

- VISUAL RESOURCES  
(SECTION 5.13 FROM 99-AFC-7)

## 5.13 VISUAL RESOURCES

This section addresses the visual resources environmental baseline conditions and the potential for the Pastoria Energy Facility (PEF) to cause significant impacts on those resources in the project study area. This assessment was conducted in conformance with the California Energy Commission (CEC) Guidelines for preparing visual impact assessments for an Application for Certification (AFC) as described in Appendix B of Title 20, California Code of Regulations. The CEC guidelines, in turn, comply with the California Environmental Quality Act (CEQA) documentation requirements. The Visual Resources section is subdivided into five general subsections including: Affected Environment, Environmental Consequences, Mitigation Measures, LORS Compliance (Laws, Ordinances, Regulations, and Standards), and References.

Before addressing the affected environment, it is important to briefly review the concepts and terminology that comprise a visual resources analysis, as well as the key project elements to be evaluated.

The visual resources of a given area consist of the landforms, vegetation, water features, and cultural modifications (physical changes caused by human activities) that impart an overall visual impression of the area landscape. A number of factors are considered in the evaluation of a landscape's visual resources and of the potential for one or more visual impacts to occur, including: visual quality, viewer sensitivity, landscape visibility, and viewer exposure. Each of these factors is generally expressed as low, moderate, or high as discussed below:

*Visual Quality* is a measure of the overall impression or appeal of an area as determined by the particular landscape characteristics such as landforms, rockforms, water features, and vegetation patterns, as well as associated public values. The attributes of variety, vividness, coherence, uniqueness, harmony, and pattern contribute to visual quality classifications of indistinctive (low), common (moderate), and distinctive (high). Visual quality is studied as a point of reference to assess whether a given project would appear compatible with the established features of the setting or would contrast noticeably and unfavorably with them. A landscape's ability to accept alteration without diminishment of visual quality (or creation of visual contrast) is often referred to as *Visual Absorption Capability*. In the case of predominantly natural settings, a project should be compatible with the natural character of the existing landscape in terms of form, line, color, and texture. It is possible for new structures to be compatible with predominantly natural settings if such settings already contain some structures that are considered compatible and the new structures are similar to the existing structures (in their replication of the existing forms, lines, colors, and/or textures) and do not appreciably change the balance of natural and cultural elements.

*Viewer Sensitivity* addresses the level of interest or concern of viewers regarding an area's visual resources and is closely associated with viewers' expectations for the area. Viewer sensitivity reflects the importance placed on a given landscape based on the human perceptions of the intrinsic beauty of the existing landforms, rockforms, water features, vegetation patterns, and even cultural features.

*Landscape Visibility* describes the accessibility of the landscape to viewers, referring to one's ability to see and perceive the landscape. Landscape visibility can be a function of several interconnected considerations, including proximity to viewing point, degree of discernible detail, seasonal variations (snow, fog, and haze can obscure landscapes), time of day, and presence or absence of screening features such as landforms, vegetation, and/or built structures.

*Viewer Exposure* describes the degree to which viewers are exposed to views of the landscape. Viewer exposure considers the number of viewers, the duration of view, and the proximity of viewers to the subject landscape. Even though a landscape may be highly scenic and have highly scenic qualities, it may be remote, receiving relatively few visitors and, thus, have a low degree of viewer exposure. Conversely, a subject landscape or project may be situated in relatively close proximity to a major road or highway utilized by a substantial number of motorists and yet still result in relatively low viewer exposure if the rate of travel speed on the roadway is high and viewing times are brief, or if the landscape is partially screened by vegetation or other features. It is the subject area's proximity to viewers or *distance zone* that is of particular importance in determining viewer exposure. Landscapes are generally subdivided into three or four distance zones based on relative visibility from travel routes or observation points. Distance zones typically include: foreground, middleground, and background. The actual number of zones and distance assigned to each zone is dependent on the existing terrain characteristics and public policy and is often determined on a project by project basis.

*Visual Impact Susceptibility* is a concluding assessment as to the degree of probability that a given landscape will demonstrate a noticeable visual impact with project implementation. Visual impact susceptibility is derived from a comparison of existing visual quality, viewer sensitivity, landscape visibility, and viewer exposure.

An *adverse visual impact* occurs within public view when: (1) an action perceptibly changes existing features of the physical environment so that they no longer appear to be characteristic of the subject locality or region; (2) an action introduces new features to the physical environment that are perceptibly uncharacteristic of the region and/or locale; or (3)

aesthetic features of the landscape become less visible (e.g., partially or totally blocked from view) or are removed. Changes that seem uncharacteristic are those that appear out of place, discordant, or distracting. The degree of the visual impact depends upon how noticeable the adverse change may be. The noticeability of a visual impact is a function of project features, context, and viewing conditions (angle of view, distance, and primary viewing directions). The key factors for consideration in determining the degree of visual impact or *Visual Impact Severity* are visual contrast, project dominance, and view impairment.

*Visual Contrast* evaluates a potential project's or activity's consistency with the visual elements of form, line, color, and texture already established in the landscape. Other elements that are considered in evaluating visual contrast include the degree of natural screening by vegetation and landforms, placement of structures relative to existing vegetation and landforms, distance from the point of observation, and relative size or scale. Generally, visual contrast inversely correlates with visual absorption capability.

*Project Dominance* refers to the project's relationship to other visible landscape components in terms of vertical and horizontal extent. A project's scale and spatial relationship to the existing landscape can be categorized as subordinate, co-dominant, or dominant.

*View Impairment* refers to the extent to which a project's scale and position result in the blockage of higher quality visual elements by lower quality elements.

*Visual Impact Severity* characterizes the degree of impact caused by a project on a given landscape or viewshed, typically, as experienced from key observation points. The assessment of visual impact severity is based on an analysis of visual contrast, project dominance, and the impairment (or blockage) of views from key observation points.

*Key Observation Points (KOPs)* are locations selected to be representative of the most critical locations from which the project will be seen. KOPs are often located in an effort to evaluate impacts on visual resources with various levels of sensitivity, in different landscape types and terrain, and from various vantage points. Typical KOP locations include: (1) along major or significant travel corridors; (2) at key vista points; (3) in proximity to residential uses; and (4) at significant recreation areas.

The Pastoria project consists of several facility components that are described in detail in Section 3.0 that are of particular relevance to the visual assessment. The principal components of interest include the power plant and associated facilities (including the combustion turbine generators, heat recovery steam generators, exhaust stacks, water storage

tanks, cooling tower banks, and administrative and support buildings); transmission line; water supply, natural gas, and wastewater discharge pipelines; and access road.

The proposed Pastoria Energy Facility is located on approximately 30 acres of land in southern Kern County, at the southern end of the San Joaquin Valley at the base of the Tehachapi Mountains. The nearest city is Bakersfield, approximately 30 miles to the north-northwest. The nearest highway is Interstate-5 (I-5), approximately 5 miles west of the power plant site. Access to the site is from Edmonston Pumping Plant Road which intersects I-5 at Grapevine.

Figures 3.1-1 through 3.1-7 show the conceptual plant layout, area plan, access and general site arrangement. Table 3.4.1-2 (Significant Structures and Equipment) lists the sizes of the plant facilities. The most noticeable of the power plant facilities will be the three heat recovery steam generators (HRSG) which will be 70 feet tall, the three HRSG stacks which will be 213 feet tall or less, and the wet cooling tower banks (one bank containing 16 tower cells and one bank containing 8 tower cells) which will be 64 feet tall. The remaining power plant facilities will range in height from 10 feet to 40 feet. The cooling towers will be the primary sources of visible atmospheric plumes from the generation facility, releasing warm water vapor that will rise into the air and have an elongated, vertical white plume, the size and height of which will be influenced by meteorological conditions. Materials and color of the project structures had not been specified at the time of AFC preparation. However, it is assumed that the facilities would be beige and gray as illustrated in the photosimulations provided later in this section and in Section 3.0.

The power generated at the facility will be transmitted over a 1.38 mile long, double circuit, 230 kV line that will exit the plant site to the west before turning south to parallel three existing Southern California Edison transmission lines to the Pastoria Substation located approximately 1 mile to the south of the plant site. The transmission line conductors will be supported by lattice steel tower structures. The tower structures will be approximately 100 to 120 feet tall, depending on span requirements. The conductors (lines) will have a non-specular finish to reduce reflectivity.

The water supply, fuel gas, and wastewater discharge pipelines will be buried approximately 4 feet underground and will not have any aboveground components along the pipeline rights of way other than occasional pipeline locational markers. Water will be supplied by a new 20- to 30-inch diameter pipeline which will connect (via Route 2) to the proposed Wheeler Ridge-Maricopa Water Storage District 54-inch diameter water pipeline to be installed approximately 250 feet west of the power plant site.

The proposed 16- to 20-inch fuel gas pipeline will exit the plant to the east and travel north via one of three alternative routes before connecting to the existing 42-inch Kern River/Mojave natural gas pipeline. The proposed connection point (approximately 6.5 miles north of the power plant site) would result in a linear route (Proposed Route 3) approximately 11.7 miles in length. Alternative Routes 3A and 3B would be 13.8 and 18.2 miles in length, respectively. Wastewater would be pumped through a new 10- to 12-inch diameter wastewater pipeline to injection wells in the Tejon Ranch Oil Field approximately 1.7 miles to the north of the power plant site. Alternatively, the PEF may utilize a zero discharge system.

During construction, a 25-acre laydown and storage area will be established immediately south of, and adjacent to, the proposed power plant site. Also, a new, 0.85-mile long, 24-foot wide, all-weather surface access road will connect the plant site to Edmonston Pumping Plant Road.

### **5.13.1 Affected Environment**

#### **5.13.1.1 Methodology**

Baseline data collection was initiated with a review of existing project documents and relevant publications in order to gain familiarity with the existing landscape setting; visual resource issues of concern, including sensitive land uses adjacent to, or crossed by, project components; and the characteristics of the proposed project and alternatives.

Following review of available documentation, a field reconnaissance was conducted with agency personnel from the California Energy Commission (Flores, 1999). The purpose of the reconnaissance was to identify specific locations of concern for the establishment of Key Observation Points (KOPs) and the conduct of detailed visual impact analyses. Applicable visual resource management policy was also identified through a review of the Kern County General Plan Land Use, Open Space, and Conservation Element.

Following completion of the baseline data review, field reconnaissance, and verification of locations for specific study, field studies were initiated. Field studies consisted of viewing the project landscapes to the extent feasible from public roads and vantage points to develop an overall assessment of landscape characteristics and the potential for project impacts. During the field studies, detailed analyses were conducted at three Key Observation Points (see Figure 5.13-1). KOPs are generally selected for one or two reasons: (1) the location provides representative views of the landscape along a specific route segment or in a general region of interest; and/or (2) the viewpoint effectively captures the presence or absence of a potentially

significant project impact in that location. KOPs are typically established in locations that provide high visibility to “relatively” large numbers of viewers and/or sensitive viewing locations such as residential areas, recreation areas, and vista points.

A description of the existing landscape characteristics and sensitivity was compiled and included notes on existing visual quality, known viewer sensitivity, landscape visibility, visible evidence of historical and cultural influence on the land landscape, and potential viewer exposure. The evaluation of viewer exposure also included qualitative notations on potential numbers of viewers, distance zones, and duration of views.

Based on the above factors, an overall visual impact susceptibility rating was determined for each key observation point using the guidance presented in Table 5.13-1. As a general guideline, a visual impact susceptibility rating of **Low** is achieved if two or more of the three contributing factors are rated low. A visual impact susceptibility rating of **High** is achieved if two or more of the three contributing factors are rated high. A visual impact susceptibility rating of **Moderate** is achieved for all other combinations of the three contributing factors.

Field Data Sheets of tabulated information that document the detailed field analysis at each key observation point are presented at the end of this section (following the figures).

#### **5.13.1.2 Regional Landscape**

The proposed project is located within generally level and open terrain. Vegetation is primarily agricultural crops, grazing land, or scrub vegetation. Streams in the region are ephemeral, running only during periods of rainfall. The most significant water feature in the area is the California Aqueduct located to the south of the site. There has also been a protracted history of oil development activities in the region, which is evidenced by the still operating oil extraction facilities scattered throughout the area.

Views are typically panoramic in scale, encompassing large horizontal expanses of agricultural fields and grazing lands with little variation in terrain. Vegetation is primarily low-growing and coloration is closely tied to current agricultural crops and uses. The most prominent visual features in the area are the Tehachapi Mountains, which wrap around the study area from the south to the east. Contrasting with horizontal and curving forms of the natural landscape are the vertical and rectilinear features of existing utility and oil extraction infrastructure, and to a lesser extent, the horizontal forms and lines of the region’s transportation infrastructure. Figure 5.13-2 shows the location of three additional viewing points that illustrate typical landscapes within the project area. Figure 5.13-3 provides an eastbound view on Laval Road at a point approximately three miles east of Interstate-5 and

Figure 5.13-4 provides the eastbound view along Sebastian Road, just east of the intersection with Rancho Road. Both of these photographs illustrate the close association between developed agricultural fields and facilities, open grazing lands, and oil extraction facilities, against a backdrop of the Tehachapi Mountains, which are often obscured by haze.

Figure 5.13-5 provides the view to the southeast from the far-eastern terminus of Sebastian Road. This view illustrates the typical landscape crossed by the fuel gas pipeline right of way along the alluvial fans at the base of the Tejon Hills (subunit of the Tehachapi Mountains). The proposed project facilities are primarily located on Tejon Ranch property and there is very limited public visual access to the project. There are also very few residences in the project area which, as indicated above, consists primarily of agricultural fields and oil extraction facilities. There are no designated scenic highways, roads, or corridors in the project vicinity and there are no potentially sensitive receptors within viewing distance of significant project components.

#### **5.13.1.3 Power Plant Site, Laydown Area, and Transmission Line**

The power plant site will be located on approximately 30 acres of existing grazing land adjacent to an active quarry and a transmission line corridor. The 25-acre laydown area will be located adjacent to, and south of, the plant site. Access to the site is from Edmonston Pumping Plant Road, which presently provides access to the California Department of Water Resources Edmonston Pumping Plant (for the California Aqueduct), located to the southeast of the proposed project, and the Griffith Company quarry, located immediately adjacent to, and east of, the proposed project. Edmonston Pumping Plant Road is an easement across Tejon Ranch and is not intended for public access.

Approaching the power plant site and transmission line from the west on Edmonston Pumping Plant Road, views are dominated by the Tehachapi Mountains to the south and to the east. Views to the north encompass expansive vistas across open agricultural lands. During the Summer and Fall (the time of the present study) the dominant coloration is the gold and tan of the grass-covered hills and valley floor. Also, extensive patches of green agricultural crops are present, as well as mottled greens on the hills and slopes to the east and south. However, visibility is often obscured by haze or ground fog during much of the year. The existing transmission lines in the immediate project vicinity are prominent foreground to middleground visual elements as viewed from Edmonston Pumping Plant Road.

**5.13.1.3.1 Key Observation Point 1 - Edmonston Pumping Plant Road.** KOP 1 was established on Edmonston Pumping Plant Road due south of the power plant site and approximately 5 miles east of Interstate-5. This location was selected because this is the only

access point where the power plant components, transmission line, and access road would be readily visible (see Figure 5.13-6a). This vantage point provides views across pastoral foreground and middleground landscapes generally lacking unique features or vivid coloration or textures. Foreground and middleground views are dominated by the existing transmission line towers while views further to the east are dominated by the distant Tejon Hills. In addition to the existing transmission lines, other apparent cultural modifications include the existing quarry, an existing access road, agricultural fields, and distant oil extraction facilities. It should be noted that Edmonston Pumping Plant Road is a private dead end road.

The plant site would be located in the middleground of the view from KOP 1, adjacent to, and east of, the existing transmission lines. The transmission line would exit the site to the west in the middleground before turning south to parallel the existing SCE transmission line corridor (toward the viewer) into the foreground of views for approximately one mile to the Pastoria Substation. Views of the site are unobstructed. As viewed from KOP 1, landscape scenic attractiveness is fairly common and the presence of utility and energy infrastructure contribute to an overall low visual quality rating. Visual absorption capability is considered low to moderate and is based on the site's relatively flat contours and low vegetation which would not be able to screen the project from view or provide a camouflaging backdrop.

Viewer sensitivity is also rated low because of the general absence of intrinsic scenic features, the pre-existing industrial infrastructure uses, and the restricted public access. Although views of the site from KOP 1 are unobstructed and the duration of view is extended, there are relatively few viewers that access this private easement (limited to workers travelling to and from the Griffith Company quarry and the California Aqueduct Edmonston Pumping Plant). Therefore, even though the site is highly visible to motorists on Edmonston Pumping Plant Road, overall viewer exposure is rated low.

As summarized in Table 5.13-2, overall visual impact susceptibility for the power plant site and transmission line is considered to be low due to the low visual quality of the site, combined with low viewer sensitivity, and low viewer exposure resulting from restricted public visual access.

**5.13.1.3.2 Key Observation Point 2 - Interstate 5.** KOP 2 was established on Interstate-5 at the southbound weigh station approximately 1.1 miles north of Grapevine. This location was selected to represent views of the power plant site and transmission line from the only significant travel corridor (and primary point of public visual access) in the project area (see Figure 5.13-7a). Views of the site are available only to southbound motorists on I-5 and would be brief due to the high rate of travel speed and site view direction perpendicular to the

direction of travel and primary view orientation. From this vantage point, the power plant site and transmission line would be located approximately five miles due east and would appear barely discernible at the base of the Tehachapis.

From I-5, views toward the site would encompass the dominant transportation infrastructure in the immediate foreground with its gray and white coloration, golden-colored grazing land appearing as a subordinate, horizontal middleground visual element, and the prominent, but often haze-shrouded Tehachapi Mountains with their tan and lavender coloration in the background.

In general, the landscape viewed from KOP 2 is indistinctive, generally lacking in vivid coloration or unique scenic qualities. Scenic quality is therefore rated low. Visual absorption capability is rated moderate owing to the substantial viewing distance to the power plant site/transmission line and the camouflaging effect that would be provided by the backdrop of the Tehachapi Mountains. Viewer sensitivity is also rated low since the proposed project would be barely discernible and viewer expectations would be tempered by the prominence of the transportation facilities in the immediate foreground. Viewer exposure is rated low due to the low visibility, background distance zone, and brief duration of view. Therefore, visual impact susceptibility as experienced from KOP 2 is rated low (see previous Table 5.13-2).

**5.13.1.3.3 Key Observation Point 3 - Laval Road.** Travelling east on Laval Road from Interstate-5, views are dominated by scrub vegetation, orchards, developed agricultural fields, and oil extraction facilities. Also present are telecommunication lines and electric transmission and distribution lines. KOP 3, viewing to the south, was established on Laval Road approximately five miles east of Interstate-5 and just east of the existing transmission line corridor. This location was selected to depict the view available to the closest point of public visual access.

The views from KOP 3 are panoramic, encompassing agricultural fields, utility infrastructure, and the Tehachapi Mountains, which are frequently partially obscured by haze (see Figure 5.13-8a). The power plant and transmission line would be approximately 2.75 miles to the south and would be visible to the left of the existing transmission lines and beyond the orchard trees in the distant middleground. The power plant and proposed transmission line would be partially screened by the orchard trees.

The rural foreground to middleground landscapes blend harmoniously with the prominent tan and lavender-colored Tehachapi Mountains in the background. However, the existing transmission lines dominate foreground to middleground views and visual quality is considered somewhat common for the area. The more vivid colorations and scenic

composition of agricultural lands and natural hillsides lead to a moderate visual quality rating in spite of the presence of utility infrastructure.

Visual absorption capability is rated moderate owing to the available vegetation screening, camouflaging effect of the backdrop provided by the Tehachapi Mountains in the background, and close proximity of existing developed infrastructure. Since the principal viewers along Laval Road would be workers associated with the various agricultural and oil extraction operations in the project area, and the existing transmission line corridor has already established a non-agricultural facility context, viewer sensitivity is rated low. Viewer exposure is also rated low due to the relatively lengthy viewing distance to the power plant and transmission line, the few number of viewers along Laval Road, and the brief to moderate duration of view of the project components (which would not be located in the primary direction of view of motorists on Laval Road). Therefore, overall visual impact susceptibility is rated low for KOP 3.

#### **5.13.1.4 Offsite Pipelines**

The water supply, natural gas, and wastewater discharge pipelines will all be buried underground and, with the exception of occasional aboveground pipeline markers for the natural gas pipeline, these project components will not be visible to the general public. Therefore, no Key Observation Points were established for these features.

As previously described, the proposed water supply pipeline will connect to a proposed Wheeler Ridge-Maricopa Water Storage District pipeline to be located immediately adjacent to the power plant site. Thus, the visual setting previously described for KOP 1 (the power plant and transmission line) would encompass the water supply pipeline as well. The waste water discharge pipeline would extend north from the power plant site to the Tejon Oil Field injection wells located immediately adjacent to, and east of, the existing transmission line corridor, approximately one mile south of Laval Road. Therefore, the visual setting previously described for KOPs 1 and 3 would encompass the wastewater discharge pipeline as well.

As previously described, the three natural gas pipeline alternative routes would extend to the northeast from the power plant site before turning to the north to generally follow the base of the Tejon Hills on the east side of the Valley. Along the base of the hills, the route segment common to the three alternatives would follow existing farm and fire roads and cross open grasslands and areas of oil extraction activity on Tejon Ranch where public access is restricted (see previous Figure 5.13-5). At two points (Sebastian Road - Proposed Route 3 and David Road - Alternate Route 3A), the fuel gas route alternatives would turn west,

diverging from the Tejon Hills. Proposed Route 3 would diverge from the Tejon Hills at Sebastian Road and then follow Sebastian Road to the west until just west of Rancho Road, where it would turn north to connect to an existing natural gas pipeline (see previous Figures 5.13-4 and -5). As previously described, the landscape along Sebastian Road is comprised of agricultural fields, orchards, and occasional oil extraction facilities.

Alternate Route 3A would diverge from the Tejon Hills at David Road and then parallel David Road to the west for a distance slightly less than two miles to its connection point with the existing natural gas pipeline. The landscape characteristics along David Road are very similar to those of Sebastian Road and encompass agricultural fields, orchards, and grapevines. One rural residence is located on the north side of David Road, east of Rancho Road.

Alternate Route 3B would continue to follow the base of the Tejon Hills to the north around Comanche Point and then north of Herring Road to the point of intersection with the existing natural gas pipeline. At the eastern terminus of Herring Road, views to the southeast, east, and northeast toward Alternate Route 3B encompass primarily open grassland and grazing land at the base of the Tejon Hills. The landscape characteristics along Alternate Route 3B are very similar to the common route segment previously shown in Figure 5.13-5. Visual access to Alternate Route 3B is extremely limited. There is one rural residence located approximately one-quarter of a mile west of the Herring Road terminus.

## **5.13.2 Environmental Consequences**

### **5.13.2.1 Methodology**

As previously described, Key Observation Points (KOPs) were established at locations of particular concern in order to conduct detailed visual analyses. At each KOP the potentially affected landscape was photographed and the following project impact information was compiled: visual contrast, probable project dominance, potential for view impairment, and visual impact severity.

The photographs were used to construct visual simulations at each KOP. The visual simulations are a very useful tool in the visual impact analysis. Following the tabulation and analysis of visual data factors, and preparation and review of the visual simulation, a determination of impact significance was made.

### **5.13.2.2 Impact Significance Criteria**

Appendix G of the CEQA Guidelines identifies the following four circumstances that can lead to a determination of significant visual impact:

- 1) The project has a substantial adverse effect on a scenic vista.
- 2) The project substantially damages scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- 3) The project substantially degrades the existing visual character or quality of the site and its surroundings.
- 4) The project creates a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.

A fifth circumstance potentially leading to a significant visual impact would be:

- 5) The project results in an inconsistency with laws, ordinances, regulations, and standards (LORS) applicable to the protection of visual resources.

The fourth criterion above is not of concern for the present project since appropriate lamp shielding is incorporated into the project design. The fifth criterion above is addressed in Section 5.13-5 below.

The first three criteria are the focus of the analysis contained in the remainder of the visual resources section and are accommodated in the present methodology through the assessment of a given landscape's visual impact susceptibility and the severity of the visual impact caused by the project.

Visual Impact Severity is arrived at through an evaluation of Visual Contrast, Project Dominance, and View Impairment. In effect, visual impact severity addresses the pertinent project characteristics and their likely effect on the landscape. Based on the above factors, an overall visual impact severity rating was determined for each key observation point using the general guidance presented in Table 5.13-3. In the present methodology, a Visual Impact Severity rating of **Low** is achieved if two or more of the contributing factors are rated Low. A Visual Impact Severity rating of **High** is achieved if two or more of the contributing factors are rated High. A Visual Impact Severity rating of **Moderate** is achieved for all other combinations of contributing factors.

In the present methodology, the degree of impact significance is arrived at as a function of impact susceptibility and impact severity. Table 5.13-4 illustrates the interrelationship between impact susceptibility and impact severity, leading to the determination of impact significance.

As Table 5.13-4 shows, a visual impact is considered significant if the impact severity rating is High with an associated impact susceptibility rating of Moderate or High. Second tier impacts occur when Impact Severity is: (1) rated high with an associated Impact Susceptibility rating of low, or (2) rated moderate with associated Impact Susceptibility ratings of moderate or high. Such second tier impacts are considered adverse but not significant, meaning that the impact is considered negative, but it doesn't exceed environmental thresholds for significance as described here. Third tier impacts occur when Impact Severity is: (1) rated moderate with an associated Impact Susceptibility rating of low, or (2) rated low with associated Impact Susceptibility ratings of low, moderate, or high. Third tier impacts are generally insignificant and while they may or may not be perceptible, they are considered minor in the context of existing landscape characteristics and viewing opportunities.

Implicit in this rating methodology is the acknowledgement that, for a visual impact to be considered significant, two conditions must exist: 1) the existing landscape must be of high quality and be highly valued by the public; and 2) the perceived incompatibility of one or more proposed project elements or characteristics must tend toward the high extreme, leading to a substantial reduction in visual quality.

### **5.13.2.3 Construction Impacts**

**5.13.2.3.1 Power Plant Site, Construction Laydown Area, Transmission Line, Water Supply Pipeline, Wastewater Discharge Pipeline, and Access Road.** Short-term construction impacts on visual resources would result from the temporary presence of equipment, materials, and workforce at the power plant site, construction laydown area, and access road, as well as along the transmission line and pipeline rights of way (ROW). Vehicles, heavy equipment, facility components, and workers would be visible during clearing and grading, and ditching of construction sites, during construction of the actual facilities, and during site and ROW cleanup and restoration.

The power plant site, construction laydown area, transmission line route, water supply pipeline route, wastewater discharge pipeline, and plant site access road, are sufficiently distant from public travel corridors and rural residences that construction of these project components would not be visible and no significant visual impacts would occur. Similarly,

although the flood control berm (which will be approximately five feet in height) may be noticeable from Edmonston Pumping Plant Road during construction, it will be replanted with grass and will not result in long-term visual impact.

**5.13.2.3.2 Fuel Gas Supply Pipeline.** Views of the natural gas pipeline construction equipment and activities would be limited to the few motorists in the area, and potentially, the residence on David Road (direct foreground view of Route Alternate 3A). However, the visual intrusion of construction equipment, materials, and personnel would constitute an adverse, but not significant, impact because it would occur only for a short time period and would not result in a long-term landscape change following site restoration.

#### **5.13.2.4 Operations Impacts**

The following discussions of project impacts focus on the longer-term visual impacts resulting from project operation and the presence of aboveground built facilities in the existing landscape.

##### **5.13.2.4.1 Power Plant, Plumes, Transmission Line, and Access Road.**

**Visible Plumes.** The potential exists for white vapor plumes (water vapor condensation from the exhaust) to be vented from the stacks and cooling tower. The frequency, persistence, and size of visible condensate plumes depends primarily on the design and type of combustion turbine generator, heat recovery steam generator, and cooling tower, as well as meteorological conditions of temperature and humidity. While vapor plumes usually tend to dissipate quickly, the plume of water vapor (steam) rising from the cooling towers could project upward as much as 1,000 feet from the ground under worst case conditions of temperature and atmospheric conditions. Worst case conditions typically occur during the months of November, December, and January, which is also the fog season in the project area. Thus, plume visibility would likely be minimal during this time period. During the rest of the period when conditions are favorable for vapor plume formation, the length of time under which plumes may occur is limited to short periods on any particular day.

When the plume is visible, the apparent form, color, and texture of the vapor plume would tend to replicate the visual characteristics of naturally-occurring atmospheric features including cumulus, cirrus, and stratus cloud forms, haze, and fog. Also, visual contrast would tend to be more closely associated with the vertical line and white or light coloration of the plume as viewed against the darker coloration and horizontal to curvilinear lines of the surrounding Tehachapi Mountains. Visual contrast would most likely be low if the plume is backdropped by open sky or is viewed from a distance since cloud forms against a sky

backdrop are common and expected occurrences. Visual contrast could be moderate if viewed in the foreground or middleground against the darker coloration and horizontal lines of the surrounding terrain. Since the visual impact associated with visible plumes is directly tied to the power plant location and is specific to the viewing point, the discussion of potential for plume-induced visual impacts is incorporated into the following discussions of the power plant by key observation point.

**Key Observation Point 1 - Edmonston Pumping Plant Road.** Figure 5.13-6a presents the existing view to the north from KOP 1 on Edmonston Pumping Plant Road toward the proposed power plant and transmission line. Figure 5.13-6b presents a photosimulation that depicts the power plant, transmission line, and access road, as they would appear once they are built. Most obvious in the photosimulation are the vertical forms of the transmission line towers and HRSG stacks, the curvilinear form of the access road, and the geometric forms of the cooling tower banks and water storage tank.

With the exception of the access road, the proposed project would not modify existing landforms or vegetation patterns such that landform or vegetation visual contrast would result with respect to form, line, color, or textures. However, the geometric shapes and straight horizontal and vertical lines of the proposed structures would cause a low to moderate level of contrast with existing landscape features in terms of form, line, and color.

The geometric forms of the proposed structures would result in a moderate level of visual contrast when compared to the prevalent horizontal forms of the existing landscape and vertical forms of the adjacent transmission lines. Structural lines would result in a low level of visual contrast due to the prominence of the foreground and middleground vertical lines of the transmission line structures and the more subtle horizontal and diagonal lines of the transmission line structures, conductors, and adjacent quarry facilities. Coloration of the transmission line structures would be similar to the existing transmission line facilities, and the earth tone coloration of the power plant facilities would share some similarities with the colors present in the existing landscape. As shown in Figure 5.13-6b, the access road will appear as a prominent foreground visual element, the color and line of which will result in a new curvilinear demarcation in the existing vegetative forms resulting in a moderate level of visual contrast.

Visible plumes would typically be backdropped against open sky as viewed from KOP 1. The visual characteristics of the plumes would be similar to natural atmospheric features in terms of form, color, and texture. However, the vertical line of the plume(s) would not be similar to naturally-occurring atmospheric features and would result in a moderate degree of visual contrast, given the relatively close proximity to KOP 1. Overall, a moderate level of visual

contrast is anticipated for the power plant site, transmission line, and access road as viewed from KOP 1. The power plant and transmission line would appear subordinate in scale as middleground visual elements, in comparison to the more prominent foreground-existing transmission line facilities. As the proposed transmission line transitions to a foreground visual element toward the viewer at KOP 1, structure scale would become co-dominant with the existing transmission lines. The access road would also appear as a co-dominant, foreground visual element. The proposed facilities would appear as subordinate to co-dominant visual elements within the spatial composition of the panoramic view from KOP 1.

While meteorological conditions could promote formation of persistent plumes which may appear co-dominant in scale when compared to other landscape features, spatial prominence of the plumes would still appear subordinate in the panoramic context as viewed from KOP 1. Since the plumes would most likely be visible only for short periods of time or not at all due to obscuring weather conditions or meteorological conditions not conducive to plume formation, overall plume dominance is considered subordinate. Therefore, overall project dominance is rated moderate (co-dominant). Also, from KOP 1, the proposed facilities would not appreciably impair (block) the panoramic views of the existing landscape and view impairment is rated low. View impairment by the plumes would also be low because the plumes represent a transient phenomenon and would be viewed against open sky.

Overall visual impact severity is rated moderate based on the moderate level of visual contrast that would result, the apparent low to moderate structural and plume dominance, and the low level of view impairment. Table 5.13-5 provides a summary of the visual impact factors contributing to a determination of visual impact severity as perceived from each key observation point.

The significance of the visual impact as experienced from Key Observation Point 1 is rated as insignificant based on the low rating for impact susceptibility and the anticipated moderate level of impact severity. Table 5.13-6 summarizes visual impact significance for each key observation point. As noted in the table, an insignificant impact may or may not be perceptible but is considered minor in the context of existing landscape characteristics and view opportunity.

**Key Observation Point 2 - Interstate-5.** Figure 5.13-7a presents the existing view to the east from KOP 2 on Interstate-5. KOP 2 is located at the southbound weigh station approximately 1.1 miles north of Grapevine. Figure 5.13-7b presents a photosimulation depicting the power plant and transmission line, as they would appear once they are built. The proposed facilities are barely discernible from KOP 2 given the extreme distance to the site (approximately 5 miles) and the prevalent haze conditions.

From this vantage point, the only potential for the creation of visual contrast would be associated with vapor plume formation. However, given that: (a) vapor plumes tend to occur only periodically and then tend to dissipate quickly; (b) with the exception of the vertical line of the plume, plume characteristics would replicate the characteristics of naturally-occurring atmospheric features; (c) there is a considerable intervening distance between the plant site and KOP 2; and (d) much of the time, haze or poor visibility will partially or fully obscure the plume, only a low level of visual contrast is anticipated.

The power plant, transmission line, and plume (when present) would appear subordinate in scale and space as a result of the great viewing distance to the site and the panoramic context of views from Interstate-5. As a result, project dominance is rated low (subordinate). Also, neither the facilities nor the plume would result in view impairment, given their relatively small scales as perceived from KOP 2. Therefore, visual impact severity is rated low based on the low level of visual contrast that would be caused by the proposed project, the low level of structural and plume dominance, and the lack of view impairment. These factors are summarized in Table 5.13-5. Furthermore, as presented in Table 5.13-6, the significance of the visual impact as experienced from Key Observation Point 2 is rated as insignificant based on the low rating for impact susceptibility and the anticipated low level of impact severity.

**Key Observation Point 3 - Laval Road.** Figure 5.13-8a presents the existing view to the south from KOP 3 on Laval Road. KOP 3 is located approximately five miles east of Interstate-5. Figure 5.13-8b presents a photosimulation depicting the power plant and transmission line, as they would appear from KOP 3. The proposed facilities are beyond the orchard trees in the middleground and to the immediate east (left) of the existing transmission lines.

From KOP 3, there would be no apparent modification of landforms or vegetation. The geometric forms and linear lines of the structures would contrast slightly with the existing forms and lines of the existing natural features. However, the horizontal and vertical lines of the structures would be consistent with the linear characteristics established by the adjacent transmission lines. The resulting degree of structural contrast with respect to form, line, color, and texture is rated low. To the extent that vapor plumes are visible from KOP 3, the vertical line and coloration of the plume could result in a moderate degree of visual contrast when backdropped by the darker coloration and horizontal to curvilinear line of the Tehachapi Mountains to the south. Therefore, overall project visual contrast is rated moderate.

The power plant and transmission line would appear subordinate in scale and space as middleground visual elements in comparison to the more prominent foreground and middleground transmission line facilities and background Tehachapi Mountains. The proposed facilities would also appear as subordinate visual elements within the spatial composition of the panoramic view from KOP 3. Therefore, structural dominance is rated low (subordinate). Also, from KOP 3, the proposed facilities would not appreciably impair the panoramic views of the Tehachapi Mountains in the background.

To the extent that a vapor plume develops, it could appear co-dominant in scale but spatially subordinate in comparison to the Tehachapi Mountains in the background. Also, since plume formation would only occur periodically and often would be obscured by poor visibility, view impairment is rated low. Thus, both project dominance and view impairment are rated low.

The moderate rating for visual contrast and low ratings for project dominance and view impairment result in an overall visual impact severity rating of low for KOP 3 (see Table 5.13-5). Furthermore, as previously presented in Table 5.13-6, the significance of the visual impact as experienced from KOP 3 is rated as insignificant based on the low rating for impact susceptibility and the anticipated low level of impact severity.

**5.13.2.4.2 Offsite Pipelines.** As previously noted, all of the pipeline components will be buried at a depth of four feet. Since both the water supply pipeline and wastewater discharge pipeline will be located out of public view, neither construction nor operation-related visual contrast or view impairment will occur. Therefore, no short-term or long-term visual impacts associated with the water supply or wastewater discharge pipelines are anticipated.

The fuel gas pipeline right of way would be located primarily within farm and fire access roads or grassland habitat (see previous Figure 5.13-5) except for those portions of Proposed Route 3 and Alternate Route 3A which parallel Sebastian and David Roads respectively, for a portion of their length. The route segments to be located in grassland habitat would experience a short-term, moderate level of visual contrast due to right of way clearing. However, the right of way will be minimally visible and the right of way clearing should recover within one growing season. Furthermore, the alternative rights of way adjacent to Sebastian and David Roads would not be noticeable to the limited number of motorists on those roads. With the exception of an occasional pipeline marker, there would be no above-ground evidence of the pipeline's presence. Therefore, no significant visual impacts are anticipated for any of the fuel gas pipeline route alternatives.

### **5.13.2.5 Cumulative Impacts**

Cumulative impacts to visual resources would occur where aboveground facilities or evidence of underground facilities (e.g., cleared ROWs) occupy the same field of view as other built facilities or impacted landscapes. It is also possible that a cumulative impact could occur if a viewer's perception is that the general visual quality of an area is diminished by the proliferation of visible structures (or construction effects such as ground scars or vegetation clear-cuts), even if the new structures are not within the same field of view as existing structures. The significance of the cumulative impact would depend on the degree to which (1) the viewshed is altered; (2) visual access to scenic resources is impaired; (3) scenic character is diminished; or (4) the project's visual contrast is increased.

Short-term cumulative visual impacts may occur if other proposed projects in the vicinity of the pipeline project are constructed at the same time. In such a circumstance, construction activities and/or equipment associated with the power plant project and other construction projects may be visible within the same field of view at some locations, compounding the visual impact as viewed from those locations. Such a cumulative visual impact is considered a short-term impact because the construction period for each project component is relatively short. Therefore, such cumulative construction impacts would generally be considered adverse but not significant.

No local projects have been identified for cumulative impact analysis with the Pastoria Energy Facility. However, the existing transmission lines and quarry have adversely affected the visual quality of the area immediately adjacent to the power plant site. Therefore, while the cumulative impacts of the existing and proposed facilities may be perceived as adverse, the incremental change associated with the proposed project is not considered significant as viewed from any of the three key observation points.

### **5.13.3 Mitigation Measures**

Although no significant visual resource impacts are anticipated to occur, the following are general mitigation measures that will be incorporated into the project design for the Pastoria Energy Facility to minimize visual resource impacts associated with the operation of the generating plant, transmission line route, and offsite pipeline facilities

**VIS-1.** All project facilities including structures, buildings, fencing and signs, will be painted with neutral earth-tone tan or gray colors that will blend with existing facilities and the background of existing vegetation as shown in the photosimulation in Figure 5.13-6b. A specific painting plan will be developed for CEC approval to ensure that the proposed colors do not unduly contrast with the surrounding landscape colors. All treatments will be in non-

reflective colors. The painting plan will be submitted sufficiently early to ensure that any precolored buildings, structures and linear facilities will have colors approved and included in bid specifications for such buildings or structures.

**VIS-2.** Except as required by security and worker safety requirements, night lighting will be hooded to direct illumination downward and inward toward the areas to be illuminated in order to minimize nighttime light and glare, backscatter to the nighttime sky, and visibility of lighting to public viewing areas. A specific lighting plan consistent with operational and safety needs will be submitted to the CEC for approval. The plan will include provisions for timed and/or motion detection-controlled switches with the 213-foot tall stacks to be illuminated only as necessary to meet FAA or other safety requirements. The lighting plan will also propose a procedure to resolve any lighting complaints.

**VIS-3.** A specific landscaping plan will be prepared showing the location of proposed landscaping, the varieties and sizes of plants to be used, and the proposed time to maturity for each species.

With implementation of the above Applicant-committed mitigation measures, no significant unavoidable adverse impacts to visual resources are anticipated from the proposed project.

#### **5.13.4 LORS Compliance**

The Pastoria Energy Facility, including transmission lines and pipelines, will cause no visual impacts inconsistent with the laws, ordinances, regulations, and standards (LORS) applicable to the protection of aesthetic values and visual resources. Refer to Section 7.5.13 for more information.

##### **5.13.4.1 Federal and State**

The proposed project, including the linear facilities, is located on private or local public lands and is thus not subject to federal land management requirements. Further, no roadway in the project area is a designated or eligible State Scenic Highway. Therefore, no federal or state regulations pertaining to scenic resources are applicable to the project.

##### **5.13.4.2 Local**

Kern County has no specific policies on visual or aesthetic resources that apply to the Pastoria project. However, these issues are addressed in the Kern County General Plan, Land Use, Open Space, and Conservation Element, and are implemented by the Kern County

Planning and Development Services Department (Kern County, 1994). This element of the General Plan requires public notification and review of any projects that may adversely impact visual resources. In accordance with Chapter 19.86 of the Kern County Zoning Code, a Landscape Plan will be prepared when final construction drawings of the project are completed (as specified in Mitigation Measure VIS-3). The Pastoria project is generally consistent with the land use designation for the area, and therefore, is considered consistent with associated visual resource planning purposes and General Plan requirements.

### **5.13.5 References**

The following list contains references used in the performance and development of methodologies used in the assessment of visual resources for the Pastoria Energy Facility.

California Energy Commission. 1997. Siting Regulations: Rules of Practice and Procedure and Power Plant Site Certification Regulations.

Compass Maps, Inc. No Date. Santa Clarita Valley (map). Compass Maps, Inc.

Flores, D. 1999. Planner II, California Energy Commission, Sacramento, CA. Personal communication with D. Flores (Michael Clayton & Associates).

Hunt, Charles B. 1974. Natural Regions of the United States and Canada. W.H. Freeman and Company, San Francisco, CA.

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Smardon, Richard C., James F. Palmer, and John P. Felleman, eds. 1986. Foundations for Visual Project Analysis. John Wiley & Sons, New York, NY.

USDA, Forest Service. 1995a. Landscape Aesthetics, A Handbook for Scenery Management. Agriculture Handbook Number 701. USDA, Forest Service.

1995b. Sustaining Ecosystems, A Conceptual Framework. USDA, Pacific Southwest Region.

1975. National Forest Landscape Management, Volume 2, Chapter 2, Utilities. USDA, Forest Service.

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U.S. Department of the Interior, Bureau of Land Management. 1986. Visual Resource Inventory Manual. USDI, BLM.

1986. Visual Resource Contrast Rating Manual. USDI, BLM.

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U.S. Geological Survey. 1:100,000 Scale. Topographic Map Series: Lancaster, CA, 1981; Tehachapi, CA, 1978, 1990.

U.S. Geological Survey. 1:24,000 Scale. Topographic Map Series: Grapevine, CA, 1991; Pastoria Creek, CA, 1991.

**TABLE 5.13-1**

**GENERAL GUIDANCE FOR DETERMINING VISUAL IMPACT  
SUSCEPTIBILITY**

<b>Visual Impact Susceptibility Rating</b>	<b>Guidance</b>
Low	Two or more of the contributing factors are rated Low
High	Two or more of the contributing factors are rated High
Moderate	All other combinations of contributing factors

**TABLE 5.13-2**

**VISUAL IMPACT SUSCEPTIBILITY**

<b>KOP</b>	<b>Visual Quality</b>	<b>Viewer Sensitivity</b>	<b>Viewer Exposure</b>	<b>Visual Impact Susceptibility</b>
<b>KOP 1</b>	Low	Low	Low	Low
<b>KOP 2</b>	Low	Low	Low	Low
<b>KOP 3</b>	Moderate	Low	Low	Low

**TABLE 5.13-3**

**GENERAL GUIDANCE FOR DETERMINING VISUAL IMPACT SEVERITY**

<b>Visual Impact Severity Rating</b>	<b>Guidance</b>
Low	Two or more of the contributing factors are rated Low
High	Two or more of the contributing factors are rated High
Moderate	All other combinations of contributing factors

**TABLE 5.13-4**

**GENERAL GUIDANCE FOR  
DETERMINATION OF IMPACT SIGNIFICANCE**

<b>Impact Susceptibility</b>	<b>Impact Severity</b>		
	<b>Low</b>	<b>Moderate</b>	<b>High</b>
Low	Insignificant <sup>1</sup>	Insignificant	Adverse But Not Significant <sup>2</sup>
Moderate	Insignificant	Adverse But Not Significant	Significant <sup>3</sup>
High	Insignificant	Adverse But Not Significant	Significant

<sup>1</sup> Characteristics and view opportunity.

<sup>2</sup> Adverse but Not Significant Impacts are perceived as negative but do not exceed environmental thresholds.

<sup>3</sup> Significant impacts can be mitigated to a level that is not significant or can be avoided altogether with feasible mitigation.

Without mitigation, the impact would exceed environmental thresholds.

**TABLE 5.13-5**

**VISUAL IMPACT SEVERITY**

<b>KOP</b>	<b>Visual Contrast</b>	<b>Project Dominance</b>	<b>View Impairment</b>	<b>Visual Impact Severity</b>
<b>KOP 1</b>	Moderate	Low to Moderate	Low	Moderate
<b>KOP 2</b>	Low	Low	Low	Low
<b>KOP 3</b>	Moderate	Low	Low	Low

**TABLE 5.13-6**

**IMPACT SIGNIFICANCE BY  
KEY OBSERVATION POINT (KOP)**

<b>Impact Susceptibility</b>	<b>Impact Severity</b>		
	<b>Low</b>	<b>Moderate</b>	<b>High</b>
<b>Low</b>	Insignificant <sup>1</sup> <b>(KOP 2, KOP 3)</b>	Insignificant <b>(KOP 1)</b>	Adverse But Not Significant <sup>2</sup>
<b>Moderate</b>	Insignificant	Adverse But Not Significant	Significant <sup>3</sup>
<b>High</b>	Insignificant	Adverse But Not Significant	Significant

<sup>1</sup> Insignificant impacts may or may not be perceptible but are considered minor in the context of existing landscape characteristics and view opportunity.

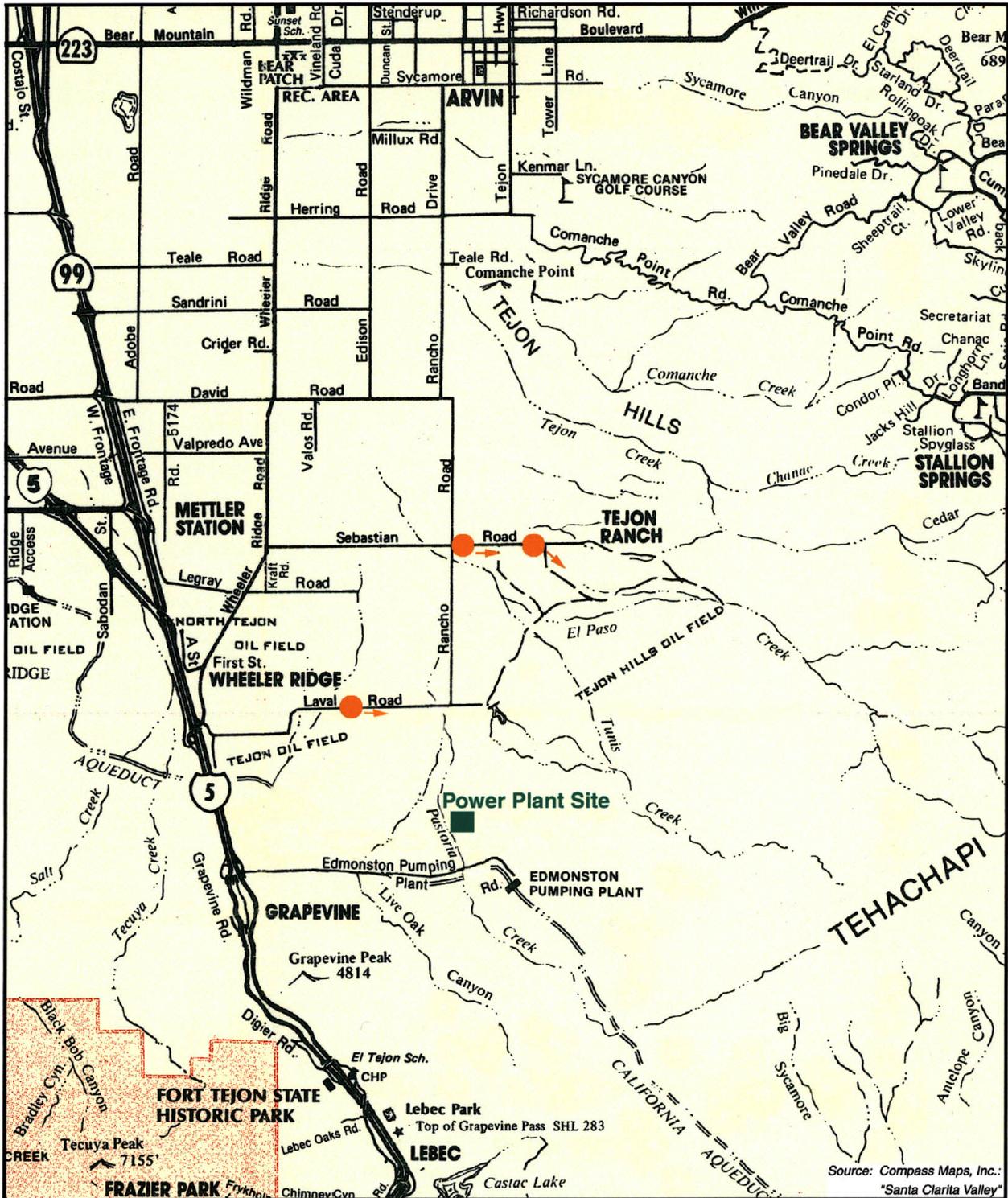
<sup>2</sup> Adverse but Not Significant Impacts are perceived as negative but do not exceed environmental thresholds.

<sup>3</sup> Significant impacts can be mitigated to a level that is not significant or can be avoided altogether with feasible mitigation. Without mitigation, the impact would exceed environmental thresholds.



Source: Compass Maps, Inc.:  
"Santa Clarita Valley"

<p><b>Pastoria Energy Facility</b> Pastoria Energy Facility, LLC</p>	<p><b>Figure</b> 5.13-1</p>	<p><b>Location of Key Observation Points</b></p> <p>① KOP 1: North side of Edmonston Pumping Plant Road, 5 miles east of Interstate-5, directly south of the power plant site, viewing north.</p> <p>② KOP 2: Southbound Interstate-5, 1.1 miles north of Grapevine at the weigh station, viewing east.</p> <p>③ KOP 3: South side of Laval Road, 5 miles east of Interstate-5, viewing south.</p>	<p>December 1999</p>
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<p><b>Pastoria Energy Facility</b> Pastoria Energy Facility, LLC</p>	<p><b>Figure</b> 5.13-2</p>	<p><b>Location of Additional Viewpoints</b></p> <ul style="list-style-type: none"> <li>● <b>Laval Road</b> - Eastbound view on Laval Road approximately three miles east of I-5</li> <li>● <b>Sebastian Road</b> - Eastbound view on Sebastian Road, just east of intersection with Rancho Road</li> <li>● <b>Sebastian Road East Terminus</b> - View to the southeast from the east terminus of Sebastian Road</li> </ul>	<p>December 1999</p>
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<p><b>Figure 5.13-3:</b> Eastbound view on Laval Road at a point approximately three miles east of Interstate-5.</p>	<p><b>Pastoria Energy Facility Pastoria Energy Facility, LLC</b></p>	<p>December 1999</p>	<p><b>FIGURES 5.13-3, 4, and 5 Additional Viewpoints</b></p>
<p><b>Figure 5.13-4:</b> Eastbound view along Sebastian Road, just east of the intersection with Rancho Road. Fuel Gas Pipeline Proposed Route 3 would parallel Sebastian Road.</p>			
<p><b>Figure 5.13-5:</b> View to the southeast from the eastern terminus of Sebastian Road. Fuel Gas Pipeline Proposed Route 3 would diverge from the Tejon Hills across open grasslands (toward the viewer) before joining, and then paralleling, Sebastian Road to the west.</p>			



**A** The **existing view** to the north from Key Observation Point 1, on Edmonston Pumping Plant Road.

**B** The same view showing a **photosimulation** of the Power Plant and associated facilities, Transmission Line, and Access Road.

**Pastoria Energy Facility**  
**Pastoria Energy Facility, LLC**

December  
 1999

**FIGURE 5.13-6**  
**Key Observation Point 1**



**A** The **existing view** to the east from Key Observation Point 2, on Interstate-5, at the southbound weigh station, north of Grapevine.

**B** The same view showing a **photosimulation** of the Power Plant and Transmission Line.

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December  
 1999

**FIGURE 5.13-7**  
**Key Observation Point 2**



**A** The **existing** view to the south from Key Observation Point 3 on Laval Road, just east of the existing transmission Line Corridor.

**B** The same view showing a **photosimulation** of the Power Plant and Transmission Line.

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December  
 1999

**FIGURE 5.13-8**  
**Key Observation Point 3**

# VISUAL ANALYSIS DATA SHEET

## KEY OBSERVATION POINT DESCRIPTION

<b>KEY OBSERVATION POINT NO.</b>
<b>1</b>
<b>PROJECT COMPONENT</b>
Power Plant, Transmission Line
<b>LOCATION</b>
Edmonston Pumping Plant Road approximately 5 miles east of Interstate-5 and 100 feet east of existing transmission lines. Viewing north.
<b>ANALYST</b>
Michael Clayton
<b>DATE</b>
9/15/99



## VISUAL QUALITY

<input checked="" type="checkbox"/> <b>Low</b> <input type="checkbox"/> <b>Moderate</b> <input type="checkbox"/> <b>High</b>	Panoramic views across pastoral foreground and middleground landscapes generally lacking unique features or vivid coloration or textures. Foreground and middleground views are dominated by existing utility infrastructure. Visual Quality is considered indistinctive and is rated low.
--	--

## VISUAL ABSORPTION CAPABILITY

<b>Slope:</b> <u>LOW</u> - Level terrain with no intervening landforms to screen project from view.
<b>Vegetative Cover:</b> <u>LOW</u> - Low growing vegetation provides no opportunities to screen project components from view.
<b>Reclamation Potential:</b> <u>MODERATE</u> - Areas of vegetation and soil disturbance would recover quickly following reclamation and replanting.

## VIEWER SENSITIVITY

The site is generally lacking in intrinsic scenic features. Public access is restricted and overall viewer sensitivity from this location is considered **low**.

## VIEWER EXPOSURE

<b>Visibility:</b> High	<b>Duration of View:</b> Extended
<b>Distance Zones:</b> [FG: 0-0.5mi.; MG: 0.5-4mi.; BG: 4mi.-horizon] Foreground to middleground	<b>Overall Viewer Exposure:</b> Low - due to restricted public access
<b>Numbers of Viewers:</b> Few	

## VISUAL IMPACT SUSCEPTIBILITY

<input checked="" type="checkbox"/> <b>Low</b> <input type="checkbox"/> <b>Moderate</b> <input type="checkbox"/> <b>High</b>	The low visual quality of the site combined with restricted visual access lead to a low rating for visual impact susceptibility.
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## Key Viewpoint No. 1

(continued)

### VISUAL CONTRAST RATING

CHARACTERISTIC LANDSCAPE DESCRIPTION			
	LAND/WATER BODY	VEGETATION	STRUCTURES
<b>FORM</b>	Prominent, well-defined	Well-defined continuous blocks to irregular patchiness	Dominant, linear
<b>LINE</b>	Horizontal, angular to curvilinear	Prominent horizontal to irregular and indistinct	Horizontal and vertical
<b>COLOR</b>	Tan	Golden, green, lavender	White, gray, tan, brown
<b>TEXTURE</b>	Smooth	Smooth	Smooth to matte

PROPOSED ACTIVITY DESCRIPTION			
	LAND/WATER BODY	VEGETATION	STRUCTURES
<b>FORM</b>	Same	Same	Same
<b>LINE</b>	Same	Curvilinear	Same + dark gray
<b>COLOR</b>	Same	Same	Same
<b>TEXTURE</b>	Same	Same	Same

DEGREE OF CONTRAST												
	LAND/WATER BODY				VEGETATION				STRUCTURES			
	NONE	LOW	MODERATE	HIGH	NONE	LOW	MODERATE	HIGH	NONE	LOW	MODERATE	HIGH
<b>FORM</b>	√				√						√	
<b>LINE</b>	√						√ <small>Road</small>			√		
<b>COLOR</b>	√				√						√ <small>Road</small>	
<b>TEXTURE</b>	√				√				√			

**TERM:**  Long  Short      **CONTRAST SUMMARY:**  None  Low  Moderate  High

### PROJECT DOMINANCE

Subordinate       Co-Dominant       Dominant

### VIEW IMPAIRMENT

None       Low       Moderate       High

### VISUAL IMPACT SEVERITY

Low       Moderate       High

# VISUAL ANALYSIS DATA SHEET

## KEY OBSERVATION POINT DESCRIPTION

<b>KEY OBSERVATION POINT NO.</b>
<b>2</b>
<b>PROJECT COMPONENT</b>
Power Plant, Transmission Line
<b>LOCATION</b>
Southbound Interstate-5 at weigh station, approximately 1.1 miles north of Grapevine
<b>ANALYST</b>
Michael Clayton
<b>DATE</b>
9/15/99



## VISUAL QUALITY

<input checked="" type="checkbox"/> <b>Low</b> <input type="checkbox"/> <b>Moderate</b> <input type="checkbox"/> <b>High</b>	Foreground transportation and utility infrastructure dominate middleground to background rural agricultural landscapes. Distant hills are frequently, partially obscured by haze. Visual quality is considered indistinctive and is rated low.
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## VISUAL ABSORPTION CAPABILITY

<b>Slope:</b> <b>LOW</b> - Level terrain with no intervening landforms to screen project from view.
<b>Vegetative Cover:</b> <b>LOW</b> - Low growing vegetation provides no opportunities to screen project components from view.
<b>Reclamation Potential:</b> <b>MODERATE</b> - Areas of vegetation and soil disturbance would recover quickly following reclamation and replanting.

## VIEWER SENSITIVITY

The site is generally lacking in intrinsic scenic features and would be barely discernible as a background visual element from Interstate-5 and KOP 2. Viewer expectations are tempered by prominence of transportation corridor characteristics. Overall viewer sensitivity is considered **low**.

## VIEWER EXPOSURE

<b>Visibility:</b> Low	<b>Duration of View:</b> Brief
<b>Distance Zones:</b> [FG: 0-0.5mi.; MG: 0.5-4mi.; BG: 4mi.-horizon] Background	<b>Overall Viewer Exposure:</b> Viewer exposure is <b>low</b> because the site is distant and perpendicular to the primary directions of view of motorists on I-5. Vehicles travel at high rates of speed and views to the site would be brief.
<b>Numbers of Viewers:</b> High	

## VISUAL IMPACT SUSCEPTIBILITY

<input checked="" type="checkbox"/> <b>Low</b> <input type="checkbox"/> <b>Moderate</b> <input type="checkbox"/> <b>High</b>	The low visual quality of the site combined with its low visibility as a background visual element that is not in the primary direction of view of I-5 motorists, leads to a low rating for visual impact susceptibility.
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## Key Viewpoint No. 2

(continued)

### VISUAL CONTRAST RATING

CHARACTERISTIC LANDSCAPE DESCRIPTION			
	LAND/WATER BODY	VEGETATION	STRUCTURES
<b>FORM</b>	Prominent, well-defined	Well-defined continuous blocks to irregular patchiness	Dominant, linear
<b>LINE</b>	Horizontal, angular to curvilinear	Prominent horizontal to irregular and indistinct	Horizontal and vertical
<b>COLOR</b>	Tan	Golden, green, lavender	White, gray, tan, brown
<b>TEXTURE</b>	Smooth	Smooth	Smooth to matte

PROPOSED ACTIVITY DESCRIPTION			
	LAND/WATER BODY	VEGETATION	STRUCTURES
<b>FORM</b>	Same	Same	Same
<b>LINE</b>	Same	Same	Same
<b>COLOR</b>	Same	Same	Same
<b>TEXTURE</b>	Same	Same	Same

DEGREE OF CONTRAST												
	LAND/WATER BODY				VEGETATION				STRUCTURES			
	NONE	LOW	MODERATE	HIGH	NONE	LOW	MODERATE	HIGH	NONE	LOW	MODERATE	HIGH
<b>FORM</b>	√				√				√			
<b>LINE</b>	√				√					√ Plume		
<b>COLOR</b>	√				√					√ Plume		
<b>TEXTURE</b>	√				√				√			

**TERM:**  Long  Short   
 **CONTRAST SUMMARY:**  None  Low  Moderate  High

### PROJECT DOMINANCE

Subordinate                      
 Co-Dominant                      
 Dominant

### VIEW IMPAIRMENT

None                      
 Low                      
 Moderate                      
 High

### VISUAL IMPACT SEVERITY

Low                      
 Moderate                      
 High

# VISUAL ANALYSIS DATA SHEET

## KEY OBSERVATION POINT DESCRIPTION

<b>KEY OBSERVATION POINT NO.</b>
<b>3</b>
<b>PROJECT COMPONENT</b>
Power Plant, Transmission Line
<b>LOCATION</b>
Laval Road, approximately 5 miles east of Interstate-5. Adjacent and to the east of the existing transmission line corridor.
<b>ANALYST</b>
Michael Clayton
<b>DATE</b>
9/15/99



## VISUAL QUALITY

<input type="checkbox"/> <b>Low</b> <input checked="" type="checkbox"/> <b>Moderate</b> <input type="checkbox"/> <b>High</b>	Panoramic views of agricultural fields backdropped by the Tehachapi Mountains which are frequently, partially obscured by haze. Rural foreground to middleground landscapes blend harmoniously with background hills. However, utility infrastructure dominates foreground to middleground views. Visual quality is considered common for the area and is rated moderate.
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## VISUAL ABSORPTION CAPABILITY

<b>Slope: LOW to MODERATE</b> - Level terrain with no intervening landforms to screen project from view although background hills provide camouflaging backdrop.
<b>Vegetative Cover: MODERATE</b> - Intervening orchards provide partial screening of project elements.
<b>Reclamation Potential: MODERATE</b> - Areas of vegetation and soil disturbance would recover quickly following reclamation and replanting.

## VIEWER SENSITIVITY

Views of the site from Laval Road encompass scenic features generally common to the region. The powerplant would be perceived as a distant middleground visual element that would be subordinate to the more prominent foreground utility infrastructure. Therefore, viewer sensitivity is considered <b>low</b> .
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## VIEWER EXPOSURE

<b>Visibility:</b> Low	<b>Duration of View:</b> Brief to Moderate
<b>Distance Zones:</b> [FG: 0-0.5mi.; MG: 0.5-4mi.; BG: 4mi.-horizon] Middleground	<b>Overall Viewer Exposure:</b> Viewer exposure is <b>low</b> due to the site's distance from Laval Road, its location perpendicular to motorists' view directions on Laval Road, and the few number of viewers on Laval Road.
<b>Numbers of Viewers:</b> Few	

## VISUAL IMPACT SUSCEPTIBILITY

<input checked="" type="checkbox"/> <b>Low</b> <input type="checkbox"/> <b>Moderate</b> <input type="checkbox"/> <b>High</b>	The moderate visual quality, in the context of low viewer sensitivity and low visual exposure, leads to a low rating for visual impact susceptibility.
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### Key Viewpoint No. 3

(continued)

#### VISUAL CONTRAST RATING

##### CHARACTERISTIC LANDSCAPE DESCRIPTION

	LAND/WATER BODY	VEGETATION	STRUCTURES
<b>FORM</b>	Prominent, well-defined	Well-defined continuous blocks to irregular patchiness	Prominent, linear
<b>LINE</b>	Horizontal, angular to curvilinear	Prominent horizontal to irregular and indistinct	Horizontal and vertical
<b>COLOR</b>	Tan, brown	Green, lavender	Gray
<b>TEXTURE</b>	Smooth to granular	Smooth to matte	Smooth

##### PROPOSED ACTIVITY DESCRIPTION

	LAND/WATER BODY	VEGETATION	STRUCTURES
<b>FORM</b>	Same	Same	Generally indistinct, geometric, block mass
<b>LINE</b>	Same	Same	Same
<b>COLOR</b>	Same	Same	Tan to white (plume)
<b>TEXTURE</b>	Same	Same	Same

##### DEGREE OF CONTRAST

	LAND/WATER BODY				VEGETATION				STRUCTURES			
	NONE	LOW	MODERATE	HIGH	NONE	LOW	MODERATE	HIGH	NONE	LOW	MODERATE	HIGH
<b>FORM</b>	√				√					√		
<b>LINE</b>	√				√						√ Plume	
<b>COLOR</b>	√				√						√ Plume	
<b>TEXTURE</b>	√				√				√			

**TERM:**  Long  Short      **CONTRAST SUMMARY:**  None  Low  Moderate  High

#### PROJECT DOMINANCE

**Subordinate**      
 **Co-Dominant**      
 **Dominant**

#### VIEW IMPAIRMENT

**None**      
 **Low**      
 **Moderate**      
 **High**

#### VISUAL IMPACT SEVERITY

**Low**      
 **Moderate**      
 **High**