

4.0 AESTHETICS/VISUAL RESOURCES

ENVIRONMENTAL SETTING

Aesthetics are highly subjective by nature. Webster's dictionary defines aesthetics as "a branch of philosophy dealing with the nature of beauty, art, and taste and with the creation and appreciation of beauty; a pleasing appearance or effect". Thus, the aesthetic value assigned to something varies significantly, depending on a person's ideas and perceptions. Visual resources are the natural and cultural features of a place that can be seen and that contribute to the public's enjoyment of that place. Visual resource or aesthetic impacts are generally defined by a project's physical characteristics and their potential visibility, and how the project would change the visual character and quality of the place in which it would be located.

Project Area Setting

The project area is located in the Central Valley, which is primarily composed of a rural agricultural/residential landscape. The rural portions of the Central Valley vary widely in use, but include extensive croplands, orchards, vineyards, and rural residences that range from single homes associated with agricultural uses to small, subdivided areas. Landscape character is common throughout most of the Central Valley, as extensive portions are devoted to orchard or field crops particularly well suited to the soils or climate of a particular locale. The project area contains extensive areas of vineyards, and cornfields and orchards were also observed. There are also rural residences scattered throughout the project area.

Public roads, irrigation canals, railroads and other linear facilities in the Central Valley are generally adjoined by agricultural land, including associated low-density rural residential development, occasional industrial and other non-agricultural uses. The project area contains several two-lane rural roads within relatively narrow rights-of-way. These include Harney Lane, DeVries Road, Tredway Road, Kingdon Road and Thornton Road. Agricultural uses and roadside residences generally dominate views along these roadways. However, an airstrip (Kingdon Airpark) is visible along portions of DeVries Road and Tredway Road. Also, a Union Pacific Railroad track traverses the center of the project area in a northwest-southeast orientation. Agricultural lands adjoin the tracks, except for an agricultural chemicals business at the intersection of Harney Lane and DeVries Road.

Along state highways, interstate freeways and other high-volume roads, rural road aesthetics are frequently dominated by the presence of the transportation facility itself and its wide, cleared right-of-way. The project area includes two high-volume roadways: Interstate 5 (I-5) and State Route 12 (SR 12). I-5 and SR 12 intersect approximately 2 miles north of the Lodi Water Pollution Control Facility (WPCF), which is near the western terminus of the project. A commercial cluster, known as Flag City, is located in the southeastern corner of the intersection. Flag City includes gas stations, a truck stop,

restaurants, motels and other highway services. East of Flag City, SR 12 has views that are of primarily agricultural lands, mainly vineyards. West of I-5 along SR 12, views consist primarily of agricultural lands, mainly field and row crops. The WPCF is visible from I-5. Located adjacent to and west of I-5, the WPCF site includes the plant with treatment and holding ponds, and an existing power plant and substation operated by the NCPA. East of the WPCF, across from I-5 and west of Thornton Road, are vacant lands owned by the City of Lodi.

Existing views from public roads in the Central Valley commonly include overhead utility pole systems, including electrical and phone facilities and occasionally cable television facilities. Some roads have overhead facilities on both sides of the road, while others have none at all. The project area contains power poles that are already installed along the preferred alignment, except along Tredway Road where only a few poles are installed around the intersection with Neeley Road, and along Thornton Road. Most existing lines in the study area have wires mounted on cross arms, with a variety of different hardware and insulator types. Most of the poles are made of wood and have been in use for decades. Due in part to the number of years the existing poles have been exposed to the elements of weather and soil conditions, many existing poles along the proposed alignment are leaning rather than upright. A few poles have some bracing to keep them upright or from leaning any further causing stress to the facility components (i.e., power and communication lines).

Areas of Visual/Aesthetic Sensitivity

While numbers of sites within the project area are potentially sensitive to visual/aesthetic impact, primary concerns typically are addressed to areas and travel routes with the highest probable viewer expectations. These would include designated scenic routes; potential project areas located in or near recreational sites; and destinations, recreational travel corridors and designated natural areas. The San Joaquin County General Plan has designated Interstate 5 north of Eight Mile Road – a segment of which passes through the project area – as a Scenic Route. In addition, the Lodi General Plan has designated the entry of SR 12 into Lodi as a “gateway” that should be made visually appealing (Urban Design and Cultural Resources Element, Goal B, Policy 1). There are no recreational sites or designated natural areas in the project area.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to the CEQA Guidelines, a project will ordinarily have a significant effect on the environment if it would have a substantial, demonstrable negative aesthetic effect. Further, a project may have significant aesthetic effects if it would:

- Have a substantial adverse effect on a scenic vista,

- Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway,
- Substantially degrade the existing visual character or quality of the site and its surroundings, or
- Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.

Project Effects on Visual Resources

The project would result in the long-term addition of new overhead power lines to the existing aesthetic environment, predominantly along existing rural roads. Physical changes associated with program implementation would include the addition of new poles, or the replacement of existing poles with taller poles; the use of steel poles at turns in the alignment (i.e., corners); the addition of new insulators, cross-arms and other equipment; and the installation of new conductors to the individual alignment.

Viewer expectations in rural areas are generally associated with agricultural and residential land use of the area, or services to these uses. Potentially affected viewer populations would consist of general-use motorists using existing highways and public roads, and project area residents who would have concerns with aesthetic changes in the vicinity of their residences. On a more general level, rural portions of the project area represent an open space resource for residents of nearby urban areas. Visual/aesthetic sensitivity levels would tend to be relatively low within the extensive common agricultural areas that predominate in the project area. Low-volume/moderate sensitivity corridors, such as numerous local roads in the project area, may affect fewer people, but the scale of change and aesthetic expectations may be somewhat greater.

While electrical facilities are generally an accepted part of the developed landscape, the number and organization of those facilities bears on whether they are a neutral or more noticeable and detrimental element of the landscape. The number of poles and conductors, and the presence or absence of transformers or other equipment, varies widely from location to location and is a reflection both of electrical demands generated by local and regional land uses; design practices of the electrical utility; and numerous changes and upgrades to the electrical system over time. Existing overhead utility systems may vary from a single, pole-mounted telephone cable to several cables, one or more distribution circuits and a transmission circuit. These configurations are generally illustrated in Figures 4-1 and 4-2 that depict existing views along Harney Lane and Kingdon Road.

Electrical facilities are a common element of the aesthetic environment throughout the project area. Overhead distribution and/or transmission facilities, together with telephone and television cables, are suspended from pole systems located along most public highways and streets. Nonetheless, some residents may find replacement electrical facilities represent aesthetic deterioration, especially the addition of steel poles. Also, portions of the proposed alignment have no existing electrical facilities. Any proposed new facilities would involve the addition of new aesthetic elements to the alignment,

rather than repetition of existing elements. Local residents or users may consider these added facilities significant in aesthetic impact.

New electrical lines, insulators and poles would add to this aspect of the rural/agricultural landscape. However, these facilities would not contrast greatly with existing conditions, as similar facilities are a common and accepted part of the landscape. To illustrate the potential aesthetics impacts of the proposed power line, Environmental Vision, a visual resource consultant, visited the area of the proposed alignment and took photographs of two representative segments of the proposed route: one view looking west along Harney Lane and the second view looking east along Kingdon Road, east of Ray Drive. The consultant then performed a visual simulation of the project along those two segments by superimposing images of the project components onto the existing view. The simulations were based on the type, height and alignment of poles proposed in these segments. Figures 4-1 and 4-2 illustrates these segments and the “before” and “after” views of the project.

As shown in Figures 4-1 and 4-2, the views after project construction would not be significantly different from existing conditions. Proposed lines will be built along existing distribution line alignments and would generally increase pole height and add the 60 kV power lines, but would result in no substantial increase in the number of poles. Some of the existing poles due to age and stress have begun to lean and be less uniform with adjacent poles. In situations where existing poles are replaced, the replacement would restore a degree of uniformity to the line through the use of standard designs and materials for both the new pole and replacement of the existing pole. As a result, proposed facilities, in comparison to many existing facilities, would involve less variation from pole to pole, with variations in pole height or conductor configuration restricted to situations where other facilities must be crossed, or where other unusual conditions occur. This same condition would extend to future system maintenance, as damaged poles and equipment will generally be replaced with comparable equipment.

Specific areas where aesthetic/visual impacts potentially may occur include the following:

State and Federal Highway Crossings. The project would involve a crossing of Interstate 5. Utility line crossings of highways and roads are common throughout the project area, and a part of the background visual environment in areas served by overhead electrical facilities. Aesthetic effects from this source would be very localized and incidental, and no mitigation would be considered necessary. The crossing of I-5 is discussed in more detail later in this chapter.

Rural Roads. The majority of the project would involve the construction of overhead lines along local roads serving rural areas that are predominantly agricultural, with some crossings. Most of these alignments have existing electrical and other utility facilities along at least one side of the road. As with the state and federal highways, facilities along rural roads are common throughout the project area, and a part of the background visual environment.



Existing View from Harney Lane Looking West



Visual Simulation of Proposed Project



Existing View from Kingdon Road Looking East



Visual Simulation of Proposed Project

Canal, Pipeline and Private Road Alignments. Power lines may be located along irrigation canals, pipeline alignments, private roads or other non-public linear facilities, including other electrical line alignments. Aesthetic concerns associated with these alignments are generally restricted to those of adjoining owners and residents, as opposed to the public using highways and roads. Potential aesthetic effects would be generally minimal and localized. Electrical transmission or distribution would be consistent with continued use of the linear facility as well as with the surrounding use, and these alignments would involve less potential for significant impacts than lines located along public-use corridors.

Public Lands. The potential impacts of electrical line construction on public lands would be similar to those described above for various land use conditions. Project alignments located adjacent to or through public corporation yards, sewage treatment plants, unused surplus lands or other lands fulfilling essentially commercial, industrial, or agricultural uses would involve no more environmental impact than private lands in comparable use. Potential aesthetic impacts on lands of this type would generally be less than significant and would not require mitigation. The project would traverse City-owned lands that are currently used for agriculture or are vacant, and the western endpoint of the project would be near the WPCF. It would not affect public lands with park, recreational or scenic uses.

The most significant visual changes in the project area resulting from the project would be the increased height of the poles and the placement of steel poles. Steel poles would be placed only where the line would change direction, which would result in 13 steel poles installed out of approximately 140 total poles. In addition, all poles would be placed in existing rights-of-way along public roads, where existing poles are currently placed. Based on this, along with the low population density, the intensive agricultural nature of the area, and the degree to which views are localized by orchard and ornamental tree plantings, the potential aesthetic/visual effects of the project are not considered significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Project Effects on Scenic Routes and Scenic Vistas

As discussed in the Environmental Setting section, there are no designated scenic vistas, notable scenic resources or designated or recognized scenic roads or highways in the project area, except for Interstate 5 and the SR 12 “gateway” to Lodi. I-5 would be affected by the project, as the power line proposes to cross I-5 near the WPCF site. The crossing would be at the location of an existing power line crossing, which would be replaced by the new crossing. Since the power line would cross I-5 at the existing location, and since the existing line would be replaced, the net effect of the project on I-5’s scenic value would be less than significant.

The proposed alignment of the project would not cross SR 12 nor follow any segment of it. Instead, the power line would exit the proposed Westside Substation from its southwestern corner and go directly west to a proposed line segment that would follow an existing line corridor south to Harney Lane; away from SR 12. The project would have no significant impact on I-5 or the SR 12.

Level of Significance: Less than significant

Mitigation Measures: None required

Aesthetic Effects of Construction

Planned construction activities associated with the project would result in potential aesthetic effects. The hole-drilling, pole-setting, installation of hardware, and conductor stringing required for power line construction would, in any particular area, involve minor and localized effects. The presence of construction equipment and activity would not be required for more than a few days in any location. The presence of utility construction and maintenance equipment would result in no significant permanent aesthetic effect.

Level of Significance: Less than significant

Mitigation Measures: None required

Light and Glare

The project would use mostly wood poles, which do not reflect light. Steel poles are typically coated with anti-rust agents that reduce potential glare, or are painted with non-reflective colors. None of these new distribution lines would require lighting, nor would they use reflective materials. Therefore, the project would not result in the potential for new light or glare.

Level of Significance: Less than significant

Mitigation Measures: None required

5.0 AGRICULTURAL RESOURCES

ENVIRONMENTAL SETTING

Agriculture has been and continues to be an important part of the economy in San Joaquin County. An estimated 4,000 farms are located within the county and cover an estimated land area of 1,400 square miles. The general trend in agriculture has been toward less acreage harvested, but higher product values.

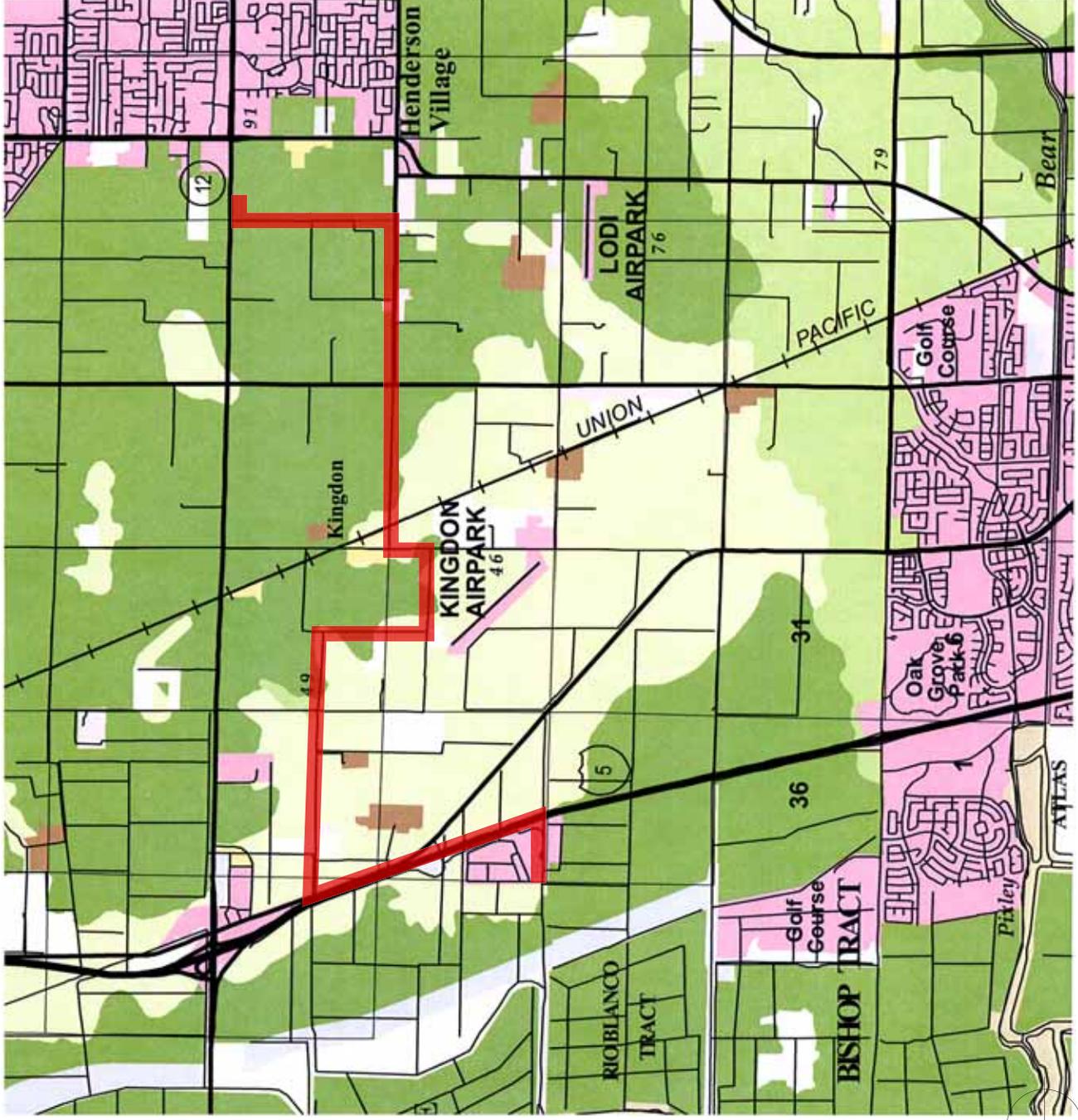
The project area is located in an area southwest of Lodi and north of Stockton. Land uses in this area are predominantly agricultural. Within the project area, vineyards, orchards and row and field crops are raised. There is little development, mostly scattered single-family residences and agricultural buildings. The two most significant developed areas are the Kingdon Airpark and the Lodi Wastewater Pollution Control Facility (WPCF) site.

According to the Natural Resources Conservation Service, approximately 54% of the soils in the project area are classified as "prime" by the soil survey, provided the soils are irrigated. The remaining soils, mostly Devries sandy loam, are classified as "non-prime." There are three soils in the project area that are rated as "excellent" for cultivated agriculture potential. These are Acampo sandy loam, Kingdon fine sandy loam, and Tokay fine sandy loam. Another soil, Tujungam loamy sand, is rated as having "good" potential. One soil rated as "poor", Devries sandy loam, covers almost half of the project area. Table 5-1 provides detailed information on the agricultural suitability of project area soils. Chapter 9.0, Geology and Soils, provides additional soils information.

Important Farmland

The California Department of Conservation has a Farmland Mapping and Monitoring Program that tracks trends in farmland acreage and prepares maps of agricultural lands. The maps categorize farmland in decreasing order of importance as "Prime Farmland," "Farmland of Statewide Importance," "Unique Farmland," and "Farmland of Local Importance." Collectively, these categories of farmland constitute "Important Farmland," and the maps illustrating these and other lands are called Important Farmland Maps.

The Important Farmland Map for San Joaquin County designates most of the project area as Prime Farmland and Local Importance (Figure 5-1). "Prime Farmland" includes lands with the best combination of physical and chemical characteristics able to sustain long-term production of agriculture crops. "Unique Farmland" is land used for production of the state's major crops on soils not qualifying as Prime Farmland. The project area contains small areas of Urban and Built Up Land, which include Kingdon Airpark and the Lodi WPCF site, as well as scatterings of Farmland of Local Importance and Other Lands. "Farmland of Local Importance" is farmable land in San Joaquin County that does not meet the definitions of Prime Farmland, Unique Farmland or other farmland designations.



Legend:

- Prime Farmland
- Statewide Importance
- Unique Farmland
- Local Importance
- Grazing
- Urban
- Other
- Water
- County Limit
- City Limit
- Street
- Water
- Primary Route of 60 kV Power Line

NORTH SOURCE: STANTEC CONSULTING INC.

INSITE ENVIRONMENTAL, INC.

Figure 5-1
IMPORTANT FARMLAND MAP

TABLE 5-1
 AGRICULTURAL SUITABILITY OF SOILS
 LODI WEST 60 KV POWER LINE PROJECT AREA

Name ¹	Prime	Capability Class	Storie Index Grade and Rating ²
101 - Acampo Sandy Loam	Yes	IIs irrigated, IVs non-irrigated	Grade 1, Excellent
149 - Devries Sandy Loam	No	IIIw irrigated, IVw non-irrigated	Grade 4, Poor
168 - Guard Clay Loam	Yes	IIIw irrigated, IVw non-irrigated	Grade 3, Fair
169 - Guard Clay Loam, drained	Yes	IIw irrigated, IVw non-irrigated	Grade 3, Fair
189 - Kingdon Fine Sandy Loam	Yes	I irrigated, IVc non-irrigated	Grade 1, Excellent
256 - Tokay Fine Sandy Loam	Yes	I irrigated, IVc non-irrigated	Grade 1, Excellent
259 - Tujunga Loamy Sand	Farmland of Statewide Importance	IIIe irrigated, IVe non-irrigated	Grade 2, Good

NOTES:

1. Refer to Figure 9-1 in Chapter 9.0 Geology and Soils for location of soil types.
2. Index value is weighted average of the component part ratings.

Sources: US Dept. of Agriculture, Soil Conservation Service, Soil Survey of San Joaquin County, California, 1992; US Dept. of Agriculture, Natural Resources Conservation Service, Custom Soil Resource Report for San Joaquin County, California, Lodi EUD Power Line, 2009

The loss of available agricultural land has been identified by the State as an issue of concern. Between 1990 and 2006, 31,015 acres of agricultural land were lost in San Joaquin County. Of these acres lost, 18,074 acres were classified as Important Farmland, defined as being Prime Farmland, Unique Farmland, Farmland of Statewide Importance and Farmland of Local Importance. Most of these lost acres (24,056 acres) were converted to Urban and Built Up Land (Department of Conservation, 2007).

REGULATORY SETTING

Williamson Act

The California Land Conservation Act of 1965 – commonly known as the Williamson Act – enables counties and cities to designate agricultural preserves and offer preferential taxation to private agricultural landowners based on the income-producing value of their property in agricultural use, rather than on the property’s assessed market value. In return for the preferential tax rate, the landowner signs a contract with the county or city agreeing

not to develop the land for a minimum 10-year period. Contracts are automatically renewed annually unless a party to the contract files for nonrenewal or petitions for cancellation. Additionally, landowners may enter into longer-term agreements by signing into a Farmland Security Zone contract. Land under a Farmland Security Zone contract is valued for property assessment purposes at 65 percent of its Williamson Act valuation, or 65 percent of its Proposition 13 valuation, whichever is lower. The minimum initial term for a farmland security zone contract is 20 years. Upon expiration of the initial term, the contract self-renews annually for an additional year until a notice of nonrenewal is filed.

Permissible land uses under Williamson Act contracts (e.g. agricultural land uses and limited ancillary uses) are governed by Government Code §51238.1. In accordance with State law, each city and county has the discretion to determine land uses that are or are not compatible with Williamson Act contracts, provided these uses are not prohibited under the Act. Several parcels adjacent to the Primary Route are under existing Williamson Act contracts.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

For the purposes of this EIR, impacts on agricultural resources are considered significant if the proposed project would:

- Result in a conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, and Farmland of Local Importance, as shown on the maps prepared under the Farmland Mapping and Monitoring Program of the California Department of Conservation, to nonagricultural use;
- Cause a conflict with existing zoning for agricultural use or a Williamson Act contract land; or
- Involve other changes in the existing environment that, because of their location or nature, could result in conversion of farmland to nonagricultural use.

Project Impacts on Agricultural Resources

Loss of Farmland

The proposed 60 kV Power Line Primary Route would traverse agricultural land, most of which has been designated Prime Farmland or Unique Farmland. However, most of the Primary Route would be placed in existing utility easements along public roads and would not result in the permanent or temporary loss of farmland.

Two of the Primary Route segments would not be located along a public road; the segment from the future Westside Substation to Harney Lane; and the portion of Thornton Road

segment that parallels I-5 along City of Lodi property (APNs 055-150-15 and 055-130-13). The Westside Substation to Harney Lane segment would be located within an existing utility easement and would replace existing poles. These existing poles are located along an existing dirt access road thus the new poles would not result in the permanent or temporary loss of farmland along this particular segment.

The segment of the Primary Route that leaves the right of way of Thornton Road and parallels the eastern edge of I-5 Freeway will be located within City of Lodi property that is currently being farmed. The poles will be located adjacent to a dirt access road near the I-5 boundary. No farming occurs between the dirt road and I-5 right-of-way, thus the new poles would not result in the permanent or temporary loss of farmland along this particular segment.

Level of Significance: Less than significant

Mitigation Measures: None required

Williamson Act Lands Impacted

The proposed 60 kV Power Line Primary Route would be placed next to parcels under Williamson Act contracts. As previously noted above, a major portion of the power line would be placed in existing utility easements, and no additional easement area would be acquired. Therefore, no lands under Williamson Act contracts would be removed from agricultural production.

Level of Significance: Less than significant

Mitigation Measures: None required

Conversion of Farmlands

The extension of electrical lines into rural areas could potentially encourage conversion of farmlands into more urban uses. However, the voltage of the proposed 60 kV power line is too great to serve any proposed development directly. The objective of the project is to provide greater reliability in the delivery of electricity to the entire incorporated area of Lodi. It is not intended to serve as a power source for any particular development in the project area. Therefore, the project would be unlikely to encourage the conversion of existing farmland in the project area to non-agricultural uses.

Level of Significance: Less than significant

Mitigation Measures: None required

6.0 AIR QUALITY

This chapter provides an overview of the existing air quality in the project area, and an analysis of potential impacts to air quality that would result from project implementation. Information for this chapter came primarily from the air quality analysis in the Lodi Energy Center EIR and from the San Joaquin Valley Air Pollution Control District (APCD). Analysis of the potential global climate change effects of the project due to greenhouse gas emissions are addressed in Chapter 10.0, Global Climate Change.

ENVIRONMENTAL SETTING

Air Basin

Air quality is a function of pollutant emissions as well as the topographic and climatologic characteristics of the region. The California Air Resources Board (ARB) has divided California into regional air basins, according to topographic and air drainage features (Figure 6-1). The project area is located in the San Joaquin Valley Air Basin (SJVAB), which encompasses the entire San Joaquin Valley (Figure 6-1). The SJVAB is about 250 miles long and averages 35 miles wide. The area is bounded by the Sierra Nevada foothills to the east, the Coast Ranges to the west, and the Tehachapi mountains to the south. The San Joaquin Valley floor is essentially flat with a slight downward gradient to the northwest, opening to the San Francisco Bay Area at the Carquinez Straits.

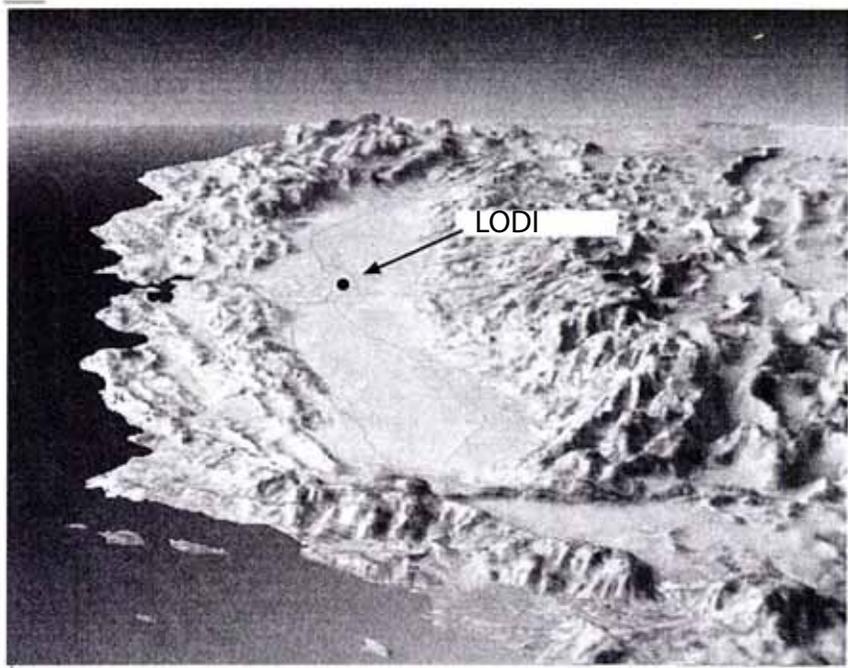
Climate

The climate of the San Joaquin Valley is characterized by hot summers, mild winters, and small amounts of precipitation. The major climatic controls in the Valley are the mountain ranges on three sides and the semi-permanent Pacific High pressure system over the eastern Pacific Ocean.

During the summer, the Pacific High moves northward and dominates the regional climate, producing persistent temperature inversions and a predominantly southwesterly wind field. Clear skies, high temperatures, low humidity and very little precipitation characterize this season. In the fall, the Pacific High weakens and shifts to the southwest, and its dominance is diminished in the San Joaquin Valley. During the transition period, the storm belt and zone of strong westerly winds also moves southward into California. The prevailing weather patterns during this time of year include storm periods with rain and gusty winds, clear weather that can occur after a storm or because of the Great Basin High pressure area, or persistent fog caused by temperature inversion (NCPA, 2008).



AIR BASIN MAP



AERIAL VIEW OF
SAN JOAQUIN VALLEY



NORTH SOURCE: SJCAPCD 2002

Precipitation and temperature data have been recorded at the meteorological monitoring station located in Lodi. In summer (June, July, and August), daily high and low temperatures at the project area average 89.7°F (degrees Fahrenheit) and 55.0°F, respectively. In winter (December, January, and February), average daily high and low temperatures are about 56.6°F and 38.8°F, respectively. The average annual rainfall at the project site is about 17.6 inches, of which about 81% occurs between November and March. Between rainstorms, skies are fair, winds are light, and temperatures are moderate (NCPA, 2008).

Summer winds in the SJVAB come from marine airflow into the basin from the west and north via the Carquinez Straits and the Sacramento-San Joaquin Delta. These air movements, which are the prevailing winds, go to the south and southeast through the Valley, and over the Tehachapi Pass into the Southeast Desert Air Basin. During the winter, regional winds occasionally originate from the southeast. The area is also subject to diurnal breezes - a sea breeze flows inward during the day and outward at night (SJVAPCD, 1998).

The mountains that surround the SJVAB restrict air movement, result in generally weak airflow, and prevent dispersion of pollutants. Air movement is further restricted vertically by persistent high barometric pressure over the Valley and both summer and winter temperature inversions that generally occur below the elevation of the surrounding mountains. As a result, the SJVAB is susceptible to pollutant accumulation over time (SJVAPCD, 1998).

Air Pollutants and Related Health Concerns

This section identifies and describes the pollutants of potential concern in the APCD in a human health context. Emissions of carbon dioxide (CO₂) are not of direct health concern, but are of concern in the global climate change context. Global climate change issues are addressed in detail in Chapter 10.0 and are not treated further in this chapter.

Ozone

Ozone is a colorless gas with a pungent odor. Most ozone in the atmosphere is formed as a result of the interaction of ultraviolet light, reactive organic gases (ROG), and oxides of nitrogen (NO_x). Because these reactions occur on a regional scale, ozone is considered a regional pollutant. Studies have indicated “high ozone concentrations in the Valley were due to varying combinations of local and transported pollutants”. Ozone causes eye irritation and respiratory function impairment.

Carbon Monoxide

Carbon monoxide (CO) is an odorless, colorless, gas. The incomplete combustion of petroleum fuels in on-road vehicles is a major cause of CO. CO is also produced during the winter from wood stoves and fireplaces that are not burning efficiently. CO tends to dissipate rapidly into the atmosphere, but increased CO levels may occur in the winter when temperature inversions trap pollutants near the ground and concentrate the CO. CO causes a number of health problems, including fatigue, headache, confusion and dizziness.

High concentrations of CO can cause heart difficulties for people with chronic diseases. It can impair mental abilities and in some cases can result in death.

Suspended Particulate Matter

Particulate matter includes smoke and ash, dust, and chemical droplets. PM-10 conditions in San Joaquin County are a result of a mix of rural and urban sources, including agricultural activities, industrial emissions, dust suspended by vehicle traffic, and secondary aerosols formed by reactions in the atmosphere.

Health concerns associated with suspended particulate matter focus on those particles small enough to reach the lungs when inhaled. Few particles larger than 10 microns in diameter reach the lungs. Consequently, both the federal and State air quality standards for particulate matter apply to particulate matter 10 microns or less in diameter (PM10). Particulate matter is known to bypass the body's defense mechanisms and becomes deeply embedded in the lung, and also can disrupt cellular processes. Research has demonstrated a strong linkage between elevated particulate levels and premature deaths, hospital admissions, emergency room visits, and asthma attacks. Particle pollution may significantly reduce lung function growth in children.

Most particulate matter in the County (84% of PM10) is generated from miscellaneous processes, which are made up primarily of agriculture, road dust, fugitive dust from other sources, and waste disposal, among others. Of these sources, agriculture accounts for 38% of PM10 emissions, while road dust accounts for an additional 27%. About 10% of the PM10 generated by miscellaneous processes is fugitive windblown dust from other sources (ARB, 2006).

Toxic Air Contaminants

"Toxic air contaminants" (TACs) are defined by California Health and Safety Code Section 39655 as "air pollutant(s) which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." State TACs also include federally listed air toxics. The State's Air Toxics Inventory (2008) includes more than 250 substances. Examples of toxic air pollutants include benzene, which is found in gasoline; perchlorethylene, which is emitted from some dry cleaning facilities; and methylene chloride, which is used as a solvent and paint stripper by a number of industries. Other listed air toxics include dioxin, asbestos, toluene, particulate matter emitted by diesel engines, and metals such as cadmium, mercury, chromium, and lead compounds. TACs cause or may cause cancer or other serious health effects, such as chronic eye, lung or skin irritation, reproductive effects or birth defects, neurological and reproductive disorders, or adverse environmental and ecological effects.

Diesel particulate matter (PM) is of particular concern because it is highly toxic, it is a potential source of both cancer and non-cancer health effects, and it is present at some concentration in all developed areas of the state. Diesel PM makes the largest single contribution to air toxic emissions in the San Joaquin Valley Air Basin; about 60% of diesel PM is derived from mobile sources.

Existing Local Air Pollution Sources

Existing air pollution sources associated with land uses in the project area include agriculture, an intermittent non-point source of particulate matter and off-road equipment exhaust emissions. Agriculture contributes criteria pollutants to the local and regional airshed. In addition, rural residences in the project area may use wood-burning fireplaces and heaters. These sources contribute criteria pollutants as well as toxic air contaminants (TACs) to the local and regional airshed. Criteria pollutants and TACs are described later in this chapter.

The existing Northern California Power Agency (NCPA) power plant near the Lodi Water Pollution Control Plant (WPCP) site generates emissions from its combustion turbine (LM5000 STIG) and its emergency diesel fire pump engine. Emissions from the combustion turbine are limited by permit, so the annual potential to emit is calculated assuming maximum daily operation for 365 days per year. Emissions from the emergency fire pump engine are calculated based on a 50-hours-per-year limitation on testing and maintenance operations in the applicable ARB Air Toxic Control Measure. Table 6-1 presents the annual potential to emit for the NCPA plant.

TABLE 6-1
POTENTIAL TO EMIT FOR EXISTING NCPA PLANT EQUIPMENT
Emissions, tons per year

Unit	NO _x	SO ₂	CO	VOC	PM10/ PM2.5
LM5000 STIG	20.4	5.7	58.8	25.9	8.8
Emergency Diesel Fire Pump Engine	0.08	<0.01	0.04	0.01	0.01

Source: NCPA, 2008

REGULATORY SETTING

The federal and state governments are responsible for the overall regulation of air quality and for the establishment of air quality standards. The actual implementation of these air quality standards is left to the local and regional air quality districts. Air quality standards have been established with the principal goal of protecting public health with a margin of safety. These standards are expressed in terms of parts per million (ppm) or micrograms per cubic meter (ug/m³).

Both the federal and state government have established pollution standards for what are termed "criteria" pollutants, which include ozone, carbon monoxide, particulate matter, nitrogen dioxide, sulfur dioxide and lead. Table 6-2 provides a summary of existing federal and State air quality standards for several criteria pollutants, along with their major sources and their potential health and atmospheric effects. It should be noted that California has additional criteria pollutants for which it has air quality standards. However, since the SJVAB is in either attainment or unclassified status for these pollutants, Table 6-2 does not list them. However, Table 6-3 lists these additional pollutants, along with their attainment status.

TABLE 6-2
STATE AND FEDERAL CRITERIA AIR POLLUTANT STANDARDS, EFFECTS AND SOURCES

Pollutant	Averaging Time	State Standard	Federal Standard	Pollutant Health and Atmosphere Effects	Major Pollutant Sources
Ozone	1 Hour 8 Hour	0.09 ppm 0.07 ppm	-- 0.075 ppm	High concentrations can directly affect lungs, causing irritation. Long-term exposure may cause damage to lung tissue.	Formed when reactive organic gases and nitrogen oxides react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial/industrial mobile equipment.
Carbon Monoxide	1 Hour 8 Hour	20 ppm 9.0 ppm	35 ppm 9 ppm	Classified as a chemical asphyxiant, carbon monoxide interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.	Internal combustion engines, primarily gasoline-powered motor vehicles.
Nitrogen Dioxide	1 Hour Annual	0.25 ppm --	-- 0.053 ppm	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown.	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships and railroads.
Sulfur Dioxide	1 Hour 3 Hour 24 Hour Annual	0.25 ppm -- 0.04 ppm --	-- 0.5 ppm 0.14 ppm 0.03 ppm	Irritates upper respiratory tract; injurious to lung tissue. Can yellow the leaves of plants, destructive to marble, iron, and steel. Limits visibility and reduces sunlight.	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
Respirable Particulate Matter (PM10)	24 Hour Annual	50 ug/m 20 ug/m	150 ug/m 50 ug/m	May irritate eyes and respiratory tract, decreases in lung capacity, cancer and increased mortality. Produces haze and limits visibility.	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g. wind-raised dust and ocean sprays).
Fine Particulate Matter (PM2.5)	24 Hour Annual	-- 12 ug/m	65 ug/m 15 ug/m	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and results in surface soiling.	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning. Also, formed from photochemical reactions of other pollutants, including nitrogen oxides, sulfur oxides, and organics.
Lead	Month Quarter	1.5 ug/m	-- 1.5 ug/m	Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurological dysfunction.	Present source: lead smelters, battery manufacturing & recycling facilities. Past sources: combustion of leaded gasoline.

Note: ppm = parts per million; ug/m³ = micrograms per cubic meter.

Source: California Air Resource Board; <http://www.arb.ca.gov/aqs/aaqs2.p>

TABLE 6-3
 SAN JOAQUIN VALLEY APCD ATTAINMENT STATUS
 WITH FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

Pollutant	Designation/Classification	
	Federal Standards	State Standards
Ozone - One hour	No Federal Standard ^d	Nonattainment/Severe
Ozone - Eight hour	Nonattainment/Serious ^c	Nonattainment
PM10	Attainment ^a	Nonattainment
PM2.5	Nonattainment ^b	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead (Particulate)	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

^a In September 2008, EPA redesignated the San Joaquin Valley to attainment for the PM10 National Ambient Air Quality Standard (NAAQS) and approved the PM10 Maintenance Plan

^b The Valley is designated nonattainment for the 1997 PM 2.5 federal standards. EPA designations for the 2006 PM 2.5 standards will be finalized in December 2009. The APCD has determined, as of the 2004-06 PM 2.5 data, that the Valley has attained the 1997 24-Hour PM 2.5 standard.

^c In April 2007, the Governing Board of the APCD voted to request EPA to reclassify the SJVAB as extreme nonattainment for the federal 8-hour ozone standards. The ARB approved this request in June 2007. This request must be forwarded to the EPA by ARB and would become effective upon EPA final rulemaking; it is not yet in effect.

^d Effective June 2006, the EPA revoked the federal 1-hour ozone standard, including associated designations and classifications. However, EPA had previously classified the SJVAB as extreme nonattainment for this standard. Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

Source: SJVAPCD, 2008

Federal

Federal air quality regulation stems from the Federal Clean Air Act (CAA), as amended. The federal CAA requires the U.S. Environmental Protection Agency (EPA) to establish the air quality standards for criteria pollutants, known as the National Ambient Air Quality Standards (NAAQS), as shown in Table 6-2. The primary standards are based on EPA medical research and specific concentration thresholds derived thereby. Secondary standards are intended to protect the public welfare from effects such as visibility reduction, soiling, nuisance, and other forms of damage.

Regions of the country are classified with respect to their attainment, or the extent of their "nonattainment", of these standards. The federal CAA requires the states to submit a State Implementation Plan (SIP) for nonattainment areas; the SIPs are reviewed and approved by EPA subject to their adequacy in demonstrating how the federal standards will be achieved. The corresponding attainment/nonattainment designations for the SJVAB are presented in Table 6-3.

State

California Clean Air Act

The California Clean Air Act (CCAA) provides the planning framework for California air quality. The CCAA establishes the State's own set of ambient air quality standards (CAAQS) for criteria pollutants that differ from but are generally more stringent than the corresponding NAAQS. Responsibility for implementation of the CCAA requirements, and for preparation of the State Implementation Plan under the federal CAA, rests with the California Air Resources Board; the local air pollution or air quality management districts are responsible for preparation of Air Quality Attainment Plans, which are input to the SIP.

The local air districts are charged to reduce pollutant concentrations for which the district is nonattainment by 5% per year. The local air district is also required to prepare an Air Quality Attainment Plan (AQAP) if the district exceeds the State air quality standards for ozone, carbon monoxide, nitrogen dioxide or sulfur dioxide. No AQAP is required for particulate nonattainment. The local AQAPs are required to address locally generated air pollutant emissions. "Upwind" air districts are required to establish control programs that address pollutant transport to downwind districts. Air Quality Maintenance Plans have been adopted for particulate matter and carbon monoxide. The APCD has adopted an AQAP only for ozone nonattainment, which describes the actions the APCD will take to work toward ozone attainment.

No particular schedule is established for achieving attainment with the CAAQS. However, the CCAA imposes increasingly severe requirements based on the degree of nonattainment. Nonattainment is classified into the following categories: Moderate, Serious, Severe and Extreme.

Air Toxics

The State regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588); under these programs, the State is responsible for an inventory of TACs, for analysis of exposure and risk and for planning to reduce risk. As with other federal and State air quality requirements, the various elements of the State air toxics program are implemented locally by the local air districts.

Local

The San Joaquin Valley Air Pollution Control District (APCD) is responsible for air quality management in San Joaquin County as well as the other seven counties that make up the District. The APCD's responsibilities include AAQS attainment planning, regulation of emissions from non-transportation sources, and mitigation of emissions from on-road sources through its Indirect Source Rule.

The APCD has adopted required attainment plans for ozone and PM 2.5 and maintenance plans for attainment pollutants. The status of APCD attainment planning is summarized below:

- Ozone. The 2004 Extreme Ozone Demonstration Plan was recommended for approval by EPA in October 2008.
- Carbon Monoxide. The APCD is attainment for carbon monoxide. The approved SIP includes measures for attainment maintenance known as the Carbon Monoxide Maintenance Plan.
- Particulate Matter (PM10). The APCD is attainment for PM10 federal standards. EPA approved a PM10 Maintenance Plan in September 2008.
- Fine Particulate Matter (PM2.5). The APCD adopted a PM2.5 Plan in April 2008.

The APCD has adopted a regulation that is potentially applicable to the project - Regulation VIII (Fugitive Dust PM10 Prohibitions). Rules 8011-8081 are designed to reduce PM₁₀ emissions (predominantly dust) generated by construction and demolition activities, among other potential sources. Rule 8021 applies specifically to construction, demolition and earthmoving. The rules that make up Regulation VIII require compliance with the District's 20% opacity standard.

Existing Air Quality

Criteria Air Pollutants

Existing air quality is monitored regularly by the APCD and reported to the ARB. Air pollutant concentration data from the District's Stockton-Hazleton monitoring station for recent years, as well as the extent to which ambient air quality standards were exceeded, are summarized in Table 6-4. The Stockton station is the closest monitoring station to the project area.

The table data indicate that the State one-hour ozone standard of 0.09 ppm have been exceeded at the Stockton station between two and six days per year during two of the preceding three years. There were no exceedences of this standard during 2007. Both the State and federal maximum eight-hour-average ozone standards were exceeded in Stockton during each of the last three years. The State standard of 0.07 ppm was exceeded between four and 21 days, while the higher federal standard of 0.08 ppm was exceeded from three to 13 days. The SJVAB is classified as nonattainment for the State one-hour ozone standard, as well as for both the State and federal 8-hour ozone standards (see Table 6-2).

The SJVAB as a whole regularly violates the PM10 standards. In Stockton, the 24-hour average federal PM10 standard of 150 ug/m³ has not been exceeded during the previous three years. However, exceedence of the lower State PM10 standard of 50 ug/m³ occurred between four and 11 times during the previous three years. Similarly, the federal annual average PM10 standard of 50 ug/m³ was not exceeded during the previous three years, while the State standard of 20 ug/m³ was exceeded in all three years.

**TABLE 6-4
STOCKTON/SAN JOAQUIN COUNTY AIR QUALITY MONITORING RESULTS**

Pollutant	Pollutant Concentration		
	2006	2007	2008
Carbon Monoxide (Hazelton)			
Highest 8-Hour Average (ppm)	2.25	2.31	1.86
Second Highest 8-Hour Average (ppm)			
1 hour levels not monitored	2.24	2.13	1.76
Days > National Standard (9.0 ppm)	0	0	0
Days > State Standard (9.0 ppm)	0	0	0
Ozone (Hazelton)			
Highest 1-Hour Measurement (ppm)	0.109	0.093	0.105
Second Highest 1-Hour Measurement (ppm)	0.105	0.092	0.101
Days > State Standard (1-hour average) (0.09 ppm)	6	0	2
Highest 8-Hour Average (ppm)	0.092	0.082	0.090
Second Highest 8-Hour Average (ppm)	0.086	0.081	0.081
Days > State Standard (8-hour average) (0.07 ppm)	21	4	7
Days > Federal Standard (8-hour average)(0.08 ppm)	13	3	4
PM 10 (Hazelton)			
Highest 24-Hour Average, State (ug/m ³)	85.0	75.0	105.0
Second Highest 24-Hour Average, State (ug/m ³)	85.0	73.0	83.7
Days > State Standard (50 ug/m ³)	11	4	8
Highest 24-Hour Average, Fed (ug/m ³)	82.0	71.0	104.5
Second Highest 24-Hour Average, Fed (ug/m ³)	80.0	68.0	83.0
Days > National Standard (150 ug/m ³)	0	0	0
Annual Average (State) (20 ug/m ³)	Exceeds	Exceeds	Exceeds
Annual Average (Fed) (90 ug/m ³)	No Exceed	No Exceed	No Exceed
PM 2.5 (Hazelton)			
Highest 24-Hour Average, Fed (ug/m ³)	47.0	52.0	81.0
Second Highest 24-Hour Average, Fed (ug/m ³)	47.0	50.0	61.7
Days > Federal Standard	7.0	11.0	9.0
Annual Average (State) (12 ug/m ³)	Exceeds	Exceeds	Exceeds
Annual Average (Fed) (15 ug/m ³)	No exceed	No exceed	No exceed

Note: ppm=parts per million; ug/m³=micrograms per cubic feet.
Source: California Air Resources Board web site; <http://www.arb.ca.gov>

Monitoring at the Stockton station indicates that the federal 24-hour PM2.5 standard of 65 ug/m³ was exceeded between seven and 11 times during the last three years. There is no 24-hour State standard for this pollutant. Similar to PM10, measured annual average PM2.5 levels did not exceed the federal standard in the last three years, but did exceed the State standard in all those years.

Carbon monoxide monitoring in Stockton shows that carbon monoxide levels are consistently below both the State and federal 8-hour standards. San Joaquin County is classified Unclassified/Attainment for both federal and State for carbon monoxide. As previously shown in Table 6-3, the County is classified Attainment or Unclassified for other criteria pollutants.

The APCD maintains an inventory of criteria air pollutant emissions within the SJVAB and within San Joaquin County. ROG emissions are produced primarily by stationary and area-wide sources, and mobile sources produce the majority of NO_x emissions. Mobile sources are the primary source of carbon monoxide emissions in the SJVAB, but area sources produce over 80% of PM₁₀ emissions in the basin (ARB, 2006).

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

For the purposes of this EIR, impacts related to air quality are considered significant if the proposed project would:

- Conflict with or obstruct implementation of an Air Quality Attainment Plan,
- Violate or worsen an existing violation of an ambient air quality standard,
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under federal or state standards,
- Expose sensitive receptors to substantial pollutant concentrations, or
- Create objectionable odors affecting a substantial number of people, be located in an area of substantial odor complaints, or would result in a sensitive odor receptor being located within a mile of an undesirable odor generator.

The impact analysis is based largely on the methodology defined in the *Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI)*, prepared by the San Joaquin Valley Air Pollution Control District. The analysis includes consideration of both project construction and long-term operation effects on criteria pollutants and air toxics. GAMAQI defines certain thresholds of significance for the assessment of air quality impacts. Based on GAMAQI, the proposed project will be considered to have a significant impact in the following situations:

- For ozone precursor emissions, if the project would generate more than 10 tons per year of either ROG or NO_x.
- For particulate matter emissions, if the project would cause “visible dust emissions” due to onsite operations, and thereby violate APCD Regulation VIII.

- For carbon monoxide emissions, if the project would:
 - Degrade operation of an intersection to level of service (LOS) E or F, or substantially worsen an intersection already operating at LOS F, and
 - The *Transportation Project-Level Carbon Monoxide Protocol* or CALINE4 modeling indicates that CO standards would be exceeded adjacent to an impacted intersection.

- For air toxics exposure effects, if the project would result in:
 - Lifetime cancer risk for sensitive land uses (including residential) exceeds 10 in one million.
 - Ground-level concentrations of non-carcinogenic toxic air contaminants that would result in a Hazard Index greater than one (1).

Impacts of Project Construction on Air Quality

All construction activities under the project would involve emissions consisting of PM10 from soil disturbance and equipment operation in unpaved areas, and ozone precursor emissions from worker commute vehicles and construction equipment. Soil disturbance for line construction projects is generally very minimal, limited to pole hole drilling and minor disturbance associated with equipment movement and conductor stringing for projects along existing roads.

Carbon monoxide and ozone precursor emissions are considered significant only in the cases of "very large or very intense construction projects." The project would involve the placement of power poles in a narrow area. Even though the length of the project is approximately seven miles, the amount of disturbed land involved would be minimal. Consequently, potential construction impacts related to ozone precursors and carbon monoxide emissions are considered less than significant.

The APCD has determined that PM10 is the pollutant of greatest concern for construction projects. Construction dust impacts are not quantified in this document, but they would be related to the amount of soil disturbance associated with the project. As noted above, this would normally range from negligible to minor. For purposes of this document, the creation of any dust is considered potentially significant. The GAMAQI indicates that construction dust impacts need not be quantitatively analyzed, but that management should focus on implementation of effective and comprehensive control measures. These measures are specified in the APCD's Regulation VIII. The APCD has determined that compliance with Regulation VIII, and implementation of the applicable measures identified in GAMAQI Tables 6-2 and 6-3, will constitute sufficient mitigation to reduce PM-10 impacts to less than significant. Appropriate measures from these tables are identified in the mitigation measure below.

Level of Significance: Potentially significant

Mitigation Measures:

- 6-1 All project construction activities shall comply with relevant provisions of the San Joaquin Valley Air Pollution Control District Regulation VIII - Control Measures for Construction Emissions of PM-10, as described in Table 6-2 of the District's Guide for Assessing Air Quality Impacts, or the applicable regulation of the APCD with jurisdiction. These requirements would typically include:
- a. All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, or vegetative ground cover.
 - b. All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
 - c. All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
 - d. When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, or at least six inches of freeboard space from the top of the container shall be maintained.
 - e. All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.
 - f. Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
 - g. Limit traffic speeds on unpaved roads to 15 mph.

Significance After Mitigation: Less than significant. Implementation of the mitigation measures would reduce the amount of dust emissions generated by project construction.

Implementation: The Lodi EUD, and any contractors hired by the EUD, shall be responsible for implementing the dust control measures.

Monitoring: The Lodi EUD will monitor all construction activities and will ensure compliance with the dust control measures.

Impacts of Project Operations on Air Quality

Operation of the new 60 kV power line will not involve any substantial air emissions, and no significant direct air quality effects. The new power line and the power poles would require occasional maintenance, which would generate associated vehicle traffic. This traffic will involve incidental ozone precursor contributions to the air basin, as well as local contributions to carbon monoxide. The effects on ozone conditions would be minimal, since the number of vehicle miles traveled by these maintenance vehicles would be extremely low, compared with background traffic associated with regional travel and commuter commercial and industrial activities. Maintenance vehicle traffic would not substantially contribute to the existing nonattainment status in San Joaquin County.

As discussed in Chapter 21.0, Growth-Inducing Impacts, the project would not have growth-inducing impacts. Any secondary emissions associated with future growth served by the project would be addressed in conjunction with local agency environmental review of specific land development projects.

Level of Significance: Less than significant

Mitigation Measures: None required

Exposure to Toxic Air Contaminants

Chapter 11.0, Health and Safety describes the hazardous materials that may be used in project construction and operation. None of the hazardous materials are TACs. The use of diesel fuel by construction equipment and vehicles would generate diesel particulate matter emissions, which are considered a TAC. However, these emissions would be temporary, and would cease once construction work is completed. It is unlikely that diesel particulate matter emissions from construction would be of a sufficient duration or concentration to pose a health risk.

Diesel particulate matter may be generated by project operations, through the use of maintenance vehicles that use diesel fuel. However, such use would be infrequent and would not generate a quantity of diesel particulate matter. No other TACs are likely to be generated during project construction or operation.

Level of Significance: Less than significant

Mitigation Measures: None required

Exposure to Odors

Project construction may generate some odors, mainly from diesel vehicles and equipment. These odors generally would be confined to the construction site, and they would cease once construction work is completed. The power line itself would generate no odors once operations begin.

Level of Significance: Less than significant

Mitigation Measures: None required