4.7 Greenhouse Gas Emissions

This section provides a discussion of global climate change, existing regulations pertaining to climate change, and an analysis of greenhouse gas (GHG) emissions associated with the Proposed Project and Alternative Project. This analysis examines the short-term construction and long-term operation impacts associated with the Proposed Project and Alternative Project. For purposes of this section, the Project Study Area is defined as the locations where work described in Chapter 3.0, Project Description would be performed.

4.7.1 Environmental Setting

The Project Study Area is located within the cities of Banning, Beaumont, Calimesa, Colton, Grand Terrace, Loma Linda, Palm Springs, Rancho Cucamonga, Redlands, San Bernardino, and Yucaipa, and unincorporated areas of Riverside and San Bernardino counties. The Proposed Project component in the City of Rancho Cucamonga is limited to improvements within the mechanical electrical equipment room (MEER) at Etiwanda Substation; the extent of this work within an existing facility would not have the potential to conflict with any policies and/or plans and, therefore, it is not included for further discussion.

The term "greenhouse gases" (GHGs) refers to gases that trap heat in the atmosphere, causing a greenhouse effect. GHGs include, but are not limited to, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (SF₆). Atmospheric concentrations of the two most important directly emitted, long-lived GHGs, CO₂ and CH₄, are currently well above the range of atmospheric concentrations that occurred over the last 650,000 years (Pew Center on Global Climate Change 2008). According to the Intergovernmental Panel on Climate Change (IPCC), increased atmospheric levels of CO₂ correlate with rising temperatures; concentrations of CO₂ have increased by 31 percent above preindustrial levels since the year 1750. Climate models show that temperatures would probably increase between 1.4 degrees Celsius (°C) and 5.8°C by the year 2100 (IPCC 2007).

The term "global warming potential" (GWP) estimates how much a given mass of a GHG contributes to climate change. The term enables comparison of the warming effects of different gases. GWP uses a relative scale that compares the warming effect of the gas in question with that of the same mass of CO_2 . The CO_2 equivalent (CO_2e) is a measure used to compare the effect of emissions of various GHGs based on their GWP, when projected over a specified time period (generally 100 years). CO_2e is commonly expressed as million metric tons (MMT) of CO_2 equivalents (MMTCO₂e). The CO_2e for a gas is obtained by multiplying the mass of the gas (in tons) by its GWP.

In Assembly Bill (AB) 32, the legislature recognized California's particular vulnerability to the effects of global warming, finding that global warming has the potential to adversely impact California's environment and on some of California's largest industries,

including agriculture, wine, tourism, skiing, recreational and commercial fishing, and forestry. Cal. Health & Safety Code § 38501(a)-(b).

4.7.2 Regulatory Setting

4.7.2.1 Federal Regulatory Setting

Federal Mandatory Reporting of Greenhouse Gases (40 C.F.R. Parts 86, 87, 89 et al.)

The United States Environmental Protection Agency (EPA) promulgated this rule in 2009 to require mandatory reporting of GHG from large GHG emissions sources within 31 source categories in the United States. In general, the threshold for reporting is 25,000 metric tons or more of CO_2e . Reporting is at the facility level, except that certain suppliers of fossil fuels and industrial GHGs, along with vehicle and engine manufacturers, will report at the corporate level. Facilities and suppliers began collecting data on January 1, 2010. The first emissions report was due on March 31, 2011, for emissions during 2010. Manufacturers of vehicles and engines outside of the light-duty sector began reporting CO_2 for model year 2011 and other GHGs in subsequent model years as part of existing EPA certification programs.

Since 2012, EPA regulations also require the reporting of SF_6 emissions from certain electrical facilities. See 40 C.F.R. Part 98, Subpart DD. SCE complies with these requirements.

4.7.2.2 State Regulatory Setting

Global Warming Solutions Act (AB 32)

The California Global Warming Solutions Act of 2006 (AB 32) charges the California Air Resources Board (CARB) with the responsibility to monitor and regulate sources of GHG emissions in order to reduce those emissions. The CARB established a scoping plan in December 2008 for achieving reductions in GHG emissions and has established and implemented regulations for reducing those emissions by the year 2020. In 2010, the CARB also adopted the Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear. Cal. Code Regs. tit. 17, §§ 95350-95359. It requires retail providers of electricity to report fugitive emissions of SF₆ related to transmission and distribution systems, substations, and circuit-breakers located inside California that the retail provider or marketer is responsible to maintain in proper working order. SCE complies with this regulation.

The South Coast Air Quality Management District (SCAQMD) adopted an interim threshold of 10,000 MTCO₂e per year (operational emissions plus construction emissions amortized over 30 years) for "industrial" projects for which the SCAQMD is the lead agency, and it is developing guidelines for projects for which other agencies are the lead. The SCAQMD established a numerical threshold of 10,000 MTCO₂e per year for stationary source GHG emissions.

Executive Order S-3-05

In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order (EO) S-3-05. This EO established the following goals for the State of California: GHG emissions should be reduced to 2000 levels by 2010; GHG emissions should be reduced to 1990 levels by 2020; and GHG emissions should be reduced to 80 percent below 1990 levels by 2050.

California Air Resources Board Scoping Plan

To achieve the mandates of AB 32, the California Air Resources Board adopted a Scoping Plan that identifies the main strategies to reduce GHG emissions (CARB 2008). The Scoping Plan includes measures to address GHG emission reduction strategies related to renewable energy generation, energy efficiency, water use, and recycling and solid waste, among other measures (Ibid.).

California's Renewables Portfolio Standard

On April 12, 2011, California Governor Jerry Brown signed Senate Bill (SB) X1-2 to increase California's Renewables Portfolio Standard (RPS) to 33 percent by the year 2020. Senate Bill X1-2 creates a three-stage compliance period for electricity providers to meet renewable energy goals: 20 percent of retail sales must be renewable energy products by 2013, 25 percent of retail sales must be renewable energy products by 2016, and 33 percent of retail sales must be renewable energy products by 2020 and thereafter. The Scoping Plan identifies achieving the RPS goals as an important component for reducing GHG emissions in California (Ibid.).

4.7.2.3 Local Regulatory Setting

The California Public Utilities Commission (CPUC) has jurisdiction over the siting and design of the Proposed Project because the CPUC regulates and authorizes the construction of investor-owned utility (IOU) facilities. Although such projects are exempt from local land use and zoning regulations and permitting, General Order (GO) No. 131-D, Section III.C requires "the utility to communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any nondiscretionary local permits." As part of its environmental review process, SCE considered public services and facilities policies from the County of Riverside General Plan, the County of San Bernardino General Plan, and the General Plans from the municipalities applicable to the Proposed Project (Banning, Beaumont, Calimesa, Colton, Grand Terrace, Loma Linda, Palm Springs, Redlands, San Bernardino, and Yucaipa).

Senate Bill 375 took effect in 2009 and required metropolitan and regional transportation planning organizations to develop regional land use plans that demonstrate how the regions will achieve compliance with AB 32 GHG-reduction goals. Cities located within these regions are then required, in turn, to ensure that certain transportation planning and programming activities are consistent with the regional GHG reduction target and sustainable communities strategy contained in the regional transportation plan.

Table 4.7-1, Local Land Use Documents Applicable to Greenhouse Gases, summarizes key policies in local land use plans applicable to GHG emissions reductions. The cities of Banning, Beaumont, Calimesa, Colton, Grand Terrace, Loma Linda, Palm Springs, Redlands, San Bernardino, and Yucaipa and the County of Riverside do not identify policies related to GHG emissions.

Table 4.7-1: Lo	ocal Land Use	Documents A	Applicable to	Greenhouse	Gases
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Document	Plans, Policies, Programs		
County of San Bernardino General Plan, Conservation Element	Policy CO 4.13: Reduce Greenhouse Gas (GHG) emissions within the County boundaries.		

Morongo Reservation

The Proposed Project will traverse approximately 8 miles of the tribal trust lands of the Morongo Indian Reservation east of Banning, California. Except for approximately two miles of new corridor between Malki Road and the western boundary of the Reservation, the Proposed Project will utilize the transmission corridor that has been used by existing SCE 220 kV transmission lines starting in 1945, and as subsequently expanded. Matters concerning the use of the Reservation's trust lands are subject to approval by the Morongo Band's General Membership, which consists of all enrolled adult voting members. With limited exceptions, the Morongo Band does not release its internal ordinances and other laws to the public.

The Morongo Band's General Membership has voted to approve the Bureau of Indian Affairs' grants to SCE of the rights of way and easements necessary for SCE to continue operating its existing 220 kV facilities on the Morongo Reservation and to replace and upgrade those facilities with the WOD Project. The Morongo Band's approval of these grants of rights of way and easements includes relocating approximately two miles of the corridor west of Malki Road into a new corridor depicted on Figure 2-3, Proposed and Alternative Transmission Line Routes, as either the Proposed Project (Alternative 1) or the Alternative Project (1X). The existing corridor, plus either Alternative 1 or 1X, thus would be consistent with all applicable tribal laws, and are the only corridors approved by the Morongo Band for the continued operation and eventual replacement of SCE's 220 kV facilities on and across the trust lands of the Morongo Indian Reservation.

4.7.3 Significance Criteria

4.7.3.1 CEQA Significance Criteria

The significance criteria for assessing the impacts from GHGs come from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA Checklist, a project causes a potentially significant impact if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Greenhouse Gas Thresholds

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD has prepared a Draft Guidance Document entitled Interim CEQA Greenhouse Gas Significance Threshold (October 2008). In order to evaluate operational impacts of proposed industrial projects, SCAQMD recommends an interim threshold of 10,000 MTCO2e/yr. Per SCAQMD guidance, construction emissions should be amortized over the operational life of the project, which is proposed at 30 years (SCAQMD 2008).

4.7.3.2 NEPA Significance Criteria

Unlike CEQA, NEPA does not have specific significance criteria for GHGs. However, NEPA regulations contain guidance regarding significance analysis. Specifically, consideration of "significance" involves an analysis of both context and intensity (Title 40 C.F.R. § 1508.27).

4.7.4 Impact Analysis

4.7.4.1 CEQA Impact Assessment

Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction Impacts

Construction emissions were estimated for the project using a detailed equipment inventory and information provided in Chapter 3.0, Project Description, combined with emissions factors from the CARB's EMFAC2011 and OFFROAD models.

Below is a brief description of the construction work for each component mentioned above and its potential construction GHG emissions impact.

Substation Modifications. There are no new substations proposed as part of the Proposed Project. Modifications to existing substation equipment would be performed to accommodate continuous and emergency power on the 220-kilovolt (kV) transmission lines between Vista, San Bernardino, El Casco, Etiwanda, and Devers substations. Additionally, modifications to Timoteo and Tennessee substations would also be performed to accommodate the 66 kV subtransmission line relocations. All substation-related work would be conducted within the existing substation walls or fence lines. The Proposed Project would not result in changes to access, parking, drainage patterns, or modifications to perimeter walls or fencing at the existing substations. Refer to Table 4.7-2, Greenhouse Gas Emissions, for tons of CO_2e generated during the substation modifications. Substation modifications would not result in significant impacts from GHG emissions.

Construction Phase	MTCO ₂ e			
Construction Emissions				
Substation Upgrades	985			
220 kV Transmission Lines – Segment 1	3,560			
220 kV Transmission Lines – Segment 2	4,865			
220 kV Transmission Lines – Segment 3	9,616			
220 kV Transmission Lines – Segment 4	11,931			
220 kV Transmission Lines – Segment 5	3,010			
220 kV Transmission Lines – Segment 6	7,739			
Temporary Guard Structures/Shoo-fly	4,896			
66 kV Subtransmission Lines	926			
Telecommunications	327			
Total Construction Emissions	47,856			
Annualized Construction Emissions ¹	15,952			
Amortized Construction Emissions ²	1,595			
Operation Emissions				
Maintenance Truck Trips	1			
Helicopter	9			
³ ⁄ ₄ Ton Pick-up Trucks	2			
Boom/Crane Truck	12			
SF_6 from Three New Circuit Breakers (as CO_2e)	25			
Total Operation Emissions	49			
TOTAL PROJECT EMISSIONS ³	1,644			
SCAQMD Threshold	10,000			
Exceeds SCAQMD Threshold?	No			

Table 4.7-2: Greenhouse Gas Emissions

¹ Assumes a 3-year construction schedule.

² The SCAQMD recommends amortizing construction GHG emissions over 30 years.

³ Includes amortized construction and operation/maintenance emissions.

 $MTCO_2e = metric tons of carbon dioxide equivalent$

220 kV Transmission Lines. The Proposed Project would include the removal and upgrade of approximately 181 circuit miles of existing 220 kV transmission line facilities (approximately 48 corridor miles) primarily within the existing WOD corridor. The Proposed Project would primarily be constructed on a combination of new 220 kV double-circuit lattice steel towers (LSTs), double-circuit tubular steel poles (TSPs), and single-phase TSPs. Each of the proposed 220 kV transmission lines would consist of overhead wires (conductors).

Access and spur roads would be used to access the planned removal and construction areas. SCE's existing access roads are located within SCE right-of-way (ROW) and/or easements. New and/or expanded property rights may be required to construct new access/spur roads.

Temporary wood and/or steel structures would be used to facilitate construction of the new 220 kV transmission lines, and would function as guard structures and/or shoo-fly structures. These temporary structures would be direct-buried and/or guyed and removed following completion of construction for the particular location.

Relocation of existing distribution facilities would be required to accommodate the relocation of 220 kV transmission infrastructure. Distribution work resulting from the 220 kV transmission portion of the Proposed Project would include overhead and underground construction. Distribution work resulting from the 220 kV transmission lines work would be conducted in franchise¹ or newly acquired utility ROW. The Dental 12 kV circuit would be relocated to a new underground system (approximately 1.5 miles). The Intern 12 kV circuit would be relocated into the same new underground system as the Dental 12 kV circuit, and a portion would be underbuilt on an existing 66 kV subtransmission line. Additionally, the relocations of both the San Bernardino-Redlands-Timoteo 66 kV and the San Bernardino-Redlands-Tennessee 66 kV subtransmission lines would require the additional relocation of existing distribution circuits and associated equipment from existing poles to new subtransmission poles exclusively in Segment 1. Refer to Table 4.7-2, Greenhouse Gas Emissions, for tons of CO₂e generated during construction of the 220 kV transmission lines and ancillary facilities (12 kV distribution line, access and spur roads, and temporary guard structures/shoo-fly facilities). Construction-related GHG impacts from the 220 kV transmission lines would be less than significant.

66 kV Subtransmission Lines. The Proposed Project would require the relocation of portions of the existing San Bernardino-Redlands-Timoteo (approximately 2 miles) and the San Bernardino-Redlands-Tennessee 66 kV (approximately 3.5 miles) subtransmission lines located within Segment 1 to new routes within existing ROW or franchise, or newly acquired ROW. Refer to Table 4.7-2, Greenhouse Gas Emissions, for tons of CO_2e generated during construction of the 66 kV subtransmission lines. Impacts would be less than significant from the construction of the 66 kV subtransmission lines.

Telecommunications. The new telecommunications infrastructure would include additions and modifications to the existing telecommunications system. This work would be required to maintain telecommunications during construction and for ongoing operation of the services after construction of the Proposed Project. The telecommunications infrastructure would be constructed in new and existing underground conduit and cable trench, and on existing riser, distribution, and subtransmission poles. Additionally, removal of the fiber optic portions from the 220 kV existing structures to connections in the field and/or at existing substations would be required. Refer to Table 4.7-2, Greenhouse Gas Emissions, for tons of CO₂e generated during construction of the telecommunications facilities. Impacts would be less than significant from construction of the telecommunications facilities.

¹ The term "franchise" refers to utility infrastructure ROW agreements that SCE holds with local jurisdictions.

Staging Yards SCE anticipates using one or more of the possible temporary staging yards listed in Table 3.2-A, Potential Staging Yard Locations, and seen in Figure 3.2-1, Potential Staging Yard Locations. The yards would be used as reporting locations for workers, vehicle and equipment parking, and material storage. Typically, each yard would be 3 to 20 acres in size, depending on land availability and intended use. Preparation of the staging yard would include temporary perimeter fencing and, depending on existing ground conditions at the site, include the application of gravel or crushed rock. Any land that may be disturbed at the staging yard(s) would be restored to pre-construction conditions or to conditions agreed upon between SCE and the landowner following the completion of construction for the Proposed Project. The emissions associated with the staging yards are included in the calculations summarized above for the substation, transmission lines, subtransmission lines, shoo-fly, and telecommunication system. Construction of the staging yards would have less than significant GHG emissions impacts.

Table 4.7-2, Greenhouse Gas Emissions, summarizes the GHG emissions that would be generated during the construction of the project components listed above. As shown, the total impact from the construction of all project components would be less than significant when amortized over a 30-year period and compared to the SCAQMD significance threshold (SCAQMD 2008).

Operation Impacts

The Proposed Project would facilitate integration of renewable resources (such as solar and wind) with minimal GHG emissions from new generation in the Blythe and Desert Center areas. The Scoping Plan identifies achieving the RPS goals as a critical component for reducing GHG emissions in California. The Proposed Project would help the State of California achieve GHG emissions-reduction mandates under AB 32 by facilitating compliance with current RPS goals. The Proposed Project would also support additional renewable generation in excess of the current RPS that may be needed to satisfy AB 32 or EO S-3-05 GHG reduction goals.

The following discussion addresses all Proposed Project components, including substation modifications, 220 kV transmission lines, 66 kV subtransmission lines, 12 kV distribution lines, and telecommunication facilities.

Fuel combustion in motor vehicles used during routine inspection and maintenance of the Proposed Project would be a source of GHG emissions during operation. Normal operation of the lines would be controlled remotely through SCE control systems, and manually in the field as required. SCE inspects the subtransmission overhead and underground facilities in a manner consistent with CPUC GO 165 a minimum of once per year via ground and/or aerial observation. Maintenance would occur as needed and could include activities such as repairing conductors, washing or replacing insulators, repairing or replacing other hardware components, replacing poles, tree trimming, brush and weed control, and access road maintenance. Most regular operation and maintenance activities of overhead facilities are performed from existing access roads with no surface disturbance. Repairs done to existing facilities, such as repairing or replacing existing

poles, could occur in undisturbed areas. Table 4.7-2, Greenhouse Gas Emissions, lists the emissions associated with the average maintenance trip that requires the use of one helicopter operating for two hours and five trucks traversing the length of the transmission lines.

Leakage of SF_6 from the circuit breakers during operation of the Proposed Project would also generate GHG emissions. GHG emissions from SF_6 leakage were calculated by multiplying the amount of SF_6 contained in new circuit breakers and gas switches by the estimated annual leakage rate (0.5%), which is the manufacturer's maximum leakage rate.

Seventeen existing 220 kV circuit breakers at Devers, El Casco, Vista, and San Bernardino substations are SF₆ gas type and would be replaced with new higher amperage SF₆ gas type circuit breakers. The SF₆ leakage rate and associated emissions would be the same or lower than current baseline levels from existing equipment. Three oil-type 66 kV circuit breakers would be replaced with new SF₆ gas-type circuit breakers at Timoteo and Tennessee substations. Therefore, emissions from only these three new circuit breakers insulated with SF₆ were estimated for purposes of the GHG analysis. Table 4.7-2, Greenhouse Gas Emissions, lists the annual GHG emissions associated with the SF₆ leakage from the new SF₆ circuit breakers.

As shown in Table 4.7-2, Greenhouse Gas Emissions, when combined with the amortized construction emissions, the GHG emissions from the Proposed Project are well below the SCAQMD significance threshold. Therefore, the impacts would be less than significant.

Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The following discussion addresses all Proposed Project components, including substation modifications, 220 kV transmission lines, 66 kV subtransmission lines, 12 kV distribution lines, telecommunication facilities, and the establishment of staging yards.

Compliance with State and Local Policies

State Policies. As discussed above, the Proposed Project would facilitate compliance with California's RPS by allowing full deliverability of new renewable resources located in the Blythe and Desert Center areas. Achieving the goals established by California's RPS is a major component of the CARB's Scoping Plan to reduce GHG emissions in compliance with AB 32. As a result, the Proposed Project is consistent with the Scoping Plan. In addition, the Proposed Project would support renewable generation in excess of the current RPS that may be needed to satisfy AB 32 or EO S-3-05 GHG reduction goals.

As discussed above, SCE complies with the CARB's regulations requiring the reporting of GHG emissions, including SF_6 .

Local Policies. The cities of Banning, Beaumont, Calimesa, Colton, Grand Terrace, Loma Linda, Palm Springs, Redlands, San Bernardino, and Yucaipa and the County of Riverside do not identify policies related to GHG emissions.

The County of San Bernardino General Plan calls for the reduction of GHG emissions within the County boundaries. The Proposed Project includes the replacement and upgrading of existing transmission lines and is not a new major energy facility. Construction and operation of the Proposed Project would not conflict with this policy, as it would not generate a substantial number of trips or consume a substantially greater amount of energy that would result in increased GHG emissions. The Proposed Project would not conflict with local plans and policies regarding GHG emissions. Impacts would be less than significant.

SCE GHG Emissions-Reduction Activities

SF₆ Gas Management Program. SCE is required to report SF₆ emissions to the CARB and U.S. EPA on an annual basis. In 2012, SCE reported to the CARB an annual SF₆ emissions rate of 0.68 percent, or 67,439 MT CO₂e. Under the CARB regulation, the maximum allowable emissions rate for 2012 was 9 percent (and decreases by one percent per year until 2020, to a maximum rate of one percent). The total amount of SF₆ in all SCE equipment in 2012 was 920,318 lbs.

SCE has taken proactive steps in the effort to minimize GHG emissions since 1997. That year, SCE established an SF₆ Gas Resource Team to address issues pertaining to the environmental impacts of SF₆. The team developed the Gas Management Guidelines that allow for rapid location and repair of equipment leaking SF₆ gas. In addition, in 2001, SCE's parent organization, Edison International, joined the EPA's voluntary SF₆ gas management program, committing SCE to join the national effort to minimize emissions of this GHG. SCE has developed SF₆ Gas Management Guidelines that require proper documentation and handling of SF₆ gas inventories, whether in equipment or in cylinders. Inventories are documented on both a quarterly and a yearly basis. SCE assumes that any SF₆ gas that is purchased and not used to fill new equipment is needed to replace SF₆ gas that has inadvertently leaked from equipment already in service. This assumption forms the basis for SCE to track and manage SF₆ gas emissions.

SCE has made a significant investment in not only improving its SF_6 gas management practices, but also in purchasing state-of-the-art gas handling equipment that minimizes SF_6 leakage. The new equipment has improved sealing designs that virtually eliminate possible sources of leakage. SCE has also addressed SF_6 leakage on older equipment by performing repairs and replacing antiquated equipment through its infrastructure replacement program. Additionally, prior to salvaging equipment, SCE recovers the SF_6 gas for recycling to minimize SF_6 emissions.

GHG emissions from SF₆ leakage were calculated by multiplying the amount of SF₆ contained in new circuit breakers by the estimated annual leakage rate. Table 4.7-2, Greenhouse Gas Emissions, lists the annual GHG emissions associated with the SF₆ leakage from the new circuit breakers which are insulated with SF₆.

The Proposed Project would not conflict with SCE's SF_6 Gas Management Guidelines. Impacts would be less than significant.

4.7.4.2 NEPA Impact Assessment

Based on the analysis performed, it is anticipated that the Proposed Project would not result in significant effects under NEPA.

4.7.5 Applicant Proposed Measures

There are no significant impacts related to GHG emissions associated with the Proposed Project. Therefore, no Applicant Proposed Measures are proposed.

4.7.6 Alternative Project

The 220 kV Line Route Alternative 2 (Alternative Project) would include relocation of an approximately 3-mile section of Segment 5 of the existing WOD corridor pursuant to an agreement between SCE and Morongo. Both the Proposed Project and Alternative Project include the same common elements outside of Segment 5.

The Alternative Project would not result in a substantive increase in emissions during construction or operation compared with the Proposed Project. The emissions associated with the alternative alignment for Segment 5 are within 1 percent of the emissions generated by the construction of Segment 5. Therefore, the emissions listed in Table 4.7-2, Greenhouse Gas Emissions, are consistent with the emissions that would be generated by the Alternative Project. Impacts related to GHG emissions from construction and operation of the Alternative Project would be less than significant.

4.7.7 No Project Alternative

The No Project Alternative would not result in construction or operation of the Proposed Project. No new GHG construction-related emissions would result under the No Project Alternative, although operational emissions would be similar to existing conditions. The No Project Alternative, however, would not facilitate the full deliverability of new renewable resources located in the Blythe and Desert Center areas. As a result, the No Project Alternative would not help facilitate compliance with the RPS or the Scoping Plan.

4.7.8 References Cited

- California Air Resources Board. 2008. AB 32 Climate Change Scoping Plan, http://www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm.
- California Air Resources Board. December 2008. Climate Change Proposed Scoping Plan: a Framework for Change. Available at: http://www.arb.ca.gov/cc/ scopingplan/document/adopted_scoping_plan.pdf. Accessed October 9, 2012.
- County of San Bernardino. 2009. *County of San Bernardino General Plan*, adopted May 26.

- Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change 2007: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Parry, Martin L., Canziani, Osvaldo, et al.). Cambridge University Press, Cambridge, United Kingdom.
- Pew Center on Global Climate Change. 2008. The Causes of Global Climate Change (science brief).
- South Coast Air Quality Management District. October 2008. Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold. Accessed at: http://www.aqmd.gov/ceqa/handbook/GHG/2008/oct22mtg/GHGguidance.pdf.
- United States Environmental Protection Agency. 2009a. 2009 Monitor Values Report: Criteria Air Pollutants.