

## 5.13 Visual Resources

Visual resources are the natural and cultural features of the environment that can be seen and that contribute to the public's enjoyment of the environment. Visual resource or aesthetic impacts are generally defined in terms of a project's physical characteristics and potential visibility, and the extent that the project's presence would change the visual character and quality of the surrounding environment.

This section was prepared following California Energy Commission (CEC) guidelines for preparing visual impact assessments for Applications for Certification (AFC). Section 5.13.1 documents the visual conditions that currently exist in the vicinity of the Almond 2 Power Plant (A2PP). Section 5.13.2 discusses the potential environmental effects as they relate to visual resources. Section 5.13.3 discusses the potential cumulative impacts of this and other projects in the area. Section 5.13.4 summarizes the mitigation measures proposed to reduce project impacts on visual resources. Section 5.13.5 describes the laws, ordinances, regulations, and standards (LORS) applicable to visual resources. Section 5.13.6 presents agencies involved and agency contacts. Section 5.13.7 cites the references used in preparation of this section.

Figure 5.13-1 shows the location of the site and the locations of the Key Observation Points (KOPs) referenced in this section as developed through consultation with the CEC Staff. The existing views and simulated views of the project from the KOPs follow as Figures 5.13-2 through 5.13-6.

### 5.13.1 Affected Environment

#### 5.13.1.1 Regional Setting

The A2PP site is located within the limits of the city of Ceres, approximately 2 miles from the city center. The city of Modesto is approximately 5 miles to the north. Highway 99 passes approximately 2 miles to the northeast and is accessible via Crows Landing Road.

The project site is an undeveloped 4.6-acre parcel situated in a small industrial zone surrounded by farmland and residential neighborhoods. The existing Turlock Irrigation District (TID) Almond Power Plant is adjacent to the south side of the project site. The rest of the industrial zone consists of a farm supply facility to the north, a WinCo distribution warehouse to the west, and a modular building distributor and drilling equipment storage facility to the east. A railroad track and a 69-kV wooden pole transmission line run along the east side of the project site. A canal and a 230-kV tubular steel transmission line run along the south side of the existing Almond Power Plant.

Surrounding farmlands include row crops, orchards, and a dairy. The closest residence to the project site is 0.30 mile north along East Service Road and marks the edge of a recently developed residential subdivision that extends north and eastward toward central Ceres. A few rural residences are located west of the project site along Crows Landing Road, and a small rural neighborhood is located approximately 1 mile south. A golf course is located along Crows Landing Road at Grayson Road, approximately 0.75 mile southwest of the project site.

No State Scenic Highways are located in the vicinity of the project site.

### 5.13.1.2 Project Site and Linear Routes

The project site is currently a vacant lot that was used by WinCo as a borrow pit during construction of its facility west of the project site. The existing power facility (Almond Power Plant) on the south side of the project site is a 48-megawatt simple-cycle plant, the tallest element of which is a 92-foot exhaust stack. Buildings, tanks, and other structures associated with the existing Almond Power Plant are generally between 30 and 40 feet high. The existing Almond Power Plant includes exposed pipelines and is surrounded by a fence.

Neither the existing Almond Power Plant nor the A2PP project site is located along a public roadway. They are set back 0.4 mile from Crows Landing Road and are accessed via an access road south of the WinCo distribution warehouse.

Because the existing Almond Power Plant and the A2PP project will be adjacent to each other and will both be operated by TID, some existing facilities will be shared. These include the anhydrous ammonia storage tank and unloading facilities, fire water storage tank, water treatment system, recycled water supply and wastewater discharge system, raw water system, instrument and service air systems, oil water separator, demineralized and reverse osmosis water storage tanks, and administration building including the control room and office space.

Other existing facilities will be modified to accommodate the project. The maintenance shop/warehouse will be expanded and shared by the facilities. A new stormwater retention pond will be constructed to accommodate the stormwater runoff from both facilities.

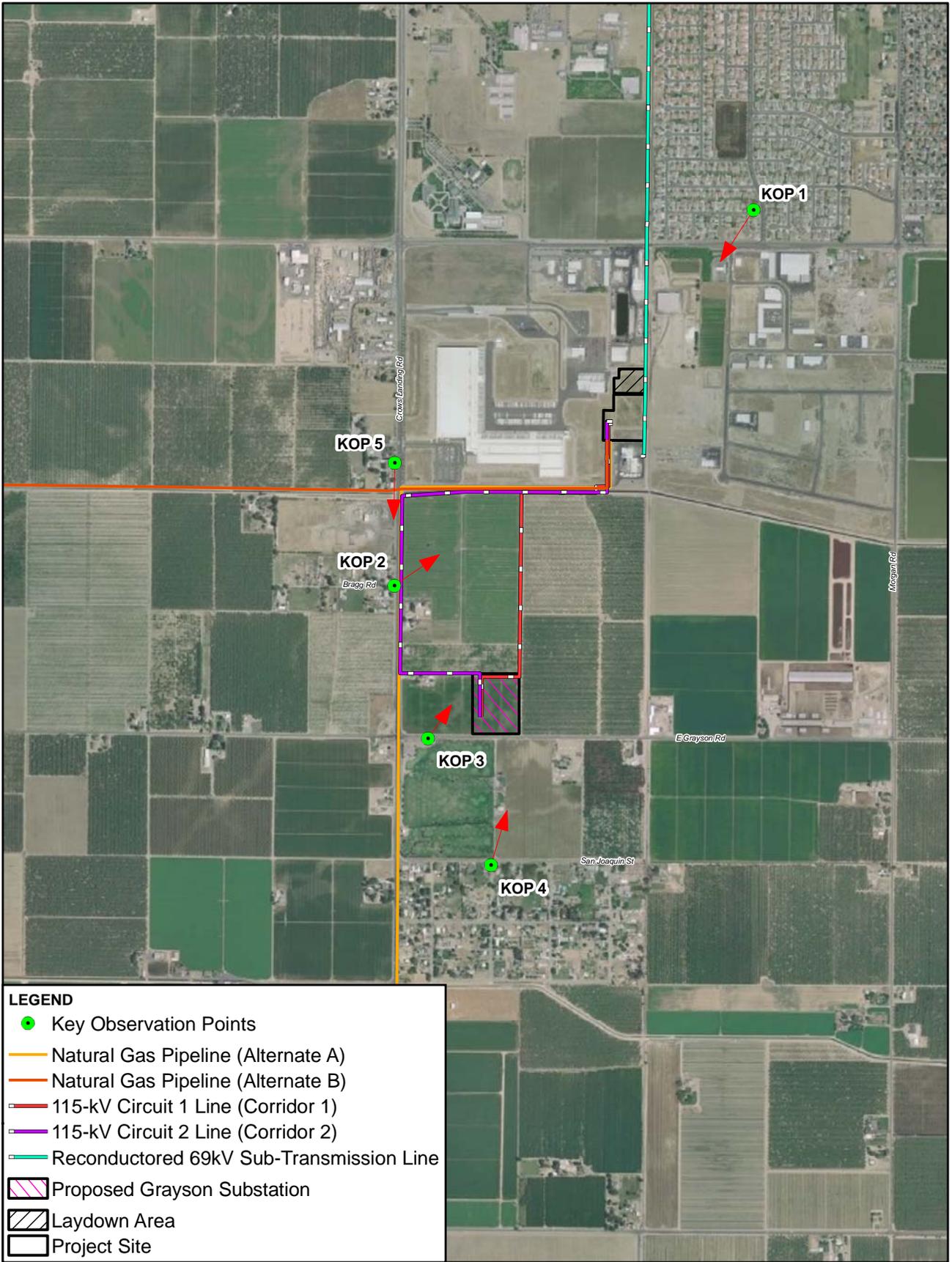
Linear routes constructed for the project will include a new natural gas supply line and two 115-kV transmission line corridors. The natural gas pipeline will follow one of two routes ultimately tying into PG&E Line #215: Alternate A, an approximately 9.1-mile-long gas line that runs south along Crows Landing Road, or Alternate B, an approximately 11.1-mile-long gas line that runs south along Carpenter Road.<sup>1</sup> The two 115-kV transmission lines, Corridors 1 and 2, will be approximately 0.9 mile long and 1.2 miles long, respectively. Both transmission lines will connect the project with the proposed Grayson Substation.<sup>2</sup>

The project will also require the reconductoring of a 2.9-mile, 69-kV sub-transmission line that runs along the east side of the project site from the Almond Power Plant to the existing TID Crows Landing Substation (see Figure 1.1-3).

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<sup>1</sup> Pacific Gas & Electric Company (PG&E) is currently examining the relative strengths of the two alignments. In order to allow the AFC to proceed, the two possible alternatives are presented in this AFC with same level of detail to allow complete evaluation of both alternatives. TID anticipates that PG&E will select a preferred route in late spring or early summer 2009. At that time, the route not selected will provide information for the California Energy Commission's Alternatives analysis.

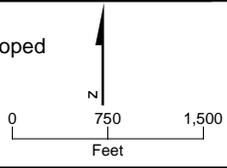
<sup>2</sup> The proposed Grayson Substation is a component of the TID Hughson-Grayson 115-kV Transmission Line and Substation Project. In addition to the substation, the Hughson-Grayson project consists of an approximately 10-mile-long, 115-kV transmission line; a 0.5-mile-long, 69-kV transmission line from the existing TID Almond Power Plant; and a second 69-kV transmission line that extends 0.8 mile east from the proposed substation. An environmental impact report for the Hughson-Grayson project (State Clearinghouse Number 2009012075) is currently being prepared. The Notice of Preparation was issued on January 26, 2009, and reissued February 10, 2009. The Draft Environmental Impact Report is anticipated to be issued in July 2009.



**LEGEND**

- Key Observation Points
- Natural Gas Pipeline (Alternate A)
- Natural Gas Pipeline (Alternate B)
- 115-kV Circuit 1 Line (Corridor 1)
- 115-kV Circuit 2 Line (Corridor 2)
- Reconductored 69kV Sub-Transmission Line
- ▨ Proposed Grayson Substation
- ▨ Laydown Area
- ▭ Project Site

Notes:  
 1. The Grayson Substation is being developed as a separate Project



**FIGURE 5.13-1**  
**KEY OBSERVATION POINT**  
**LOCATIONS AND PROJECT VISIBILITY**  
 ALMOND 2 POWER PLANT  
 CERES, CALIFORNIA

This map was compiled from various scale source data and maps and is intended for use as only an approximate representation of actual locations.



A. KOP-1. Existing view toward the project site from Rocky Brook Drive at Blue Falls Court.



B. KOP-1. Simulated view toward the project site from Rocky Brook Drive at Blue Falls Court.

**FIGURE 5.13-2**  
**KOP-1 VIEW FROM NEIGHBORHOOD**  
**TO THE NORTH**  
ALMOND 2 POWER PLANT  
CERES, CALIFORNIA



A. KOP-2. Existing view toward the project site from Crows Landing Road.



B. KOP-2. Simulated view toward the project site from Crows Landing Road.

**FIGURE 5.13-3**  
**KOP-2 VIEW FROM CROWS LANDING ROAD**  
ALMOND 2 POWER PLANT  
CERES, CALIFORNIA



A. KOP-3. Existing view toward the project site from golf course parking lot on Grayson Road.



B. KOP-3. Simulated view toward the project site from golf course parking lot on Grayson Road.

**FIGURE 5.13-4**  
**KOP-3 VIEW FROM THE GOLF COURSE**  
ALMOND 2 POWER PLANT  
CERES, CALIFORNIA



A. KOP-4. Existing view toward the project site from San Joaquin Street at Avenue B.



B. KOP-4. Simulated view toward the project site from San Joaquin Street at Avenue B.

**FIGURE 5.13-5**  
**KOP-4 VIEW FROM THE NEIGHBORHOOD**  
**TO THE SOUTH**  
ALMOND 2 POWER PLANT  
CERES, CALIFORNIA



A. KOP-5. Existing view toward Corridor 2 from Crows Landing Road.



B. KOP-5. Simulated view toward Corridor 2 from Crows Landing Road.

**FIGURE 5.13-6**  
**KOP-5 VIEW OF CORRIDOR 2**  
ALMOND 2 POWER PLANT  
CERES, CALIFORNIA

### 5.13.1.3 Service Water

Service water (i.e., water for eye wash, safety showers, and facility washdown) will be drawn from an existing well at the Almond Power Plant. Water for construction will either come from the onsite fire system or the TID irrigation canal to the south. Potable water will be delivered by a commercial vendor. The project will tie into the existing process and wastewater lines that connect the Almond Power Plant with the City of Ceres Wastewater Treatment Plant (WWTP).

### 5.13.1.4 Construction Laydown Area

The construction laydown and parking area will be an approximately 1.85-acre parcel adjacent to the north border of the project site that is within the WinCo property (see Figure 5.13-1).

### 5.13.1.5 Potential Project Visibility

The project site is visible from locations throughout the surrounding area, as evidenced by the visibility of the existing Almond Power Plant. However the project may be somewhat less visible than the existing facility since it will be slightly shorter and consists of three narrow stacks rather than a single wider stack. From many locations, views of the project site are blocked by intervening structures or vegetation.

The project site is set back from public roadways, the closest being Crows Landing Road, 0.3 mile to the west. From parts of Crows Landing Road between East Service Road and Grayson Road, the view of the project site is obstructed by the WinCo distribution warehouse. From the north, along East Service Road, views are largely obstructed by retaining walls, industrial facilities, and warehouses. From the south, along Grayson Road, views of the lower two-thirds of the project are obstructed by an orchard. From the east, along Morgan Road, the project site is visible except from a few locations where views are obstructed by industrial facilities.

Due to the sound wall along the south side of East Service Road and intervening structures, the project is only visible from a small portion of the neighborhood to the north. The best views of the project from the neighborhood are from limited parts of Rocky Brook Drive. Views from the cul-de-sacs south of Rocky Brook Drive have oblique rather than frontal views of the project site. The project site is not visible from Highway 99.

### 5.13.1.6 Sensitive Viewing Areas and Key Observation Points

To structure the analysis of the project's effects on visual resources, sensitive receptors<sup>3</sup> and viewing areas that will be most sensitive to the project's potential visual impacts were identified. Representative viewpoints from these sensitive receptor locations are referred to as key observation points (KOPs). The KOPs chosen in consultation with CEC Staff represent the best viewing conditions from five major areas of viewer sensitivity: the view from the nearest residential neighborhood (KOP 1); the view from a the closest main road, Crows Landing Road (KOP 2); the view from the golf course (KOP 3); the view from a

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<sup>3</sup> Typically, residents and recreationists are considered to be sensitive receptors to changes in the landscape. This is because of the potential for effects to their long-term views or their enjoyment of a particular landscape or activity.

residential neighborhood to the south (KOP 4); and the view of the transmission line along a major transportation corridor, Crows Landing Road (KOP 5). The locations of the KOPs are indicated on Figure 5.13-1. Existing views from all KOPs and simulated views from KOPs 1, 2, 3, 4, and 5 are presented in Figures 5.13-2 through 5.13-6 respectively.

Based on field work conducted in January and February 2009 by CH2M HILL, the existing condition of the view from each KOP was documented. Assessment of existing level of scenic quality was made based on professional judgment that took a broad spectrum of factors into consideration, including:

- Natural features, including topography, water courses, rock outcrops, and natural vegetation;
- The positive and negative effects of cultural alterations and built structures on visual quality; and
- Visual composition, including an assessment of the vividness, intactness, and unity of patterns in the landscape.<sup>4</sup>

The final scenic quality ratings assigned to each view fit within the rating scale summarized in Table 5.13-1. This scale was developed using a scale created for use with an artificial intelligence system for evaluation of visual landscape quality (Buhyoff et al., 1994) and landscape assessment concepts applied by the U.S. Forest Service and the U.S. Department of Transportation.

**TABLE 5.13-1**  
Landscape Scenic Quality Scale

Rating	Explanation
Outstanding Visual Quality	A rating reserved for landscapes with exceptionally high visual quality. These landscapes are significant nationally or regionally. They usually contain exceptional natural or cultural features that contribute to this rating. They are what we think of as "picture post card" landscapes. People are attracted to these landscapes to view them.
High Visual Quality	Landscapes that have high quality scenic value. This may be due to cultural or natural features contained in the landscape or to the arrangement of spaces contained in the landscape that causes the landscape to be visually interesting or a particularly comfortable place for people. These landscapes have high levels of vividness, unity, and intactness.
Moderately High Visual Quality	Landscapes that have above average scenic value but are not of high scenic value. The scenic value of these landscapes may be due to built or natural features contained within the landscape, to the arrangement of spaces, in the landscape or to the two-dimensional attributes of the landscape. Levels of vividness, unity, and intactness are moderate to high.
Moderate Visual Quality	Landscapes, that are common or typical landscapes that have average scenic value. They usually lack significant cultural or natural features. Their scenic value is primarily a result of the arrangement of spaces contained in the landscape and the two-dimensional visual attributes of the landscape. Levels of vividness, unity, and intactness are average.

<sup>4</sup> Vividness is the memorability of the visual impression received from contrasting landscape elements as they combine to form a striking and distinctive visual pattern. Intactness is the integrity of visual order in the natural and human-built landscape, and the extent to which the landscape is free from visual encroachment. Unity is the degree to which the visual resources of the landscape join together to form a coherent, harmonious visual pattern. Unity refers to the compositional harmony or intercompatibility between landscape elements. (US DOT FHWA 1988)

**TABLE 5.13-1**  
Landscape Scenic Quality Scale

Rating	Explanation
Moderately Low Visual Quality	Landscapes that have below average scenic value but not low scenic value. They may contain visually discordant cultural alterations, but these features do not dominate the landscape. They often lack spaces that people will perceive as inviting and provide little interest in terms of two-dimensional visual attributes of the landscape.
Low Visual Quality	Landscapes that have below average scenic value. They may contain visually discordant human-induced alterations, and often provide little interest in terms of two-dimensional visual attributes of the landscape. Levels of vividness, unity, and intactness are below average.

Note: Rating scale based on Buhyoff et al., 1994; U.S. DOT Federal Highway Administration, 1988, and United States Department of Agriculture Forest Service, 1995.

#### 5.13.1.6.1 KOP 1—View from Neighborhood to the North

Figure 5.13-2A depicts the view from KOP 1 on Rocky Brook Drive, approximately 0.4 mile north of the project site. This view was selected because it represents the best view of the project site from the nearest residential neighborhood. The project site was not visible from the neighborhood entrance at Brown Avenue and was not visible from the majority of the neighborhood.

From KOP 1, the project site is identifiable as the area in the middleground to the right of the existing Almond Power Plant, behind the gas station awning. The character of the foreground of the image is a suburban view of a cul-de-sac including two homes, parked cars, a light post, and sound wall. The character of the middle to background is industrial, including a gas station awning, wooden utility poles, trees, and the existing Almond Power Plant.

Applying the scale presented in Table 5.13-1, this view can be rated as having a moderately low level of visual quality. The vividness of the image is moderate to moderately low because the combination of landscape elements is of average to low distinctiveness or memorability. The visual intactness and unity of the image is moderately low due to the juxtaposition between suburban elements in the foreground and the visually discordant industrial elements in the middle to background.

This view is representative of that of hundreds of residents that enter and exit the neighborhood via Rocky Brook Drive. It is also representative of the view from homes along the north side of Rocky Brook Drive and from the cul-de-sacs south of Rocky Brook Drive from which the project site may be visible. However, views from houses on the cul-de-sacs would be oblique rather than frontal because they are oriented at perpendicular angle to the project site. Because it represents potential views from people's homes, the level of visual sensitivity is assumed to be high.

#### 5.13.1.6.2 KOP 2—View from Crows Landing Road

Figure 5.13-3A depicts the view from KOP 2, a viewpoint on Crows Landing Road, approximately 0.5 mile southwest of the project site. This KOP was selected to represent views from the closest major roadway and the views from some rural residences to the west of the project site.

The character of the view is somewhat rural but is dominated by industrial elements. The foreground contains an agricultural field and orchard beyond it. To the north and east are a large distribution warehouse and the existing power plant. An existing 230-kV transmission line runs along the access road that connects the Almond Power Plant with the existing transmission corridor at Crows Landing Road. Applying the scale presented in Table 5.13-1, this view is rated as having a moderately low level of visual quality. There are no memorable features, thus the level of vividness is low. The elements of the view have no discernable pattern. The industrial facilities and transmission lines in the middleground are visually discordant with the agricultural land closer to the viewer. As such, the level of visual intactness and unity is moderately low.

Crows Landing Road is classified as an arterial roadway that runs between I-5 and Highway 99 and serves the cities of Modesto and Ceres. The stretch of Crows Landing Road in the project vicinity is traveled by at least 1,200 vehicles per rush hour period. This view is also representative of the potential view from between 7 and 15 rural residences along and west of Crows Landing Road. Because it represents potential views from people's homes, the level of visual sensitivity is assumed to be high.

#### **5.13.1.6.3 KOP 3—View from the Golf Course**

Figure 5.13-4A depicts the view from a golf course, approximately 0.75 mile southeast of the project site, on Grayson Road at Crows Landing Road. The image was taken from the east side of the parking lot on Grayson Road. KOP 3 is representative of views from the golf course and provides the basis for developing a “worst case” scenario of the project's visual effects on areas to the south.

The view contains rural elements but is dominated by industrial elements. The foreground contains an agricultural field that is flanked by an orchard. Behind the orchard, the top half of the existing power plant is visible along with the 230-kV transmission line and the WinCo distribution warehouse. The visual quality of the view is moderately low. As in KOP 2, the landscape elements are not distinctive and thus have low level of vividness. The landscape contains no coherent pattern and contains visually discordant elements such as industrial facilities adjacent to agricultural fields and orchards. As such, there is a moderately low level of visual intactness and unity.

This view has the potential to be seen by users of the golf course and by motorists near the intersection of Crows Landing Road and Grayson Road. Because this view is primarily seen by motorists and recreationists, the level of visual sensitivity is considered to be moderate.

#### **5.13.1.6.4 KOP 4—View from Neighborhood to the South**

Figure 5.13-5A depicts the view from KOP 4 at the intersection of San Joaquin Street and Avenue B, approximately 1 mile south of the project site. This view was selected because it represents the best view of the project site from the closest residential neighborhood to the south.

The character of the image is primarily rural. The foreground contains a rural intersection, wooden utility poles, a picket fence, and a stop sign. Across the street, a fence blocks access to a field that contains a small industrial facility. Beyond that, two houses are visible in the middleground. On the left side, the chainlink fence marks the southeast corner of the golf

course. In the background, the existing Almond Power Plant and the WinCo distribution warehouse are visible but the Almond Power Plant is difficult to make out.

The vividness of the image is moderately low because the combination of landscape elements is of average to low distinctiveness or memorability. The visual intactness and unity of the image is also moderately low due to the lack of visual coherence between the rural and industrial elements. Considering the levels of visual vividness, intactness, and unity, the overall visual quality of the exiting view from KOP 4 is moderately low.

This view is representative of views of tens to hundreds of residents who live in this neighborhood and who use streets in the north part of the neighborhood such as San Joaquin Road. However, few residents are likely to have this view from their house. The houses are oriented east-west so views toward the project side would be oblique not frontal. Additionally, the view from most residences would be blocked by intervening structures or vegetation. Because it represents potential views from a residential neighborhood, the level of visual sensitivity is assumed to be high.

#### **5.13.1.6.5 KOP 5— View of Transmission Line Corridor 2 along Crows Landing Road**

Figure 5.13-6A depicts the view from KOP 5, a viewpoint looking south along Crows Landing Road from a point directly west of the project site. This KOP was selected to represent views of the proposed transmission Corridor 2.

The character of the view is primarily industrial. The foreground on the right side of the image contains the plants and fence of a residential front yard. On the left side of the image, a grassy area enclosed by a chain link fence marks the edge of the WinCo warehouse distribution facility. A wood pole transmission line flanks the right side of Crows Landing Road and a 230 kV transmission line supported by steel poles crosses Crows Landing Road. Buildings, trees, and transmission lines that are difficult to distinguish characterize the middle and background of the image.

Applying the scale presented in Table 5.13-1, this view is rated as having a low level of visual quality. There are no memorable elements in the landscape so the level of vividness is low. The foreground is dominated by transmission lines and the background contains in a mix of land uses that is visually incoherent. As such, the image has a low level of visual intactness and unity.

The stretch of Crows Landing Road presented in the image is traveled by at least 1,200 vehicles per rush hour period. The level of visual sensitivity of motorists is assumed to be moderate.

## **5.13.2 Environmental Analysis**

### **5.13.2.1 Analysis Procedure**

This assessment was conducted by applying the systematic method for evaluating the potential aesthetic effects of power plant projects that was adopted by the staff of the CEC. This methodology, which the CEC applied in its evaluation of the impacts of the Roseville Energy Park Project, is summarized in Appendix 5.13A.

As an initial step in the evaluation process, planning documents (including those of the City of Ceres and of Stanislaus County) applicable to the project area were reviewed to gain

insight into land uses intended for the area and the guidelines for the preservation of visual resources. Consideration was then given to the existing visual setting within the project viewshed (the geographical area in which the project can be seen). An assessment was then made of the visual changes that the project will cause following the California Environmental Quality Act (CEQA) Guidelines checklist. Appendix 5.13A provides a more complete description of the visual resources evaluation process that was followed.

Site reconnaissance was conducted by CH2M HILL to visually assess the surrounding area, to identify potential KOPs, and to take representative photographs of existing visual conditions. A single-lens reflex 35-mm camera with a 50-mm lens (view angle 40 degrees) was used to shoot the photographs.

Photographs are presented to represent the “before” conditions from each KOP. Visual simulations were produced to illustrate the “after” visual conditions from each of these KOPs, to provide the viewer with a representation of the location, scale, and appearance of the project. These simulations represent the project’s appearance immediately after completion of construction. The computer-generated simulations are the result of a computer modeling process described briefly below.

Computer modeling techniques were used to produce the simulated images of the views of the site as they will appear after development of the project. Existing topographic and site data provided the basis for developing an initial digital model. The project engineers provided site plans and digital data for the project facility, and site plans and elevations for the components of the transmission system. These were used to create three-dimensional (3-D) digital models of these facilities. These models were combined with the digital site model to produce a complete model of the generating facility and portions of the overhead transmission system.

For each viewpoint, viewer location was digitized from topographic maps and scaled aerial photos, using 5 feet as the assumed eye level. Computer “wire frame” perspective plots were then overlaid on the photographs of the views from the KOPs to verify scale and viewpoint location. Digital visual simulation images were produced as a next step, based on computer renderings of the 3-D model combined with high-resolution digital versions of base photographs.

Once all potential impacts were examined, a determination was made as to whether any impacts will reach a level that would be significant under CEQA’s standards, and thus require mitigation beyond that proposed as a part of the initial project design. Under CEQA, any required mitigation must be specific to an identified impact and must be feasible.

#### **5.13.2.2 Impact Evaluation Criteria**

The following criteria from the CEQA Guidelines were considered in determining whether a visual impact would be significant.

The CEQA Guidelines define a “significant effect” on the environment to mean a “substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including... objects of historic or aesthetic significance” (California Code of Regulations [CCR], Title 14 §15382).

Appendix G of the CEQA Guidelines, under Aesthetics, lists the following four questions to be addressed regarding whether the potential impacts of a project are significant:

1. Would the project have a substantial adverse effect on a scenic vista?
2. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway?
3. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?
4. Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

### 5.13.2.3 Project Appearance

#### 5.13.2.3.1 Project Structures and Dimensions

Project facilities are described in detail in Chapter 2.0, Project Description. Figure 2.1-1 shows the general arrangement and layout of project features on the site, and Figure 2.1-2 provides typical elevation views. Table 5.13-2 summarizes the dimensions, finishes, and materials of the generating facility's major features. The finishes available from the original equipment manufacturer for all major project equipment will be coordinated with the Almond Power Plant finishes to optimize the project's visual integration into the surrounding environment. The project will be surrounded by a chain-link security fence. Access will be provided by a gated driveway on the southeastern corner of the site.

**TABLE 5.13-2**  
Approximate Dimensions and Colors, Materials, and Finishes of the Major Project Features

Feature	Height (feet)	Length (feet)	Width (feet)	Diameter (feet)	Color	Materials	Finish
Exhaust Stack	80	NA	NA	12	Gray	Metal	Flat/Untextured
CTG Inlet Air Housing	34	34	14	NA	Gray	Metal	Flat/Untextured
VBV Air Outlet	47	NA	NA	7	Gray	Metal	Flat/Untextured
SCR	31	70	20	NA	Gray	Metal	Flat/Untextured
Combustion Turbine	15	65	14	NA	Gray	Metal	Flat/Untextured
New Building Expansion	18	45	60	NA	Gray	Metal	Flat/Untextured
115-kV lines	70	NA	NA	2	Brownish	Metal/Wood	Flat/Untextured

#### 5.13.2.3.2 Transmission Line

Two separate transmission line corridors are required for project reliability (see Figure 5.13-1). Transmission Corridor 1 will be 0.9 mile long and will extend south from the project site for 0.2 mile, west for 0.2 mile, then south along an agricultural road for 0.5 mile. Transmission Corridor 2 will be 1.2 miles long and extend south from the project site for 0.2 mile, west for 0.4 mile, south along Crows Landing Road for 0.4 mile, then east along an agricultural road for 0.2 mile. Both transmission corridors will connect to the proposed Grayson Substation east of the intersection of Grayson Road and Crows Landing Road. The construction of the Grayson Substation is not considered part of this project and is

undergoing environmental review separately as part of the Hughson-Grayson 115-kV Transmission Line and Substation Project. Additionally, as part of the A2PP, an existing 2.9-mile 69-kV sub-transmission line will be reconducted.

#### **5.13.2.3.3 Natural Gas Pipeline**

Either a 9.1-mile-long gas pipeline (Alternate A) or a 11.1-mile-long gas pipeline (Alternate B) will be constructed to connect the project to PG&E's high-pressure natural gas pipeline #215. Service water (for eye wash, safety showers, and facility washdown) will come from a well located on the Almond Power Plant property. Process water will come from the City of Ceres WWTP through an existing pipeline serving the Almond Power Plant. Potable water will be provided by a drinking water delivery service. The majority of the plant process wastewater will be collected in a sump and pumped to the existing wastewater tank, from there it will be sent to the WWTP through an existing pipeline. Stormwater runoff will be routed to the onsite retention basin.

#### **5.13.2.3.4 Construction Laydown Area**

As detailed in Section 2.2, construction of the project will take place during the 12-month period beginning during the third quarter of 2010. An approximately 1.85-acre parcel adjacent to the northern edge of the project site is proposed for parking and laydown during the construction period. During the construction phase of the project, construction materials, construction equipment, trucks, and parked vehicles will be visible in the laydown area.

#### **5.13.2.3.5 Landscaping**

The Almond Power Plant and A2PP will share a common entry point and other shared facilities. The existing Almond Power Plant has landscaping at the plant entrance, and there will be no additional public access or entrance for the A2PP project. In addition, the common entrance is set back 0.4 mile from Crows Landing Road and most project features will not be visible to the public. Therefore, no additional landscaping is proposed.

#### **5.13.2.3.6 Lighting**

The power plant could be operated 24 hours per day, 7 days per week and will require night lighting for safety and security. The lights will provide illumination for operation under normal conditions, for safety under emergency conditions, and for manual operations during a power outage. Some night lighting is already visible from the project site due to the existing Almond Power Plant.

To reduce offsite lighting impacts, lighting at the A2PP will be restricted to areas required for safety and operation. Exterior lights will be hooded and will be directed onsite to minimize significant light or glare. Low-pressure sodium lamps and non-glare fixtures will be specified. High illumination areas not occupied on a regular basis will be provided with switches or motion detectors to light these areas only when occupied.

Project construction activities are planned to occur between 7:00 a.m. and 3:30 p.m. from Monday through Friday with weekends and later hours, as needed. To the extent feasible and consistent with worker safety codes, lighting required for night construction activities will be directed toward the center of the construction site and shielded to prevent light from straying offsite. Task-specific construction lighting will be used to the extent practical while complying with worker safety regulations.

### 5.13.2.3.7 Water Vapor Plumes

Plume formation will not result from the project because it does not have a heat recovery steam generator (HRSG) or a cooling tower. The plant will be simple cycle with a selective catalytic reactor (CTG) that produces hot exhaust (790 to 850 degrees Fahrenheit) that will not condense as a plume.

### 5.13.2.4 Assessment of Visual Effects

#### 5.13.2.4.1 KOP 1—View from Nearest Residential Neighborhood to the North

Figure 5.13-2 presents a photo of the existing view toward the project site from Rocky Brook Drive at Blue Falls Court (Photo A) and a simulation of the view as it would appear during the project's operational period (Photo B). Comparison of the images indicates that when the project is in place, the change to the view will be noticeable but not out of character with the existing setting. Visible project features somewhat expand the industrial area in the view by adding new vertical elements to the background. However, the area now occupied by the project features already had a somewhat industrial or commercial character due to the presence of the gas station awning. Additionally, project features are smaller in scale compared to the existing Almond Power Plant facilities and appear to be related to it. From this viewpoint, one of the new stacks is not distinguishable from the existing Almond Power Plant stack because it is located in front of the stack. The project features will not significantly change the character or quality of the view.

#### 5.13.2.4.2 KOP 2—View from Crows Landing Road

Figure 5.13-3 presents a photo of the existing view toward the project site from Crows Landing Road (Photo A) and a simulation of the view as it would appear during the project's operational period (Photo B). Comparison of the images indicates that when the A2PP project is in place, the change to the view will be noticeable but not out of character with the existing setting.

The project will cause the industrial area in the view to appear larger and more dense, filling in the space between the Almond Power Plant and the distribution warehouse. Project features are on a smaller scale than existing Almond Power Plant features and appear to be part of the same facility rather than a new one. The new transmission lines may be more noticeable than the new power plant since they radiate out from the project site and link the foreground with the middleground. However, the transmission lines follow property boundaries and blend in relatively well with other vertical elements in the landscape such as the existing Almond Power Plant and transmission line. Corridor 2 is oriented in the same direction as the existing poles and warehouse.

The additional transmission lines and the pole in the foreground reinforce the industrial character of the view. In terms of visual quality, the transmission line connection between the foreground and middleground of the image increases the degree of unity. However, intactness is decreased because the agricultural field now appears to be bordered by transmission lines. The juxtaposition of the transmission poles and field appears visually discordant. On balance, the visual quality of the view has changed from moderately low to low.

#### 5.13.2.4.3 KOP 3—View from the Golf Course

Figure 5.13-4 presents a photo of the existing view toward the project site from the golf course parking lot (Photo A) and a simulation of the view as it would appear during the project's operational period (Photo B). Comparison of the two images indicates that when the project is in place, the new transmission lines will cause more visual impact than the new power plant. Though the three new plant stacks are visible in the background, they are adjacent to an existing plant. Project plant facilities are the same height or lower than the Almond Power Plant features and appear to be part of the same complex. Due to its distance from the KOP, the new plant facilities do not dominate the view and cause relatively little visual impact.

However, the two new transmission line corridors reduce the visual quality of the view. The new corridors extend from the background to the foreground of the view where they converge to connect to the proposed Grayson Substation. From this vantage point, the organization of the poles is not readily discernible. The poles visually encroach on the field and clutter the foreground. The intactness and unity of the view is decreased, changing the visual quality of the image from moderately low to low.

#### 5.13.2.4.4 KOP 4—View from Neighborhood to the South

Figure 5.13-5 presents a photo of the existing view toward the project site from the neighborhood to the south (Photo A) and a simulation of the view as it would appear during the project's operational period (Photo B). Comparison of the two images indicates that when the project is in place, there will be no change to the character and quality of the view. Project facilities will be located north of the Almond Power Plant and will not be visible from this vantage point. The new transmission poles will not be visible. Thus, there will be no change to the character or quality of the view from this location.

#### 5.13.2.4.5 KOP 5—View of Transmission Line Corridor 2 along Crows Landing Road

Figure 5.13-6 presents a photo of the existing view looking south down Crows Landing Road (Photo A) and a simulation of the view as it would appear during the project's operational period (Photo B). Comparison of the two images indicates that when the project is in place, the view will be dominated by transmission lines. The existing view already contains a transmission corridor along the front and another along the right side of the image. Transmission lines will be on both sides of the street. Visual unity is increased because the new line parallels the existing wooden pole line bringing symmetry to the image. However, visual intactness decreases because of the increased number of visually disparate elements that compose the image. From this view, the project elements do not harmonize with elements of the view but dominate them. The visual quality of the existing view is already rated low and will continue to be rated low with project-related changes.

#### 5.13.2.4.6 Light and Glare

The project's effects on visual conditions during hours of darkness will be limited. As indicated in Section 5.13.2.3.6, some night lighting will be required for operational safety and security. Additional visible lighting will be associated with the project stacks, and open site areas. High illumination areas not regularly used will be provided with switches or motion detectors so that they are only lit when used. When lights are turned on, they will not be highly visible offsite and will not produce offsite glare effects. Offsite lighting visibility and potential glare will be restricted by specification of non-glare fixtures and light placement to illuminate only the areas where it is needed. With construction of the project,

the overall change in ambient lighting conditions at the project site, as viewed from nearby locations, will not be substantial.

Lighting that may be required to facilitate nighttime construction activities will, to the extent feasible and consistent with worker safety codes, be directed toward the center of the construction site and shielded to prevent light from straying offsite. Task-specific construction lighting will be used to the extent practical while complying with worker safety regulations.

#### **5.13.2.4.7 Water Vapor Plumes**

As indicated in Section 5.13.2.3.7, the project will not result in plume formation because there will be no HRSG or cooling tower.

#### **5.13.2.5 Impact Significance**

A discussion regarding whether the visual effects of the project would be significant pursuant to CEQA is provided below. The assessment of these impacts has been structured by applying the criteria set forth in Appendix G of the CEQA Guidelines. The CEQA Guidelines define a “significant effect” on the environment to mean a “substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including objects of historic or aesthetic significance.” (14 CCR 15382) The four questions related to aesthetics that are posed for lead agencies and the answers to them are:

##### **Would the project have a substantial adverse effect on a scenic vista?**

No. No scenic vistas were identified in proximity to the project site or within the area from which the project would be visible.

##### **Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

No. There are no such scenic resources in the vicinity of this industrially zoned area. There are no orchard trees on the project site and trees will be avoided for the linear facilities. There are no rock outcroppings or historical buildings affected, and none of the project facilities fall within the boundaries of a state scenic highway.

##### **Would the project substantially degrade the existing visual character or quality of the site and its surroundings?**

No. The project is set within an existing industrial area that is surrounded by agricultural and residential areas. The project site is situated adjacent to the existing the Almond Power Plant, WinCo distribution warehouse, a farm supply company, a modular building manufacturer and various other industrial facilities. The project shares the industrial character of the surrounding facilities and blends in with the existing Almond Power Plant 69-kV and 230-kV lines that already pass near the site. The surrounding areas already have views of this industrial zone. Most of these views are relatively distant because the project is set back 0.4 mile from Crows Landing Road, and 0.3 miles from Service Road, the nearest roadway.

As indicated, the project will be visible in views from KOPs 1, 2, 3, and 5 but not from KOP 4. From KOPs 2 and 3, the project was found to cause visual quality to be reduced

from moderately low to low. These adverse visual impacts do not constitute a substantial or significant change in visual character or quality. From KOPs 1 and 5 the project does not cause a reduction in the visual quality rating, therefore the project does not result in significant visual impacts.

**Would the project create a new source of substantial light and glare that would adversely affect day or nighttime views in the area?**

No. As described in Section 5.13.2.4.4, project light fixtures will be restricted to areas required for safety, security, and operations. Lighting will be directed on site and shielded from public view. Non-glare fixtures and switches, sensors, and timers will be used to minimize lighting when safety and security is not an issue. These measures will substantially reduce the offsite visibility of project lighting.

Because the existing Almond Power Plant is adjacent to the A2PP site and already has night time illumination, the lighting associated with the project is not likely to create a substantial change from present conditions. Given the limited level of lighting proposed for the A2PP project, the measures that will be taken to minimize offsite effects, and the minimal level of change from existing conditions, the project's night lighting impacts will be less than significant.

Because none of the major project features will have surfaces that are highly reflective, the project will not be a source of daytime glare.

Any lighting that will be installed to facilitate nighttime construction activities will, to the extent feasible and consistent with worker safety codes, be directed toward the center of the construction site and shielded to prevent light from straying offsite. Task-specific construction lighting will be used to the extent practical while complying with worker safety regulations. Because of these impact attenuation, lighting during the construction period will not create a significant impact.

### **5.13.3 Cumulative Effects**

The A2PP is a permitted use at the project site and will not result in significant adverse impacts that cannot be mitigated. The proposed project is consistent with applicable General Plan land use and zoning designations, and is similar to adjacent industrial uses. Additional information regarding land use may be found in Section 5.6 Land Use. No new industrial uses have been announced as planned for this area, and the A2PP would be part of the baseline for the CEQA analysis of any currently unforeseen future projects. Therefore, the A2PP project will not contribute to cumulative visual resource impacts.

Any new development in either the project vicinity or the vicinity of the KOPs may provide additional screening of the A2PP, thus further reduce its visibility within the surrounding area. There are no known projects that will remove surrounding structures and make the project more visible. Therefore, the A2PP will not contribute to cumulative impacts.

### **5.13.4 Mitigation Measures**

This analysis has documented the fact that no significant visual impacts will result from implementation of the project. Therefore, no additional mitigation measures beyond those proposed and described in this AFC are necessary. A site plan will be submitted to CEC

Compliance Project Manager for review and approval and to the City of Ceres for review before construction begins. The site plan will comply with all applicable LORS.

### 5.13.5 Laws, Ordinances, Regulations, and Standards

This subsection describes the LORS relevant to visual resource issues associated with the project. The project site is located within the limits of the City of Ceres; as such, visual resources-related LORS in the Ceres General Plan and Ceres Municipal Code were reviewed. Because the transmission lines associated with the project extend into unincorporated Stanislaus County, Stanislaus County General Plan policies are also reviewed.

Table 5.13-3 lists the City plans and ordinances that are pertinent to the project elements.<sup>5</sup> The specific provisions of each plan or ordinance that have potential relevance to the project are identified in Sections 5.13.5.1, 5.13.5.2 and 5.13.5.3.

**TABLE 5.13-3**  
Laws, Ordinances, Regulations, and Standards for Visual Resources

LORS	Requirements/Applicability	Administering Agency	AFC Section Explaining Conformance
City of Ceres General Plan (1997)	Comprehensive long-range plan to serve as the guide for the physical development of the City.	City of Ceres Community Development Department, Planning Division	Section 5.13.5.1
City of Ceres Development Code—Municipal Code Title 18 (2008)	Establishes zoning districts governing land use and the placement of buildings and district improvements.	City of Ceres Community Development Department, Planning Division	Section 5.13.5.2
Stanislaus County General Plan (2000)	Comprehensive long-range plan to serve as the guide for the physical development of the County.	Stanislaus County	Section 5.13.5.3

#### 5.13.5.1 City of Ceres General Plan

The project site is on land incorporated into the City of Ceres; therefore the provisions of the City of Ceres General Plan pertaining to visual resources are reviewed in Table 5.13-4. As is described in Section 5.6, Land Use, the project site is designated General Industrial (GI).

<sup>5</sup> The 69-kV subtransmission line reconductoring is an activity that is exempt from CEQA (14 CCR 15302.). Accordingly, the any City of Modesto LORS for that portion of the reconducted line within the City of Modesto are inapplicable.

TABLE 5.13-4

Conformity with the City of Ceres General Plan. Part II. Chapter 1: Land Use and Community Design

Provision	Conformity?
<p><b>Section: Community Character and Identity</b></p> <p><b>Goal 1.A:</b> To maintain Ceres' small-town character and to create a distinctive city identity as the city grows.</p>	<p>Yes. The project will not alter the character of the immediate vicinity, the surrounding area, or of Ceres more generally. The project site is not very visible. It is located near the southern edge of the city, is set back from public roadways, and is located in an industrial zone next to an existing power plant, the Almond Power Plant. The project would not change the character of its immediate vicinity and is not visible from the downtown area or from any culturally important locations.</p>
<p><b>Section: Community Character and Identity</b></p> <p><b>Policy 1.A.7:</b> The City shall seek to enhance the appearance of its major corridors as important structural elements in Ceres' physical identity, and as a feature to improve Ceres' image in attracting economic development.</p>	<p>Yes. For the most part, the project is not visible from the closest major corridor within City limits, East Service Road, due to intervening retaining walls, industrial facilities, and warehouses.</p>
<p><b>Section: Industrial Development</b></p> <p><b>Policy 1.G.4:</b> The City shall seek to minimize the adverse visual impacts of industrial development from State Route 99, primarily through landscaping and fences.</p>	<p>Yes. The project will not be visible from Highway 99.</p>
<p><b>Section: Industrial Development</b></p> <p><b>Policy 1.G.5:</b> The City shall encourage industrial developments that include the following features:</p> <ul style="list-style-type: none"> <li>• Attractive building frontages that are readily visible for the public street (brick, wood façade).</li> <li>• Variation in the roofline (multi-planed, pitched roofs)</li> <li>• Articulation in the walls (insets, projections, canopies, wing walls, trellis)</li> <li>• Large parking areas with tree coverage separated into a series of smaller parking areas with the use of landscaping and the location of buildings.</li> <li>• Outdoor service areas, loading bays and outdoor storage areas that are not readily visible to the public.</li> <li>• Attractive landscaping to enhance the business by softening buildings and parking areas.</li> </ul>	<p>Yes. The project facility is set back 0.3 mile from Service Road, the closest public roadway and most project features will not be visible to the public.</p>

Source: City of Ceres, 1997

### 5.13.5.2 City of Ceres Municipal Code

The Ceres Municipal Code Title 18 (Zoning) designates the project site General Industrial (M-2). Provisions of the Municipal Code that are applicable to the project are discussed in detail in Section 5.6, Land Use, and those that are related to visual resources are summarized in Table 5.13-5.

**TABLE 5.13-5**  
Conformity with the City of Ceres Municipal Code

Provision	Conformity?
<b>18.34.120 Property Development Standards</b>	
J.2. Landscaping: All uses shall provide landscaping which shall be maintained. All landscaped areas that abut public property shall include a four inch (4") raised planter box along the line of abutment.	Yes. Though no new landscaping is proposed for the project site, landscaping currently at the Almond Power Plant will be adequate for the A2PP since they share an entrance.
G. Building Heights Requirements: The height of all main and accessory buildings erected in the M-2 Zone shall be as approved by the Planning Commission upon architectural and site plan approval, except those areas of an M-2 Zone that fall within the area designated as an Airport Overlay Zone, which shall comply with the height limitations prescribed by the Zone, if they are more restrictive than those herein prescribed.	Yes. The A2PP stacks will be 80 feet. The stack associated with the existing Almond Power Plant is 92 feet and the project is located in an industrial zoned area. The Planning Commission's architectural and site plan is the type of entitlement that is preempted by the CEC's exclusive jurisdiction, though the local agency may weigh in with what it typically requires for such an approval.

Source: City of Ceres, 2008.

### 5.13.5.3 County of Stanislaus General Plan

The reconducted 69-kV sub-transmission line will cross unincorporated Stanislaus County land. The Stanislaus County General Plan includes policies related to visual resources in the Land Use and Conservation/Open Space Elements, as presented in Table 5.13-6.

**TABLE 5.13-6**  
Conformity with Stanislaus County General Plan 2000

Provision	Conformity?
<b>Conservation/Open Space Goal 1:</b> Encourage the protection and preservation of natural and scenic areas throughout the County.	Yes. Areas in the project vicinity are not considered natural or scenic.

Source: Stanislaus County, 2000.

### 5.13.5.4 Summary of Project's Conformity with Applicable LORS

As discussed above, the project complies with applicable LORS related to visual resource issues.

### 5.13.6 Agencies and Agency Contacts

The agencies responsible for the review but for the CEC's exclusive jurisdiction in this case would be the City of Ceres and the County of Stanislaus (Table 5.13-7).

**TABLE 5.13-7**  
Agency Contacts for Visual Resources

Issue	Agency	Contact
Design review and site plan approval	City of Ceres Planning Division	Tom Westbrook Senior Planner 2720 Second Street Ceres, California 95307 (209) 538-5700
Design review and site plan approval	Stanislaus County Planning and Community Development Department	Angela Freitas, Deputy Director Stanislaus County Planning and Community Development Department 1010 10th Street Modesto, California 95354 209-525-6330 Email: planning@mail.co.stanislaus.ca.us

### 5.13.7 References

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