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4.13 VISUAL RESOURCES

This section describes existing and proposed visual conditions in the Visual Sphere of Influence (VSOI, or study area) of the Puente Power Project (P3 or project), and evaluates potential impacts of the project to these conditions. The project area discussed in this section refers to all areas of temporary and permanent disturbance associated with the construction and operation of the new plant and ancillary systems, and construction laydown areas. No new offsite linear facilities are required for P3. The VSOI forms a radial boundary extending 5 miles from the project site. This analysis emphasizes potential impacts to visual resources within 1 mile of the project site.

This visual resource analysis was conducted using the California Energy Commission (CEC) guidelines for the inventory and assessment of visual impacts for an Application for Certification (AFC) (CEC, 2008). CEC Guidelines, in turn, comply with the California Environmental Quality Act (CEQA). This impact assessment also follows the CEC Methodology for Visual Impact Assessment contained in Draft Appendix VR-1 (2015).

The sections below provide an overview of the affected environment; an evaluation of the environmental consequences of the proposed project to visual resources; a cumulative impact analysis; identification of mitigation measures that will avoid and reduce project impacts to less-than-significant levels; and applicable laws, ordinances, regulations, and standards (LORS).

4.13.1 Affected Environment

This section discusses existing visual conditions within the VSOI of the project. The description of existing conditions focuses on the existing visual character and scenic resources in the VSOI (Figures 4.13-1 and 4.13-2). This assessment considers Average Daily Trip (ADT) and population statistics to inform the visibility of the project (Figure 4.13-3).

4.13.1.1 Regional Landscape Setting

4.13.1.1.1 Overview of Visual Character at a Regional Scale

The project site is on the coast of southern California, on the Oxnard Plain, in Transverse Range[1] Physiographic Province (USGS, 2000; USGS, 2004). It is in the City of Oxnard, in western Ventura County. Oxnard is just south of the City of Ventura, west of the City of Camarillo, and north of Port Hueneme.

Terrain along the Oxnard Plain is gently rolling to flat. Coastal lowlands in the Oxnard Plain vary in elevation from sea level to about 115 feet above sea level. The topography is influenced by historic alluviation from the Santa Clara River (City of Oxnard, 2006).

The climate of this region is characterized by cool winters and generally moderate summers (City of Oxnard 2006). The weather is locally influenced by a predominant onshore flow from the Pacific Ocean, which moderates temperatures. Proximity to the coast increases the moisture content of the air, which leads to predominant hazy conditions. Hazy ambient conditions, when present, reduce visibility and obscure distant views.

The City of Oxnard General Plan Background Report (2006) states that the City's Planning Area is defined by, "natural and human-made aesthetic resources, including open spaces, beaches and coastline,

[1] The Transverse Ranges Province of southern California is so-named because the mountains, valleys, and geologic structures in this province lie east-west, or "transverse to," the prevailingly northwest-trending grain characteristic of southern California (USGS, 2004).

agricultural areas, low rise commercial and residential development, as well as tall buildings which are visible in the City's skyline." This setting provides the basis for regulation of scenic character/quality provisions in the General Plan, the City of Oxnard's Coastal Land Use Plan (CLUP), and the City's Zoning Ordinance.

The project site is in the California Coastal Zone. Land uses in the Oxnard Coastal Zone are governed by the CLUP. The CLUP has four planning areas, and the project site is in the "McGrath-Mandalay Planning Area." The project site has a sub-zoning designation of EC, the purpose of which is to provide areas that allow for siting, construction, modification, and maintenance of power-generating facilities and electrical substations consistent with Policies 51, 52, 54, 55, and 56 of the Oxnard CLUP.[2]

The City of Oxnard is a semi-urban to mostly suburban coastal community with a population of approximately 198,000 (U.S. Census Bureau, 2010) distributed over nearly 27 square miles.[3] The City of Oxnard land uses range from highly urbanized (but not highly dense or vertical in scale), to semi-rural/ agricultural. Most structural development in Oxnard is less than five stories (or 50 feet tall), which creates dominant horizontal-trending lines; and large, rectangular forms (AECOM, 2015).

The Los Padres and San Gabriel mountains feature prominently in northerly, easterly, and southeasterly views from within the city, while views to the west—when unobstructed—feature the Pacific Ocean. These mountain ranges create a backdrop for the city, visible in the background of most views from within the city.

4.13.1.1.2 Overview of Visual Character in the VSOI

At a finer scale, the project site is bordered immediately to the west by Mandalay State Beach and McGrath State Beach. The Pacific Ocean abuts these beaches. To the north and south, the project is bordered by McGrath State Beach and Mandalay County Park.[4] Immediately north of the project site is undeveloped open space that surrounds McGrath Lake. A restoration mitigation site associated with the future North Shore at Mandalay Bay residential development is immediately north of the Mandalay Generating Station (MGS) property, and east of McGrath State Beach. To the east, the project site is bordered by electrical supply facilities and infrastructure, North Harbor Boulevard, and agricultural lands (see Figure 4.6-2 in the Land Use Section of this AFC). This agricultural area is part of the "Ventura-Oxnard Greenbelt," which is designated as a "Scenic Area/View Corridor" by the City of Oxnard (2006).

The beach and coastal dune preserve areas surrounding the project site are mostly undeveloped, but are intermixed with oil and gas drilling and storage facilities, electrical transmission towers, a Southern California Edison (SCE) switchyard/substation (SCE Switchyard), energy-generating facilities (the existing MGS and the SCE-owned McGrath Peaker Plant), and McGrath State Beach/Campground, McGrath Lake, and the Santa Clara Estuary Natural Preserve. The Edison Canal (a tidally influenced marine water feature) runs northerly from the Channel Islands Harbor, and then westerly into the existing MGS property. This canal provides once-through ocean cooling water to MGS Units 1 and 2. The banks of the canal add to the long, linear-trending dominant lines of this landscape. Additionally, an undeveloped residential subdivision (i.e., North Shore at Mandalay Bay [North Shore]) is just southeast of the project site. North Shore is a residential subdivision and community that is fully entitled and planned for 292 residences (Suncal, 2015); vertical construction is scheduled to commence in 2016. The Oxnard Airport is approximately 1.8 miles east-southeast of the project site.

[2] Additional information regarding land use designations at the P3 site and surrounding area are provided in Section 4.6, Land Use and Agriculture.

[3] Additional details regarding demographics and population trends are provided in Section 4.10, Socioeconomics.

[4] Mandalay County Park is a 94-acre park that serves as a preserve for coastal dunes, wetlands, wildlife, and plants. It is undeveloped open space and allows public access to the ocean, beach, and adjacent coastal dunes for public recreational day use and enjoyment (California's Best Beaches, 2015).

McGrath State Beach, Mandalay State Beach, and Mandalay County Park offer passive and active recreational opportunities immediately adjacent to the project site. Primary views from these beach and coastal dune areas face west towards the ocean. The coastal dunes that abut the landward (eastern) side of these beach areas are considered a "scenic resource" because of their unique physical terrain and habitat (CEC, 2015; City of Oxnard, 1982).

Beyond the immediate area surrounding the project, the Los Padres Mountains visually enclose distant views to the north and east, while the Santa Monica Mountains enclose distant views to the southeast, as viewed from the project site (AECOM, 2015). Panoramic views towards the west are of the Pacific Ocean. Depending on ambient conditions, the Channel Islands are visible focal points on the horizon (AECOM, 2015).

Existing nighttime lighting in the area is concentrated in more developed areas of Oxnard and Ventura that are north and east of the P3 site. MGS has nighttime security lighting, and aside from the McGrath Peaker Plant and the residences south of the MGS, the existing lighting at the plant is one of the few sources of nighttime lighting in the immediate vicinity. Following their decommissioning, minimal lighting will remain at Units 1 and 2 for safety and security purposes.

4.13.1.1.3 Summary

This mosaic of varying landscapes and intensity of uses (i.e., beach, coastal dunes, agricultural, residential, and industrial-oriented oil and gas/energy generation) collectively inhibit the VSOI from developing a strong semblance of uniformity or harmony. This in turn reduces the overall visual quality of the existing landscape, specifically within the limits of the VSOI.

4.13.1.2 Visual Sphere of Influence

The VSOI for the project represents the area within which the project could be seen, and where impacts to visual resources could potentially occur (Figure 4.13-1). This area was determined using geographic information systems (GIS)–based viewshed analyses, which were conducted using 10-meter grid-cell resolution generated from the National Elevation Dataset from the U.S. Geological Survey (USGS) to map the viewshed boundaries of the project, based on the tallest feature existing at the MGS, and the proposed tallest feature associated with P3. USGS Digital Elevation Model (DEM) files were imported into an ArcMap-based GIS using the spatial analysis extension. Once in GIS, the DEMs were mosaicked. The combined DEM was used to run viewshed analyses in State Plane California, Zone V, Units U.S. feet, North American Datum 83. The existing MGS tallest structure (the stack), measuring at a height of 200 feet, was input into the viewshed model with a vertical observer offset of 6 feet. The proposed stack height of 188 feet for the P3 project was also input into the viewshed model. Other aboveground or at-grade project components, such as the transmission poles, the operations facility, and other structural components of the project were not included in the viewshed model, but are considered in the analysis. The resulting shaded polygon areas represent the viewshed of MGS (existing) and P3, assuming no vegetation or other structural interference/shielding (see Figure 4.13-1). The figure shows that P3 would not increase visibility of the generation station.

The viewshed model, which is a conservative estimate of views, shows that the MGS stack is currently intermittently visible from the east, north, and south. The P3 stack would be slightly shorter, and therefore somewhat less visible than the MGS stack and the steam boiler units. Absent structural and vegetative interference, the viewshed suggests that both the existing MGS stack and the P3 stack would be visible from developed areas of Oxnard, Ventura, and Port Hueneme, though P3 would be less visible than the MGS.

The VSOI was used to identify sensitive view areas (or scenic resources) that would have views of the project site, and therefore have the potential to experience significant impacts as a result of the project.

Per CEC guidance, the review emphasized the identification of sensitive viewer areas within a 5-mile radius; however, potentially sensitive resources were reviewed in the framework of the following distance zones:

- **Foreground:** 0 to 0.5 mile from the observer's position. At this distance, the observer can view details of trees, shrubs, wildflowers, and animals.
- **Middleground:** 0.5 to 5 miles from the observer's position. At this distance, the observer can see forest stands, natural openings, masses of shrubs, and rock outcrops.
- **Background:** 5 miles to horizon from the observer's position. At this distance, the observer can view mountain peaks, ridgelines, and patterns of forest stands and openings.

4.13.1.3 Landscape View Inventory

The following sections detail the Landscape View Inventory (CEC, 2015) components used to provide the baseline for the assessment of potential impacts. The baseline inventory is informed by descriptions of visual character from sensitive viewing areas in the VSOI.

4.13.1.3.1 Key Observation Point Selection

CEC Guidelines (CEC, 2015) include a "design based classification assessment" that allows for evaluation of a project from Key Observation Points (KOPs) in the VSOI.[5] KOPs are defined as a "fixed position in a publically accessible area where a view of the project is analyzed or evaluated." KOPs are selected based on their value in assessing the existing landscape, and the potential changes or effects a project may have to that landscape. For this analysis, KOPs were identified based on review of available land use data, communication with CEC visual resource technical staff, and field verification/ reconnaissance with CEC staff that took place on March 6, 2015 (AECOM, 2015).

4.13.1.3.2 Landscape View Inventory and Assessment

The following subsections describe the affected environment (or existing visual conditions) at each of the KOPs. The CEC refers to this analysis as a "Landscape View Inventory." This inventory evaluates existing views from each KOP based on the following analysis factors:

1. **Landscape:** Landscape is the "outdoor environment, natural or built which can be directly perceived by a person visiting and using that environment. For this assessment, the landscape's physical state, and its intactness from visual, functional, and ecological perspectives are weighed."

2. **Public View:** Public view is the observable area or likely to be observed area by a person from a publicly accessible location.

3. **Visibility:** Visibility is the capability of being readily noticed.

Appendix L contains complete inventory tables for each KOP with text to support each ranking. The Landscape View Inventory tables provide ranking for the landscape, public view, and visibility for each KOP. The Landscape View Inventory allows for an overall rating of the landscape that translates to scenic character and quality at each KOP. This baseline inventory of the landscape delineates the degree of contrast or change to scenic character the project could have in the VSOI. The inventory was developed by the scenic resources identified in Figure 4.13-1 and 4.13-2, as well as the population and

[5] This classification assessment was based on similar methodologies used by the U.S. Bureau of Land Management (BLM), the U.S. Forest Service, and U.S. Department of Transportation Federal Highway Administration .

ADT information included in Figure 4.13-3, which helped determine the number and type of viewers in the VSOI.

Five KOPs were selected and evaluated to represent a range of views of the project site. The landscape inventory of each KOP is described as follows:

Key Observation Point No. 1

KOP 1 is on Mandalay State Beach, just west of its intersection with West 5th Street and Mandalay Beach Road (Figures 4.13-1, 4.13-2, and 4.13-4a). It is approximately 0.7 mile south of the proposed P3 stack. The KOP faces north, and was selected to capture the existing and proposed public view towards the project site. The existing view features Mandalay State Beach, Mandalay County Park, and the existing MGS—of which the 200-foot-tall stack and Units 1 and 2 combustion turbine generator (CTG) structures—dominate fore- to mid-ground views. The McGrath Peaker Plant is also visible to the northeast. Viewer(s) at this location would mainly be users of the state beach.

The natural topography of the beach visibly slopes downward from east to west as the beach converges with the Pacific Ocean. Mandalay State Beach and McGrath State Beach are abutted to the east by coastal dunes (also referred to as the Oxnard Dunes). From KOP 1, the coastal dunes featured in the fore- to mid-ground of the view are part of Mandalay County Park. The Mandalay State Beach area is a transitional buffer area between the ocean and the coastal dunes. This strip of beach is homogeneously beige and granular in texture. The form of the stack is repeated by the stack at the McGrath Peaker Plant; the transmission and telephone poles leading to the SCE switchyard; and the oil and gas facilities visible in the far distance. The recurrence of these structures creates some repetition of form and mass.

From this KOP, the existing MGS stack and Units 1 and 2 dominate the existing view to a degree where viewers cannot avoid concentrating on the height of the stack and Units 1 and 2. These two structures are notably taller and bulkier than any other structures in this view. Furthermore, the top of the stack features prominently in this view due to the bright orange-and-white paint that denotes it as a potential aviation hazard. However, once the viewer turns 45 degrees to the west, the panoramic views of the Pacific Ocean are unobstructed towards the Channel Islands and distant horizon beyond.

Based on the factors above, KOP 1 received a View Landscape Inventory Ranking of Low to Moderate.

Key Observation Point No. 2

KOP 2 is north of KOP 1, and is less than 0.4 mile south of the P3 stack. KOP 2 is in Mandalay State Beach and situated just west of Mandalay County Park (Figures 4.13-1, Figure 4.13-2, and 4.13-5a). This location on the beach (instead of in the dune area) was chosen because Ventura County is actively restoring the dune habitat in Mandalay County Park. Therefore, no public access was allowed to the park. The public view from KOP 2 includes Mandalay State Beach, Mandalay County Park, MGS, McGrath Peaker Plant, and the Pacific Ocean. Viewer(s) at this location would mainly be recreators using the state beach.

KOP 2 is at a subordinate elevation compared to the existing MGS. The current landscape is dominated by the MGS stack and the geometric form, bulk, and mass of the two conventional steam turbine units and control building for Units 1 and 2. From this location, however, the stack commands viewer attention due to the bright aviation safety coloring atop the stack. Additionally, the strong vertical nature of the stack, and geometric shape of Units 1 and 2 contrast with the mostly natural, low-stature, undeveloped surroundings that are defined by horizontal and undulating lines and form associated with natural topography.

From this location, the hummocky form of the coastal dunes and the patchy vegetation that occupy them create the most visual variety in views towards the east. The transmission towers, oil and gas facilities, and McGrath Peaker Plant all disrupt the natural form and line of the dunes, which detracts from the harmony created by those natural features. Predominant views from KOP 2 are assumed to be towards the Pacific Ocean and Channel Islands.

Based on the factors above, KOP 2 received a View Landscape Inventory Ranking of Low to Moderate.

Key Observation Point No. 3

KOP 3 is approximately 0.22 mile north of the proposed P3 stack, and is just west of McGrath Lake and south of the Santa Clara Estuary (Figures 4.13-1, 4.13-2, and 4.13-6a). Southerly views towards the P3 site capture the recreational viewer experience. McGrath State Beach is recognized for bird watching, surfing, and fishing. It also offers unique coastal estuary habitat to the east and north of this KOP. McGrath State Beach Campground is north of KOP 3, and was closed at the time of site reconnaissance. Therefore, the location of KOP 3 can be used to infer potential views of the project from within the campground, but these are considered conservative due to the fact the KOP is 1 mile closer to the proposed project than the campground.

Existing views from KOP 3 feature cultural modifications such as power/telephone lines, oil and gas drilling, storage, and operations facilities, the McGrath Peaker Plant, and the existing MGS. Vegetation is sparse, and is limited to the coastal dune areas visible to the east. The dunes have a hummocky form that undulates with subtle changes in elevation. Beach areas are smooth, with monotone shades of beige and brown. Similar to KOP 1 and 2, the dominance of the scale of the existing MGS stack and Units 1 and 2 does not blend well with the undeveloped character of the area surrounding the MGS.

The convergence of land and sea at the shoreline offers constant movement, which provides a high degree of scenic quality to westerly views from this location. However, the bright orange and white of the existing MGS stack, and the form, bulk, and mass of the two conventional steam turbine units and control building associated with MGS appear visually discordant with the natural elements of the shoreline.

Based on the factors above, KOP 3 received a View Landscape Inventory Ranking of Low to Moderate.

Key Observation Point No. 4

KOP 4 is on Victoria Avenue just south of its intersection with West 5th Street near the Rancho Victoria Plaza (Figures 4.13-1, 4.13-2, and 4.13-7a). KOP 4 is just less than 2 miles southeast of the P3 stack, and represents views from nearby residences in the Sea View Estates (a large residential subdivision) and motorists traveling on West 5th Street or Victoria Avenue. West 5th Street is a locally designated scenic road, and the Oxnard-Ventura Greenbelt just west of KOP 4 is a designated scenic area (City of Oxnard, 2006). Existing views towards the P3 stack are partially obstructed by the coastal dunes in the mid-ground of this view. KOP 4 was rated moderate for landscape. This ranking is based on the panoramic nature of the view, and on the arrangement of agricultural uses in the foreground, coastal dune/ topographic relief in the mid-ground, and Pacific Ocean in the background.

The foreground is flat, cultivated agricultural land that provides sequenced line and bright-green color, which adds depth to the view. The telephone poles/transmission lines mimic this sequence of pattern, and along with MGS add vertical elements to the view. In the foreground of this viewshed, coastal dune areas rise gradually, creating topographic relief that partially obscures complete views towards MGS and the Pacific Ocean in the background. The agricultural land allows for panoramic views that are interesting in this setting, but not uncommon in the area.

Based on the factors above, KOP 4 received a View Landscape Inventory of Ranking of Moderate.

Key Observation Point No. 5

KOP 5 is on the eastern side of North Harbor Boulevard at the entrance to North Shore at Mandalay Bay residential subdivision (Figures 4.13-1, 4.13-2, and 4.13-8a). KOP 5 is just over 0.5 mile southeast of the existing MGS and proposed P3 stack. This KOP captures existing views of MGS and the McGrath Peaker Plant for motorists traveling north on North Harbor Boulevard. This location on North Harbor Drive currently has an ADT rate of approximately 17,000 vehicles (Figure 4.13-3). Although currently undeveloped, the location of this KOP also captures views of future residents of the North Shore development.

From this location, the coastal dunes in the foreground partially obstruct lower portions of the existing MGS, SCE switchyard, and telephone/transmission towers associated with both. The Los Padres Mountains distantly enclose this, and create a dramatic backdrop where the ridgelines intersect with the skyline. The Pacific Ocean is mostly obscured by subtle changes in topography associated with the Oxnard Dunes; however, glimpses of the ocean are possible (AECOM, 2015).

Based on the factors above, KOP 5 received a View Landscape Inventory Ranking of Low to Moderate.

4.13.1.3.3 Summary of Landscape View Inventory

The Landscape View Inventory indicates the physical appearance of the VSOI is strongly influenced by the presence of the existing MGS and other industrial structures, including the McGrath Peaker Project. Various factors were considered in the analysis of existing conditions for each KOP, including the character of the landscape, viewer/user groups with views of the project, and the visibility of the project. These individual findings are provided in the KOP Rating Tables attached as Appendix L-1.

Overall, although there are several designated scenic resources visible from each KOP, the intactness or harmony of the views of those resources is either strongly or moderately disrupted by the scale, mass, and geometric form of MGS and other industrial structures. Most pronounced is the strong degree of contrast the bright orange-and-white coloring on the existing MGS stack creates in the landscape. The coloring attracts and holds viewer attention in the VSOI when visible (AECOM, 2015). Therefore, the existing visual character and quality in the VSOI is heavily influenced by the existing MGS facility and other industrial structures.

4.13.2 Environmental Consequences

4.13.2.1 Significance Criteria

The following sections evaluate the potential impacts to visual resources associated with construction and operation of the project. Appendix G of the CEQA describes project-related effects that would normally be considered to have a significant effect on the environment. Based on this guidance, project-related visual impacts are considered significant if the project would do any of the following:

- Have a substantial adverse effect on scenic vista;
- Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings in a state scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings;
- Create a new source of substantial light or glare that will adversely affect daytime or nighttime views in the area.

There are no designated scenic vistas or state-designated scenic highways in the VSOI; therefore, these criteria are not evaluated below.

Additionally, the CEC requires consideration of the following:

- Compliance with LORS;
- Level of viewshed alteration and ground-form manipulation;
- Regional effects to visual resources;
- Magnitude of impact related to light and glare;
- Magnitude of back-light scatter during nighttime hour; and
- Level of sunlight reduction or increase in shadows in areas used by the public.

Refer to Section 4.13.5 for a discussion on compliance with visual resource LORS.

4.13.2.2 Assessment Methodology

Levels of potential visual impact to resources in the VSOI were interpreted based on individual characteristics of each KOP described above. The existing condition, or Landscape View Inventory for each KOP, was compared to the Project Prominence (CEC, 2015) ranking[6] and the Visual Absorption Capability[7] (VAC) (CEC, 2015) of the existing environment. Together, the Project Prominence and the VAC collectively determine the potential for a project to alter the visual character of a VSOI. Simulations were used to determine the level of potential impact. In addition, Table 4.13-1 was used to understand details regarding the appearance of the project. Table 4.13-1 contains information on the quantity, size (height, width, length), and color/materials projected to be used for major equipment associated with P3. The degree of contrast of these components—in relation to the existing visual conditions—determined the level of potential impact the project could have in the VSOI.

4.13.2.2.1 Visual Impact Susceptibility of Sensitive Viewing Areas

Varying levels of project visibility were identified in the VSOI. The greatest visibility exists from locations situated immediately adjacent to the project site, where views are not blocked by vegetation or topographic screening (i.e., along the adjacent beach). Conversely, the lowest visibility exists, for example, when the viewer is at greater distances from the project; when viewer duration becomes more truncated or episodic (i.e., roadway travelers moving at high speeds); or in partially to fully screened conditions. For instance, more screening occurs in more densely developed areas of Oxnard.

4.13.2.2.2 Project Prominence

A project's prominence in a landscape as viewed from a KOP is an analytical assessment that is drawn from contrast rating, scale dominance, and spatial dominance evaluations (CEC, 2015). Individual scores for elements of contrast, scale dominance, and spatial dominance ratings are included in KOP Ranking Tables, provided as Appendix L.

Contrast Rating

A modified version of the U.S. Bureau of Land Management (BLM) process for contrast rating was used to determine visual contrast that may result from construction and operation of the project. The procedure is based on guidance from CEC Methodology for visual impact analysis in Draft Appendix VR-1 (2015). The contrast rating analysis for this project is based on photo simulations depicting project features. Contrast rating assumes that the extent to which the project results in adverse visual effects (i.e.,

[6] Project Prominence is determined by contrast rating, scale dominance, and spatial dominance.
[7] VAC is defined as the extent to which the complexity of the landscape can absorb new elements without changing the overall visual character of the area.

significant impacts to scenic character and scenic quality) is a function of the visual contrast between the project and the existing landscape character (BLM, 1986).

At each KOP, existing landforms, vegetation, and structures were described using the basic components of form, line, color, and texture. The addition of project features was then evaluated using simulations, and was described using the same elements of form, line, color, and texture. Appendix L includes tables that rate and score the degree of expected contrast.

The level of contrast was assessed for all project components pertaining to operation of P3. The level of visual contrast expected to result from construction of P3 or decommissioning-related activities related to MGS Units 1 and 2 was estimated based on a knowledge of the anticipated activities and equipment that would be present. No photo simulations of construction or decommissioning were developed.

Scale Dominance

The scale of an object relative to the visible expanse of the landscape that forms its setting determines its degree of scale dominance (BLM, 1986). Scale dominance is "the relationship between two or more objects being compared in terms of apparent size" (BLM, 1986). At each KOP, the scale dominance of the project as compared with the existing visual conditions was assessed and scored according the CEC Methodology in Draft Appendix VR-1 (2015). Scores rating scale dominance for each KOP were assigned and were ultimately used to inform the Project Prominence Rating and potential impact of the project. Appendix L contains individual tables detailing the Scale Dominance ratings for each KOP.

Spatial Dominance

Spatial Dominance is described as the dominance of the project in the setting or landscape situation backdrop (BLM, 1986). Each KOP was ranked based on the composition of the landscape, the spatial position of the project, and the backdrop of the project, according to the CEC Methodology in Draft Appendix VR-1 (2015). Each of the sub-element scores for "composition of landscape, spatial position of the project, and backdrop of the project" were then tallied to determine the overall spatial dominance of the project from each KOP. Appendix L contains individual tables detailing the Spatial Dominance ratings for each KOP.

4.13.2.2.3 Visual Absorption Capability

VAC is defined as the extent to which the complexity of the landscape can absorb new elements without changing the overall visual character of the area. Two of the most important factors affecting the VAC of a landscape are: 1) the distance into the landscape a viewer can see from a vantage point; and 2) the complexity of that landscape.

The degree of penetration into the landscape is based on obstructions such as vegetation, structural development, and topography in a given view (CEC, 2015). VAC can be used to predict the visual impact of a project on a landscape. All landscapes and particular views vary in their potential to absorb modifications, but it is generally accepted that areas near landscape focal points have lower capacity to absorb modification or change. Furthermore, the higher the complexity and diversity of a landscape, the higher its VAC. Appendix L contains VAC ratings for each KOP.

4.13.2.2.4 Visual Simulations

Visual simulations of project components were used to evaluate project prominence and assess potential impacts to aesthetic quality that may result from the project. Views of the project were simulated from KOP 1 through KOP 5, as shown on Figures 4.13-4b through 4.13-8b. The simulations serve to provide an illustration of how the project may look from specific key viewing locations that were selected to

represent the VSOI. The general process used to develop these photographic simulations is described below.

Photographic and Three-Dimensional Model Composite Simulation

To ensure a high degree of visual accuracy in the simulations, computer-aided design (CAD) equipment and global positioning systems (GPS) were used to create true-to-scale, computer-generated three-dimensional (3D) models of the project. This translates to using real-world scale and coordinates to site facilities, other site data, and the actual camera locations corresponding to 3D simulation viewpoints. The degree of accuracy of the CAD equipment is absolute; the accuracy for the GPS location data is to within approximately 1 meter, or 3.3 feet.

Microstation/AutoCAD, 3D CAD, and GPS Data Integration

A DEM was used to provide a 3D representation of the earth's surface in the project vicinity, and a CAD site map was imported as a background reference. CAD drawings of both existing and proposed facilities were placed on top of the site map to register and orient the correct locations of KOPs. The 3D massing models of both the existing structures and the proposed project were generated in real-world scale. The GPS camera positioning information was then referenced to the 3D data set.

Model View Professional/3D-Studio/Adobe Photoshop

An electronic camera lens matches the camera lens that was actually used in the field. An 8-megapixel camera with a 50-millimeter lens was used consistently throughout the process. This lens selection allows for viewing the computer-generated model in the same way that the project would be viewed in the field.

Next, the digital photograph is transferred into the 3D database as an environment in which the view of the 3D model is generated. To generate the correct view relative to the actual photograph, the electronic camera is placed in the digital environment at a location corresponding to the real-world location from which the photograph was taken. This is provided by GPS records collected during field study. From here, the 3D wire-frame model is displayed on top of the existing structures, topography, or natural features to ensure proper alignment, scale, angle, and distance. When all lines of the wire-frame model exactly match the photograph, the camera target position is confirmed. To complete this phase, the sun angle is set, materials and textures are applied, and the composite image is rendered through a computer-imaging process known as ray tracing. Any additional filters required for appropriate atmospheric conditions (such as blur, focus, or haze) are applied at this time. The photographic simulations developed for this project have been designed to be viewed 12 inches from the viewer's eye when printed on 11-inch by 17-inch paper. This distance portrays the most realistic life-sized image from the location of the KOPs.

4.13.2.3 Assessment of Visual Effects

4.13.2.3.1 Construction Period Visual Impacts

Construction of the project is estimated to take approximately 21 months, and is expected to begin in October 2018, with completion by June 2020. Construction operations are anticipated to generally occur between 7:00 a.m. and 6:00 p.m., Monday through Friday. Access to the project site would be from North Harbor Drive; beyond this entrance, access would be self-contained in the existing MGS area.

Construction of the project would require construction laydown areas, mobile trailers for construction operations staff, and parking for personnel and equipment. Figure 2.9-3 in Chapter 2.0 (Project Description) details the location of laydown areas, access roads, and proposed locations for mobile

trailers. The Project Description also provides details regarding amounts and locations of cut-and-fill/ grading that would occur during construction.

During project construction, construction activities, materials, equipment, trucks, temporary structures, and vehicles would be visible from areas east and west of the project. Specifically, views from McGrath State Beach are likely to have the most unobstructed views of the construction activities, because P3 is closest to this beach, and not obstructed by the existing MGS.

Although visual change associated with construction activities would introduce movement, equipment, and structures not currently occurring in the area, these impacts will be temporary in nature. Therefore, construction period impacts will be less than significant.

Indirect impacts associated with construction of the project may include impacts associated with fugitive dust, night lighting, and the presence of construction equipment. Construction activities would be conducted in a manner that minimizes (visible) dust emissions, and hours of construction are not anticipated to last beyond 6:00 p.m. Any nighttime lighting that is required will be positioned to face downward and away from beach, residential, and agricultural uses, as is practicable for safety. Therefore, potential indirect impacts to visual resources are also considered temporary, and less than significant.

4.13.2.3.2 Direct and Indirect Visual Impacts Related to Operations

The project would be clearly visible from the west, and partially screened from the east with less contiguous visibility from populated areas of Oxnard that are east of the project. KOP Figures 4.13-4b through 4.13-8b depict existing and simulated views from each of the five selected KOPs. Tables for KOPs 1 through 5 in Appendix L rank the Project Prominence attributes based on the simulated views of the project. These five sensitive viewing areas were identified as representative of viewers who are likely to be most susceptible to visual impacts in their viewshed as a result of the project. The simulations serve to present a representative sample of the existing landscape settings contained in the VSOI, as well as an illustration of how the project may look from specific valued locations in the VSOI. Each of the five KOPs and resulting project impacts to visual resources are described below.

Key Observation Point No. 1

KOP 1 is on Mandalay State Beach, just west of its intersection with West 5th Street and Mandalay Beach Road (Figure 4.13-1). The existing Landscape Inventory View was ranked Low to Moderate.

Figure 4.13-4b indicates the MGS stack and Units 1 and 2 would remain the dominant features of this viewshed even with operation of P3. From this distance, the P3 stack and CTG are visible, but somewhat screened by the existing MGS. Contrast rating indicates the proposed P3 would have a low degree of contrast with the existing conditions in terms of form and line, and no degree of contrast in terms of color or texture (see Appendix L, rankings for KOP 1). This is because the proposed P3 facility would mimic much of the dominant form and line associated with the existing MGS. Additionally, the scale of the proposed P3 stack would be subordinate to the existing MGS.

Future views from KOP 1 would be co-dominant between the existing MGS and the proposed P3. Therefore, the overall Project Prominence would have a moderate degree of "prominence," but would not substantially contrast with the existing visual character. This, combined with the high VAC, indicates operation of the proposed P3 facility would have less-than-significant impacts to existing measures of visual character and quality of the site and its surroundings, as viewed from KOP 1.

Key Observation Point No. 2

KOP 2 is in Mandalay State Beach and situated just west of Mandalay County Park (Figure 4.13-1). The existing Landscape View Inventory from KOP 2 was ranked Low to Moderate. Due to its proximity to KOP 1, KOP 2 shares the same basic existing and proposed visual character as KOP 1.

Figure 4.13-5b indicates the MGS Units 1 and 2 and stack would remain the dominant features from this view. The proposed P3 stack and CTG would be highly visible from this distance. Contrast rating indicates the project would have a low degree of contrast with the existing conditions in terms of form and line, and no degree of contrast in terms of color or texture (Appendix L, rankings for KOP 2). This is because the proposed P3 facility would mimic much of the dominant form and line associated with the existing MGS. Additionally, the scale (height, bulk, and mass) of the proposed P3 stack and CTG would be subordinate to the existing MGS; however, the scale of the man-made features of the landscape would increase in overall size.

From KOP 2, the proposed P3 would appear co-dominant with the existing MGS, with the existing MGS stack commanding viewer attention due to the height and bright orange–and-white coloring. Therefore, the overall Project Prominence would have a moderate degree of "prominence." However the proposed P3 would not substantially contrast with the existing visual character due to similarities in form, line, color, texture, and scale. These factors, combined with the high VAC, indicate operation of the project would have less-than-significant impacts to existing measures of visual character and quality of the site and its surroundings.

Key Observation Point No. 3

KOP 3 is approximately 0.22 mile northwest of the proposed P3 stack, and is just west of McGrath Lake and south of the Santa Clara Estuary (Figure 4.13-1). The existing Landscape View Inventory was ranked Low to Moderate.

Figure 4.13-6b indicates the proposed P3 facility would dominate views from KOP 3 along McGrath State Beach. From this KOP, the proposed CTG and stack associated with P3 would be highly visible, and the physical distance between the two plants much more pronounced compared to views facing north (i.e., KOP 1 and 2).

Due to the proximity of this KOP to the project, the scale of P3 would appear to be roughly equal to the existing MGS, making them appear co-dominant. Contrast rating indicates the proposed P3 would have a low degree of contrast with the existing dominant measures of form, line, color, and texture (Appendix L, rankings for KOP 3). This is because the P3 design/facilities would mimic much of the dominant form, line, and scale of the existing MGS.

Future views from KOP 3 would be co-dominant between the existing MGS and the proposed P3. However at this distance, P3 would appear slightly more dominant than MGS. Therefore, the overall Project Prominence would have a moderate degree of "prominence," but would not substantially contrast with the existing visual character.

The factors described above, combined with the high VAC, indicate operation of the proposed P3 facility would have less-than-significant impacts to existing measures of visual character and quality of the site and its surroundings.

Key Observation Point No. 4

KOP 4 is on Victoria Avenue just south of its intersection with West 5th Street near the Rancho Victoria Plaza (Figure 4.13-1). West 5th Street is a locally designated scenic road, and the agricultural area (also

known as Oxnard-Ventura Greenbelt) just west of this KOP is a designated scenic area (City of Oxnard, 2006). The existing Landscape View Inventory was ranked Moderate at this KOP.

Figure 4.13-7b indicates the existing MGS Units 1 and 2 are visible from this location, although reduced in scale within the greater landscape due to the KOP's distance from the project. Contrast rating indicates the proposed P3 would have a moderate degree of contrast from this location (Appendix L-1, rankings for KOP 4). This is because the dominant feature in this existing view is the agricultural lands and coastal dunes in the fore and mid-ground. Although the respective scales of the existing MGS and proposed P3 are less dominant from this distance, the addition of P3 moderately contrasts with the dominant form, line, color, and textures of the agricultural and dune areas that are important scenic resources to the City of Oxnard (2006).

The P3 facility would have a moderate project prominence; and due to the panoramic and open nature of the existing view, it would have a moderate to high VAC. The proposed P3 facility would have less-than-significant impacts to existing measures of visual character and quality of the site and its surroundings.

Key Observation Point No. 5

KOP 5 is on the eastern side of North Harbor Boulevard at the entrance to the North Shore at Mandalay Bay residential subdivision (Figure 4.13-1). The existing landscape inventory was ranked Moderate from this location.

The simulation produced from this KOP (Figure 4.13-8b) indicates that P3 would be co-dominant with MGS Units 1 and 2, and the stack. Contrast rating indicates the project would have a low degree of contrast with the existing visual conditions in terms of form and line, and no degree of contrast in terms of color or texture (see Appendix L, rankings for KOP 5). This is because the proposed P3 facility would mimic much of the dominant form and line associated with the existing MGS and McGrath Peaker Plant. Additionally, the scale of the proposed P3 stack would be subordinate to the existing MGS; however, the scale of the man-made features of the landscape would increase in overall size. The proposed P3 and existing MGS would appear co-dominant from KOP 5. Therefore, the overall Project Prominence would have a moderate degree of "prominence," but would not substantially contrast with the existing visual character. This, combined with high VAC of the existing view, indicates operation and maintenance of the proposed P3 facility would have less-than-significant impacts to existing measures of visual character and quality of the site and its surroundings.

4.13.2.3.3 Light and Glare

Plant lighting would be required to support, protect, and control the project. Lighting would be required for:

- Building interiors (i.e., control room, administrative rooms, and electrical rooms);
- Exterior entrances to buildings;
- Outdoor equipment platforms and stairways;
- Building perimeter and entrance gate; and
- Parking lot (existing).

The lighting system is intended to provide personnel with illumination for project operation under normal conditions, means of egress under emergency conditions, and emergency lighting to perform manual operations during a power outage of the normal power source. The lighting system would be designed and installed to meet Occupational Safety and Health Administration minimum standards, and to offer maximum illumination of operating work areas while minimizing off-site illumination.

Lighting will be directed downward to avoid backscatter, and shielded from public view to the extent practicable. Lighting not required continuously during nighttime hours will be controlled with sensors or switches operated so that lighting will be on only when needed. Lighting design for the project will be consistent with applicable lighting LORS. See Section 2.7.10.1, Plant Auxiliary and Safety Systems, in the Project Description for further description of lighting.

Although the project may contribute to existing levels of nighttime lighting, the project will not significantly increase the existing night lighting in VSOI. Project lighting will be designed to minimize backscatter, glare, and unnecessary light. In addition, structures and transmission towers will be treated to reduce sun reflectivity and potential glint/glare.

Overall, the addition of the project is not anticipated to create significant glint/glare or night-lighting impacts from backscatter light and night lighting that the average viewer may experience when looking towards the project site. Therefore, impacts from light and glare would be less than significant.

Water Vapor Plume

The project will use evaporative cooling for air intake cooling for the gas turbine. This will not create a visible plume because the resulting moisture in the gas turbine exhaust will be approximately 900 degrees Fahrenheit. Therefore, no visible steam plumes will be created.

4.13.3 Cumulative Impacts Analyses

All five of the cumulative projects identified in Section 4.0 are in the VSOI of the project. The cumulative projects include three residential developments, a shopping center, and a Specific Plan (or community planning document that would facilitate development in the Teal Club Specific Plan Area).

Each of the cumulative projects identified, including P3, would alter the existing visual conditions of the locations at which they are proposed; however, none are of a size and scale to collectively and substantially alter the existing visual character in the VSOI. Therefore, cumulative impacts would not result from any individual minor, or collectively significant, alterations of visual character.

P3 would incrementally alter existing views of the project site; however, operation of the project would not significantly change the existing visual character and quality of these views. Therefore, the development of these five additional projects, in addition to P3 would not cause significant impacts to scenic quality and/or character of the VSOI.

4.13.4 Mitigation Measures

Although project impacts would be less than significant and no mitigation is required, measures have been designed to help minimize visual impacts. The following will be incorporated in the project design:

VIS-1 Project Structures

Structures, stacks, buildings, and storage tanks will be painted in accordance with CEC Guidelines. Colors will be selected to blend in with the existing visual conditions.

The colors will provide subtle variations and contrast. The selected color will help the project to blend more naturally with the natural setting.

Reflectivity of surfaces will be reduced by using non-reflective elements where practical.

VIS-2 Lighting

Lighting on the project site will be limited to areas required for safety, will be directed on site and downward to avoid backscatter, and will be shielded from public view to the extent practical.

All lighting that is not required to be on during nighttime hours will be controlled with sensors or switches operated so that the lighting will be on only when needed.

High-pressure sodium vapor fixtures will be used. These lights typically produce low-intensity amber light, which will reduce visual contrast with the night sky.

Stacks and other tall project elements will be lit in accordance with Federal Aviation Administration guidelines.

4.13.5 Laws, Ordinances, Regulations, and Standards

P3 will be constructed and operated in accordance with all LORS applicable to visual resources. Federal, state, and local LORS applicable to visual resources are discussed below and summarized in Table 4.13-2, Applicable Laws, Ordinances, Regulations, and Standards.

4.13.5.1 Federal

There are no federal LORS for visual or scenic resources that would apply to the project.

4.13.5.2 State

4.13.5.2.1 California Department of Parks and Recreation – McGrath State Beach General Plan

The *McGrath State Beach General Plan* provides goals and policies of McGrath State Beach, including those related to visual resources (California Department of Parks and Recreation, 1979). The plan includes policies to protect scenic values of the park, including both interior views and views from adjacent lands, by carefully siting and landscaping all developments in the unit. The project does not fall within the park; however, it is adjacent to it, and should consider effects to views from the park if possible. As described above, impacts on the park, as represented by KOP 3, would be less than significant. In addition, the measures identified in Section 4.13.4 will be incorporated in the project design to minimize visual impacts.

4.13.5.2.2 California Department of Transportation – California Scenic Highway Program

U.S. Highway 1 and U.S. Highway 101 are both eligible State Scenic Highways in Ventura County. These highways are in the project vicinity (5 miles), but are not adjacent to the project. Additionally, the State of California does not specifically identify sections of those highways in Ventura County as having specific scenic vistas or viewpoints of importance (Caltrans, 2015).

4.13.5.3 Local

4.13.5.3.1 City of Oxnard – General Plan

The *City of Oxnard 2030 General Plan Goals & Policies* contains several policies that pertain to protection of visual resources and preservation of views and scenic values found in the City's landscapes (City of Oxnard, 2011). The plan defines the City's beaches and coastline as primary scenic resources. Policies that apply to visual resources and are relevant to the project are summarized below:

Policy ER-1.1 – Protect Oxnard's Natural Cultural Resources: Protects the City's scenic areas from unnecessary encroachment and requires full mitigation if harm is necessary. P3 would comply with this standard because P3 would not significantly contrast with the existing visual character of views towards its location.

Policy ER-1.2 – Protect Surrounding Agriculture and Open Space: Protects open space and agricultural uses by adherence to existing development guidelines and greenbelt programs. Although the project is adjacent to both open space and agricultural lands, it would not encroach on them. Therefore, the project would comply with this policy.

Policy ER-6.1 – Incorporate Views in New Development: Preserves important public views and viewsheds, requiring development to provide physical breaks so that access to existing views and view corridors is not impeded. Although the project is visible within certain important public views in the VSOI, it would not significantly impede or reduce those existing views. Therefore, the project would comply with this policy.

Policy ER-6.2 – Protect and Enhance Major Scenic Resources: The scenic resources that are to be protected and enhanced under this policy that apply to the project include the beaches in the viewshed of the project. P3 would comply with this standard because P3 would not significantly contrast with the existing visual character.

Policy ER-6.3 – Preserve Views of Small Aesthetic Resources: Preserve views of significant small-scale plant communities such as wetlands, riparian vegetation, man-made water features, and other similar features. This would include McGrath Lake, which is in the project viewshed. P3 would comply with this standard because P3 would not significantly contrast with the existing views of McGrath Lake.

Policy ER-6.5 – Control of Lighting and Glare: Requires all outdoor light fixtures use low-energy shield light fixtures where public safety would not be compromised. Measure VIS-2, described in Section 4.13.4, will ensure the project will comply with this standard.

Policy ER-8.1 – Protect Shoreline: Projects the shoreline, including views to and along the Pacific Ocean. P3 would comply with this standard because P3 would not significantly contrast with the existing visual character.

Policy ER-8.2 – New Coastal Development: Requires new development along primary beach access routes to maintain and enhance scenic quality of those routes. Construction and operation of P3 will not significantly alter the existing visual character of existing views from beach access routes. Therefore, construction and operation of P3 will not significantly diminish the existing visual quality of views from beach access routes. Implementation of Measures VIS-1 and VIS-2, described in Section 4.13.4, will ensure that the project maintains existing levels of Landscape View Inventory (see Section 4.13.1.3 above).

4.13.5.3.2 City of Oxnard – Coastal Land Use Plan

The *City of Oxnard CLUP* includes policies for resource management within the Coastal Zone Boundary (City of Oxnard, 1982). The project site is within the Coastal Zone Boundary and in the Coastal Energy Facilities Sub-Zone. The plan includes policies for design development to protect scenic and visual qualities and views to and along coastal areas. It also states that development should be compatible with surrounding areas; minimize alteration of existing natural landforms; minimize impacts to visual resources in the area; and restore and enhance visual quality of degraded areas where feasible. It also states that development should adhere to height restrictions per City Zoning Ordinance to avoid blocking views. P3 will comply with the CLUP.

4.13.5.3.3 City of Oxnard – Coastal Zoning Ordinance

The Coastal Zoning Ordinance includes codified ordinances for lands within the Coastal Zone Boundary.

Section 37-5.2.2 (6) Permitted Uses, Variances: This ordinance requires that if a variance is granted it would not adversely affect the visual qualities of access along the shoreline. The project would not require a variance, because an electrical power-generating plant and accessory uses normally associated with said power-generating facility is a conditionally permitted use in the EC sub-zone, subject to the approval of a coastal development permit (City Code Section 17-20).

Chapter 17 Coastal Zoning. Article IV. General Coastal Development and Resource Standards, Section 17-46 Design Standards: This section includes standards that development in the Coastal Energy Facilities Sub-Zone are compatible with existing development and harmonize with the existing landscape character. P3 would comply with this standard because P3 would not significantly contrast with the existing visual character of views towards its location.

4.13.5.3.4 Ventura County – General Plan

According to the *Ventura County General Plan*, the project site is in Urban Land Use (City of Oxnard); however, it is adjacent to Agricultural and Open Space County land uses (Ventura County, 2013). The plan includes policies to discourage outward expansion of urban development. It also states that open space should define boundaries around urban areas to prevent urban sprawl. The project area is not in any Scenic Resource Areas, as designated in the Ventura County General Plan. North Harbor Boulevard, which runs adjacent to the eastern site boundary, is defined as an eligible County Scenic Highway; however, no designation has been made, and no specific management prescriptions have been applied.

4.13.6 Involved Agencies and Agency Contacts

Table 4.13-3 provides relevant agency contacts for the LORS discussed above.

4.13.7 Permits Required and Permit Schedule

Other than certification from the CEC, no state, federal, or local permits are required by the project for management of visual resources.

4.13.8 References

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Ventura County Planning Division, 2013. Ventura County General Plan, Goals, Policies, and Programs. Last amended October 22, 2013

Table 4.13-1
Major Component Design Characteristics

Structure	Quantity	Size, L×W×H (feet)	Color/Materials
Natural gas compressor enclosure[1]	1	35 × 12 × 15	
CTG	1	107 × 52 × 79 (top of air filter)[2]	Industrial equipment
SCR	1	87 × 33 × 99[3]	Industrial equipment
SCR stack	1	22 feet diameter × 188 feet high	Steel vertical cylinder, painted gray
Cooling fan module	1	65 × 38 × 18	
Transmission structure	1	100-foot-high A-Frame	Weathered or galvanized steel structure
Transmission structure	3	100-foot-high single-circuit monopole	Weathered or galvanized steel structure
Existing MGS Structures to be Reused by P3			
Water treatment building	1	68 × 86 × 15	Corrugated steel, painted gray
Demineralized water storage tank	2	28 feet diameter × 32 feet	Steel tank, painted gray
Service water storage tank	1	40 feet diameter × 48 feet	Steel tank, painted gray
Outfall structure	1		
Administration building	1	43 × 142 × 12	Corrugated steel, painted gray
Aqueous ammonia storage tanks	1	9 feet diameter × 30 feet	Steel horizontal tank, painted white
Warehouse building, portion to be reconfigured as control center	1	100 feet × 191 feet × 10 feet (total) 15 feet × 40 feet × 10 feet (new control center)	

Notes:

[1] Sound attenuation enclosure.

[2] The 52-foot width is based on the width of the intake filter. Used for envelope. Actual turbine enclosure width is approximately 28 feet.

[3] The 25-foot width does not include wingwalls for tempering fans. Width including wing walls is approximately 53 feet.

This table extracted from Project Description document.

All dimensions shown are considered accurate at this time and agree with electronic drawings/model.

Gray is Slate Gray, Sherwin Williams 4026 (LRV 36) or similar.

CTG = combustion turbine generator
GE = General Electric
HRSG = heat recovery steam generator
MGS = Mandalay Generating Station
NO_X = oxides of nitrogen
P3 = Puente Power Project
SCR = selective catalytic reduction

Table 4.13-2
Summary of LORS – Visual Resources

LORS	Administering Agency	Applicability	AFC Section
Federal			
There are no applicable federal LORS.			
State			
McGrath State Beach General Plan, Resource Management Policy	California Department of Parks and Recreation	Protect the scenic values of the property, including both interior views and views from adjacent lands, by carefully siting and landscaping all developments in the unit.	4.13.5.2
State Scenic Highway Requirements	California Department of Transportation	Requirements are applicable to state-designated scenic highways. U.S. Highways 1 and 101 are in the vicinity of the project and are both eligible as State Scenic Highways. The state does not identify sections of those highways in Ventura County as having specific scenic attributes.	4.13.5.2
Local			
City of Oxnard General Plan policies; Policy ER-1.1	City of Oxnard; Development Services Department, Planning Division	Defines the City's beaches and coastline as primary natural scenic resources. Protects the City's scenic areas from unnecessary encroachment and for full mitigation, if harm is necessary.	4.13.5.3
City of Oxnard General Plan policies; Policy ER-1.2	City of Oxnard; Development Services Department, Planning Division	Protects open space around the City.	4.13.5.3
City of Oxnard General Plan policies; Policy ER-6.1	City of Oxnard; Development Services Department, Planning Division	Provides for preservation of important public views and viewsheds, requiring development to provide physical breaks to allow views into vistas and view corridors.	4.13.5.3
City of Oxnard General Plan policies; Policy ER-6.2	City of Oxnard; Development Services Department, Planning Division	Provides for protection and enhancement of scenic resources of beaches.	4.13.5.3

Table 4.13-2
Summary of LORS – Visual Resources (Continued)

LORS	Administering Agency	Applicability	AFC Section
City of Oxnard General Plan policies; Policy ER-6.3	City of Oxnard; Development Services Department, Planning Division	Provides for preservation of small-scale views such as plant communities and wetlands wherever possible.	4.13.5.3
City of Oxnard General Plan policies; Policy ER-6.5	City of Oxnard; Development Services Department, Planning Division	Requires all outdoor light fixtures use low energy shield light fixtures where public safety would not be compromised.	4.13.5.3
City of Oxnard General Plan policies; Policy ER-8.1	City of Oxnard; Development Services Department, Planning Division	Protects the shoreline and views to and along the Pacific Ocean.	4.13.5.3
City of Oxnard General Plan policies; Policy ER-8.2	City of Oxnard; Development Services Department, Planning Division	Requires new development along primary beach access routes to maintain and enhance scenic quality of those routes.	4.13.5.3
City of Oxnard Coastal Land Use Plan; Coastal Act Policy 30251	City of Oxnard; Planning and Environmental Services	Scenic and visual qualities of coastal areas shall be protected, and development should be sited to protect views to and along coastal areas. Development should minimize alteration of natural landforms and be compatible with surround areas and restore and enhance visual quality in degraded areas, where feasible.	4.13.5.3
City of Oxnard Coastal Land Use Plan; Local Coastal Policy 37	City of Oxnard; Planning and Environmental Services	New development in the coastal zone shall be designed to minimize impact on visual resources in the area.	4.13.5.3
City of Oxnard Coastal Land Use Plan; Local Coastal Policy 38	City of Oxnard; Planning and Environmental Services	Development should adhere to height restrictions per the City Zoning Ordinance to avoid blocking views.	4.13.5.3
City of Oxnard Coastal Zoning Ordinance; Sec. 37-5.2.2 (6) Permitted Uses, Variances	City of Oxnard; Development Services	Requires that if a variance is granted it would not adversely affect the visual qualities of access along the shoreline.	4.13.5.3

Table 4.13-2
Summary of LORS – Visual Resources (Continued)

LORS	Administering Agency	Applicability	AFC Section
City of Oxnard Code or Ordinances, Chapter 17 Coastal Zoning. Article IV. General Coastal Development and Resource Standards, Section 17-46 Design Standards	City of Oxnard; Development Services	Outlines design review standards for the Coastal Energy Facilities Sub-Zone, including compatibility and harmony with existing development.	4.13.5.3
Ventura County General Plan	Ventura County Planning Division	Project area is within Urban Land Use per the Ventura County General Plan and adjacent to Open Space – Urban Reserve and Agricultural Land Use. Policies for Urban Land Use include discouraging outward expansion of existing urban development. There are no policies for Agricultural land use that would apply. Open Space should define boundaries around urban-designated areas to prevent urban sprawl and promote efficient development in existing urban areas. The project area is not in a County Scenic Resource Area. North Harbor Boulevard is an eligible County Scenic Highway, but no designation has been made.	4.13.5.3

Table 4.13-3
Involved Agencies and Agency Contacts

Issue	Agency	Contact/Title	Telephone	E-mail
Application for Certification Requirements	California Energy Commission Energy Facilities Siting Division Community Resources Unit	Mark Hamblin, Senior Planner/ Supervisor	(916) 654-5107	Mark.hamblin@energy..ca.gov
McGrath State Park Management	California Department of Parks and Recreation	Barry Trute Associate Park and Recreation Specialist	(916) 653-3495	Barry.trute@parks.ca.gov
Applicability of State Scenic Highway Requirements	Caltrans	Ken Murray, L.A. #4345 Senior Landscape Architect	(916) 653-0086	kenneth.murray@dot.ca.gov
Compliance with City of Oxnard General and Coastal Plan, Policies and Ordinances	City of Oxnard; Development Services Department, Planning Division	Ashley Golden Interim Planning Division Manager	(805) 385-7858	ashley.golden@ci.oxnard.ca.us
Compliance with Ventura County General and Coastal Plan, Policies, and Ordinances	Ventura County Resource Management Agency, Planning Division	Kimberly L. Prillhart Planning Director	(805) 654-2481	kim.prillhart@ventura.org

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Source: Imagery, ESRI 2013.

3 Key Observation Point and Photo Direction

Puente Power Project (P3) Site

Mandalay Generating Station Property

Greenbelt

Stack Visibility

Neither Stack Visible

Only Existing Stack Visible

Both Stacks Visible

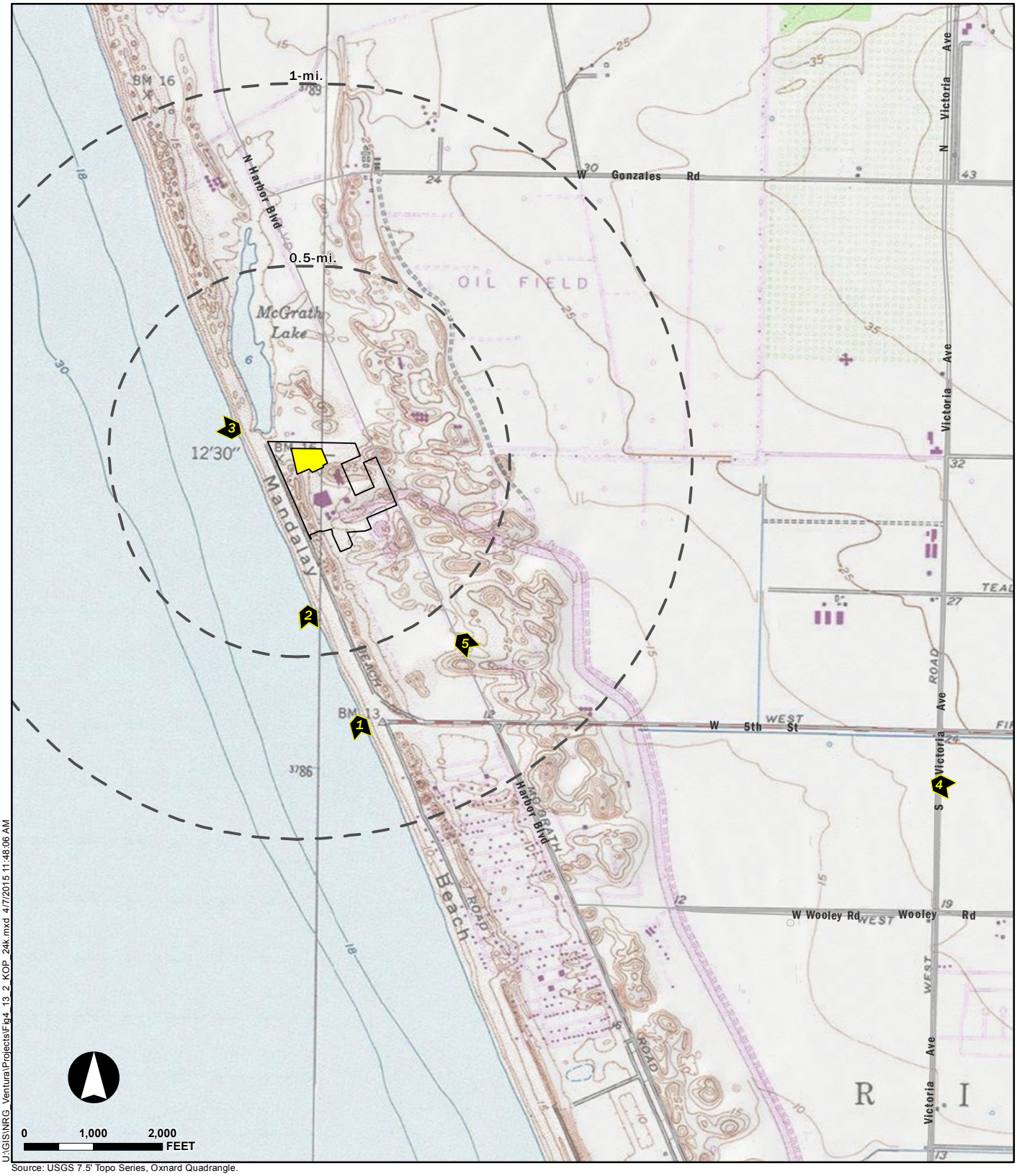
0 3,000 6,000 FEET

KEY OBSERVATION POINTS
VISUAL SPHERE OF INFLUENCE

NRG
Puente Power Project
Oxnard, California

April 2015

FIGURE 4.13-1



U:\GIS\NRG_Ventura\Projects\Fig4_13_2_KOP_24k.mxd 4/7/2015 11:48:06 AM

Source: USGS 7.5' Topo Series, Oxnard Quadrangle.

3 Key Observation Point and Photo Direction

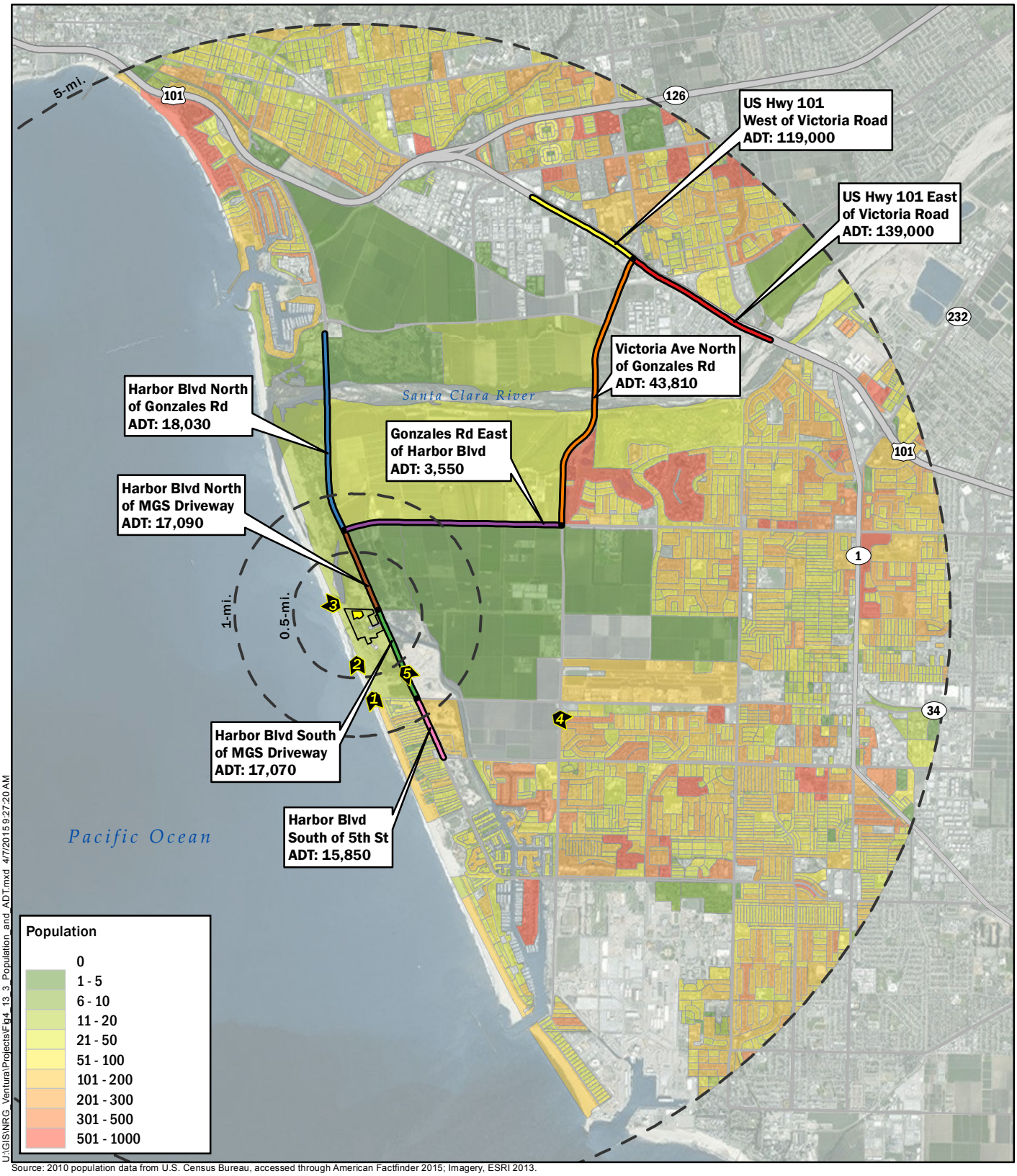
Puente Power Project (P3) Site

Mandalay Generating Station Property

KEY OBSERVATION POINTS

NRG
Puente Power Project
April 2015 Oxnard, California

FIGURE 4.13-2



U:\GIS\NRG_Ventura\Projects\Fig4_13_3_Population_and_ADT.mxd 4/7/2015 9:27:20 AM

Source: 2010 population data from U.S. Census Bureau, accessed through American Factfinder 2015; Imagery, ESRI 2013.

3 Key Observation Point and Photo Direction

Puente Power Project Site

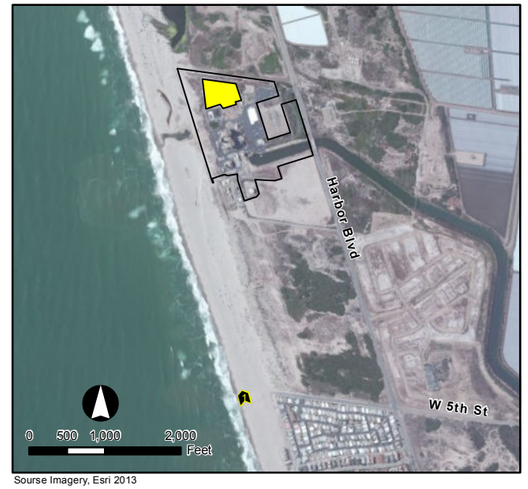
Mandalay Generating Station Property

0 4,000 8,000 FEET

POPULATION AND AVERAGE DAILY TRIPS

NRG
Puente Power Project
April 2015 Oxnard, California

FIGURE 4.13-3



Sourse Imagery, Esri 2013

Key Observation Point and Photo Direction

Puente Power Project Site

Mandalay Generating Station Property

Photograph Information

Time of photograph:	12:26 PM
Date of photograph:	2-6-15
Weather condition:	Cloudy
Bearing:	North
Latitude:	34°11’51.01”N
Longitude:	119°14’55.86”W
Distance to stack:	N/A
Camera:	Nikon D700
Lens:	Nikon 50mm f/1.4D AF
Focal length:	50mm
Aperture:	F/14

Photograph above is intended to be viewed 12” from viewer’s eyes when printed on 11” x 17” paper. The photograph below was cropped, top and bottom, to show a wide-angle view of the area; the area in yellow depicts the location of the above imagery.

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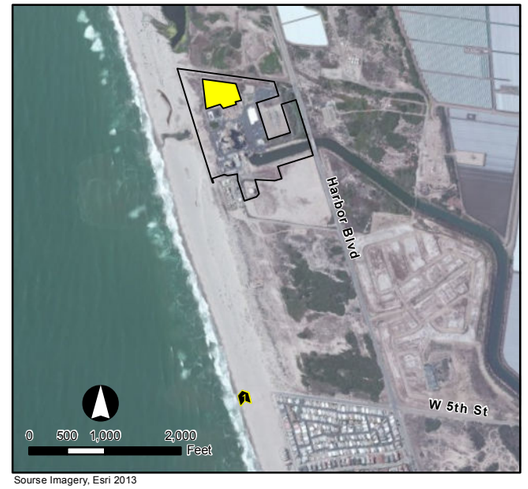
EXISTING CONDITIONS FROM KEY OBSERVATION POINT 1

NRG
Puente Power Project
Oxnard, California

April 2015

FIGURE 4.13-4A



Sourse Imagery, Esri 2013

Key Observation Point and Photo Direction

Puente Power Project Site

Mandalay Generating Station Property

Photograph Information

Time of photograph:	12:26 PM
Date of photograph:	2-6-15
Weather condition:	Cloudy
Bearing:	North
Latitude:	34°11’51.01”N
Longitude:	119°14’55.86”W
Distance to stack:	3,882 feet
Camera:	Nikon D700
Lens:	Nikon 50mm f/1.4D AF
Focal length:	50mm
Aperture:	F/14

Photograph above is intended to be viewed 12” from viewer’s eyes when printed on 11” x 17” paper. The photograph below was cropped, top and bottom, to show a wide-angle view of the area; the area in yellow depicts the location of the above imagery.

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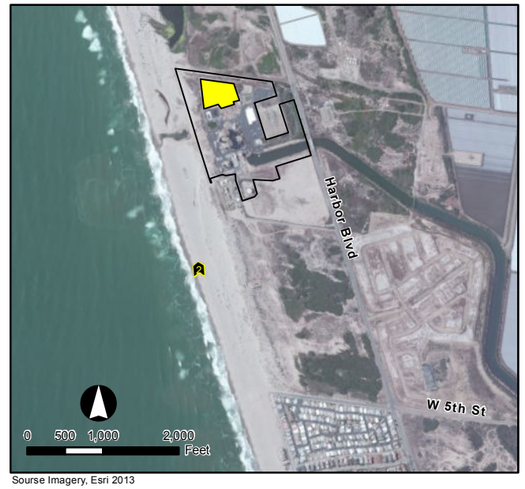
PHOTOGRAPHIC SIMULATION FROM KEY OBSERVATION POINT 1

NRG
Puente Power Project
Oxnard, California

April 2015

FIGURE 4.13-4B



Sourse Imagery, Esri 2013

Key Observation Point and Photo Direction

Puente Power Project Site

Mandalay Generating Station Property

Photograph Information

Time of photograph:	1:02 PM
Date of photograph:	2-6-15
Weather condition:	Cloudy
Bearing:	North
Latitude:	34°12’6.52”N
Longitude:	119°15’5.03”W
Distance to stack:	N/A
Camera:	Nikon D700
Lens:	Nikon 50mm f/1.4D AF
Focal length:	50mm
Aperture:	F/11

Photograph above is intended to be viewed 12” from viewer’s eyes when printed on 11” x 17” paper. The photograph below was cropped, top and bottom, to show a wide-angle view of the area; the area in yellow depicts the location of the above imagery.

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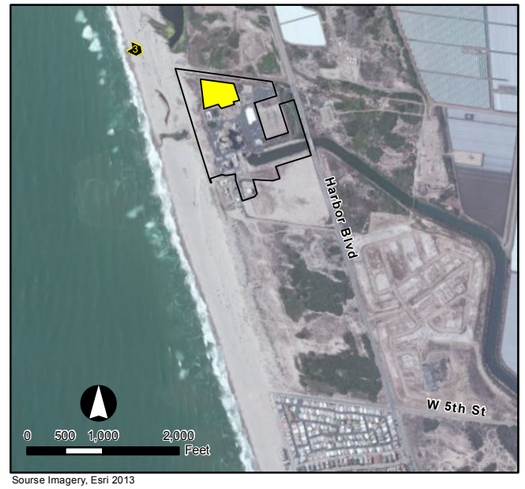
EXISTING CONDITIONS FROM KEY OBSERVATION POINT 2

NRG
Puente Power Project
Oxnard, California

April 2015

FIGURE 4.13-5A



Sourse Imagery, Esri 2013

Key Observation Point and Photo Direction

Puente Power Project Site

Mandalay Generating Station Property

Photograph Information

Time of photograph:	1:02 PM
Date of photograph:	2-6-15
Weather condition:	Cloudy
Bearing:	North
Latitude:	34°12’6.52”N
Longitude:	119°15’5.03”W
Distance to stack:	2,216 feet
Camera:	Nikon D700
Lens:	Nikon 50mm f/1.4D AF
Focal length:	50mm
Aperture:	F/11

Photograph above is intended to be viewed 12” from viewer’s eyes when printed on 11” x 17” paper. The photograph below was cropped, top and bottom, to show a wide-angle view of the area; the area in yellow depicts the location of the above imagery.

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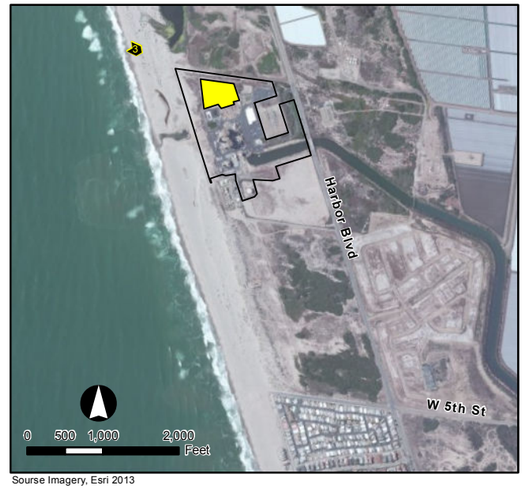
PHOTOGRAPHIC SIMULATION FROM KEY OBSERVATION POINT 2

NRG
Puente Power Project
Oxnard, California

April 2015

FIGURE 4.13-5B



Sourse Imagery, Esri 2013

Key Observation Point and Photo Direction

Puente Power Project Site

Mandalay Generating Station Property

Photograph Information

Time of photograph:	1:50 PM
Date of photograph:	2-6-15
Weather condition:	Cloudy
Bearing:	South
Latitude:	34°12'33.42"N
Longitude:	119°15'18.96"W
Distance to stack:	N/A
Camera:	Nikon D700
Lens:	Nikon 50mm f/1.4D AF
Focal length:	50mm
Aperture:	F/13

Photograph above is intended to be viewed 12" from viewer's eyes when printed on 11" x 17" paper. The photograph below was cropped, top and bottom, to show a wide-angle view of the area; the area in yellow depicts the location of the above imagery.

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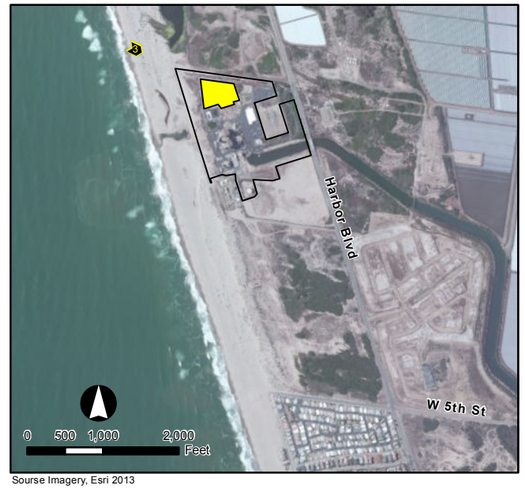
EXISTING CONDITIONS FROM KEY OBSERVATION POINT 3

NRG
Puente Power Project
Oxnard, California

April 2015

FIGURE 4.13-6A



Sourse Imagery, Esri 2013

Key Observation Point and Photo Direction

Puente Power Project Site

Mandalay Generating Station Property

Photograph Information

Time of photograph:	1:50 PM
Date of photograph:	2-6-15
Weather condition:	Cloudy
Bearing:	South
Latitude:	34°12'33.42"N
Longitude:	119°15'18.96"W
Distance to stack:	1,150 feet
Camera:	Nikon D700
Lens:	Nikon 50mm f/1.4D AF
Focal length:	50mm
Aperture:	F/13

Photograph above is intended to be viewed 12" from viewer's eyes when printed on 11" x 17" paper. The photograph below was cropped, top and bottom, to show a wide-angle view of the area; the area in yellow depicts the location of the above imagery.

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PHOTOGRAPHIC SIMULATION FROM KEY OBSERVATION POINT 3

NRG
Puente Power Project
Oxnard, California

April 2015

FIGURE 4.13-6B

Sourse Imagery, Esri 2013

Photograph above is intended to be viewed 12” from viewer’s eyes when printed on 11” x 17” paper. The photograph below was cropped, top and bottom, to show a wide-angle view of the area; the area in yellow depicts the location of the above imagery.

Key Observation Point and Photo Direction

Puente Power Project Site

Mandalay Generating Station Property

Photograph Information

Time of photograph:	3:49 PM
Date of photograph:	2-6-15
Weather condition:	Partly Cloudy
Bearing:	Northwest
Latitude:	34°11’43.61”N
Longitude:	119°13’15.72”
Distance to stack:	N/A
Camera:	Nikon D700
Lens:	Nikon 50mm f/1.4D AF
Focal length:	50mm
Aperture:	F/13

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EXISTING CONDITIONS FROM KEY OBSERVATION POINT 4

NRG
Puente Power Project
Oxnard, California

April 2015

FIGURE 4.13-7A

Sourse Imagery, Esri 2013

Photograph above is intended to be viewed 12” from viewer’s eyes when printed on 11” x 17” paper. The photograph below was cropped, top and bottom, to show a wide-angle view of the area; the area in yellow depicts the location of the above imagery.

Key Observation Point and Photo Direction

Puente Power Project Site

Mandalay Generating Station Property

Photograph Information

Time of photograph:	3:49 PM
Date of photograph:	2-6-15
Weather condition:	Partly Cloudy
Bearing:	Northwest
Latitude:	34°11’43.61”N
Longitude:	119°13’15.72”
Distance to stack:	1.96 miles
Camera:	Nikon D700
Lens:	Nikon 50mm f/1.4D AF
Focal length:	50mm
Aperture:	F/13

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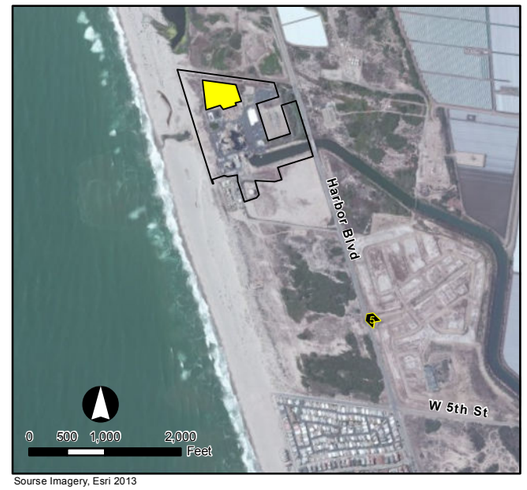
PHOTOGRAPHIC SIMULATION FROM KEY OBSERVATION POINT 4

NRG
Puente Power Project
Oxnard, California

April 2015

FIGURE 4.13-7B



Sourse Imagery, Esri 2013

Key Observation Point and Photo Direction

Puente Power Project Site

Mandalay Generating Station Property

Photograph Information

Time of photograph:	4:17 PM
Date of photograph:	2-6-15
Weather condition:	Partly Cloudy
Bearing:	Northwest
Latitude:	34°12’3.06”N
Longitude:	119°14’38.01”W
Distance to stack:	N/A
Camera:	Nikon D700
Lens:	Nikon 50mm f/1.4D AF
Focal length:	50mm
Aperture:	F/13

Photograph above is intended to be viewed 12” from viewer’s eyes when printed on 11” x 17” paper. The photograph below was cropped, top and bottom, to show a wide-angle view of the area; the area in yellow depicts the location of the above imagery.

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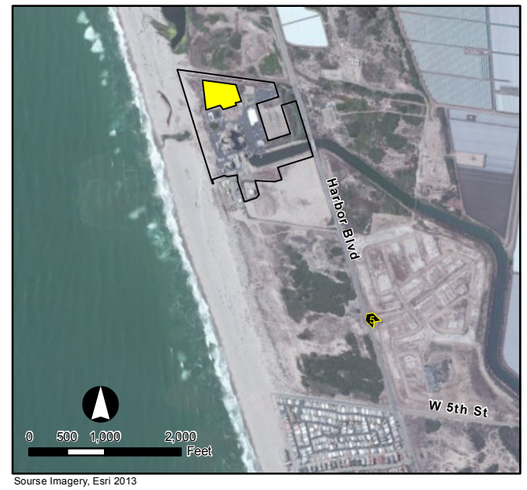
EXISTING CONDITIONS FROM KEY OBSERVATION POINT 5

NRG
Puente Power Project
Oxnard, California

April 2015

FIGURE 4.13-8A



Sourse Imagery, Esri 2013

Key Observation Point and Photo Direction

Puente Power Project Site

Mandalay Generating Station Property

Photograph Information

Time of photograph:	4:17 PM
Date of photograph:	2-6-15
Weather condition:	Partly Cloudy
Bearing:	Northwest
Latitude:	34°12’3.06”N
Longitude:	119°14’38.01”W
Distance to stack:	3,516 feet
Camera:	Nikon D700
Lens:	Nikon 50mm f/1.4D AF
Focal length:	50mm
Aperture:	F/13

Photograph above is intended to be viewed 12” from viewer’s eyes when printed on 11” x 17” paper. The photograph below was cropped, top and bottom, to show a wide-angle view of the area; the area in yellow depicts the location of the above imagery.

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PHOTOGRAPHIC SIMULATION FROM KEY OBSERVATION POINT 5

NRG
Puente Power Project
Oxnard, California

April 2015

FIGURE 4.13-8B