3. Applicable Laws, Regulations, and Standards

The proposed Project includes construction but does not include any stationary emission sources, so there are very few direct air quality regulations that specifically regulate the Project's air quality emission sources. The regulations that do apply, such as fugitive dust regulations, tend to be general and allow multiple means of achieving compliance. A description of the specific and general regulations that apply to the Project is provided below.

3.1 Federal

The United States Environmental Protection Agency (USEPA) has issued a number of National Ambient Air Quality Standards (NAAQS). Pollutants regulated under these standards include ozone, nitrogen dioxide (NO_2), carbon monoxide (CO), respirable particulate matter (PM10), fine particulate matter (PM2.5), and sulfur dioxide (SO_2). Additional information regarding the NAAQS that are relevant to the Project is provided in Section 2.2. The South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB) are the responsible agencies for providing attainment plans and meeting attainment with these standards; and the USEPA reviews and approves these plans and regulations that are designed to attain and maintain attainment with the NAAQS.

USEPA has a number of other regulations under the authority of the federal Clean Air Act (such as New Source Review (NSR), Prevention of Significant Deterioration (PSD), Title V permitting program, etc.); however, none of these regulations apply to this Project because the Project would have no operating stationary emission sources. Therefore, a PSD air quality impact analysis of the proposed Project's impacts to the nearest mandatory Class I area is not required.

The USEPA does have on-road and off-road engine emission reduction programs that indirectly affect the Project's emissions through the phasing in of cleaner on-road and off-road equipment engines.

The USDA Forest Service regulates the portion of the Project's route that goes through the Angeles National Forest (ANF) and the Forest Service has prepared a Land Management Plan (Forest Plan) for the ANF (USDA Forest Service, 2005). The Angeles National Forest Plan Strategy does not include any air quality strategies that would be significantly impacted by the construction or operation of the proposed Project. The Angeles National Forest air quality strategies are limited to the following:

- AIR 1: Minimize Smoke and Dust
- AIR 2: Forest Air Quality Emissions

The Angeles National Forest strategy AIR 1 is very general and is directed to "Control and reduce fugitive dust to protect human health, improve safety and moderate or eliminate environmental impacts." The only action item of this of this strategy is to "Incorporate visibility requirements into project plans." The Angeles National Forest air quality strategy AIR 2 relates to providing an air quality inventory for prescribed burns and wildfires and therefore does not directly relate to the proposed Project's construction and operation emissions.

Per Section 176(c) of the Clean Air Act Amendments (CAAA) of 1990, the Forest Service must make a determination of whether the proposed Project (i.e., Proposed Action) and Project alternatives "conforms" with the State Implementation Plan (SIP). A small portion of Project's route also goes through the land of United States Army Corps of Engineers, and the USACE must make a determination of whether the proposed Project (i.e., Proposed Action) and Project alternatives "conforms" with the State Implementation Plan (SIP),

based on the General Conformity requirements (40 CFR Part 93 et seq; November1993). Conformity is defined as compliance with the SIP's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards (NAAQS) and achieving expeditious attainment of such standards, and that the activities will not:

- Cause or contribute to any new violation of any standard;
- Interfere with provisions in the applicable SIP for maintenance of any standard;
- Increase the frequency or severity of any violation of any standard in any area; or
- Delay timely attainment of any standard or any required interim emission reductions or other milestones in any area

However, for both the Forest Service and the USACE, if the total direct and indirect emissions from the proposed Project and Project alternatives are below the General Conformity Rule applicability emission trigger levels, and where no "regionally significant" emissions would occur, the proposed Project would be exempt from performing a comprehensive Air Quality Conformity Analysis and Determination, and would be considered to be in conformity with the SIP. A "regionally significant" action would occur only where the direct and indirect emissions of any pollutant represent 10 percent or more of a non-attainment area's emissions inventory for that pollutant (See 40 C.F.R. §93.152). If an Air Quality Conformity Analysis and Determination is necessary it must be certified prior to the Project's Record of Decision (ROD).

3.2 State

CARB has issued a number of California Ambient Air Quality Standards (CAAQS). These standards include pollutants not covered under the NAAQS and also require more stringent standards than provided under the NAAQS. Pollutants regulated under these standards include ozone, nitrogen dioxide (NO_2), carbon monoxide (CO), respirable particulate matter (PM10), fine particulate matter (PM2.5), sulfur dioxide (SO_2), lead, sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. Additional information regarding the CAAQS that are relevant to the Project is provided Section 2.2.

CARB, like USEPA, also has on-road and off-road engine emission reduction programs that indirectly affect the Project's emissions through the phasing in of cleaner on-road and off-road equipment engines. Additionally, CARB has a Portable Equipment Registration Program that allows owners or operators of portable engines and associated equipment to register their units under a Statewide portable program to operate their equipment, which must meet specified program emission requirements, throughout California without having to obtain individual permits from local air districts.

The State recently enacted a new regulation for the reduction of diesel particulate matter (DPM) and criteria pollutant emissions from in-use off-road diesel-fueled vehicles (CCR Title 13, Article 4.8, Chapter 9, Section 2449). This regulation provides target emission rates for particulate matter and NOx emissions from owners of fleets of diesel-fueled off-road vehicles. This regulation applies to equipment fleets of three specific sizes and the target emission rates are reduced over time. This regulation would begin implementation prior to the end of Project construction.

3.3 Local

The proposed Project is routed through three separate local jurisdictions, the KCAPCD, the AVAQMD, and the SCAQMD. The local jurisdictions are responsible for planning, implementing, and enforcing federal and State ambient standards within their jurisdictions. The regulations of these agencies are focused on stationary

sources; therefore, most of the local agency regulations are not relevant to this Project. However, portable engines used during construction that are larger than 50 hp and that are not registered under the CARB Portable Equipment Registration Program would need to be obtain permits from the local jurisdictions.

All three agencies have visible emissions, nuisance, and fugitive dust regulations with which the Project's construction will need to comply. The specific regulations are as follows:

- AVAQMD Rule 401 – Visible Emissions
- AVAQMD Rule 402 – Nuisance
- AVAQMD Rule 403 – Fugitive Dust
- KCAPCD Rule 401 – Visible Emissions
- KCAPCD Rule 402 – Fugitive Dust
- KCAPCD Rule 419 – Nuisance
- SCAQMD Rule 401 – Visible Emissions
- SCAQMD Rule 402 – Nuisance
- SCAQMD Rule 403 – Fugitive Dust

These rules limit the visible dust emissions from the Project construction sites, prohibit emissions that can cause a public nuisance, and require the prevention and reduction of fugitive dust emissions. One or more measures are required by the Fugitive Dust rules to reduce fugitive dust emissions from specific dust causing activities. These measures may include, adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers and/or ceasing all activities (such as during periods of high winds).

SCAQMD has also recently enacted Rule 2446 that implements portions of Title 13, Article 4.8, Chapter 9, Section 2449.3 of the California Code of Regulations (CCR)[3]. This rule does not apply directly to the project but could impact construction contractor off-road vehicle fleets.

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. To achieve this, CARB has a mandate to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions.

CARB announced early action GHG reduction measures in June 2007 and is expected to establish a statewide emissions cap for 2020 by January 2008. Also by January 2008, CARB is scheduled to adopt regulations requiring mandatory GHG emissions reporting. The remainder of the timeline for implementation would have CARB adopting a plan by January 1, 2009, that would indicate how emission reductions will be achieved from significant sources of GHGs via regulations, market mechanisms, and other actions. Then, during 2009, ARB staff would draft rule language to implement its plan and hold public workshops on each measure including market mechanisms (CARB, 2006b).

Strategies that the State should pursue for managing GHG emissions in California are identified in the California Climate Action Team's Report to the Governor (CalEPA, 2006). Many focus on generally reducing consumption of petroleum across all areas of the California economy. Improvements in transportation energy efficiency (fuel economy) and alternatives to petroleum-based fuels are slated to provide substantial reductions by 2020 (CalEPA, 2006). Initially, three "discrete" early action measures to reduce GHG emissions between 13 and 26 $MMTCO_2e$ annually by 2020 are being pursued: the Low Carbon Fuel Standard; reduction of refrigerant losses from motor vehicle air conditioning maintenance; and increased methane capture from landfills (CARB, 2007). In early 2008, the CPUC and California Energy Commission found that a cap-and-

[3] See discussion of this CCR above in the State regulation discussion.

trade program would enable CARB to cost-effectively reduce GHG emissions from the electricity sector, but allowances and offset programs for carbon trading in California are still in the developmental phase (CPUC Rulemaking R. 06-04-009).

CPUC GHG Emissions Performance Standard. The Electricity GHG Emission Standards Act (SB1368) was enacted in 2006, and at its January 25, 2007, meeting, the CPUC adopted GHG requirements in the form of an Emissions Performance Standard for any long-term power commitments made by the State's electrical utilities. Utilities are not allowed to enter into a long-term commitment to buy base load power from power plants that have CO_2 emissions greater than 1,100 pounds (0.5 metric tons) per megawatt-hour (MWh), which is roughly the amount emitted by a combined cycle turbine fueled with natural gas. The GHG Emissions Performance Standard applies to new power plants, new investments in existing power plants, and new or renewed contracts with terms of five years or more, including contracts with power plants located outside of California.[4] On May 23, 2007, the CEC also adopted a performance standard consistent with that adopted by the CPUC.[5]

IPCC Key Mitigation Technologies and Practices for Energy Supply. In the absence of explicit State or federal GHG requirements at this time, international literature also provides policy direction. The Intergovernmental Panel on Climate Change (IPCC) provides a broad overview of climate change mitigation strategies that are available to policy-makers and decision-makers. The following strategies are identified by IPCC for decisions related to energy supply (IPCC, 2007).

- **Key mitigation technologies and practices currently commercially available.** Improved energy supply and distribution efficiency; fuel switching from coal to gas; nuclear power; renewable heat and power (hydropower, solar, wind, geothermal, and bioenergy); combined heat and power; early applications of Carbon Capture and Storage (e.g., storage of removed CO2 from natural gas).
- **Key mitigation technologies and practices projected to be commercialized before 2030.** Carbon capture and storage for gas, biomass and coal-fired electricity generating facilities; advanced nuclear power; advanced renewable energy, including tidal and waves energy, concentrating solar, and solar photovoltaic.

Local Climate Change Plans. There are many jurisdictions (city and county) within California that have adopted climate change plans (OPR 2008). This Project is not known to traverse any of the jurisdictions that have adopted climate changes plans; however the City of Pasadena and the Los Angeles County have passed Green Building Programs. These two green building programs do not appear to have provisions that would apply to transmission line construction or substation upgrades. In addition, SCAQMD recently adopted Rule 2702 Greenhouse Gas Reduction Program as an implementation guideline for Rule 2701 SoCal Climate Solutions Exchange. These rules neither have any requirements nor provisions as this is a voluntary program to encourage greenhouse gas reduction, and to certify the greenhouse gas emission reduction credits. This project encourages greenhouse gas reduction through the interconnection of renewable power to the Los Angeles Load Center, however, certified GHG reduction, per these rules, will be sought as a part of this project. Therefore, the SCAQMD GHG rules do not directly apply to the project.

[4] See Rule at http://www.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/64072.htm
[5] See CEC Docket # 06-OIR-1, http://www.energy.ca.gov/ghgstandards/index.html.