

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 environment in which it would be located.

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 Redondo Beach Energy Project (RBEP) area. 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) relevant to visual resources. Section 5.13.6 lists agencies involved and agency contacts, and Section 5.13.7 discusses permits. Section 5.13.8 lists the references used in preparation of this section.

Figure 5.13-1 shows the location of the RBEP site, and the locations of the viewpoints referenced in this section. The existing views and simulated views of the project from the viewpoints follow as Figures 5.13-2 through 5.13-6. Additional views, shown in Figure 5.13-7, are included at the request of CEC to provide further context in terms of the project area's existing landscape character. No simulations for these views were requested or prepared. All figures are provided at the end of this section.

5.13.1 Affected Environment

5.13.1.1 Introduction

RBEP is a 496-megawatt (MW)¹ natural-gas-fired power plant, consisting of one 3-on-1 combined-cycle gas turbine power block. The power block includes three combustion turbine generators (CTG), three supplemental-fired heat recovery steam generators (HRSG), one steam turbine generator (STG), an air-cooled condenser, and related ancillary equipment. RBEP will be constructed entirely within the existing approximately 50-acre Redondo Beach Generating Station site in Redondo Beach, California. The project will use the existing onsite potable water, natural gas, stormwater, process wastewater, and sanitary pipelines and electrical transmission facilities. No offsite linear developments are proposed as part of the project.

RBEP will use potable water, provided by the California Water Service Company, for construction water and for operational process and sanitary uses. During RBEP operation, stormwater and process wastewater will be discharged to a retention basin and then ultimately to the Pacific Ocean via an existing permitted outfall. Sanitary wastewater will be conveyed to the Los Angeles County Sanitation District via the existing City of Redondo Beach sewer connection. A new onsite 230-kilovolt (kV) transmission interconnection will connect the RBEP power block to the existing onsite Southern California Edison (SCE) 230-kV switchyard.

Construction and demolition activities at the project site are anticipated to last 60 months, from first quarter of 2016 until the end of 2020. The first activities to occur on site will be the dismantling and partial removal of existing Units 1–4. The major generating equipment including steam turbines, generators, boilers, and duct work will be removed, leaving the administration building and western portion of the building that houses Units 1–4 intact. These buildings will be left standing temporarily to provide screening between the construction site of the new power block and Harbor Drive. Construction of the new power block will begin in the first quarter of 2017 and continue through to the end of the second quarter 2019, when it will be ready for commercial operation. Although operational, construction will continue through 2019 including construction of the new control building and the relocation of the Wyland Whaling Wall. The existing Units 5–8 and auxiliary boiler no. 17 will remain in service until the second quarter of 2018. Units 5–8 and auxiliary boiler no. 17 will be demolished starting the first quarter of 2019 through the fourth quarter of 2020. During the demolition and removal of Units 5–8, the Wyland Whaling

¹ Referenced to site ambient average temperature (SAAT) conditions of 63.3°F dry bulb and 58.5°F wet bulb temperature.

Wall will be dismantled and moved to a new location directly in front of the new power block. Finally, the remaining buildings and structures left standing will be demolished and removed by the end of 2020.

All laydown and construction parking areas will be located within the existing Redondo Beach Generating Station fence line, as shown in Figure 2.1-1. Approximately 17 acres onsite will be used for construction laydown and parking. All construction equipment and supplies will be trucked directly to the site.

5.13.1.2 Regional Setting

The project site is located in Redondo Beach, southeast of the intersection of North Harbor Drive and Herondo Street. For purposes of this analysis, and to orient the viewer, Figure 5.13-1 shows the relationship between the proposed RBEP footprint (including aboveground equipment and construction laydown and parking), the 2-acre existing switchyard, and the larger, existing Redondo Beach Generating Station area within which it would be located. The Redondo Beach Generating Station site has been occupied by power-generating facilities for over 100 years. Its structures have been a constant physical presence as the surrounding area has evolved into a relatively densely populated waterfront community with a wide range of land uses, including single- and multi-family residences, commercial corridors and clusters, civic uses, and a marina/harbor area.

The Redondo Beach Generating Station site is bordered by Herondo Street to the north, North Francisca Avenue to the east, commercial uses to the south, and North Harbor Drive to the west. Beyond North Harbor Drive to the west are the Redondo Beach King Harbor area and the Pacific Ocean. A residential area of the city of Hermosa Beach is north of the project site. Beyond North Francisca Avenue to the east are mostly commercial and residential uses, as well as an SCE transmission right-of-way that extends east from the onsite switchyard at the Redondo Beach Generating Station site. A formal entrance to the King Harbor area is located at the intersection of Herondo Street and the Pacific Coast Highway. The Gertruda Avenue / Original Town Historic District is east of the Pacific Coast Highway, and the North Catalina Historic District is southeast of the project site.

The land in the immediate area of the project site is mostly flat and is characterized visually as two distinct areas of urbanization: mixed uses (including commercial, residential, service, and the industrial-appearing project site) east of North Harbor Drive, and the mostly maritime uses (harbor, yacht club, ocean-oriented commercial businesses including restaurants and conference centers) west of North Harbor Drive. The land east of the site slopes upward—gaining approximately 200 feet within 0.5 mile—where the area is predominantly neighborhood residential (single and multi-family), and where the project site, harbor, and ocean are all at least partially visible where views are unobstructed, due to the increased elevation.

Herondo Street is the boundary between Hermosa Beach and Redondo Beach. The southern portion of Hermosa Beach, north of the project site, is predominantly residential, with relatively dense town homes and apartments along and near the beach, and with slightly larger apartment complexes inland. Veterans Memorial Trail extends north into Hermosa Beach from the northeast corner of the intersection Herondo Street and North Francisca Avenue. South of the project site is the Redondo Beach Pier and International Boardwalk, and the majority of the beach south of there is included in Redondo Beach State Park. The community of Torrance Beach is south of Redondo Beach, and beyond that is Palos Verde Estates, a portion of which sits atop the southern curve of the bay on which Redondo Beach is located, and from which the project site is visible in relatively distant (approximately 3.5 miles) views.

There are no officially designated state scenic highways near the project site. The project site is within a coastal plan area and near two historic districts. The historic districts do not have specific requirements related to visual resources that are applicable to RBEP. Due to its location within the coastal zone, the City of Redondo Beach local coastal program (LCP), implemented pursuant to the California Coastal Act, is applicable to RBEP. Policies and requirements related to visual resources in the LCP, including the Harbor/Civic Center Specific Plan and the Coastal Land Use Plan Implementing Ordinance are discussed in detail in 5.13.5.2.

The project site is designated P (Public or Institutional) in the Redondo Beach General Plan, and zoned P-GP (Public – Generating Plant) in the City of Redondo Beach Coastal Land Use Plan Implementing Ordinance. This zoning designation conditionally allows power plants. The portion of the General Plan Land Use section specific to the North Catalina Avenue Corridor directs that structures be designed and sited “to mitigate the noise, vibration,

visual, and other impacts attributable to the AES Redondo Beach generating facilities and Southern California Edison transmission corridors.” All applicable policies and the project’s consistency with these policies are discussed in Section 5.13.5.

5.13.1.3 Project Site

The RBEP aboveground equipment (CTGs, air-cooled condenser, etc.) will be located within the approximately 50-acre site of the currently operating Redondo Beach Generating Station, which will be demolished as part of the project. Both the construction of RBEP and removal of Redondo Beach Generating Station are analyzed in this section.

The bulk of the existing Redondo Beach Generating Station aboveground structures are located along the western edge the site, bordering North Harbor Drive, while the RBEP will be located along the eastern edge of the site. The RBEP equipment will be sited on what are abandoned secondary containment structures for fuel oil storage tanks that have been removed, and mostly unused or underutilized areas within the boundary of the current power plant site. Immediately adjacent uses and structures include: a storage facility to the east, between the site and North Francisca Avenue; the existing SCE transmission right-of-way to the north, between Herondo Street and the existing onsite switchyard; and the existing Redondo Beach Generating Station structures to the south and west. An office building is within approximately 100 feet of the site to the southeast.

A new single-circuit overhead transmission line will be installed onsite to connect the step-up transformers to the existing SCE 230-kV switchyard. See AFC Sections 2.0 and 3.0 for additional information on the project’s interconnection to the electrical grid and transmission of electricity generated.

All other linear appurtenances (natural gas, potable water, process and sanitary wastewater) will connect to infrastructure already associated with Redondo Beach Generating Station. There will be no new offsite linear facilities as a result of this project.

5.13.1.4 Construction Laydown Area

Temporary construction facilities will include approximately 17 acres of land within the fence line of the project site, which have been allocated for laydown, storage and parking. Specific construction laydown areas are identified in Section 5.13.1.5, Sensitive Viewing Areas and Key Observation Points.

5.13.1.5 Sensitive Viewing Areas and Key Observation Points

To structure the analysis of RBEP effects on visual resources, the project’s viewshed was established. The viewshed is the area surrounding a project from which the project is, or could be, visible to viewers based on topography, vegetation, and the built environment. A viewshed can be established using geographic information system (GIS) software, or it can be estimated based on an understanding of the proposed project and visibility throughout the surrounding area; visibility of the project site is verified during a site visit. The view areas within the viewshed that would be the most sensitive to the project’s potential visual impacts and the sensitive receptors in those areas were identified prior to the site visit.²

Representative viewpoints from these sensitive receptor locations are referred to as key observation points (KOP). The five KOPs chosen for this analysis represent the best viewing conditions from the closest areas of viewer sensitivity: King Harbor Marina (two locations); Redondo Pier; Pacific Coast Highway; and the southern boundary of Hermosa Beach.

Based on field work conducted in October 2011 and April 2012 by CH2M HILL staff, the existing visual conditions of the views from each of the five KOPs were documented and evaluated. Assessments of existing visual conditions were made based on professional judgment that took into consideration the following conditions: visual quality, viewer concern, visibility, number of viewers, and duration of view. These conditions were then factored into an overall rating of viewer exposure and viewer sensitivity. This is the approach used by CEC staff in

² 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.

making a determination of impact in the visual resource analysis for the Avenal Energy project (CEC, 2009). CEC uses the following definitions in this approach:

- **Visual Quality** – An expression of the visual impression or appeal of a given landscape and the associated public value attributed to the resource. Visual quality is rated from high to low. A high rating is generally reserved for landscapes viewers might describe as picture-perfect. Landscapes rated high generally are memorable because of the way the components combine in a visual pattern; in analysis of specific views, such qualities are referred to as vividness. In addition, those landscapes are free from encroaching elements, thus retaining their intactness, or visual integrity. Finally, landscapes with high visual quality have a high degree of unity; they are visually coherent and harmonious when each element is considered as part of the whole. Conversely, landscapes rated low are often dominated by visually discordant human alterations.
- **Viewer Concern** – Viewer concern represents the reaction of a viewer to visible changes in the viewshed, an area of land visible from a fixed vantage point. For example, viewers have a high expectation of viewshed quality for views formally designated as scenic areas or travel corridors and for recreational and residential areas. Viewers generally expect that the quality of such views will be preserved. Travelers on highways and roads, including those in agricultural areas, are generally considered to have moderate viewer concerns and expectations. Viewers tend to have low-to-moderate viewer concern, when viewing commercial buildings; and industrial uses typically have the lowest viewer concern. For any viewshed type, the level of concern could be lower if the existing landscape contains discordant elements. Conversely, some areas of lower visual quality and degraded visual character may contain particular views of substantially higher visual quality or interest to the public.
- **Visibility** – Visibility is a measure of how well an object can be seen. Visibility depends on the angle or direction of views; extent of visual screening; and topographical relationships between the object and existing homes, streets, or parks. In that sense, visibility is determined by considering any and all obstructions that may be in the sightline—trees and other vegetation; buildings; transmission poles or towers; general air quality conditions such as haze; and general weather conditions such as fog.
- **Number of Viewers** – Number of viewers is a count or estimate of the number of persons per day who would have a view of the proposed project. Number of viewers is organized into the following categories: residential according to the number of residences; motorist according to the number of vehicles; and recreationists.
- **Duration of View** – Duration of view is the amount of time to view the site. For example, a high or extended view of a project site is one reached across a distance in 2 minutes or longer. In contrast, a low or brief duration of view is reached in a short amount of time—generally less than 10 seconds.
- **Viewer Exposure** – Viewer exposure is a function of three elements previously listed: visibility, number of viewers, and duration of view. Viewer exposure can range from low to high. A partially obscured and brief background view for a few motorists represents a low value; and unobstructed foreground view from a large number of residences represents a high value.
- **Visual Sensitivity** – Visual sensitivity is comprised of three elements previously listed: visual quality, viewer concern, and viewer exposure. Viewer sensitivity tends to be higher for homeowners or people driving for pleasure or engaged in recreational activities and lower for people driving to and from work or as part of their work.

Existing conditions in views from each of the five KOPs and two character views are described below.

Figures 5.13-1a and 5.13-1b show the location of each viewpoint relative to the project site and specify the relationship between the existing and proposed aboveground facilities. Figures 5.13-2 through 5.13-7 show the views from each KOP.

5.13.1.5.1 KOP 1 – View from Moonstone Park in the Redondo Beach Harbor

Figure 5.13-2a depicts the view from KOP 1, which is located within Moonstone Park, adjacent to the end of Marina Way, approximately 0.4 mile west of the project site. The Redondo Beach Generating Station, the western edge of which is approximately 0.3 mile away from the viewpoint, is visible across the view. This viewpoint was

selected because it approximates the view from within the harbor area, which includes boat slips, yacht clubs, restaurants and hotels. As many as 10 percent of the boats moored in the harbor area are residences. This view is therefore seen by residents, tourists, recreationists, and workers.

The visual quality of views from KOP 1 toward the project site is moderately low. Despite the view's maritime visual character, as evidenced by the boat masts and palm trees, the backdrop consists entirely of the existing Redondo Beach Generating Station power plant. Unlike views from along North Harbor Drive or closer points within the harbor, the existing power plant is not obscured by the wall and "Whaling Wall" mural in views from this distance. The overall effect is a cluttered view, in which features located separately from one another appear as part of a mostly incoherent whole. The masts and trees relate to one another in terms of form and size and convey a seaside setting; however, this is undermined by the Redondo Beach Generating Station stacks, the view's other primary vertical feature, which overwhelm the masts and trees on account of their prominence along the back of the view and the overall bulk of the power plant facility.

The RBEP site would be partially visible from this location, though the ground level would likely be completely obscured by intervening structures in the foreground. Because this view represents the view from within the harbor area, the number of viewers at this location is assumed to be moderately high. Duration of view is similarly assumed to be high, taking into account the residences, hotels, and restaurants in the harbor area, low speed limits (on roads and in the harbor waterways) and Moonstone Park (though viewers within the park would likely be oriented toward the ocean). Given the moderately low visibility of the RBEP site, the moderately high number of viewers and high duration of views, viewer exposure is moderately high for KOP 1.

Visual sensitivity is moderately high. While the visual quality of this view is moderately low, viewer concern is high and viewer exposure is moderately high. A moderately high degree of sensitivity is typically expected from viewpoints located near or within residential areas.

5.13.1.5.2 KOP 2 – View from Seaside Lagoon

Figure 5.13-3a depicts the view from KOP 2, which is located near the entrance to Seaside Lagoon, a formal recreation area within King Harbor. It is a City-run facility, open during summer months, with a large saltwater lagoon for swimming, volleyball courts, sunbathing and playground areas, and dining and event facilities. This viewpoint was selected to represent the view from this recreational area and also to provide a mostly unobstructed view toward the project site from the harbor area to the southwest. This view is seen by people leaving the pick-up / drop-off roundabout near the entrance to Seaside Lagoon.

The visual quality of the view from KOP 2 is moderately low. The existing Redondo Beach Generating Station power plant and Whaling Wall that appear in front of it from this vantage point are the most vivid visible features, along with the landscaped trees and other vegetation. The rest of the view includes commercial buildings and their associated roadways and parking areas. While a generally intact view—a fairly low-density commercial area appears completely in front of a large mural which, along with vegetation partially obscures the power plant entirely in the background—the visual confluence of a commercial area and large power-generating facility results in a view that appears discordant at a basic level.

Visibility of the RBEP site from KOP 2 is low. It would be mostly obscured by vegetation in the foreground. The number of viewers is assumed to be moderately high during the summer months because Seaside Lagoon is one of only a few formal outdoor recreation centers in this part of Redondo Beach. Duration of views toward the site is moderately low; KOP 2 is a temporary parking area and views from within Seaside Lagoon are oriented internally, with views toward the project site likely being intermittent and not plentiful. The overall viewer exposure for this viewpoint is moderate at best, given the low visibility, moderately high number of viewers, and moderately low duration of views.

Visual sensitivity for KOP 2 is moderate. Viewer concern in the area is high and the view from KOP 2 represents the view from a recreational destination. However, evident visual quality from this location is not exceptional, and direct views toward the project site are likely to be available only from limited locations.

5.13.1.5.3 KOP 3 – View from Redondo Beach Pier

Figure 5.13-4a depicts the view from KOP 3, which is located at the westernmost portion of Redondo Pier, approximately 0.75 mile south of the project site. This viewpoint was selected to represent the view from a tourist destination, as well as a location for community events, including 4th of July fireworks and summer concert series. The specific viewpoint is at the convergence of two boardwalks in an open area removed from shops and restaurants. The view toward the project site is seen by anyone in this space looking north along the shoreline, toward Kings Harbor or back toward central Redondo Beach.

The visual quality of the view from KOP 3 is moderate. The ocean and breakwater are the most vivid features in the view, and the existing Redondo Beach Generating Station stacks and Whaling Wall are recognizable as regionally unique structures. The same power plant, however, appears to break up a skyline that would otherwise appear to step down from high-density residential uses to smaller-scale structures along the water. It also undermines a view that would, without the Redondo Beach Generating Station power plant present, appear more unified as a city's coastal area.

Visibility of the project site from KOP 3 is moderately low. The ground-level area would not be visible from this location, screened by intervening vegetation and structures, and obscured by distance. The number of viewers would be moderately high, given the use of this space as a promenade and occasional event space. Duration of views toward the project site would be high, though it should be noted that the more popular views from this location are likely to be the unobstructed ones to the west, toward the ocean. Viewer exposure would therefore be moderately high from KOP 3.

Given the moderate visual quality in this view, high viewer concern, and moderately high viewer exposure, visual sensitivity for KOP 3 is moderately high. A relatively large number of viewers would have somewhat sustained views of the project site from this area, though the views are of moderate quality, and the project site is mostly screened by existing vegetation and other human alterations.

5.13.1.5.4 KOP 4 – View from Pacific Coast Highway entrance to King Harbor Area

Figure 5.13-5a depicts the view from KOP 4, which is located at the northeast corner of the location where Pacific Coast Highway intersects with Anita Street, which extends eastward, and Herondo Street, which extends westward to the marina area. This location is approximately 0.25 mile from the northeastern corner of the project site and is the formal entryway into the King Harbor area of Redondo Beach, as indicated by the sign partially visible in the southwest corner of the same intersection. This viewpoint was selected to provide a view from this entry point, as well as to show a view from Pacific Coast Highway. In addition, this segment of Herondo and Anita Streets is generally coterminous with the boundary between Redondo Beach and Hermosa Beach. Thus, this view represents views from southern portions of Hermosa Beach and also approximates a worst-case view from some of the nearby portions of each city located at higher elevations to the east.

The visual quality of the existing view toward the project site from KOP 4 is low. The view down a sloping terrain toward the ocean is dominated by the industrial-appearing Redondo Beach Generating Station site, a variety of transmission structures and lines, and a substantial intersection. The sign demarking the entrance to the King Harbor area is subordinate to these other features, which define the visual character despite the partial visibility of the ocean horizon beyond the foreground. The varying masses and orientations of the visible structures result in a scene inconsistent in form, and there is little coherence in the view despite its evident proximity to the harbor area.

Visibility of the project site is moderately high; transmission poles and vegetation in the immediate foreground partially obscure what would otherwise be an unimpeded line of sight toward the RBEP. Pacific Coast Highway is a prominent local road and Anita Street is a main arterial providing access to portions of both Redondo Beach and Hermosa Beach located east of the project site. As such, the number of viewers from this location is assumed to be high, though because it is also assumed that most views will be from moving vehicles, the duration of views is moderate. Viewer exposure is therefore moderately high from KOP 4.

Overall, visual sensitivity from KOP 4 is moderately high. This is based on the moderately high visibility of the RBEP site, with a moderately high degree of exposure, in an area where viewer concern is assumed to be high.

5.13.1.5.5 KOP 5 – View from Kay Etow Park (Hermosa Beach)

Figure 5.13-6a depicts the view from KOP 5, which is located within Kay Etow Park, a pocket park located at the corner of Herondo Street and Monterey Boulevard, within 0.1 mile of the northern edge of the project site. This location provides the most proximate view of the project site from the north and represents views from the relatively dense residential area along the southern edge of Hermosa Beach. The lower extent of the project site is not visible from this location due to the wall along the southern side of Herondo Street, despite the park's slight elevation above street level. Immediately beyond the wall is the SCE transmission corridor, which in this location includes small buildings and a yard, apparently used for materials and vehicle storage. The Redondo Beach Generating Station is prominent in the foreground, to the right of the project site. An office building is visible beyond the RBEP site and the low hillsides of Redondo Beach and Palos Verdes Estates are visible in the middleground and background of the view.

The visual quality of the existing view toward the project site from KOP 5 is moderately low. Features that provide the view's vivid elements are mostly singular: the relatively distant hillsides provide the one notable element relative to landform; the tree and overhanging branch in the center of the view are limited but prominent vegetative features; and the Redondo Beach Generating Station from this location appears as the view's most prominent, somewhat unique human-made feature, though the orange-colored office building visible beyond the project site is a source of color in an otherwise mostly industrial-appearing foreground. Overall, however, these features, while highly visible, are not notable, and appear collectively as being inconsistent in form and color. With electricity generation, office, and residential uses clearly identifiable, the view possesses a low degree of overall unity.

Visibility from this location is high, despite the wall's blocking of a street-level view toward the project site. The park is slightly above street-level and its size and orientation make it a place for respite; passive, not active, recreation is available in the form of sitting on benches mostly oriented toward the project site. In addition, this view represents views from the residential neighborhood to the north, which includes multi-story homes. The number of viewers is assumed to be moderate, but duration of views would be high. This results in a generally high degree of viewer exposure.

This high degree of exposure, in conjunction with the assumed high degree of viewer concern and moderately low visual quality, results in a moderately high degree of viewer sensitivity in the view from a residential area toward the project site.

5.13.1.5.6 Character Views

Per CEC guidance, two additional views (KOP 6 and KOP 7), the locations of which are shown in Figure 5.13-1b, are included for the purpose of providing further context in terms of the project area's existing landscape character. These views also show the visibility of the project site from relatively distant locations. KOP 6 is located at the end of the Hermosa Beach Pier, approximately 0.9 mile northwest of the project site. The project site is in the center of the view, beyond the residential, beachside area of Hermosa Beach. The existing Redondo Beach Generating Station, which is the most prominent built feature in the view, appears to the right of the proposed RBEP site from this location. KOP 7 is located along the Esplanade in Redondo Beach, approximately 1.7 miles south of the project site. The viewpoint location overlooks Redondo Beach State Park. The existing Redondo Beach Generating Station is also prominent in this view, though its relative visual dominance is reduced by the presence of relatively large residential buildings in the foreground of the view. The project site would appear just to the right of the existing Redondo Beach Generating Station in this view.

In both of these views, the area within which the project site is located can be seen within a densely developed, relatively low-rise seaside setting. The Redondo Beach Generating Station, among the most massive structures in these views, indicates the project site location.

No simulations for these character views were requested, and therefore these views will not be evaluated in the assessment of visual effects presented in Section 5.13.2.4.

5.13.2 Environmental Analysis

5.13.2.1 Analysis Procedure

This assessment of the proposed project's potential effects on visual resources was conducted through the review of applicable planning documents, site reconnaissance and photography, production of visual simulations, and the application of a systematic method for evaluating the potential aesthetic effects of proposed power plant projects. This evaluation depends in part on the assessment of landscape visual quality under existing conditions and with the proposed project. Visual quality ratings range from outstanding to low. Development of this scale builds on a scale developed for use with an artificial intelligence system for evaluation of landscape visual quality (Buhyoff et al., 1994), and incorporates landscape assessment concepts applied by the U.S. Forest Service (1995) and the U.S. Department of Transportation (FHWA) (Federal Highway Administration, 1988). This method has been adopted by the staff of the CEC.³ Finally, a determination of impact significance was made following the four California Environmental Quality Act (CEQA) Guidelines checklist questions discussed in Section 5.13.2.2.

The initial step in the evaluation process was the review of planning documents applicable to the project area to gain insight into the type of land uses intended for the general area, and the guidelines given for the protection or preservation of visual resources. Consideration was then given to the existing visual setting within the project viewshed, which is defined as the geographical area in which the project can be seen.

Potential project impacts were evaluated using a KOP analysis, among other tools and information sources. Site reconnaissance was conducted to view the site and surrounding area, identify potential KOPs, and take representative photographs of existing visual conditions. A single-lens reflex digital camera set to take photos with a focal length equivalent to that of photos taken with a 35 millimeter (mm) camera with a 50-mm lens (view angle 40 degrees) was used to shoot site photographs. Photographs from the site reconnaissance were selected to represent the "before" conditions from each KOP.

Visual simulations were produced to illustrate the "after" visual conditions from each of the KOPs to provide the viewer with a clear image of the location, scale, and visual appearance of the proposed project. These simulation images represent the project's appearance after completion of construction of the RBEP and demolition of the Redondo Beach Generating Station. The computer-generated simulations are the result of an objective analytical and computer modeling process described briefly below. The images are accurate within the constraints of the available site and project data.

Computer modeling and rendering techniques were used to produce the simulated images of the views of the site as they would 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 proposed generation 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 computer model of the generating facility and portions of the overhead transmission system.

For each viewpoint, viewer location was identified based on in-field GPS logs, and the eye level was assumed to be 5 feet. 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. The final "hardcopy" visual simulation images that appear in this AFC document were produced from the digital image files using a color printer.

The "before" site photographs are included as Photograph "a" for each KOP in Figures 5.13-2 through 5.13-6. The "after" visual simulations are included as Photograph "b" in each of the figures.

³ The rationale for the CEC's application of this method was appended to its Staff Report for the Avenal Energy Project (CEC, 2009).

The figures were used in the visual resource analysis for the project. The determination of visual effects incorporates the elements of contrast, dominance, view blockage, and visual change, as defined below.

- **Contrast** – Contrast concerns the degree to which a project’s visual characteristics or elements (form, line, color, and texture) differ from the same visual elements in the existing landscape. The degree of contrast can range from low to high. A landscape with forms, lines, colors, and textures similar to those of a proposed energy facility is more visually absorbent; that is, more capable of accepting those characteristics than a landscape in which those elements are absent. Generally, visual absorption is inversely proportional to visual contrast.
- **Dominance** – Dominance is a measure of the proportion of the total field of view occupied by the field; a feature’s apparent size relative to other visible landscape features; and the conspicuousness of the feature due to its location in the view. A feature’s level of dominance is lower in a panoramic setting than in an enclosed setting with a focus on the feature itself. A feature’s level of dominance is higher if it is near the center of the view; elevated relative to the viewer; or has the sky as a backdrop. As the distance between a viewer and a feature increases, its apparent size decreases; and consequently, its dominance decreases. The level of dominance ranges from low to high.
- **View Disruption** – The extent to which any previously visible landscape features are blocked from view constitutes view disruption. The view is also disrupted when the continuity of the view is interrupted. When considering a project’s features, higher quality landscape features can be disrupted by lower quality project features, thus resulting in adverse visual impacts. The degree of view disruption can range from none to high.
- **Visual Change** – Visual change is a function of contrast, dominance, and view disruption. Generally, contrast and dominance contribute more to the degree of visual change than does view disruption.

The systematic evaluation of visual effects from the proposed project was conducted using FHWA worksheets. These worksheets are attached as Appendix 5.13A. Once all effects were examined, a determination was made as to whether any potential impacts would reach a level that would be significant under CEQA 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” (14 CCR 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

As described more fully in Section 2.0, Project Description, RBEP is a natural-gas-fired, combined-cycle, air-cooled electrical generating facility that will replace and be constructed on the site of the Redondo Beach Generating

Station. The project will consist of one, 3-on-1, combined-cycle gas turbine power block with three natural-gas-fired CTGs, three supplemental-fired HRSGs, one STG, an air-cooled condenser, and related ancillary equipment. Other equipment and facilities to be constructed include natural gas compressors, water treatment facilities, emergency services, and administration and maintenance buildings. The project will be constructed entirely within the existing approximately 50-acre Redondo Beach Generating Station site and will include 16.8 acres of temporary construction laydown and parking, 10.5 acres of RBEP aboveground equipment, an 2.2-acre existing switchyard, and the 20.2-acre existing Redondo Beach Generating Station aboveground equipment (stacks, turbines, control buildings, etc.). For purposes of this analysis, and to orient the viewer, Figure 5.13-1 shows the relationship between the proposed RBEP equipment within the larger, existing Redondo Beach Generating Station area in which it would be located. The existing Redondo Beach Generating Station will be demolished as part of the project. There are no offsite linear developments proposed as part of the project.

5.13.2.3.1 Project Structures and Dimensions

The RBEP facilities are described in detail in Section 2.0, Project Description. Figure 2.1-2 shows the general arrangement and layout of the proposed project features on the site, and Figures 2.1-3a and 2.1-3d provide typical elevation views. Table 5.13-1 summarizes the dimensions, finishes, and materials of the generating facility's major features. The exteriors of major project equipment would be treated with a neutral gray or tan finish to optimize its visual integration with the surrounding environment. The project would be surrounded by a chain-link security fence.

TABLE 5.13-1
Approximate Dimensions and Colors, Materials, and Finishes of the Major Project Features

Feature	Length (feet)	Width (feet)	Height (feet)	Diameter (feet)	Color	Materials	Finish
Combustion Gas Turbine (CGT) and Generator	100	32	34		Gray	Steel	Flat / Untextured
CGT Generator Enclosure	16	39	34	—	Gray	Mild Steel Plate	Flat / Untextured
CGT Enclosure	61	32	25	—	Gray	Steel	Flat / Untextured
Steam Turbine Generator (STG) Enclosure	77	73	40	—	Gray	Mild Steel Plate	Flat / Untextured
Heat Recovery Steam Generator (HRSG)	96	45	70	—	Gray	A-36 Steel Plate	Flat / Untextured
HRSG Stacks	—	—	140	18	Gray	A-36 Steel Plate	Flat / Untextured
Fuel Gas Compressor Enclosure	125	60	25	—	Gray	Mild Steel Plate	Flat / Untextured
BOP Fin Fan Cooler	86	48	15	—	Gray	A-36 Steel Shapes	Flat / Untextured
Existing Service Water Tank 1	—	—	48	40	Gray	A-36 Steel	Flat / Untextured
Existing Fire Pump Enclosure	58	32	18	—	Gray	Ribbed Sheet Steel	Flat / Untextured
Existing Gas Metering Station	106	38	—	—	Yellow	Steel Pipe and Support	Flat / Untextured
Air-Cooled Condenser	209	174	83	—	Gray	A-36 Steel Shapes	Flat / Untextured
Water Treatment Building	70	50	19	—	Gray	Ribbed Sheet Steel	Flat / Untextured
New Control / Admin Building	100	72	19	—	Tan	Ribbed Sheet Steel	Flat / Untextured
Ammonia Tank and Containment	18	38	14	—	Stark White	A-106 Pressure Vessel	Flat / Untextured
Distilled Water Tank	—	—	30	28	Gray	A-36 Steel	Flat / Untextured

TABLE 5.13-1
Approximate Dimensions and Colors, Materials, and Finishes of the Major Project Features

Feature	Length (feet)	Width (feet)	Height (feet)	Diameter (feet)	Color	Materials	Finish
Retention Pond	100	180	—	—	N/A	N/A	N/A
Transmission Pole (Typical)	—	—	80–135	—	Gray	A-36 Steel Shapes	Flat / Untextured
Transmission A-Frame			75		Gray	A-36 Steel Shapes	Flat / Untextured
Transformer Wall	53	42	30	—	Gray	Concrete	Flat/Untextured
New Service Water Tank	—	—	30	28	Gray	A-36 Steel	Flat / Untextured
Turbine Hall Enclosure - HRSG	349	95	83	—	LBlue	Aluminum	Flat/Untextured
Turbine Hall Enclosure – CGT	349	126	60	—	LBlue	Aluminum	Flat/Untextured

5.13.2.3.2 Transmission Interconnection

A 230-kV transmission interconnection will connect the RBEP power block to the existing onsite SCE 230-kV switchyard. The effects of any visible features related to this interconnection are discussed below as applicable in the analysis of the visual effects resulting from the project as a whole.

RBEP will connect to the existing SCE switchyard via new single-circuit 230-kV line. For additional information on the transmission lines, see Section 3.0, Transmission System Engineering.

5.13.2.3.3 Construction/Demolition Laydown Area

Temporary construction facilities will include 16.8 acres of land within the approximately 50-acre project site, which have been allocated for laydown, storage, and parking (see Figure 2.1-1). Construction access will be from Herondo Street. As detailed in Section 2.2, construction and demolition activities at the project site are anticipated to last 60 months, from the first quarter of 2016 until the end of 2020. The first activities to occur on site will be the dismantling and partial removal of existing Units 1–4. The major generating equipment including steam turbines, generators, boilers, and duct work will be removed, leaving the administration building and western portion of the building that houses Units 1–4 intact. These buildings will be left standing temporarily to provide screening between the construction site of the new power block and Harbor Drive. Construction of the new power block will begin in the first quarter of 2017 and continue through to the end of the second quarter 2019, when it will be ready for commercial operation. Although operational in 2019, construction of a new control building and the relocation of the Wyland Whaling Wall will continue through the end of 2019. The existing Units 5–8 and auxiliary boiler No. 17 will remain in service until the second quarter of 2018. Units 5–8 and auxiliary boiler no. 17 will be demolished starting the first quarter of 2019 through the fourth quarter of 2020. During the demolition and removal of Units 5–8, the Wyland Whaling Wall will be dismantled and moved to a new location directly in front of the new power block. Finally, the remaining buildings and structures left standing will be demolished and removed by the end of 2020. During this time, construction materials, construction equipment, trucks, and parked vehicles could be visible on the site, though views toward this area from outside of the project site are mostly screened. After construction and demolition are complete, all debris would be removed from the laydown area.

5.13.2.3.4 Landscaping

The Coastal Land Use Plan Implementing Ordinance in the Redondo Beach Municipal Code requires a landscape plan and irrigation plan be submitted to the City of Redondo Beach Planning Division for all new projects in all nonresidential zones. A conceptual landscaping plan is included as Appendix 5.13B and the set of simulations included in this analysis include simulated views showing proposed landscaping, where visible, depicted as it

would likely appear 5 years after installation. The conceptual landscaping plan incorporates appropriate water-efficient landscaping practices required by the State Department of Water Resources.

5.13.2.3.5 Lighting

The power plant may 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 egress under emergency conditions. The system will also provide 120-volt convenience outlets for portable lamps and tools.

To reduce offsite lighting impacts, lighting at the facility will be restricted to areas required for safety and operation. Exterior lights will be hooded and would be directed onsite to minimize significant light or glare. Low-pressure sodium lamps and fixtures of a non-glare type will be specified. In addition, switched lighting circuits will be provided for areas where lighting is not required for normal operation or safety to allow these areas to remain dark at most times and to minimize the amount of lighting potentially visible offsite.

Construction will most typically take place between the hours of 7 a.m. and 6 p.m., Monday through Friday, and 9 a.m. and 5 p.m. on Saturday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities (for example, pouring concrete at night during hot weather, working around time-critical shutdowns and constraints). During some construction periods and during the startup phase of the project, some activities will continue 24 hours per day, 7 days per week. During periods when nighttime construction activities take place, illumination that meets state and federal worker safety regulations will be required. To the extent possible, the nighttime construction lighting will be erected pointing toward the center of the site where activities are occurring and will be shielded. Task-specific lighting will be used to the extent practical while complying with worker safety regulations.

5.13.2.4 Assessment of Visual Effects

As previously noted, the systematic evaluation of visual effects from the proposed project was conducted using FHWA worksheets, which are attached as Appendix 5.13A and provide fuller details regarding the comparison between existing and simulated views as summarized below. Each figure includes the existing view from the viewpoint (the “a” figures, referred to in Section 5.13.1.4) and a simulation of the same view during the project’s operational period, with the Redondo Beach Generating Station removed (the “b” figures).

5.13.2.4.1 KOP 1 – View from Moonstone Park in the Redondo Beach Harbor

Figure 5.13-2a presents the existing view toward the project site from Moonstone Park and Figure 5.13-2b presents a simulation of the same view with the proposed project. Figure 5.13-2c shows the simulated view with proposed landscaping installed, depicting vegetation with 5 years of growth after installation.

Comparison of the existing view with the view with the project in place indicates that replacement of the Redondo Beach Generating Station with the RBEP would substantially reduce the degree to which a power-generating facility would appear within this view. RBEP stacks would be visible, but they would appear beyond and above the Wyland Whaling Wall, and below the skyline that would now be formed primarily by the palm trees and masts of the boats in the marina area. The rest of the proposed facility would be obstructed by the relocated Wyland Whaling Wall mural, which in turn would be partially obscured by the trees and boat masts. Portions of Redondo Beach east of the harbor area would be discernible in the right half of the view without the Redondo Beach Generating Station. The RBEP would not be a dominant feature and would disrupt only a nominal portion of the skyline, though the relocated Wyland Whaling Wall mural would remain a vivid feature in the view from this location. Taking into account the moderately high degree of visual sensitivity, the proposed project would result in a positive visual change to this view from KOP 1.

This assessment is supported in the FHWA worksheet, which indicates an increase in visual quality from moderately low to moderate. The most notable difference between the existing and simulated with-project view is that with the project, composition of the view would be more harmonious. With the removal of the Redondo Beach Generating Station, and with the proposed RBEP set back in the view, behind the relocated Wyland

Whaling Wall, the view is more open, and there is a visual connection between the waterfront area in the foreground and the residential area on the slope beyond the harbor area.

5.13.2.4.2 KOP 2 – View from Seaside Lagoon

Figure 5.13-3a presents the existing view toward the project site from Seaside Lagoon and Figure 5.13-3b presents a simulation of the same view as it would appear with the proposed project in place. Figure 5.13-3c shows the simulated view with proposed landscaping installed, depicting vegetation with 5 years of growth after installation.

Comparison of the existing view to the view with the project in place indicates that replacement of the Redondo Beach Generating Station structures with the RBEP would completely remove the power plant that now dominates the view. The new view would show most prominently the relocated Wyland Whaling Wall mural. A barely visible single stack would be visible protruding above the tree line at the right side of the view. Distance, vantage point and intervening vegetation and features would result in the RBEP appearing mostly absorbed into the existing backdrop, and would disrupt only the minor portion of sky blocked by the Wyland Whaling Wall and the single visible stack. As a consequence, the project would create a positive visual change to the view from this KOP, where there is a moderate level of visual sensitivity.

As indicated in the FHWA worksheet, there would be an increase in visual quality from moderately low to moderate. While the view would actually lose one of the two more vivid visible features—the Redondo Beach Generating Station would be removed, while the Whaling Wall would be relocated to a location further away from the view—a more coherent, consistent view would result with the proposed project.

5.13.2.4.3 KOP 3 – View from Redondo Beach Pier

Figure 5.13-4a depicts the existing view toward the project site from Redondo Beach Pier and Figure 5.13-4b presents a simulation of the same view with the proposed project in place. Figure 5.13-4c shows the simulated view with proposed landscaping installed, depicting vegetation with 5 years of growth after installation.

Comparison of the existing view with the view with the project in place indicates that replacement of the Redondo Beach Generating Station with the RBEP would substantially reduce the degree to which a power plant would be visible from the pier. The tall power plant stacks and structures now visible in the view would be gone. The three visible stacks that would replace them would be considerably shorter, and as a result would relate more to the scale and form of the multi-family residential buildings in the right side of the view and would not substantially contrast with the overall setting. A slight portion of the Wyland Whaling Wall mural would be visible near the center of the view. The proposed project would not be a dominant element of the view seen from the pier, and it would have considerably less effect on the skyline than the existing Redondo Beach Generating Station. The proposed project's stacks would appear as relatively minor elements in a visual mosaic of features varying in type, scale, color, and form. Compared with the existing view, without the Redondo Beach Generating Station, the shoreline and breakwater become the dominant features in the view. Given the pier area's primary uses and its corresponding moderately high sensitivity, the visual change in the view from KOP 2 would be positive.

The FHWA worksheet indicates a positive change in visual quality, though the overall assessment would remain moderate. With the proposed project, the view from KOP 3 would appear more unified, consisting of a seaside cityscape with a variety of development that is generally consistent in scale.

5.13.2.4.4 KOP 4 View from Pacific Coast Highway Entrance to King Harbor Area

Figure 5.13-5a depicts the existing view toward the project site from Pacific Coast Highway at Herondo/Anita streets, and Figure 5.13-5b presents a simulation of the same view with the proposed project. Figure 5.13-5c shows the simulated view with proposed landscaping installed, depicting vegetation with 5 years of growth after installation.

Comparison of the existing view with the project in place indicates that replacement of the Redondo Beach Generating Station with the RBEP would reduce the profile of a power plant in the view from the entrance to the harbor area. The RBEP would be prominently visible, but would appear more compact, and would not extend

across the entire view as the existing facility does currently. The RBEP air-cooled condenser, HRSG stacks and the back side of the Wyland Whaling Wall and turbine/HRSG enclosures would be clearly visible beyond the bases of transmission towers in the near foreground. However, removal of the Redondo Beach Generating Station would effectively open up views toward the marina area and the ocean beyond, as evidenced by the visibility of the breakwater in right side of the simulated view. The more pronounced presence of the marina and ocean in the backdrop would contrast somewhat with the RBEP and transmission facilities in the foreground. However, based on the reduction in horizontal space occupied by RBEP, the degree to which a power plant would be a dominant feature would be reduced. Further, because it would allow for a partial, currently unavailable, view toward the marina and ocean horizon, there would be a positive visual change in views from KOP 4, where visual sensitivity is moderately high.

The visual quality of the view would improve from low to moderately low, as indicated in the FHWA worksheet. The visibility of the ocean and marina area, marked by the breakwater that would be visible in the right side of the view, adds a degree of vividness not in the existing view. In addition, its visibility allows the harbor area to be seen, not just announced by the sign in the left portion of the view. And while a substantial degree of discord remains visible due to the transmission corridor, signage and structures of varying shapes, color, scale and linear orientation, removal of the Redondo Beach Generating Station improves the view's overall intactness.

5.13.2.4.5 KOP 5 View from Kay Etow Park (Hermosa Beach)

Figure 5.13-6a depicts the existing view toward the project site from Kay Etow Park, and Figure 5.13-6b presents a simulation of the same view with the proposed project. Figure 5.13-6c shows the simulated view with proposed landscaping installed, depicting vegetation with 5 years of growth after installation.

Comparison of the existing view with the view with the project in place indicates a substantial reduction in the visibility of specific power plant structures, including internal transmission towers and conductors, from this location. The top of two RBEP stacks would be visible in the left side of the view, beyond and above the Wyland Whaling Wall. Though the wall would obscure practically the entire RBEP from this vantage point, it would appear as a relatively massive, block-like structure, which would occupy a substantial amount of the view without the articulation and visual variety of the existing view and also block views of the office building beyond the site, which is one of the existing view's main sources of color. These effects would be offset by the addition of long-distance views toward the Palos Verde peninsula in the right side of the view (the result of removal of the Redondo Beach Generating Station) and the vividness of the relocated Wyland Whaling Wall mural. In addition, the wall would add clean, well-defined lines to the view. The project would result in a positive visual change from this location, where visual sensitivity is moderately high.

Despite the positive visual change, the overall visual quality of the view would remain moderately low. The increased visibility of the relatively distant hillsides, along with the added presence of the relocated Wyland Whaling Wall mural, would lightly enhance the vividness of the view, and the overall composition of the scene would become more unified with the bulk of the industrial-appearing facilities concentrated in the left portion of the view, behind the wall. However, the apparent bulk of the RBEP, viewed from this location as a relatively massive wall, would result in the view still substantially occupied by a power-generating facility, despite the improvement in the view's intactness and unity.

5.13.2.4.6 Light and Glare

With development of the proposed project, there will be a substantial reduction in the amount of night lighting on the project site. At present, red lights required by the Federal Aviation Administration (FAA) for aircraft safety are atop the existing Redondo Beach Generating Station stacks, and the catwalks along the boilers are lit for worker safety. In addition, a marine navigation beacon, oriented toward the ocean, is in operation atop one the Redondo Beach Generating Station units.

With the proposed project, all of the Redondo Beach Generating Station facilities and the lighting associated with them will be removed. As indicated in Section 5.13.2.3.6, the lighting on the smaller RBEP will consist of some night lighting for operational safety and security, mounted to buildings, in open areas, and affixed to HRSG stacks. High-illumination areas not occupied on a regular basis would be provided with switches or motion detectors to

light these areas only when occupied. At times when lights are turned on, the lighting would be shielded, would not be highly visible offsite, and would not produce offsite glare effects. The offsite light visibility and glare would be restricted by specification of non-glare fixtures and placement of lights to directly illuminate only those areas where it is needed. The site is located within a completely urbanized area, in which street lighting and other sources of night lighting are present. Given the reduced height and scale of RBEP compared to the Redondo Beach Generating Station, it is likely that there would be reduction in ambient lighting conditions in the area surrounding the project site.

As a consequence, except for the smaller number of red FAA aviation safety lights on the shorter stacks, and possibly a marine navigation beacon, there will no longer be lighting on elevated structures visible from the surrounding community. In addition, because the lighting that is installed at the facility will be the minimum required to meet operational and safety requirements, will use the latest fixture designs to focus the lighting where it is needed and to minimize light spill, and will be operated only when required, the night lighting effects of RBEP will be considerably less than those of the Redondo Beach Generating Station.

Lighting that may be required to facilitate night construction activities would, 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 would be used to the extent practical while complying with worker safety regulations. Despite these measures, there may be limited times during the construction period when the project site may appear as a brightly lit area as seen in views from surrounding hillside residential areas.

5.13.2.4.7 Water Vapor Plumes

Visible plumes from power plants (and other sources) form when the mass of water in an exhaust plume exceeds the saturation point of the exhaust gases. The saturation point of air is directly related to its temperature with warm air having a higher saturation point (being able to carry more water in a vapor state) than cold air. When the saturation point is reached, water will condense out of vapor state to a liquid state, forming fine water droplets. These water droplets are visible in an exhaust plume.

Based on previous experience with these kinds of systems, formation of visible plumes from the project will be an unlikely occurrence related to unusual combination of near freezing temperatures and damp conditions and that, if present, the plumes would be relatively small.

RBEP will use an air-cooled condenser. Air cooled condensers do not form visible plumes. Furthermore, RBEP will not employ a cooling tower; therefore, there will be no visible cooling tower plumes.

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 applies 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. There are no designated scenic vista points in the vicinity of the project.

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

No. This question does not apply to the proposed project because none of the project facilities would 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 proposed project would not substantially degrade the existing visual character of the project site and its surroundings. At present, the project site and some adjacent areas have a visual character that is dominated by large-scale electric generation and transmission facilities because of the presence of the Redondo Beach Generating Station and a major electric transmission corridor. With the project, the intensity of this existing visual character would be reduced, particularly in views from KOPs 1, 3 and 4, in which the harbor/marina area would be visible. In fact, with the removal of the Redondo Beach Generating Station, the harbor/marina area would be the dominant or co-dominant feature in views from KOP 1 and KOP 3. Views toward nearby hill areas would be increased in some views (notably KOP 1 and KOP 5), providing a wider context of the area within which the project would be sited. The existing visual quality of the project area would be improved in all views, due to the removal of the Redondo Beach Generating Station and/or the placement of the smaller RBEP in a location that substantially reduces its prominence in views.

- **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 5.13.2.4.6, project light fixtures would be restricted to areas required for safety and operations. Lighting would be directed onsite and would be shielded from public view. Non-glare fixtures would be specified, as would switches, sensors, and timers to minimize the use of the lights. These measures would substantially reduce the offsite visibility of project lighting. In addition, current sources of light would be eliminated with the removal of the Redondo Beach Generating Station, specifically the safety lights associated with the boiler catwalks. In addition, with the reduced number and height of stacks, there will be fewer red aviation safety lights. Finally, the maritime navigation beacon atop an existing Redondo Beach Generating Station stack will be removed and relocated to an as-yet-undetermined location.

Given the limited level of lighting proposed for the project and the measures that would be taken to minimize offsite effects, along with the reduction in amount and prominence of existing night lighting, night lighting impacts from RBEP would be less than significant. Because none of the major project features would have surfaces that are highly reflective, the project would not be a source of daytime glare.

Any lighting that would be installed to facilitate nighttime construction activities would, 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 would be used to the extent practical while complying with worker safety regulations.

5.13.3 Cumulative Effects

A cumulative impact refers to a proposed project's incremental effect together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project (Public Resources Code Section 21083; 14 CCR Sections 15064(h), 15065(c), 15130, and 15355).

RBEP would not contribute to adverse impacts of other projects. As described in Section 5.6, Land Use, there are a number of projects that have been recently approved or are currently in the entitlement process with the City. A 12-acre hotel development project consisting of two 4-story hotels with a total of 309 rooms has been approved but would be located on Marine Avenue, near Interstate 405, approximately 3 miles away from RBEP. Three small condominium construction projects totaling seven units are currently in the entitlement process with the City. The specific locations of these projects, along with anticipated construction schedules, are unknown at this time.

The only approved project in the vicinity of the RBEP is the Mole B Master Plan, which will provide a Harbor Patrol emergency helicopter landing zone in the current location of Moonstone Park in the marina, as well as mast-up boat storage, outrigger canoe storage, public boat launch, and a sea wall.

The incremental effect of the project will be to decrease the height and dominance of an existing power plant facility in the harbor vicinity, and to set it further away from the marina area. In views that would include RBEP

and proposed structures associated with the Mole B Master Plan, the reduced scale of the power generating facility compared with existing conditions would not contribute cumulative effects to visual resources. Given that RBEP, compared with Redondo Beach Generating Station, would be located further away from other local recreational uses in the harbor and beach area, such as Seaside Lagoon, Redondo Pier, and Redondo Beach State Park, there would likely be reduced or even eliminated visibility of a power plant in views, including those toward the Mole B Master Plan area. The project may increase visual quality and thereby add cumulatively to other projects that increase visual quality of the area.

The project may contribute to temporary visual impacts associated with construction. This could add cumulatively with other projects that are to be constructed over the same time period. However, cumulative construction-related impacts, are not expected because a temporal overlap with the construction periods of the projects listed is considered unlikely.

RBEP is not expected to have any cumulatively considerable visual effects in conjunction with any of the projects described above. Therefore, no cumulative impacts are expected.

5.13.4 Mitigation Measures

This analysis has documented that the project would not have a substantial adverse effect on any scenic vistas, would not substantially damage scenic resources within a state scenic highway, would not degrade the existing visual character and quality of the project site, and would not create a new source of substantial light and glare that would adversely affect day or nighttime views in the area. Because there will be no significant adverse visual impacts, no mitigation measures are required.

5.13.5 Laws, Ordinances, Regulations, and Standards

This subsection describes the LORS relevant to the visual resource issues associated with RBEP. The RBEP site is within the city limits of Redondo Beach and within the coastal zone. No federal or regional LORS are known that would apply to the project's visual resource issues. Applicable state and local LORS are described below.

5.13.5.1 State LORS

The California Coastal Act and California Scenic Highway Program are state LORS that typically apply to power plant projects in coastal locations.

5.13.5.1.1 California Coastal Act

The project is located within the City's coastal zone and is subject to the California Coastal Act. Section 30251 of the California Coastal Act requires that "permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas." As described in Section 5.13.2.4, the project would result in a positive visual change in the surrounding area. In compliance with the requirements of the Coastal Act, the City of Redondo Beach prepared a Local Coastal Plan. As discussed in detail in Section 5.6, Land Use, the LCP includes the Coastal Land Use Plan and the Coastal Land Use Plan Implementing Ordinance, in Chapter 5 of Title 10 of the Redondo Beach Municipal Code. The LCP was most recently amended and certified by the California Coastal Commission (CCC) effective January 14, 2011. RBEP consistency with the California Coastal Act is addressed in the discussion of its consistency with the LCP, which is discussed in greater detail in Section 5.13.5.2.3.

5.13.5.1.2 California Scenic Highway Program

The California Scenic Highway Program protects and enhances the natural scenic beauty of California highways and adjacent corridors through special conservation treatment (Caltrans, 2008). A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. The status of a proposed state scenic highway changes from eligible to "officially designated" when the local governing body applies to Caltrans for scenic highway approval, adopts a Corridor Protection Program, and receives notification

that the highway has been officially designated a Scenic Highway. At present, there are no highways that have been officially designated or designated as eligible scenic highways in the vicinity of the proposed project (Caltrans, 2012).

5.13.5.2 Local LORS

Table 5.13-2 lists the applicable state and local LORS that are pertinent to the project and visual resources. In addition to the state plans described above, the specific provisions of each plan or ordinance that have potential relevance to the project are the City of Redondo Beach General Plan, City of Redondo Beach Harbor / Civic Center Specific Plan, and the City of Redondo Beach Municipal Code Zoning Ordinance, which are discussed in Sections 5.13.5.2.1, 5.13.5.2.2, and 5.13.5.2.3, respectively.

TABLE 5.13-2
Laws, Ordinances, Regulations, and Standards for Visual Resources

LORS	Requirements/Applicability	Administering Agency	AFC Section Explaining Conformance
California Coastal Act	Section 30251 of the California Coastal Act addresses the protection and, where feasible, enhancement of visual resources and visual quality when permitting a proposed development in the coastal zone. The CCC certified the amended LCP in 2011. With this certification, the LCP, implements the Coastal Act, including Section 30251.	City of Redondo Beach Planning Department	Section 5.13.5.1.1
California Scenic Highway Program	Protects and enhances the natural scenic beauty of California highways and adjacent corridors through special conservation treatment.	California Department of Transportation	Section 5.13.5.1
City of Redondo Beach General Plan	Comprehensive long-range plan to serve as the guide for the physical development of the city.	City of Redondo Beach Planning Department	Section 5.13.5.2.1
City of Redondo Beach Harbor / Civic Center Specific Plan	Specific plan to guide development within the designated Harbor/Civic Center area.	City of Redondo Beach Planning Department	Section 5.13.5.2.2
City of Redondo Beach Municipal Code Zoning Ordinance, Title 17	Establishes zoning districts governing land use and the placement of buildings and district improvements.	City of Redondo Beach Planning Department	Section 5.13.5.2.3

5.13.5.2.1 City of Redondo Beach General Plan

The RBEP site is located within the city limits of Redondo Beach and is, therefore, subject to the provisions of the City of Redondo Beach General Plan. The project site is designated Public or Institutional in the General Plan. Policies pertaining to visual resources that are applicable to the project are summarized and evaluated in Table 5.13-3.

TABLE 5.13-3
Conformity with the City of Redondo Beach General Plan

Provision	Conformity?
Land Use Element	
North Catalina Avenue Corridor - Design and Development Policy 1.37.4 Design and site structures to mitigate the noise, vibration, visual, and other impacts attributable to the AES Redondo Beach generating facilities and Southern California Edison transmission corridors.	Yes. Replacement of the existing Redondo Beach Generating Station with RBEP would substantially reduce the presence of a generating facility in views from the surrounding areas, as discussed in Section 5.13.2.4. Site lighting design would ensure exterior lights within the project site are downward facing, limiting the amount of light spilling over into the area outside of the project site.

Source: City of Redondo Beach, 2008

5.13.5.2.2 City of Redondo Beach Harbor / Civic Center Specific Plan

The City of Redondo Beach Harbor / Civic Center Specific Plan includes specific goals, objectives and policies applicable to visual resources. The RBEP site is within Zone 2 of the Catalina Avenue Sub-Area, and would also be subject to Specific Plan Area-Wide Goals, Objectives, and Policies. RBEP consistency with all Specific Plan provisions applicable to visual resources is addressed in Table 5.13-4.

TABLE 5.13-4

Conformity with the City of Redondo Beach Harbor / Civic Center Specific Plan

Provision	Conformity?
Specific Plan Area-Wide Policies	
5.2.1 Infrastructure / Utilities Goals and Objectives	
Retain the existing, compatible, and attractive low scale and limited building density of the area.	Yes. The proposed RBEP would, in comparison with the existing Redondo Beach Generating Station, reduce the overall scale of power-generating facilities in the Specific Plan area
5.2.2 Infrastructure / Utilities Policies	
Services, meters, and utility-related structures or facilities (including ground level or roof-mounted free-standing air conditioning/heating units) that must be located on or within a use or parcel, should, as much as possible or feasible, be constructed, installed so as to be shielded and buffered from view. Shielding techniques may include but not be limited to the use of small planters, decorative fences, or walls, or the use of appropriate sizes and species of natural landscaping, etc.	Yes. The proposed RBEP would be constructed in a manner that encloses pipe racks and other structures that could, in aggregate, appear more cluttered and less streamlined in design. The project will comply with any landscaping requirements formulated during design and site plan review.
Catalina Corridor Sub-Area 2 Goals, Objectives and Policies	
5.6.1 Goals and Objectives	
Ensure that the physical and environmental (relative to noise, light and glare, and traffic) integrity of the larger, intact, and established lower-density residential areas along the corridor (particularly on the eastern side of the Avenue between Beryl Street and Garnet Street) are respected, maintained, and protected.	Yes. As described in Section 5.13.2.4.4, and Section 5.13.2.5, project light fixtures would be restricted to areas required for safety and operations. Lighting would be directed onsite and would be shielded from public view. Non-glare fixtures would be specified, as would switches, sensors, and timers to minimize the use of the lights. These measures would substantially reduce the offsite visibility of project lighting. In addition, removal of the Redondo Beach Generating Station would result in the elimination of current on-site light sources.
5.6.2 Policies (Zone 2) – Urban / Architectural Design Policies	
Maximum Permitted Building Density; Maximum Permitted Building Height; Required (Horizontal) Building Setbacks; Recommended Massing/Articulation	Yes. The Specific Plan provides for these policies to be determined by the City of Redondo Beach Planning Commission during the site plan and design review associated with issuance of a conditional use permit. As local review is subsumed by CEC jurisdiction over RBEP, the CEC review process will determine necessary urban/architectural design specifications and ensure project conformity with such requirements.

TABLE 5.13-4
Conformity with the City of Redondo Beach Harbor / Civic Center Specific Plan

Provision	Conformity?
<p>5.6.2 Policies (Zone 2) – Supplemental Recommended Urban / Architectural Design Policies</p> <p>In consideration of the various lower and moderate-density commercial and residential land uses surrounding the Zone, implement, as possible and financially feasible any reasonable means, methods, or ways of eliminating entirely or reducing, as much as possible, the range of significant adverse environmental impacts that are created through operation of the Southern California Edison Plant (these measures could include, but are not limited to: external noise walls or fences, landscaping shields and buffering, additional internal noise insulation or air quality filtering systems, etc.).</p>	<p>Yes. Landscape and irrigation plans consistent with Municipal Code guidelines in Section 10-5.1900 of the Coastal Land Use Plan Implementing Ordinance will be submitted. In addition, both the scale and footprint of the RBEP will be smaller compared with the existing Redondo Beach Generating Station, which would reduce visual effects associated with the current electrical generation and transmission activities on and near the project site.</p>

Source: City of Redondo Beach, 2008

5.13.5.2.3 City of Redondo Beach Municipal Code Zoning Ordinance, Title 10

Chapter 5 of Title 10 of the Municipal Code Zoning Ordinance contains the Coastal Land Use Plan Implementing Ordinance and is part of the LCP. The project site is zoned P-GP (Generating Plant). The provisions of the Municipal Code that are applicable to the project are discussed in detail in Section 5.6, Land Use. Those that pertain to visual resources are summarized in Table 5.13-5.

TABLE 5.13-5
Conformity with the City of Redondo Beach Municipal Code Zoning Ordinance

Provision	Conformity?
<p>10-5.1900 Landscaping regulations.</p> <p>Establish standards for installation of landscaping in order to enhance the aesthetic appearance of properties within the City, ensure the quality, quantity, and appropriateness of landscape materials, effect a functional and attractive design, improve compatibility between land uses, conserve water, control soil erosion, and preserve the character of existing neighborhoods.</p>	<p>Yes. Landscape and irrigation plans consistent with Municipal Code guidelines in Section 10-5.1900 of the Coastal Land Use Plan Implementing Ordinance will be submitted.</p>
<p>10-5.1114 Development standards: P-GP generating plant zone.</p> <p>Floor Area Ratio, Building Height, Stories, and Setbacks shall be determined subject to Planning Commission Review.</p>	<p>Yes. The Zoning Ordinance provides for these development standards for the P-GP zone to be determined subject to Planning Commission Review. As local review is subsumed by CEC jurisdiction over RBEP, RBEP design plans will be submitted to CEC for review and approval, which will determine necessary development standards and ensure project conformity with those standards.</p>
<p>10-5.2502 Planning Commission Design Review.</p> <p>Planning Commission Design Review is established to ensure compatibility, originality, variety, and innovation in the architecture, design, landscaping, and site planning of developments in the community. The provisions of this section will serve to protect property values, prevent the blight and deterioration of neighborhoods, promote sound land use, encourage design excellence, and protect the overall health, safety, and welfare of the City.</p>	<p>Yes. As local review is subsumed by CEC jurisdiction over RBEP, the CEC review process will ensure project conformity with all applicable criteria provided for in section 10-5.2502.</p>

Source: City of Redondo Beach, 2012

5.13.5.3 Summary of Project's Conformity with Applicable LORS

The project complies with applicable LORS related to visual resource issues.

5.13.6 Agencies and Agency Contacts

The City of Redondo Beach would be responsible for design review and approval of RBEP, but for the exclusive jurisdiction of the CEC over RBEP (see Table 5.13-6).

TABLE 5.13-6
Agency Contacts for Visual Resources

Issue	Agency	Contact
Design Review	City of Redondo Beach Planning Department	Aaron S. Jones, Planning Director City of Redondo Beach Planning Department 415 Diamond Street Redondo Beach, CA 90277 (310) 318-0637, x1-2200 aaron.jones@redondo.org

5.13.7 Permits and Permit Schedule

There are no permits related to visual resources, however but for the exclusive jurisdiction of the CEC, the City of Redondo Beach would normally conduct design and site plan review and approval for the project. The CEC may request that the City review and comment on RBEP final design and site plans prior to construction (see Table 5.13-7).

TABLE 5.13-7
Permits and Permit Schedule for Visual Resources

Permit or Approval	Agency Contact	Schedule
Design and Site Plan Review	Aaron S. Jones, Planning Director City of Redondo Beach Planning Department 415 Diamond Street Redondo Beach, CA 90277 (310) 318-0637, x1-2200 aaron.jones@redondo.org	Prior to construction, at discretion of CEC.

5.13.8 References Cited or Consulted

Buhyoff, G. J., P. A. Miller, J. W. Roach, D. Zhou, and L. G. Fuller. 1994. "An AI Methodology for Landscape Visual Assessments." *AI Applications*. Vol. 8, No. 1., pp. 1-13.

California Department of Transportation. 2008. Scenic Highway Guidelines. Available on-line at: http://www.dot.ca.gov/hq/LandArch/scenic_highways/scenic_hwy.htm

California Department of Transportation. 2012. California Scenic Highway Program – List of Eligible and Officially Designated Scenic Highways. http://www.dot.ca.gov/hq/LandArch/scenic_highways/scenic_hwy.htm

California Energy Commission. 2009. Preliminary Staff Assessment for Avenal Energy. Appendix VR-1: Energy Commission Visual Resource Analysis Evaluation Criteria.

City of Redondo Beach. 2008. City of Redondo Beach Land Use Element of the General Plan. Accessed online at: http://www.redondo.org/depts/planning/general_plan/default.asp

City of Redondo Beach. 2008. City of Redondo Beach Harbor / Civic Center Specific Plan. Accessed online at: http://www.redondo.org/depts/planning/harbor_civic_center_specific_plan.asp

City of Redondo Beach. 2012. Zoning Ordinance (Municipal Code Title 10). Accessed online at:
<http://www.qcode.us/codes/redondobeach/>

U.S. Department of Transportation Federal Highway Administration (FHWA). 1988. Visual Impact Assessment for Highway Projects.

U.S. Forest Service (USFS). 1995. Landscape Aesthetics: A Handbook for Scenery Management. Agriculture Handbook No. 701. December.



Source: Department of Public Works Water Resources Division (2004).
 Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Legend



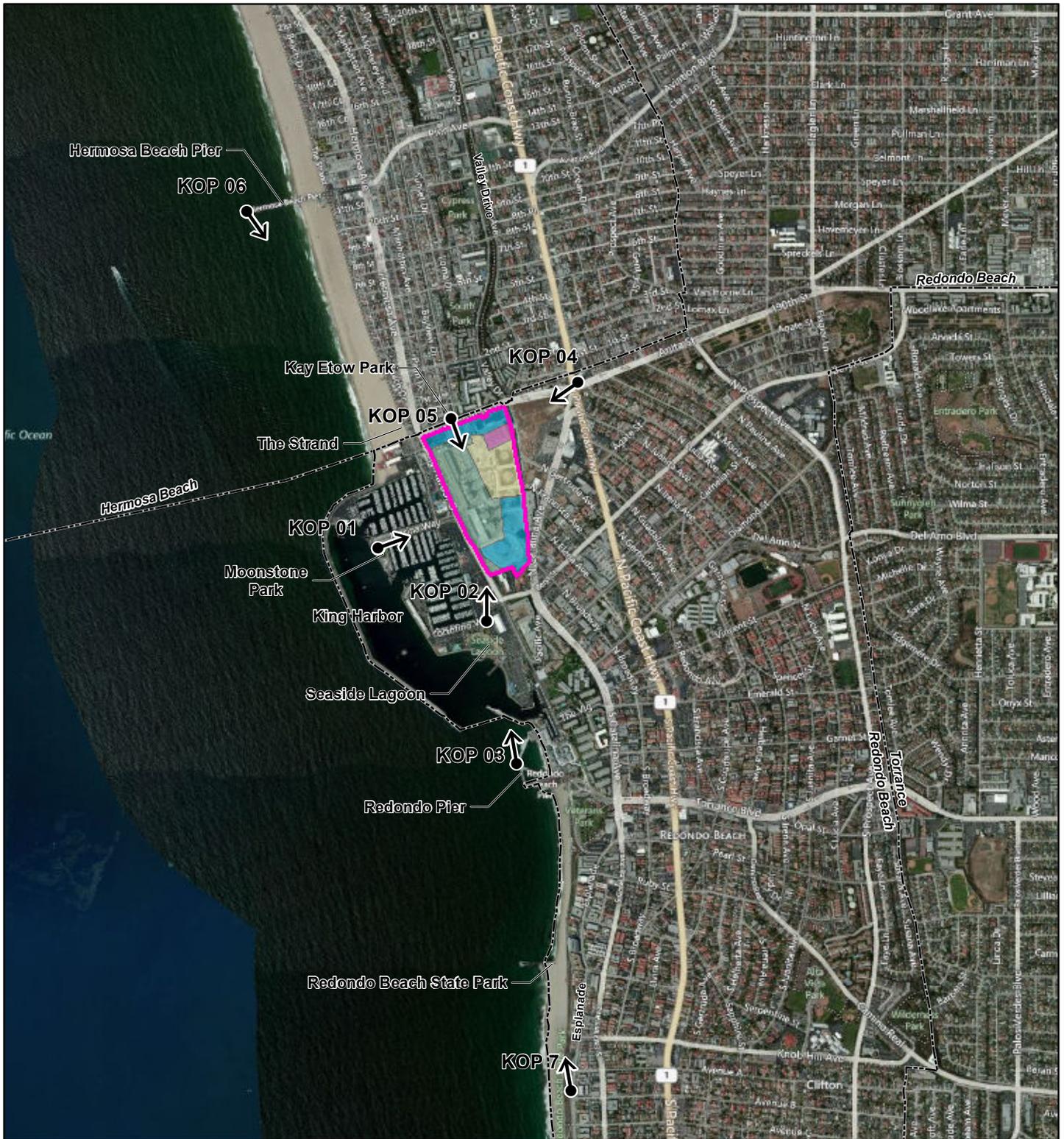
KOP



-  AES Redondo Beach Energy Project
-  Existing RBGS Aboveground Facilities
-  Existing SCE Switchyard
-  Proposed RBEP Aboveground Facilities
-  Laydown and Parking Areas
-  City Boundary

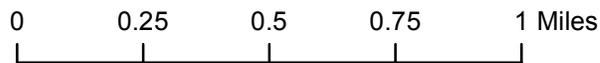


FIGURE 5.13-1a
Key Observation Point Locations
 AES Redondo Beach Energy Project
 Redondo Beach, California



Source: Department of Public Works Water Resources Division (2004). Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Legend



-  AES Redondo Beach Energy Project
-  Existing RBGS Aboveground Facilities
-  Existing SCE Switchyard
-  Proposed RBEP Aboveground Facilities
-  Laydown and Parking Areas
-  City Boundary



FIGURE 5.13-1b
Key Observation Point Locations
 AES Redondo Beach Energy Project
 Redondo Beach, California



A. View toward the project site from Moonstone Park, located near the end of Marina Way, in the King Harbor area. The RBGS is visible beyond the marina and the "Whaling Wall" mural.



B. View from KOP 1 with the RBEP constructed and RBGS removed. The new stacks are visible near the center of the view, beyond the sound wall displaying the relocated whale mural, which would be prominently visible from this location.

FIGURE 5.13-2
View from Key Observation Point 1
AES Redondo Beach Energy Project
Redondo Beach, California



C. View from KOP 1 with the RBEP constructed and RBGS removed, and with vegetation proposed in the Conceptual Landscape Plan, shown as it would appear after 5 years of growth. From this location, additional vegetation would be barely discernible.

FIGURE 5.13-2
View from Key Observation Point 1
AES Redondo Beach Energy Project
Redondo Beach, California



A. View toward the project site from the parking area outside Seaside Lagoon, in the southern portion of the King Harbor area. The RBGS is visible beyond the "Whaling Wall" mural.



B. View from KOP 2 with the RBEP constructed and RBGS removed. One of the new stacks is visible beyond the trees in the foreground in the right portion of the view, to the right of the relocated whale mural.

FIGURE 5.13-3
View from Key Observation Point 2
AES Redondo Beach Energy Project
Redondo Beach, California



C. View from KOP 2 with the RBEP constructed and RBGS removed, and with vegetation proposed in the Conceptual Landscape Plan, shown as it would appear after 5 years of growth. From this location, additional vegetation would not be visible.

FIGURE 5.13-3
View from Key Observation Point 2
AES Redondo Beach Energy Project
Redondo Beach, California



A. View toward the project area from the westernmost portion of the Redondo Pier. The RBGS is visible beyond the marina area.



B. View from KOP 3 with the RBEP constructed and RBGS removed. New stacks are visible above the foreground skyline in the center-right portion of the view.

FIGURE 5.13-4
View from Key Observation Point 3
AES Redondo Beach Energy Project
Redondo Beach, California



C. View from KOP 3 with the RBEP constructed and RBGS removed, and with vegetation proposed in the Conceptual Landscape Plan, shown as it would appear after 5 years of growth. From this location, additional vegetation would not be visible.

FIGURE 5.13-4
View from Key Observation Point 3
AES Redondo Beach Energy Project
Redondo Beach, California



A. View toward the project site from the intersection of Pacific Coast Highway and Herondo/Anita Streets. The RBGS is visible beyond the King Harbor entrance sign and an SCE transmission corridor, which runs along the southern side of Herondo Street.



B. View from KOP 4 with the RBEP constructed and RBGS removed. The new Air-Cooled Condenser would be the most prominently visible RBEP feature.

FIGURE 5.13-5
View from Key Observation Point 4
AES Redondo Beach Energy Project
Redondo Beach, California



C. View from KOP 4 with the RBEP constructed and RBGS removed, and with vegetation proposed in the Conceptual Landscape Plan, shown as it would appear after 5 years of growth.

FIGURE 5.13-5
View from Key Observation Point 4
AES Redondo Beach Energy Project
Redondo Beach, California



A. View toward the project site from within Kay Etow Park, a small park on the northern side of Herondo Street, along the southern border of Hermosa Beach. The RBGS occupies the right portion of the view.



B. View from KOP 5 with simulated project visible in the left portion of the view and the current RBGS removed from the right portion of the view.

FIGURE 5.13-6
View from Key Observation Point 5
AES Redondo Beach Energy Project
Redondo Beach, California



C. View from KOP 5 with the RBEP constructed and RBGS removed, and with vegetation proposed in the Conceptual Landscape Plan, shown as it would appear after 5 years of growth.

FIGURE 5.13-6
View from Key Observation Point 5
AES Redondo Beach Energy Project
Redondo Beach, California



A. View toward the project area from the end of the Hermosa Beach Pier. The existing RBGS is visible in the center of the view beyond the southwestern portion of Hermosa Beach. The RBEP would be located to the left of the current location of the RBGS.



B. View toward the project area from the southern portion of Redondo Beach, above Redondo Beach State Park. The existing RBGS is visible in the center of the view, beyond the Redondo Pier. The RBEP would be located to the right of the current location of the RBGS.

FIGURE 5.13-7
Views from Key Observation Point 6 and 7
AES Redondo Beach Energy Project
Redondo Beach, California