporting of the El Casco Substation SF<sub>6</sub> leak rate to confirm compliance with this limit, until rules are promulgated under AB32 to address this pollutant. Although the measure would reduce SF6 escape and because carbon offset programs are still in the developmental phase, it would not be possible to entirely eliminate or offset this impact. Therefore, the direct impact of the Proposed Project on greenhouse gases would remain significant and unavoidable (Class I).

- Page D.2-23 through D.2-24 (Subsection D.2.3.3, Proposed Project Impact Analysis):
  - AQ-3 Avoid Sulfur Hexafluoride Emissions. SCE shall ensure that Project equipment, specifically the circuit breakers at the El Casco Substation, maintain a leakage rate of 0.5 percent per year or less for sulfur hexafluoride (SF<sub>6</sub>). To accomplish this, SCE shall include this limit as a performance specification for the circuit breakers that would be installed as part of the Project. Maintenance, repair, and replacement of all circuit breakers shall be in a manner that ensures continued compliance with this performance specification. SCE shall demonstrate compliance with this limit by submitting an annual report of  $SF_6$  emissions for the El Casco Substation to the CPUC. This report should contain information regarding leaks that are detected at the substation and the actions that were taken to address such occurrences. The annual SF<sub>6</sub> emission rate is defined as total SF<sub>6</sub> emissions from the El Casco Substation for the most recent reporting year divided by total name-plate capacity of  $SF_6$  at the El Casco Substation (i.e., the total quantity of  $SF_6$  contained in electrical equipment at the end of the reporting year). The annual report of SF<sub>6</sub> emissions at the El Casco Substation shall be submitted to the CPUC until the California Air Resources Board enacts a program to report and restrict  $SF_6$  emissions from the electricity sector under the California Global Warming Solutions Act of 2006 (AB32). SCE shall report SF<sub>6</sub> emissions to the California Climate Action Registry (CCAR) according to CCAR methodologies or alternate methodology

<sup>&</sup>lt;sup>1</sup> International Electrotechnical Commission (IEC) Standard 62271-1, 2004.

approved by the California Air Resources Board. This report shall include the El Casco Substation and indirect GHG emissions from energy imported and consumed to support operation of the system and indirect GHG emissions from transmission and distribution losses.

- AQ-3 Avoid Sulfur Hexafluoride Emissions. SCE shall identify sulfur hexafluoride (SF6) leaks and establish a strategy for replacing leaking equipment to reduce SF6 leaks. To accomplish this, SCE shall develop and maintain a record of SF6 purchases, an SF6 leak detection and repair program using laser imaging leak detection and monitoring no less frequently than quarterly, an SF6 recycling program, and an employee education and training program for avoiding or eliminating SF6 emissions caused by the Proposed Project. The SF6 leak detection and repair program shall be provided to the CPUC 90 days prior to project operation. SCE shall also report SF6 emissions from the Proposed Project to the California Climate Action Registry (CCAR) according to CCAR methodologies or alternate methodology approved by the California Air Resources Board. To develop a complete GHG inventory, SCE shall follow established methodologies to report indirect GHG emissions from energy imported and consumed to support operation of the Proposed Project and indirect GHG emissions from transmission and distribution losses associated with the Proposed Project.
- Page D.2-25 (Subsection D.2.4.2, CPUC's Northerly Route Alternative Option 3 Environmental Impacts and Mitigation Measures):

Construction and operation of Route Alternative Option 3 would result in similar emissions as those described above for the Proposed Project. An unquantifiable direct air quality impact of subtransmission system operation would be the potential escape of SF<sub>6</sub>, a potent greenhouse gas, used in operation of the electrical switchgear equipment and circuit breakers. Any increase in SF<sub>6</sub> emissions absent a commensurate GHG emission reduction would result in an increase of GHG emissions and is considered adverse. Mitigation Measure AQ-3 would be required to minimize the impact of SF<sub>6</sub> escape. Although the measure would reduce SF<sub>6</sub> escape and because carbon offset programs are still in the developmental phase, it would not be possible to entirely eliminate or <u>offset</u> this impact. Therefore, the direct impact of Route Alternative Option 3 on greenhouse gases would be significant and unavoidable (Class I).

• Page D.2-28 (Partial Underground Alternative – Environmental Impacts and Mitigation Measures):

Construction and operation of the Partial Underground Alternative would result in similar emissions as those described above for the Proposed Project. An unquantifiable direct air quality impact of subtransmission system operation would be the potential escape of SF<sub>6</sub>, a potent greenhouse gas, used in operation of the electrical switchgear equipment and circuit breakers. Any increase in SF<sub>6</sub> emissions absent a commensurate GHG emission reduction would result in an increase of GHG emissions and is considered adverse. Mitigation Measure AQ-3 would be required to minimize the impact of SF<sub>6</sub> escape. Although the measure would reduce SF<sub>6</sub> escape and because carbon offset programs are still in the developmental phase, it would not be possible to entirely eliminate or <u>offset</u> this impact. Therefore, the direct impact of the Partial Underground Alternative on greenhouse gases would be significant and unavoidable (Class I).

• Page D.2-28 through D.2-29 (Subsection D.2.6., Environmental Impacts of the No Project Alternative):

Construction and operation of required No Project Alternative would result in fewer emissions than those described above for the Proposed Project. The construction emissions and possible fugitive emissions of SF<sub>6</sub> from the transformer and substation improvements would cause an increase of greenhouse gas emissions similar to those of the Proposed Project. Mitigation similar to Measure AQ-3 described above would be required to minimize the impact of SF<sub>6</sub> escape associated with the No Project Alternative. Although the measure would reduce SF<sub>6</sub> escape and because carbon offset programs are still in the developmental phase, it would not be possible to entirely eliminate <u>or offset</u> this impact. Therefore, significant unavoidable greenhouse gas emissions would occur (Class I). Furthermore, the No Project Alternative would not be as effective as the Proposed Project in improving the distribution efficiency of the California transmission grid, thus resulting in more greenhouse gas release.

• Page D.2-30 (Note: The following is an excerpt from Table D.2-19 that identifies only the impacts and mitigation measures for which changes were made):

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness	Responsible	Timing
AQ-3: Emissions Contribute to Climate Change (Class I)	AQ-3 Avoid Sulfur Hexafluoride Emissions. SCE shall ensure that Project equipment, specifically the circuit breakers at the El Casco Substation, maintain a leakage rate of 0.5 percent per year or less for sulfur hexafluoride (SF <sub>6</sub> ). To accomplish this, SCE shall include this limit as a performance specification for the circuit breakers that would be installed as part of the Project. Maintenance, repair, and replacement of all circuit breakers shall be in a manner that ensures continued compliance with this performance specification. SCE shall demonstrate compliance with this limit by submitting an annual report of SF <sub>6</sub> emissions for the El Casco Substation to the CPUC. This report should contain information regarding leaks that are detected at the substation and the actions that were taken to address such occurrences. The annual SF <sub>6</sub> emission rate is defined as total SF <sub>6</sub> emissions from the El Casco Substation for the most recent reporting year divided by total name-plate capacity of SF <sub>6</sub> at the El Casco Substation (i.e., the total quantity of SF <sub>6</sub> contained in electrical equipment at the end of the reporting year). The annual report of SF <sub>6</sub> emissions at the El Casco Substation shall be submitted to the CPUC until the California Air Resources Board enacts a program to report and restrict SF <sub>6</sub> emissions from the electricity sector under the California Global Warming Solutions Act of 2006 (AB32). SCE shall report SF <sub>6</sub> emissions to the California Climate Action Registry (CCAR) according to CCAR methodologies or alternate methodology approved by the California Air Resources Board. This report shall include the El Casco Substation and indirect GHG emissions from transmission and distribution losses.	Entire Project	SCE shall report SF <sub>6</sub> emissions from the Proposed Project to the California Climate Action Registry (CCAR) <u>and CPUC</u>	Reduced SF <sub>6</sub> emissions	CPUC and CCAR SCE	Construction and Operation

Table D.2-19. Mitig	ation Monitoring Program – Air Quality					
Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	AQ 3 Avoid Sulfur Hexafluoride Emissions SCE shall identify sulfur hexafluoride (SF <sub>6</sub> ) leaks and establish a strategy for replacing leaking equipment to reduce SF <sub>6</sub> -leaks To accomplish this, SCE shall develop and maintain a record of SF <sub>6</sub> purchases an SF <sub>6</sub> -leak detection and repair program using laser imaging leak detection and monitoring no less frequently than quarterly, an SF <sub>6</sub> -recycling program, and an employee education and training program for avoiding or eliminating SF <sub>6</sub> -emissions caused by the Proposed Project. The SF <sub>6</sub> leak detection and repair program shall be provided to the CPUC 90 days prior to project operation. SCE shall also report SF <sub>6</sub> emissions from the Proposed Project to the California Climate Action Registry (CCAR) according to CCAR methodologies or alternate methodology approved by the California Air Resources Board. To develop a complete GHG inventory, SCE shall follow established methodologies to report indirect GHG emissions from energy imported and consumed to support operation of the Proposed Project and indirec t GHG emissions from transmission and distribution losses associated with the Proposed Project					

# Section D.4 – Biological Resources

- Page D.4-62 (Subsection D.4.5.2, Impacts to Riparian or Sensitive Natural Communities):
  - **B-4** Conduct Pre-Construction Surveys and Monitoring for Breeding Birds. SCE shall conduct protocol-level surveys for nesting birds if construction activities are scheduled to occur during the breeding season for raptors and other migratory birds. For sections of the Project which occur within the MSHCP, protocol surveys may be waived if SCE provides evidence of compliance with the MSHCP. This approval will require written verification from the RCA that protocol surveys will not be required. SCE shall still conduct pre-construction surveys to check for nesting birds not covered by the MSHCP. These surveys shall commence two weeks prior to construction and be repeated as construction activities occupy new sections of the ROW. Documentation of these surveys shall be provided to the CPUC. Surveys shall be conducted in areas within 500 feet of tower sites, laydown/staging areas, substation sites, and access road/spur road locations. If active nests are found, a biological monitor shall establish a 300-foot buffer around the nest and no activities will be allowed within the buffer until the young have fledged from the nest or the nest fails. The biological monitor shall conduct regular monitoring of the nest to determine success/failure and to ensure that Project activities are not conducted within the 300-foot buffer until the nesting cycle is complete or the nest fails. The biological monitor shall be responsible for documenting the results of the surveys and the ongoing monitoring. The 300-foot buffer may be adjusted to accommodate environmental conditions (background noise, existing level of disturbance, nest location) with the approval of the CPUC monitor and the CDFG.
- Page D.4-66 (Subsection D.4.5.3, Impacts to Endangered or Threatened Species, or Proposed or Critical Habitat):
  - **B-6** Conduct Surveys for Sensitive Plant Species and Flag for Avoidance. SCE shall conduct focused surveys prior to construction during the floristic period appropriate for each of the sensitive plant species identified in Table D.4-3 with the potential to occur within the Project ROW and within 100 feet of all surface-disturbing activities. For sections of the Project which occur within the MSHCP, protocol surveys for narrow endemic plants may be waived if SCE provides evidence of compliance with the MSHCP. This approval will require written verification from the RCA that protocol surveys will not be required. SCE shall still conduct pre-construction surveys for rare plants to check for species not covered by the MSHCP. Populations of sensitive plants shall be flagged and mapped prior to construction. If sensitive plants (CNPS List 1A, 1B, or 2) are located during the focused surveys, then modification of the placement of structures, access roads, laydown areas, and other ground-disturbing activities would be implemented in order to avoid the plants. If listed plant species or species requiring 90 percent avoidance by the MSHCP cannot be avoided, SCE shall avoid the plants until authorized to proceed through the context of a Biological Opinion or and-authorized through the MSHCP Determination of Biologically Equivalent or Superior Preservation process.

- Page D.4-76 (Subsection D.4.5.4, Impacts to Candidate, Sensitive, or Special-Status Species):
  - **B-13b** Monitor and Relocate Species during Grading of Substation. In order to salvage sensitive reptiles from the substation site, SCE shall coordinate all initial grubbing and vegetation removal activities with the biological monitor such that biologists can watch these activities and capture and relocate any sensitive reptiles disturbed by this work. At the substation site, SCE shall clear and grub the existing vegetation prior to site grading. If populations of sensitive wildlife are identified SCE shall coordinate with the biological monitor to relocate the species to adjacent habitat. This is typically accomplished by slowly removing the vegetation at the ground surface in one pass, then in 4 inch lifts in successive passes until grading is at least 12 inches deep. The biologist shall have the authority to halt grading activities to relocate sensitive reptiles from the Project area. SCE shall provide written documentation to the CPUC of any sensitive wildlife identified during clearing or grading, how many were relocated, if any were harmed, and if any additional measures were implemented.
- Page D.4-118 (Note: The following is an excerpt from Table D.4-7 that identifies only the impacts and mitigation measures for which changes were made):

Table D.4-7. Mitigation Monitoring Program – Biological Resources									
Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing			
<b>B-4:</b> The Project would result in a loss of nesting birds (Class II).	B-4: Conduct Pre-Construction Surveys and Monitoring for Breeding Birds. SCE shall conduct protocol level surveys for nesting birds if construction activities are scheduled to occur during the breeding season for raptors and other migratory birds. For sections of the project which occur within the MSHCP protocol surveys may be waived if SCE provides evidence of compliance with the MSHCP. This approval will require written verification from the RCA that protocol surveys will not be required. SCE shall still conduct pre-construction surveys to check for nesting birds not covered by the MSHCP. These surveys shall commence two weeks prior to construction and be repeated as construction activities occupy new sections of the right of way. Documentation of these surveys shall be provided to the CPUC. Surveys shall be conducted in areas within 500 feet of tower sites, laydown/staging areas, substation sites, and access road/spur road locations. If active nests are found, a biological monitor shall establish a 300 foot buffer around the nest and no activities will be allowed within the buffer until the young have fledged from the nest or the nest fails. The biological monitor shall conduct regular monitoring of the nest to determine success/failure and to ensure that project activities are not conducted within the 300 foot buffer until the nesting cycle is complete or the nest fails. The biological monitor shall be responsible for documenting the results of the surveys and the ongoing monitoring. The 300-foot buffer may be adjusted to accommodate environmental conditions (background noise, existing level of disturbance, nest location) with the approval of the CPUC monitor and the CDFG.	Entire Project; within 500 feet of tower sites, laydown/staging areas, substation sites, access roads, and spur roads.	Monitor nests within a 300-foot buffer area of construction areas; determine success / failure of nests; ensure that construction activities do not enter the buffer area.	Nesting birds are not disturbed by Project activities.	CPUC / CDFG	Prior to Project construction.			
<b>B-6:</b> Construction activities would result in indirect or direct loss of listed plants (Class II).	B-6: Conduct Surveys for Sensitive Plant Species and Flag for Avoidance. SCE shall conduct focused surveys prior to construction during the appropriate floristic period appropriate for each of the sensitive plant species identified in Table D.3-3 with the potential to occur within the Project ROW and within 100 feet of all surface disturbing activities. For sections of the project which occur within the MSHCP protocol surveys for narrow endemic plants may be waived if SCE provides evidence of compliance with the MSHCP. This approval will require written verification from the RCA that protocol surveys for rare plants to check for species not covered by the MSHCP. Populations of sensitive plants shall be flagged and mapped prior to construction. If	Entire Project; within 100 feet of all surface disturbance.	Modify location of ground disturbance to avoid listed and sensitive plant species as needed; where unavoidable, authorize disturbance of plant species.	Listed and sensitive plant species are not disturbed by Project construction.	CPUC	Prior to Project construction; during floristic periods (Table D.3-3).			

Table D.4-7. Mitigation Monitoring Program – Biological Resources								
Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing		
	sensitive plants (CNPS List 1A, 1B, or 2) are located during the focused surveys, then modification of the placement of towers, access roads, laydown areas, and other ground disturbing activities would be implemented in order to avoid the plants. If listed plant species or species requiring 90% avoidance by the MSHCP cannot be avoided, SCE shall avoid the plants until authorized through the context of a biological opinion and or authorized through the MSHCP Determination of Biologically Equivalent or Superior Preservation process.							
<b>B-13:</b> The Project would result in the loss of special-status reptile species (Class II).	B-13b: Monitor and Relocate Species During Grading of Substation. In order to salvage sensitive reptiles from the substation site, SCE shall coordinate all initial grubbing and vegetation removal activities with the biological monitor such that biologists can watch these activities and capture and relocate any sensitive reptiles disturbed by this work. At the sub-station site SCE shall clear and grub the existing vegetation prior to site grading. If populations of sensitive wildlife are identified SCE shall coordinate with the biological monitor to relocate the species to adjacent habitat. This-is typically accomplished by slowly removing the vegetation at the ground surface in one pass, then in 4 inch lifts in successive passes until grading is at least 12 inches deep. The biologist shall have the authority to halt grading activities to relocate sensitive reptiles from the Project area. SCE shall provide written documentation to the CPUC of any sensitive wildlife identified during clearing or grading, how many were relocated, if any were harmed, and if any additional measures were implemented.	El Casco Substation site.	Capture and relocate reptiles disturbed during grubbing and vegetation removal; halt grading activities as necessary.	Legless lizards and two striped garter snakes Sensitive reptiles are not disturbed by grading or construction activities at the substation site.	CPUC	During Project construction (grubbing and vegetation removal activities).		

# Section D.5 – Cultural and Paleontological Resources

- Page D.5-34 (Subsection D.5.3.3, Proposed Project Impact Analysis):
  - **CR-3e** Train Construction Personnel. All construction personnel shall be trained regarding the recognition of possible buried paleontological resources and protection of all paleontological resources during construction, prior to the initiation of construction or ground-disturbing activities. SCE shall complete training for all construction personnel. Training shall inform all construction personnel of the procedures to be followed upon the discovery of paleontological materials.

Upon discovery of potential buried paleontological materials by paleontologists or construction personnel, work in the immediate area of the find shall be diverted and SCE's paleontologist notified. Once the find has been inspected and a preliminary assessment made, SCE's assigned paleontologist <u>or paleontological representative</u> shall notify the CPUC and proceed with data recovery in accordance with the approved Treatment Plan consistent with Mitigation Measure CR-3b (Develop Paleontological Monitoring and Treatment Plan).

• Page D.5-45 (Note: The following is an excerpt from Table D.5-11 that identifies only the impacts and mitigation measures for which changes were made):

Table D.5-11. Mitigation Monitoring Program – Cultural and Paleontological Resources								
Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing		
<b>CR-3:</b> Project Construction Would Affect Significant Paleontological Resources (Class II)	<b>CR-3e:</b> Train Construction Personnel. All construction personnel shall be trained regarding the recognition of possible buried paleontological resources and protection of all paleontological resources during construction, prior to the initiation of construction or ground-disturbing activities. SCE shall complete training for all construction personnel. Training shall inform all construction personnel of the procedures to be followed upon the discovery of paleontological materials. Upon discovery of potential buried paleontological materials by paleontologists or construction personnel, work in the immediate area of the find shall be diverted and SCE's paleontologist notified. Once the find has been inspected and a preliminary assessment made, SCE's assigned paleontologist <u>or paleontological representative</u> shall notify the CPUC and proceed with data recovery in accordance with the approved Treatment Plan consistent with Mitigation Measure CR 3b (Develop Paleontological Monitoring and Treatment Plan).	Entire project.	<ul> <li>CPUC reviews and approves contract specifications.</li> <li>CPUC reviews verification of required training.</li> <li>CPUC receives prompt notification of new resource discoveries and violations.</li> </ul>	Paleontological resources are not adversely affected by construction activity.	CPUC	Prior to and during construction.		

# Section D.6 – Geology and Soils

Page D.6-26 (Note: The following is an excerpt from Table D.6-9 that identifies only the impacts and mitigation measures for which changes were made):

Table D.6-9. Mitigation Monitoring Program – Geology and Soils								
Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing		
GEO-2: Construction activities would accelerate erosion (Class II).	<b>GEO-2:</b> Minimize Soil Erosion. The Construction SWPPP for the Project shall include Best Management Practices (BMPs) designed to minimize soil erosion along access roads and at work areas. Appropriate BMPs may include construction of water bars, grading road surfaces to direct flow away from natural slopes, use of soil stabilizers, and consistent maintenance of roads and culverts to maintain appropriate flow paths. Silt fences and straw bales installed during construction shall be removed to restore natural drainage during the cleanup and restoration phase of the Proposed Project. Where access roads cross streams or drainages, they shall be built at or close to right angles to the streambeds and washes and culverts or rock crossings shall be used to cross streambeds and washes. Design of appropriate BMPs should be conducted by or under the direction of a qualified geologist or engineer.	Entire Project alignment <u>Areas having soils</u> that are loosely compacted such as along the <u>Maraschino Loop</u> South, much of the subtransmission line route, and in patches on hillsides	Review and approve final construction plans demonstrating compliance with this measure. Onsite monitor to verify effective use of screening fencing and compliance with additional requirements of this measure. CPUC-approved engineer and RWQCBs shall review and approve construction plans and Construction SWPPP	Ground level clutter from equipment, materials, and vehicles will be effectively screened from views in areas of high public visibility. Plan/ remediation prevents failure of tower footings to the extent feasible	CPUC, <u>CRBRWQCB,</u> <u>SARWQCB local</u> planning agencies	Prior to and during construction.		

# Section D.7 – Hazards and Hazardous Materials

• Page D.7-46 through D.7-47 (Subsection D.7.8.2, Environmental Impacts and Mitigation Measures for Operation of the Proposed Subtransmission Line):

# Impact HAZ-9: Radio and Television Interference (Class II Class III)

The existing single-circuit 115 kV subtransmission operating line, operating under normal conditions, does not carry any electrical load in some portions (i.e., between Maraschino and Banning Substations). However, there is voltage in the line. Corona or gap discharges related to high frequency radio and television interference impacts are dependent upon several factors, including the strength of broadcast signals, and are anticipated to be very localized if they occur. With implementation of the Proposed Project, the new double-circuit 115 kV subtransmission line would carry load at all times, which may result in radio and television interference. Individual sources of adverse radio/television interference impacts can be located and corrected on the power lines. Conversely, magnetic field interference with electronic equipment such as computer monitors can be corrected through the use of software, shielding, or changes at the monitor location. Mitigation Measures HAZ 9a (Limit Conductor Surface Gradient) and HAZ 9b (Resolve Radio/Television/ Equipment Interference Complaints) are recommended to reduce the potential impacts of interference (Class II). However, independent analysis conducted by the CPUC has determined that the Proposed Project would not result in a conductor surface electrical gradient, as this condition does not occur on subtransmission lines energized at less than 200 kV. Therefore, radio/television/equipment interference would not increase over existing conditions and this impact would be less than significant (Class III).

#### **Mitigation Measures for Impact HAZ-9**

- **HAZ-9a** Limit Conductor Surface Gradient. As part of the design and construction process for the Proposed Project, SCE shall limit the conductor surface electric gradient in accordance with the IEEE Radio Noise Design Guide.
- **HAZ-9b** Resolve Radio/Television/Equipment Interference Complaints. After energizing the transmission line, SCE shall respond to and document all radio/television/equipment interference complaints received and the responsive action taken. These records shall be made available to the CPUC for review upon request. All unresolved disputes shall be referred by SCE to the CPUC for resolution.
- Page D.7-48 (Subsection D.7.8.3, CPUC's Northerly Route Alt Option 3):

# Impact HAZ-9: Radio and Television Interference (Class # III)

The existing single-circuit 115 kV subtransmission operating line, operating under normal conditions, does not carry any electrical load in some portions (i.e., between Maraschino and Banning Substations). However, there is voltage in the line. Corona or gap discharges related to high frequency radio and television interference impacts are dependent upon several factors, including the strength of broadcast signals, and are anticipated to be very localized if they occur. With implementation of the Proposed Project, the new double-circuit 115 kV subtransmission line

would carry load at all times, which may result in radio and television interference. Individual sources of adverse radio/television interference impacts can be located and corrected on the power lines. Conversely, magnetic field interference with electronic equipment such as computer monitors can be corrected through the use of software, shielding, or changes at the monitor location. Mitigation Measures HAZ 9a (Limit Conductor Surface Gradient) and HAZ 9b (Resolve Radio/Television/Equipment Interference Complaints) are recommended to reduce the potential impacts of interference (Class II). However, independent analysis conducted by the CPUC has determined that the Proposed Project would not result in a conductor surface electrical gradient, as this condition does not occur on subtransmission lines energized at less than 200 kV. Therefore, radio/television/equipment interference would not increase over existing conditions and this impact would be less than significant (Class III).

#### **Mitigation Measures for Impact HAZ-9**

- **HAZ-9a** Limit Conductor Surface Gradient. As part of the design and construction process for the CPUC's Northerly Route Alternative Option 3, SCE shall limit the conductor surface electric gradient in accordance with the IEEE Radio Noise Design Guide.
- **HAZ-9b** Resolve Radio/Television/Equipment Interference Complaints. After energizing the transmission line, SCE shall respond to and document all radio/television/equipment interference complaints received and the responsive action taken. These records shall be made available to the CPUC for review upon request. All unresolved disputes shall be referred by SCE to the CPUC for resolution.
- Page D.7-49 through D.7-50 (Subsection D.7.8.4, Partial Underground Alternative):

# Impact HAZ-9: Radio and Television Interference (Class # III)

As described above for the Proposed Project, corona or gap discharges related to high frequency radio and television interference impacts are dependent upon several factors, including the strength of broadcast signals, and are anticipated to be very localized if they occur. Individual sources of adverse radio/television interference impacts can be located and corrected on the power lines. Conversely, magnetic field interference with electronic equipment such as computer monitors can be corrected through the use of software, shielding, or changes at the monitor location. EMF levels for the underground portion of this alternative would be 0.2 mG or less at the edge of the transmission ROW, and 3.0 directly above the line and would not result in these impacts. However, Mitigation Measures HAZ 9a (Limit Conductor Surface Gradient) and HAZ 9b (Resolve Radio/Television/Equipment Interference Complaints) are recommended to reduce the potential impacts of interference of the aboveground portion of this alternative route (Class II). However, independent analysis conducted by the CPUC has determined that the aboveground portion of the Partial Underground Alternative would not result in a conductor surface electrical gradient, as this condition does not occur on subtransmission lines energized at less than 200 kV. Therefore, radio/television/equipment interference would not increase over existing conditions and this impact would be less than significant (Class III).

#### **Mitigation Measures for Impact HAZ-9**

- **HAZ-9a** Limit Conductor Surface Gradient. As part of the design and construction process for the aboveground portion of this alternative, SCE shall limit the conductor surface electric gradient in accordance with the IEEE Radio Noise Design Guide.
- **HAZ-9b** Resolve Radio/Television/Equipment Interference Complaints. After energizing the transmission line, SCE shall respond to and document all radio/television/equipment interference complaints received and the responsive action taken. These records shall be made available to the CPUC for review upon request. All unresolved disputes shall be referred by SCE to the CPUC for resolution.
- Page D.7-52 (Note: The following is an excerpt from Table D.7-8 that identifies only the impacts and mitigation measures for which changes were made):

Table D.7-8. Mitigation Monitoring Program – Hazards								
Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing		
HAZ-8: The project would expose people or structures to a significant risk of loss, injury or death involving wildland fires. (Class II)	<ul> <li>HAZ-8a: Prepare and Implement Fire Management Plan. SCE shall develop and implement a comprehensive Fire Management Plan to reduce the risk of igniting a fire during construction and operation as well as controlling the spread of a fire should one occur. The plan shall include, but not be limited to:</li> <li>Ensuring that reasonable safeguards and Best Management Practices have been implemented and all supervision, labor, tools, equipment and material as necessary to prevent starting any fire, control spread of fires if started, and provide assistance for extinguishing fires started as a result of transmission line construction activities are provided.</li> <li>Using every reasonable precaution against starting fires where the work is performed, in whole or in part, in an area covered with flammable dry grass, brush, and trees.</li> <li>Providing temporary safeguards, walks, rails, guards, construction fences, and suchlike, as required by any ordinances, as directed by the Construction Representative, or as necessary to protect workers, SCE employees, and the public.</li> <li>Providing portable fire fighting equipment, shovels, axes, and other necessary fire fighting equipment at all sites where work is in progress, and with all crews in transit.</li> <li>Prohibiting smoking on the jobsite, and if necessary assigning a Fire Patrolperson whose responsibility would be solely to monitor the contractor's fire-prevention activities.</li> </ul>	Entire Project route.	CPUC approved engineer shall review and approve plans. Onsite monitor shall verify compliance with plans.	Prevent wildfires	CPUC	Prior to, during, and after construction		

Table D.7-8. Mitigation Monitoring Program – Hazards								
Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing		
HAZ-9: Radio and Television Interference (Class II)	HAZ-9a: Limit Conductor Surface Gradient. As part of the design and construction process for the Proposed Project, SCE shall limit the conductor surface electric gradient in accordance with the IEEE Radio Noise Design Guide.	Along the entire transmission line route	CPUC approved engineer shall review construction design plans to ensure consistency with IEEE Radio Noise Design Guide.	The potential for magnetic field interference of electronic equipment is reduced.	CPUC	Prior to construction		
	HAZ-9b: Resolve Radio/Television/Equipment Interference Complaints. After energizing the transmission line, SCE shall respond to and document all radio/television/equipment interference complaints received and the responsive action taken. These records shall be made available to the CPUC for review upon request. All unresolved disputes shall be referred by SCE to the CPUC for resolution.	Along the entire subtransmission line route	Review documentation provided.	All radio/television/equ ipment interference disputes are resolved.	CPUC	After construction		

# Section D.8 – Hydrology and Water Quality

- Page D.8-19 (Subsection D.8.3.3, Proposed Project Impact Analysis):
  - HYD-1d Control of Side-Cast Material, Right-of-Way Debris, and Roadway Debris. Side-cast material includes any loose, unconsolidated materials that must be re-located to facilitate construction activities. This may include rocks and boulders as well as organic materials. Prior to the onset of any construction activities, waste areas must be designated where excess material can be deposited and stabilized Waste areas must be located within designated work areas and stabilized to prevent wind and water erosion. During road construction and maintenance, potential sidecast and other waste material will be utilized on the road surface. Any unused material shall be removed to designated disposal sites. Waste areas shall not be left exposed and must be transported to disposal facilities on a regular basis, which will be determined based on site-specific conditions.
- Page D.8-23 (Subsection D.8.3.3, Proposed Project Impact Analysis Impact HYD-4):

In order to ensure that potential impacts to groundwater would be less than significant (Class II), implementation of Mitigation Measure HYD-2d4 (Develop and Implement a Groundwater Remediation Plan) is recommended.

• Page D.8-39 (Note: The following is an excerpt from Table D.8-7 that identifies only the impacts and mitigation measures for which changes were made):

Table D.8-7. Mitigation Monitoring Program – Hydrology and Water Quality								
Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing		
Impact HYD-1: Soil erosion and sedimentation caused by construction activities would degrade water quality (Class II).	<ul> <li>HYD-1a: Implementation of Erosion and Sediment BMPs. The following BMPs shall be implemented in order to minimize potential hydrologic and water quality impacts of erosion and sedimentation created through Project construction:</li> <li>Mechanical and vegetative measures shall be implemented to provide surface soil stability where necessary. Mechanical measures may include but are not limited to: wattles, erosion nets, terraces, side drains, blankets, mats, riprapping, mulch, tackifiers, pavement, soil seals, and windrowing construction slash at the toe of fill slopes. Vegetative measures shall be used to supplement mechanical measures, as appropriate.</li> <li>Road slope stabilization practices shall be implemented prior to the first winter rains. These practices shall include: verification of the correct slope steepness as dependent upon the dominant soil type/s present, implementation of methods to handle surface and subsurface runoff, and finalization of road surface compaction or application of appropriate surfacing material.</li> <li>Any temporary roadways which are built or used for the purpose of transporting construction equipment and materials to construction sites shall be situated to prevent undercutting of the designated final cut slope, avoid deposition of materials outside the designated roadway limits, and accommodate drainage with temporary culverts as necessary.</li> <li>Embankment methods shall be implemented to ensure adequate strength of the roadway and shoulder and to minimize potential failure of road embankments and fill areas. Acceptable stabilization methods include: sidecasting and end dumping, layer placement (roller compaction), controlled compaction, minimization of fill volumes, or strengthening of fills using retaining walls, confinement systems, plantings, or a combination of techniques. The appropriate stabilization effort shall be determined by the supervising project or crew leader prior to the onset of construction, based on site-specific</li> </ul>	Areas having moderate to high erosion potential and anywhere grading occurs.	CPUC-approved engineer Appropriate local agencies shall review and approve erosion control plans.	Plan/remediation prevents erosion and sedimentation from degrading water quality.	CPUC, CRBRWQCB, SARWQCB	Prior to and during construction		

Table D.8-7. Mitigation Monitoring Program – Hydrology and Water Quality								
Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing		
	<ul> <li>conditions.</li> <li>Strictly control vehicular traffic to only that which is necessary.</li> <li>Restore temporary construction areas (e.g., temporary roads, pulling and splicing stations) to a near-natural condition and ensure that the sites are re-vegetated and stabilized, unless operation and maintenance of the Project would require the areas to remain clear.</li> <li>Establish the use of concrete washout stations to capture and contain concrete washout material and wastewater to avoid direct release of washout to surface water.</li> <li>Erosion control measures shall be completed prior to the first anticipated rains at all construction sites. An Erosion Control Plan shall be prepared as part of the Project SWPPP.</li> <li>HYD-1d: Control of Side-Cast Material, Right-of-Way Debris, and Roadway Debris . Side-cast material includes any loose, unconsolidated materials that must be re-located to facilitate construction activities. This may include rocks and boulders as well as organic materials. Prior to the organic materials.</li> </ul>	Entire Project	Onsite monitor will verify proper handling and disposal of side-cast material and debris.	Remediation prevents erosion and sedimentation from degrading water quality.	CPUC	Prior to and during construction		
	must be designated where excess material can be deposited and stabilized Waste areas must be located within designated work areas and stabilized to prevent wind and water erosion. During road construction and maintenance, potential sidecast and other waste material will be utilized on the road surface. Any unused material shall be removed to designated disposal sites. Waste areas shall not be left exposed and must be transported to disposal facilities on a regular basis, which will be determined based on site-specific conditions. <b>GEO-2: Minimize Soil Erosion</b> . The Construction SWPPP for the Project shall include BMPs designed to minimize soil erosion along access roads and at	Areas having soils that are loosely compacted such as	CPUC-approved engineer <u>and</u> <u>RWQCBs</u> shall review and approve construction plans	Plan/ remediation prevents failure of tower footings to the	CPUC, <u>CRBRWQCB,</u> SARWQCB <del>local</del>	Prior to construction. Could be		
	work areas. Appropriate BMPs may include construction of water bars, grading road surfaces to	along the Maraschino Loop	and Construction SWPPP	extent feasible	planning agencies	staged to stay ahead of		

Table D.8-7. Mitigation Monitoring Program – Hydrology and Water Quality								
Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing		
	direct flow away from natural slopes, use of soil stabilizers, and consistent maintenance of roads and culverts to maintain appropriate flow paths. Silt fences and straw bales installed during construction shall be removed to restore natural drainage during the cleanup and restoration phase of the Proposed Project. Where access roads cross streams or drainages, they shall be built at or close to right angles to the streambeds and washes and culverts or rock crossings shall be used to cross streambeds and washes. Design of appropriate BMPs should be conducted by or under the direction of a qualified geologist or engineer.	South, much of the subtransmission line route, and in patches on hillsides				construction at particular site		
Impact HYD-2: Degradation of surface water or groundwater quality would occur from the accidental release of potentially harmful materials during construction activities (Class II).	<ul> <li>HYD-2a: Prevent Frac-out. SCE's HDD contractor shall take the following precautions to prevent fracout from occurring during drilling activities:</li> <li>Ensure that HDD casings are drilled to a depth of at least eight (8) feet below the bottom of San Timoteo Creek.</li> <li>Ensure HDD machinery arrives onsite in clean condition and is free of fluid leaks.</li> <li>Wash, refuel, and service machinery and store fuel and other materials for the machinery at least 50 feet away from San Timoteo Creek to prevent any hazardous substances from entering the water.</li> <li>Keep emergency spill kits on site in case of fluid leaks or spills from machinery.</li> <li>Restore banks to original condition if any disturbance occurs.</li> <li>Ensure drilling mud, sediment-laden water, and any other deleterious substances are contained above the high water mark and do not enter San Timoteo Creek.</li> <li>Dispose of excess drilling mud, cuttings, and other waste materials at an adequately sized disposal facility located at least 50 feet away from San Timoteo Creek to prevent if from entering the watercourse.</li> <li>Monitor San Timoteo Creek to observe signs of surface migration (frac-out) of drilling mud during all phases of construction</li> </ul>	Location of HDD activities at the proposed El Casco Substation site	CPUC-approved engineer Appropriate agencies shall review and approve plans. Plan implementation shall be confirmed by the onsite monitor during bore activities.	Plan/remediation prevents construction-related hazardous materials from degrading water quality.	CPUC, <u>CDFG,</u> CRBRWQCB, SARWQCB	Prepare plans prior to construction and implement during construction		

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	<ul> <li>HYD-2b: Implement HDD BMPs. SCE's HDD contractor shall implement BMPs during HDD activities to prevent water quality degradation. These measures shall include, but not be limited to:</li> <li>Perform all HDD activities outside of the rainy season (November to March). HDD activities shall be scheduled to occur only between the months of April and October.</li> <li>A re-circulation system for drilling surface fluid returns shall be employed to minimize the amount of drilling fluid used. Residual materials separated from the drilling fluid shall be disposed of in accordance with applicable regulations.</li> <li>All drilling fluid and fluid additives shall be disclosed, and Material Safety Data Sheets (MSDS) shall be maintained onsite during drilling.</li> <li>Excess drilling fluid shall be confined in a containment pit at entry and exit locations until recycled or removed from the site.</li> <li>Precautions shall be taken to ensure that drilling fluid does not enter roadways, streams, or any other drainage system or body of water.</li> <li>Unintended surfacing of drilling fluid shall be contained at the point of discharge and recycled or removed from the site.</li> <li>Drilling fluids that are not recycled and reused shall be removed from the site and disposed of at an approved disposal facility in compliance with all environmental regulations, right-of-ways and workspace agreements, and permit requirements.</li> <li>Drilling fluids shall be conpletely removed from the construction site prior to back filling the open conduit pits.</li> <li>Collection, transportation, and disposal of drilling fluids shall be conducted in an environmentally safe method and comply with local ordinances and government conditions SCE and its contractor shall ensure that all drilling materials and fluids are disposed properly.</li> </ul>	Location of HDD activities at the proposed EI Casco Substation site	CPUC-approved engineer and appropriate agencies shall review and approve plans. Onsite monitor shall verify compliance with all BMPs.	Plan/remediation prevents construction-related hazardous materials from degrading water quality.	CPUC, <u>CDFG,</u> CRBRWQCB, SARWQCB	Prepare plans prior to construction and implement during construction

Table D.8-7. Mitigation Monitoring Program – Hydrology and Water Quality								
Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing		
	<ul> <li>HYD-2c: Prepare and Implement Frac-out Response Plan. Prior to construction SCE shall prepare a Frac-out Response Plan. The plan shall identify detailed, site-specific procedures to monitor, contain, and clean up a potential frac-out, to avoid introduction of drilling fluids into San Timoteo Creek. Procedures shall include measures to stop work, contain the drilling mud and prevent its further migration into the watercourse, notify all applicable authorities, and clean up and dispose of the drilling mud The plan shall include, but not be limited to:</li> <li>Ensuring all material and equipment needed to contain and clean up drilling mud releases is kept on-site and readily accessible in the event of a frac-out.</li> <li>Ensuring clean-up measures do not result in greater damage to the banks and watercourse than from leaving the drilling mud in place.</li> <li>Developing a contingency crossing plan including measures to either locate a more appropriate location to re-drill or to isolate the watercourse to complete the crossing at the current location.</li> </ul>	Location of HDD activities at the proposed El Casco Substation site	CPUC-approved engineer <u>and</u> <u>appropriate agencies</u> shall review and approve plans. <u>Plan implementation shall be</u> <u>confirmed by the onsite</u> <u>monitor during bore activities.</u>	Plan/remediation prevents construction-related hazardous materials from degrading water quality.	CPUC, <u>CDFG,</u> <u>CRBRWQCB,</u> <u>SARWQCB</u>	Prepare plans prior to construction and implement during construction		

# Section D.11 – Transportation and Traffic

- Page D.11-8 (Subsection D.11.3.3, Proposed Project Impact Analysis):
  - **T-1d Restrict Lane Closures.** SCE shall restrict all necessary lane closures or obstructions on major roadways associated with overhead or underground construction activities to off-peak periods in urbanized areas, or as directed in writing by the affected public agency in the encroachment permit, to mitigate traffic congestion and delays. Lane closures in urbanized areas must not occur between 6:00 and 9:30 a.m. and between 3:30 and 6:30 p.m., or as directed in writing by the affected public agency in the encroachment permit.
- Page D.11-24 (Note: The following is an excerpt from Table D.11-4 that identifies only the impacts and mitigation measures for which changes were made):

Table D.11-4. Mitigation Monitoring Program – Public Services and Utilities Transportation and Traffic								
Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing		
T-1: Temporary Road and Lane Closures (Class II)	T-1d: Restrict Lane Closures. SCE shall restrict all necessary lane closures or obstructions on major roadways associated with overhead or underground construction activities to off-peak periods in urbanized areas, or as directed in writing by the affected public agency in the encroachment permit, to mitigate traffic congestion and delays. Lane closures in urbanized areas must not occur between 6:00 and 9:30 a.m. and between 3:30 and 6:30 p.m., or as directed in writing by the affected public agency in the encroachment permit.	All locations where temporary road or lane closures would be required.	Review documentation of SCE coordination with affected public agencies and compliance with all required conditions	Traffic flows would be generally maintained without severe congestion	CPUC and the applicable local jurisdictions	Prior to and during construction		

# Section D.12 – Visual Resources

• Page D.12-44 (Note: The following is an excerpt from Table D.12-7 that identifies only the impacts and mitigation measures for which changes were made):

Table D.12-7. Mitigation Monitoring Program – Visual Resources						
Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
V-3: Increased structure contrast, industrial character, view blockage, skylining and glare when viewed from Key Viewpoint 1 on eastbound San Timoteo Canyon Road (Class II)	<ul> <li>V-3b: Reduce Operation Night Lighting Impacts. SCE shall design and install all permanent lighting such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project facilities, vicinity, and nightime sky is minimized. SCE shall submit a Lighting Mitigation Plan to the BLM and CPUC for review and approval at least 90 days prior to ordering any permanent exterior lighting fixtures or components. SCE shall not order any exterior lighting fixtures or components until the Lighting Mitigation Plan is approved by the CPUC. The Plan shall include but is not necessarily limited to the following:</li> <li>Lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light sources are shielded to prevent light trespass outside the project boundary;</li> <li>All lighting shall be of minimum necessary brightness consistent with worker safety; and</li> <li>High illumination areas not occupied on a continuous basis shall have switches or motion detectors to light the area only when occupied.</li> </ul>	El Casco Substation	CPUC to review Lighting Mitigation Plan prior to start of construction and verify implementation following construction.	Light bulbs and reflectors at construction yards and staging areas would not be visible from public viewing areas and night lighting would not cause reflected glare and illumination beyond the construction site and into the nighttime sky.	CPUC	Prior to and during construction.

# Section F.1.5 – Cumulative Impact Analysis

# Section F.1.5.6 – Hazards and Hazardous Materials

• Page F-63 (Geographic Scope):

**Hazardous Materials and Emergency Response.** The geographic extent for the analysis of cumulative impacts related to hazards and hazardous materials, including environmental contamination, is limited to the areas of active construction as well as a 0.25 mile area on either side of the subtransmission line ROW and a 0.25 mile radius around the substation sites. This is because any potential release of hazardous materials associated with project activities or from other sites that could combine with a release from the Proposed Project or alternative routes would not likely be able to migrate more than 0.25 mile from the location of the actual release. Similarly, safety impacts related to emergency response would be limited to the immediate vicinity of the project site.

Airport Traffic Hazards: The geographic extent for the analysis of cumulative impacts related to safety hazards at airports is limited to two miles in any direction from Banning Municipal Airport, because this airport is the only airport that impacts of the Proposed Project or alternative routes may affect.

**Field-Related Concerns**. Electric power facility projects can create both safety and nuisance issues related to radio/television/electronic equipment interference; induced currents and shock hazards and potential effects on cardiac pacemakers. These effects could only combine to have a cumulative impact within the immediate area of the Proposed Project, because the electric fields from a transmission line cannot create impacts at a distance greater than 500 feet from the corridor.

• Page F-65 (Analysis of Proposed Project):

**Transmission line operation causes radio and television interference (Impact HAZ-9).** Corona or gap discharges related to high frequency radio and television interference impacts are very localized, if they occur at all. Independent analysis conducted by the CPUC has determined that the Proposed Project would not result in a conductor surface electrical gradient, as this condition does not occur on subtransmission lines energized at less than 200 kV. Therefore, radio/television/ equipment interference would not increase over existing conditions and this impact would be less than significant (Class III). Additionally, there are no other projects within 500 feet of the proposed ROW with which potential impacts of the Proposed Project could combine. Therefore, impacts of the Proposed Project would not have the potential to combine with impacts of past, present, ore reasonably foreseeable projects to result in cumulative impacts related to radio/television/equipment interference (No Impact).

**Transmission line operation causes induced currents and shock hazards in joint use corridors** (Impact HAZ-10). Induced currents and voltages on conducting objects near the proposed transmission lines represent a potential significant impact, but these impacts do not pose a threat to safety if the conducting objects are properly grounded. None of the reasonably foreseeable projects identified in Table F-2 (El Casco System Project Cumulative Projects List) that are located within 500 feet of the proposed ROW would be expected to be expand the potential for induced currents or shock hazards to occur. A cumulative impact would occur if past or reasonably foreseeable projects would result in placement of objects with the potential for induced voltages within proximity of the proposed ROW. However, Mitigation Measure HAZ-10 would require grounding of nearby objects that that have the potential for induced voltages. Therefore, implementation of this mitigation measure would render the Proposed Project's contribution to Impact HAZ-10 to less than significant (Class II).

**Electric fields can affect cardiac pacemakers (Impact HAZ-11).** The electric fields associated with the Proposed Project's transmission lines may be of sufficient magnitude to impact operation of a few older model pacemakers resulting in them reverting to an asynchronous pacing. This impact would not combine with impacts of other projects in the area because it would occur only in the immediate area of the transmission line and no other projects with the potential to affect cardiac pacemakers are located within the immediate vicinity of the proposed ROW. Therefore, Proposed Project impacts would not have the potential to combine with impacts of other past, present, or reasonably foreseeable projects (No Impact).

**Transmission line structures can be affected by wind and earthquakes (Impact HAZ-12).** This impact describes effect of local environment on the project, rather than the project's effect on the environment. Therefore, Impact HAZ-12 cannot combine with other projects and cannot create a cumulatively considerable impact (No Impact).

• Page F-67 (Analysis of Alternatives – CPUC's Northerly Route Alt Option 3):

**Transmission line operation causes radio and television interference (Impact HAZ-9).** Corona or gap discharges related to high frequency radio and television interference impacts are very localized, if they occur at all. Independent analysis conducted by the CPUC has determined that the proposed Route Alternative Option 3 would not result in a conductor surface electrical gradient, as this condition does not occur on subtransmission lines energized at less than 200 kV. Therefore, radio/television/equipment interference would not increase over existing conditions and this impact would be less than significant (Class III). Additionally, there are no other projects within 500 feet of the proposed ROW with which potential impacts of the proposed Route Alternative Option 3 could combine. Therefore, impacts of past, present, ore reasonably foreseeable projects to result in cumulative impacts related to radio/television/equipment interference (No Impact).

**Transmission line operation causes induced currents and shock hazards in joint use corridors** (Impact HAZ-10). Induced currents and voltages on conducting objects near the proposed transmission lines represent a potential significant impact, but these impacts do not pose a threat to safety if the conducting objects are properly grounded. None of the reasonably foreseeable projects identified in Table F-2 (El Casco System Project Cumulative Projects List) that are located within 500 feet of the proposed ROW would be expected to be expand the potential for induced currents or shock hazards to occur. A cumulative impact would occur if past or reasonably foreseeable projects would result in placement of objects with the potential for induced voltages within proximity of the proposed ROW. However, Mitigation Measure HAZ-10 would require grounding of nearby objects that that have the potential for induced voltages. Therefore, implementation of this mitigation measure would render the proposed Route Alternative Option 3's contribution to Impact HAZ-10 to less than significant (Class II).

Electric fields can affect cardiac pacemakers (Impact HAZ-11). The electric fields associated with the proposed Route Alternative Option 3's transmission lines may be of sufficient magnitude to

impact operation of a few older model pacemakers resulting in them reverting to an asynchronous pacing. This impact would not combine with impacts of other projects in the area because it would occur only in the immediate area of the transmission line and no other projects with the potential to affect cardiac pacemakers are located within the immediate vicinity of the proposed ROW. Therefore, proposed Route Alternative Option 3 impacts would not have the potential to combine with impacts of other past, present, or reasonably foreseeable projects (No Impact).

Transmission line structures can be affected by wind and earthquakes (Impact HAZ-12). This impact describes effect of local environment on the project, rather than the project's effect on the environment. Therefore, Impact HAZ-12 cannot combine with other projects and cannot create a cumulatively considerable impact (No Impact).

• Page F-68 (Analysis of Alternatives – Partial Underground Alternative):

**Transmission line operation causes radio and television interference (Impact HAZ-9).** Corona or gap discharges related to high frequency radio and television interference impacts are very localized, if they occur at all. Independent analysis conducted by the CPUC has determined that the Partial Underground Alternative would not result in a conductor surface electrical gradient, as this condition does not occur on subtransmission lines energized at less than 200 kV. Therefore, radio/television/equipment interference would not increase over existing conditions and this impact would be less than significant (Class III). Additionally, there are no other projects within 500 feet of the proposed ROW with which potential impacts of the Partial Underground Alternative could combine. Therefore, impacts of the Partial Underground Alternative would not have the potential to combine with impacts of past, present, ore reasonably foreseeable projects to result in cumulative impacts related to radio/television/equipment interference (No Impact).

**Transmission line operation causes induced currents and shock hazards in joint use corridors** (**Impact HAZ-10**). Induced currents and voltages on conducting objects near the proposed transmission lines represent a potential significant impact, but these impacts do not pose a threat to safety if the conducting objects are properly grounded. None of the reasonably foreseeable projects identified in Table F-2 (El Casco System Project Cumulative Projects List) that are located within 500 feet of the proposed ROW would be expected to be expand the potential for induced currents or shock hazards to occur. A cumulative impact would occur if past or reasonably foreseeable projects would result in placement of objects with the potential for induced voltages within proximity of the proposed ROW. However, Mitigation Measure HAZ-10 would require grounding of nearby objects that that have the potential for induced voltages. Therefore, implementation of this mitigation measure would render the Partial Underground Alternative's contribution to Impact HAZ-10 to less than significant (Class II).

**Electric fields can affect cardiac pacemakers (Impact HAZ-11).** The electric fields associated with the Partial Underground Alternative's transmission lines may be of sufficient magnitude to impact operation of a few older model pacemakers resulting in them reverting to an asynchronous pacing. This impact would not combine with impacts of other projects in the area because it would occur only in the immediate area of the transmission line and no other projects with the potential to affect cardiac pacemakers are located within the immediate vicinity of the proposed ROW. Therefore, Partial Underground Alternative impacts would not have the potential to combine with impacts of other past, present, or reasonably foreseeable projects (No Impact).

Transmission line structures can be affected by wind and earthquakes (Impact HAZ-12). This impact describes effect of local environment on the project, rather than the project's effect on the environment. Therefore, Impact HAZ-12 cannot combine with other projects and cannot create a cumulatively considerable impact (No Impact).

• Page F-68 (Analysis of Alternatives – No Project Alternative):

Although it is currently unknown where the required No Project Alternative 12 kV distribution lines would be constructed, it can be reasonably assumed that construction of these lines would result in similar impacts as the Proposed Project, and therefore would result in the same contribution to a significant cumulative impact for Impact HAZ-8 as described above for the Proposed Project. However, since construction activities associated with this alternative would likely be less intensive and of shorter duration than those of the Proposed Project, the No Project Alternative's contribution to a cumulative impact would be incrementally reduced. Additionally, like the Proposed Project, construction of 12 kV distribution lines would result in the same less than significant impacts for Impacts HAZ-1 through HAZ-3 (Class III). This alternative would also likely have no contribution to Impacts HAZ-4 through HAZ-6, HAZ-9, HAZ-11, and HAZ-12 (No Impact), and would likely require similar mitigation measures as the Proposed Project to reduce its contribution to Impacts HAZ-10 (Class II).

# Section F.1.5.9 – Public Services and Utilities

• Page F-80 through F-81 (Analysis of Proposed Project):

Cumulatively disrupt the existing utility systems or cause a collocation accident through the crossing or shared location with another utility line (Impact U-1). All Proposed Project construction activities would occur within existing SCE ROWs. Collocated utilities such as natural gas or water pipelines may be within the utility easement underneath the existing 115 kV subtransmission line. While SCE is required by State law to contact Underground Service Alert and manually probe for existing buried utilities in the Proposed Project corridor prior to any poweredequipment drilling or excavation, any temporary disruption in utility service during construction would hinder activities in the surrounding area. In addition, Construction of all cumulative projects identified in Table F-2 (Cumulative Project List) would be subject to identical State law to contact Underground Service Alert and manually probe for existing buried utilities prior to any subsurface drilling or excavation activities. However, as temporary disruptions in utility service could occur during construction of the Proposed Project and identified cumulative projects, potential cumulative utility disruptions could occur. This would result in a cumulatively considerable contribution to a significant cumulative impact without mitigation. The Proposed Project includes Mitigation Measure U-1a, which would inform those affected by any temporary disruption in utility service during construction of the Proposed Project. Implementation of Mitigation Measure U-1a (listed in Section D.10.3.3 of the original Draft EIR), would ensure the Project's contribution to utility systems disruption and collocation accidents would be less than cumulatively considerable/ significant (Class II). Therefore, less than significant (Class III) cumulative impacts to utility systems disruption or collocation accident through the crossing or shared location with any utility line would occur with Proposed Project implementation.

• Page F-81 through F-82 (Analysis of Alternatives – CPUC's Northerly Route Alt Option 3):

Cumulatively disrupt the existing utility systems or cause a collocation accident through the crossing or shared location with another utility line (Impact U-1). As described for the Proposed Project, utilities may be co-located within existing ROWs that Route Alternative Option 3 would traverse. Temporary disruptions in utility service would be considered significant. However, Mitigation Measure U-1a, which would inform those affected by any temporary disruption in utility service during construction of Route Alternative Option 3, would ensure that Route Alternative Option 3's contribution to utility systems disruption and collocation accidents would be less than cumulatively considerable/significant (Class II). Route Alternative Option 3 activities within the new El Casco to Banning subtransmission line Segment 2 would result in 5.6 miles of new single-circuit 115 kV line would be overbuilt on existing City of Banning distribution poles containing active electrical line. However, as shown on Figures F-1a and F-1b (Cumulative Projects – Northeast and Southeast Figures), no cumulative projects would occur within this specific segment of ROW, therefore no cumulative impacts would occur from this collocated segment of utility infrastructure.

• Page F-82 (Analysis of Alternatives – Partial Underground Alternative):

Cumulatively disrupt the existing utility systems or cause a collocation accident through the crossing or shared location with another utility line (Impact U-1). Within the underground segment of the proposed Partial Underground Alternative, there is a high-pressure natural gas line co-located with SCE's existing 115 kV subtransmission line through the Sun Lakes community. However, the distances between facilities would provide adequate separation between the existing high-pressure gas line and any proposed underground electric facilities. Proposed mitigation is recommended for the Partial Underground Alternative to ensure no impacts would occur within the underground segment. Furthermore, as shown on Figures F-1a and F-1b (Cumulative Projects – Northeast and Southeast Figures), no cumulative projects would occur within this specific segment of ROW, therefore no cumulative impacts would occur from this collocated segment of utility infrastructure. However, as described for the Proposed Project, other utilities may be co-located within the utility easement underneath the existing 115 kV subtransmission line. As temporary disruptions in utility service could occur during construction of the Partial Underground Alternative and identified cumulative projects, potential cumulative utility disruptions could occur. This would result in a cumulatively considerable contribution to a significant cumulative impact without mitigation. Mitigation Measure U-1a would inform those affected by any temporary disruption in utility service during construction of the Partial Underground Alternative. Implementation of Mitigation Measure U-1a (listed in Section D.10.3.3 of the original Draft EIR), would ensure the Partial Underground Alternative's contribution to utility systems disruption and collocation accidents would be less than cumulatively considerable/significant (Class II).

# Section F.1.5.10 – Transportation and Traffic

• Page F-86 through F-87 (Analysis of Proposed Project):

Cumulatively result in safety problems for aviation facilities <u>activities</u> (Impact T-10). A portion of the 115 kV subtransmission line would be located approximately 4,000 west of Banning's Municipal Airport runway and within the Banning Municipal Airport Land Use Plan. Construction of subtransmission line poles exceeding the maximum permitted height of the Banning Municipal Airport Land Use Plan or Federal Aviation Administration (FAA) regulations would require SCE to

submit FAA Form 7460 1. Notice of Proposed Construction or Alteration, to the Manager of the FAA Air Traffic Division for review and approval of the Project. As shown in Figures F-1a and F-1b (Cumulative Projects Northeast and Southeast Figures), many approved or pending projects are located along this segment of the Proposed Project subtransmission route and within proximity of the Banning Municipal Airport. However, these projects would all be subject to the same FAA regulations as the Proposed Project. Therefore, even if construction of these projects occur at the same time as the Proposed Project, compliance with FAA guidelines would ensure that cumulative impacts to airport operations would be less than significant and no mitigation measures would be required (Class III). Helicopters would be used at SCE's existing Mill Creek Communications Site within the San Bernardino National Forest (SBNF) for construction of the microwave tower, and during installation of fiber optic cable at locations between the Cities of Redlands and Banning. As shown in Figures F-1a and F-1b (Cumulative Projects – Northeast and Southeast Figures), many approved or pending projects are listed to be located within the Cities of Redlands and Banning. Should construction of these projects require helicopter use and occur at the same time as the Proposed Project, potential cumulative aviation impacts may occur. Mitigation Measure T-10 is recommended to reduce Proposed Project impacts associated with helicopter use during construction. Therefore, the Proposed Project's cumulative contribution to this impact is considered reduced to a less-than-significant level (Class II).

**Cumulatively result in safety problems for public airports (Impact T-11).** A portion of the 115 kV subtransmission line would be located approximately 4,000 west of Banning's Municipal Airport runway and within the Banning Municipal Airport Land Use Plan. Construction of subtransmission line poles exceeding the maximum permitted height of the Banning Municipal Airport Land Use Plan or Federal Aviation Administration (FAA) regulations would require SCE to submit FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the Manager of the FAA Air Traffic Division for review and approval of the Project. As shown in Figures F-1a and F-1b (Cumulative Projects – Northeast and Southeast Figures), many approved or pending projects are located along this segment of the Proposed Project subtransmission route and within proximity of the Banning Municipal Airport. However, these projects would all be subject to the same FAA regulations as the Proposed Project. Therefore, even if construction of these projects occur at the same time as the Proposed Project, compliance with FAA guidelines would ensure that cumulative impacts to airport operations would be less than significant and no mitigation measures would be required (Class III).

# Section F.1.5.11 – Visual Resources

• Page F-92 (Analysis of Proposed Project):

**Project construction activities would cause a cumulative visual impact (Impacts V-1 and V-2).** To the extent that the Proposed Project during construction would be visible within the same field of view as one or more of the cumulative projects, which are also under construction, adverse visual impacts would occur with the visible presence of construction equipment, vehicles, materials, and personnel. However, these visual impacts would be temporary and would not create significant cumulative effects, particularly along the linear components of the project where construction activities are transient. This would be the case for the following 56 projects identified in Table F-2 and Figures F-1a and F-1b: A3, A4, B1, B4, B7, B9, B15, B24, B26, B27, C2, C4-C8, C11, C13, C15, C22, C25, C28, C31, C33, D11, E7, E11, E15, E24, E25, E28, E29, E31, E32, E34, E35, E37, E38, E44, E49, E52, F2, F4, F6, F11-F14, F16, F21, F28, F30, F33, F38, F39, and

F41. No additional mitigation measures are recommended beyond Measures V-1 (reduce visibility of construction activities and equipment) and V-2 (reduce visibility of land scarring). Therefore, because construction related visual impacts are short-term and temporary, the Proposed Project cumulative contribution would be less than significant after mitigation (Class II).

• Page F-93 (Analysis of Proposed Project):

Cumulative impacts to a perceived increase in industrialization of the landscape (Impacts V-2 <u>V-3 through V-12</u>). Even though some of the above-referenced projects would be visible within the same field of view as the Proposed Project once constructed, those projects would contribute to the on-going urbanization of the study area and transformation of the landscape in a way that the Proposed Project would not. The referenced cumulative projects (in conjunction with the other cumulative projects identified in Table F-2) would continue to change the character of the existing landscape, which is gradually transitioning from a more rural and in some areas, undeveloped character, to a developed suburban and urban character. The Proposed Project consists of features (subtransmission line, cable, even substation) that are not uncommon in less developed landscapes and typically do not cause the landscape character shifts that occur with regional land use transformations. Therefore, the Proposed Project would not result in cumulative visual impacts with the above-referenced projects. With respect to construction, this conclusion would also apply to the projects referenced in the following paragraphs.

• Page F-94 (Analysis of Alternatives – CPUC's Northerly Route Alt Option 3):

**Project construction activities would cause a cumulative visual impact (Impacts V-1 and V-2).** As construction of Route Alternative Option 3 would result in temporary and short-term visual impacts similar to that described above for the Proposed Project, the inclusion of Mitigation Measures V-1 (reduce visibility of construction activities and equipment) and V-2 (reduce visibility of land scarring) would reduce the Route Alternative Option 3 cumulative contribution to visual construction impacts to a less than significant level after mitigation (Class II).

Cumulative impacts to a perceived increase in industrialization of the landscape (Impacts V-2 V-3 through V-5, V-10, and V-13 through V-15). There are three types of Route Alternative Option 3-cumulative project interactions that are particularly relevant to this analysis: (1) the project construction activities are jointly visible, (2) the constructed projects jointly reduce visibility of some valued landscape feature, and (3) the constructed projects jointly contribute to a perceived increase in industrialization of the landscape.

• Page F-96 (Analysis of Alternatives – Partial Underground Alternative):

**Project construction activities would cause a cumulative visual impact (Impacts V-1 and V-2).** While construction activities would be increased with the Partial Underground Alternative, the duration of construction would continue to be temporary and short-term in nature similar to that described above for the Proposed Project. Therefore, the inclusion of Mitigation Measures V-1 (reduce visibility of construction activities and equipment) and V-2 (reduce visibility of land scarring) would reduce the Partial Underground Alternative cumulative contribution to visual construction impacts to a less than significant level after mitigation (Class II). Cumulative impacts to a perceived increase in industrialization of the landscape (Impacts V-2 V-3 through V-12, V-16). The cumulative impacts associated with the Partial Underground Alternative would be identical to those of the Proposed Project. The reader is therefore, referred to the discussion of the Proposed Project cumulative impacts above. The one slight variation is the cumulative interaction between the transition structures of the underground segment and the 500 kV lattice structures associated with the Devers-Valley segment of the Devers-Palo Verde No. 2 Transmission Line Project (No. A2). As for the Proposed Project (and CPUC's Northerly Route Alternative Option 3), the increase in industrial character and view blockage caused by the proposed subtransmission line (and in this case, the transition structures) would result in adverse but less than significant (Class III) impacts. However, in conjunction with the highly industrial character of the DPV2 500 kV Project (No. A2) structures that would be placed in the nearby Devers-Valley corridor to the immediate south of the Sun Lakes development, the combined increase in industrial character and view blockage I) cumulative visual impact.