

## **5.13 VISUAL RESOURCES**

This section documents the existing visual setting of the project area, the identification of visually sensitive areas in the project vicinity and the potential impacts to these areas, applicable laws, ordinances, regulations and standards, and mitigation measures to minimize impacts to visually sensitive areas. A prepared California Energy Commission (CEC) data adequacy checklist, indicating section and page locations for information responsive to CEC data adequacy requirements, is provided as well as stipulations to standard CEC visual conditions.

### **5.13.1 Affected Environment**

The El Segundo Power Redevelopment (ESPR) Project involves the replacement of two existing, aged, lower efficiency units at the existing El Segundo Generating Station (ESGS) with a combined-cycle facility. This allows for very efficient use of an existing power facility with minimal environmental impacts because the new facility falls substantially within the environmental impact envelope of the old units. In the case of visual resources, the lack of contrast of the visual signature of the existing site versus the proposed changes is a great example of this phenomenon.

There are also three new pipeline routes, through which water and ammonia will be brought to ESGS and allow sanitary waste to be delivered to a municipal handling system. There are no new transmission lines offsite, although three generator lead poles are being replaced onsite. Finally, no new gas pipeline is required for ESPR.

#### **5.13.1.1 Regional Setting**

The ESPR Project is located along the coastline of Santa Monica Bay within the City of El Segundo in Los Angeles County, California (Figure 5.13-1). The project will be located within the existing ESGS facility. This coastal region is adjacent to coastal beach and Pacific Ocean areas, as well as industrial, commercial, recreational, and residential uses located along the beaches and hillside communities of El Segundo and Manhattan Beach. The ESPR Project is adjacent to Dockweiler State Beach and Manhattan State Beach, south of Santa Monica Bay. The coastal landscape is a dominant feature within this region. Additionally, open spaces, such as parks, landscaped areas, or undeveloped natural areas (e.g., the beaches) can be found throughout the project vicinity. Major roads and local streets both connect and divide residential neighborhoods, commercial districts, and industrial areas.

Major industrial development includes the Chevron Refinery, ESGS, and the LADWP Scattergood Power Plant and Hyperion Water Treatment Facility. The commercial areas consist primarily of Los Angeles International Airport (LAX) to the north, as well as gas stations, convenience stores, retail shops, and restaurants. The recreation areas are located

primarily along the beach including parking areas, bike paths, locker facilities, volleyball courts, concession stands, and lifeguard facilities. The residential areas along the western edge of the City of El Segundo are primarily low density single-family detached homes, while the residential areas in Manhattan Beach are primarily two-story single and multi-family homes. The residential areas are built on a rectangular grid, with major roads defining major boundaries on the section and half-section lines. Vista Del Mar is a major road that travels north and south throughout the project vicinity. This road provides access to the ESGS and adjacent beaches, as well as to the surrounding industrial, commercial, and residential development.

The Pacific Ocean and Santa Monica Bay are the focus of views from the beaches and hillside communities of El Segundo and Manhattan Beach. Views toward the Santa Monica Bay are concentrated along the first 0.25 to 0.5 mile of land adjacent to the shoreline, due to the terrain. Additionally, there are panoramic views of Santa Monica Bay and the beaches for passengers in vehicles travelling along Vista Del Mar between the ESGS and Marina Del Rey.

As previously discussed there are several industrial facilities visible from locations (i.e., residences, beaches, bike paths, and roads) within the project vicinity. These facilities are visible under a range of meteorological conditions, as well as during day and night hours. These facilities include exhaust stacks, storage tanks, ponds, transmission lines, administration buildings, night lighting, and visible vapor plumes emanating from the exhaust stacks of the power plants.

### **5.13.1.2 Project Site**

Figure 5.13-2 depicts the approximate region from which the power plant site may be seen (project view-shed). The project view-shed was developed based upon review of topographic maps and aerial photographs, field observations and project engineering specifications. The visual SOI for the proposed project represents the area within which the proposed project could potentially result in impacts to visual resources. The furthest distance at which potentially significant impacts to visual resources could occur was identified as 5 miles. Typically, views beyond 5 miles represent low impacts; however, the four existing ESGS exhaust stacks remain visible from a distance of 5 miles when viewed across the Pacific Ocean under clear conditions. Although the ESGS occupies a very small portion of the field of view at these distances, it forms a landmark for orientation in some view directions. For this project, therefore, the SOI needs to take into account the visibility of the existing exhaust stacks, as well as the visibility of the proposed ESPR Project exhaust stacks. The potential for visible vapor plumes emanating from the proposed stacks was not considered when determining the SOI because this vapor would only occur intermittently under certain meteorological conditions (i.e., cool temperatures, no fog, and low wind speed), and presently occurs with the existing ESGS stacks.

The ESPR Project is located entirely within the boundary of the existing ESGS. In addition to the ESGS, there is a considerable amount of industrial development located within the vicinity of the project. This development includes the Chevron Refinery immediately adjacent to the east side of the site; LADWP Scattergood Power Plant and Water Treatment Facility, 0.75 miles to the north; and several overhead transmission lines on steel-lattice or single pole structures. The power plants have several visible features associated with them which contribute to the industrial character in the area including generating units, exhaust stacks, water tanks, administration buildings, switchyards, night lighting, parking lots, access roads, etc. Additionally, the refinery has several large holding tanks situated along Vista Del Mar, which contribute to the industrial nature of this area.

The most recognizable features in this area are those that are the tallest in height including the exhaust stacks (approximately 200 to 250 feet high), the switchyards and transmission line structures (approximately 50 to 150 feet high), and the holding tanks (approximately 30 to 100 feet high). The exhaust stacks for the LADWP Scattergood Power Plant are painted in alternating orange and white colors.

Additionally, vapor plumes (approximately 250 to 500 feet above ground and 100 to 500 feet in length, estimated during field review on October 11 and 17, 2000) emanating from the exhaust stacks are characteristic features associated with the existing ESGS power plant. The industrial facilities have landscape buffers around the perimeters consisting of a combination of vegetation (native trees and shrubs), berms, and boulder/rock walls. These buffers provide a softer, more natural appearing landscape while enhancing the aesthetics of the area. Currently, the two large storage tanks at the south end of the facility are being removed. These large tanks are visible from many areas and are shown on Figure 5.13-3, Storage Tanks.

Within the 5-mile distance limit, the SOI boundary was refined to account for local viewing conditions, primarily topographic screening. Beyond the mapped SOI, the proposed project would be either not visible due to screening, or of such a small size in the background field of view that the possibility of significant impacts would not be anticipated.

After consultation with staff and other interested individuals, scenic corridors and all other visually sensitive areas that might be potentially affected by the project were identified. These areas included trails, streets, and surrounding recreational and residential areas. The most sensitive areas that were identified were Vista Del Mar and the Manhattan Beach residences that border the project site. Vista Del Mar is considered a viewshed corridor. This corridor would represent southbound views from the roadway, as well as the adjacent sidewalks. According to projections within the El Segundo General Plan, the Average Daily Trips (ADT) for this roadway is 31,000. The most sensitive views of the proposed project range from approximately 500 feet to 0.25 mile and are partially screened due to vegetation,

utility lines, surrounding development, and fences. The existing ESGS is visible to the south, the Chevron Refinery visible to the east, and Santa Monica Bay is visible to the south. The City of Manhattan Beach is another sensitive residential area that could be impacted by the proposed project. This area was analyzed from northward views from residences (first and second story), as well as a main travel road Vista Del Mar near its intersection with 45th Street. Views of the proposed project are within 0.25 mile and are partially screened by adjacent vegetation and development. There are 166 residences that have a view of the project site. It should be noted that a majority of the residences in the area are multi-story. Therefore, it can be inferred that these houses have two viewpoints apiece. Other visually sensitive areas include Dockweiler State Beach Park, Manhattan Beach State Park, Manhattan Beach State Pier. Usage at these sites is lower than average due to the proximity of the Hyperion Sewage Treatment plant and off-shore dumping for treated sewage from more than 4 million people. These areas are further analyzed in detail below as Key Observation Points.

#### **5.13.1.3 Continued Use of Existing Natural Gas Pipeline**

No new natural gas pipeline is required for ESPR. Natural gas will be supplied and delivered to the El Segundo Generating System through the existing 20-inch pipeline from Southern California Gas Company. The existing pipeline will continue to be used from the location where the pipeline enters the plant to the existing metering station. The existing metering station will be modified to incorporate the new flow and pressure requirements. From the metering station, natural gas will flow to the existing Units 3 and 4, Units 5 and 7 HRSG duct burners, and Units 5 and 7 natural gas compression system.

#### **5.13.1.4 Water Pipeline Corridors**

Reclaim water from the West Basin Municipal Water District will be supplied to the El Segundo Generating Station for use, after treatment, as make-up to the steam cycle, make-up to the closed-loop auxiliary cooling system, and for steam injection to the combustion turbines. The El Segundo Power Redevelopment Project proposes to install a new 8-inch diameter reclaimed water pipeline from the existing tie-in point in the City of El Segundo to the plant site.

The new pipeline will begin at a tie-in point on an existing 12-inch diameter reclaimed water main near the intersection of Richmond Street and El Segundo Boulevard, north on Richmond Street, west on Grand Avenue and south on Vista Del Mar. Immediately north of the power plant property, the new reclaimed water pipeline will be routed under Vista Del Mar at an overpass that is currently utilized by Chevron Refinery for routing pipe.

Construction of the proposed water line will meet the requirements established by the state and the City of El Segundo. The pipeline will be constructed of 8-inch diameter HDPE pipe

and will extend approximately 1.75 miles from the tie-in point to the termination point within the plant site.

### 5.13.2 Applicable Laws, Ordinances, Regulations & Standards

The ESPR Project is located on private lands and is not subject to any federal regulations pertaining to visual resources. However, the project falls under the jurisdiction of multiple local planning agencies. The agencies include the cities of El Segundo and Manhattan Beach, and the California State Parks Department. The applicable laws, ordinances, regulations, and standards, administrating agencies, and compliance discussions for the project are summarized in Table 5.13-1.

**TABLE 5.13-1**

#### LORS APPLICABLE TO VISUAL RESOURCES

LORS	Applicability	Section
<b>FEDERAL</b>		
No federal LORS	Not applicable	Not applicable
<b>STATE</b>		
No state LORS	Not applicable	Not applicable
<b>CITY OF EL SEGUNDO</b>		
<b>OBJECTIVE LU-1-1</b> Preserve and Maintain the City's low-medium density residential nature, with low building height profile and character, and minimum development standards.	Limit development to be consistent with existing City density and appearance.	Sections 5.13.2.2.2, 5.13.3.1, and 5.13.4
<b>OBJECTIVE LU1-2</b> Prevent deterioration and blight throughout the City.	Project Design Decisions made to ensure objectives maintain consistency.	Section 5.13.4
<b>Policy LU1-2.2</b> Prevent deterioration and blight; properties should be maintained at all times in accordance with City of El Segundo codes.	Maintain and, if necessary, improve visual character of all properties.	Section 5.13.4
<b>OBJECTIVE LU1-5</b> Recognize the City as a comprehensive whole and create policies, design standards, and monumentation that will help create a sense of place for the entire city.	Require appearance of City structures to be consistent and unified.	Section 5.13.4
<b>Policy LU1-5.2</b> Adopt a comprehensive sign ordinance that will regulate the quantity, quality, and location of signs.	Require City signage to be consistent and unified.	Sections 5.13.1.2 and 5.13.4

**TABLE 5.13-1  
(CONTINUED)**

<b>LORS</b>	<b>Applicability</b>	<b>Section</b>
<b>Policy LU1-5.3</b> Preserve existing street trees and encourage new ones consistent with the City Tree Program.	Maintain and promote use of trees as a means of beautification.	Section 5.13.2.2.2
<b>Policy LU1-5.4</b> Adopt action programs that will provide for planting of trees in all the City streets, landscaping of median strips in major and secondary highways, improvement and beautification of parking lots, railroad rights-of-way, unsightly walls or fences, and vacant lots.	Use vegetation as a means to improve the appearance of transportation corridors and disturbed open areas.	Sections 5.13.1.2, 5.13.4, and 5.13.4.1
<b>Policy LU1-5.5</b> Develop an active program to beautify the major entrances to the City. Landscaping and an attractive monument with the City's name and other design features would heighten the City's identification.	Use landscaping and art as a means of introduction between the City and outlying areas.	Sections 5.13.4 and 5.13.4.1
<b>Policy LU1-5.7</b> Appropriate buffers such as walls, landscaping, or open space, shall be provided between residential and non-residential uses. Development within the Corporate Office area abutting Single-Family Residential shall maintain a 100-foot building set-back, including a 25-foot landscape buffer, adjacent to the Single-Family area.	Protect residential uses from non-residential by using buffers, which may include visually appealing elements such as landscaping and/or landscaped open space.	Sections 5.13.1.2, 5.13.4, and 5.13.4.1
<b>Policy LU1-5.8</b> innovative land development and design techniques as well as new materials and construction methods should be encouraged.	Introduce modern landscape design and architecture that is consistent with existing design.	Sections 5.13.1.2 and 5.13.4
<b>OBJECTIVE LU3-2</b> Preserve and maintain the City's low-medium residential nature, with low building height and profile and character, and minimum development standards	Limit development to be consistent with existing City density and appearance.	Sections 5.13.2.2.2, 5.13.3.1, and 5.13.4
<b>Policy LU3-2.3</b> Appropriate buffers such as walls, landscaping, or open space, shall be provided between residential and non-residential uses.	Protect residential uses from non-residential by using buffers, which may include visually appealing elements such as landscaping and/or landscaped open space.	Sections 5.13.1.2, 5.13.2.2.2, 5.13.3.1, and 5.13.4
<b>Policy LU3-2.5</b> Concerted public and private effort should be directed toward the upgrading and rehabilitation of older dwellings and toward the removal of substandard units.	Ensure that residential areas are not blighted and pose a health and safety risk.	Section 5.13.4
<b>Policy LU3-2.6</b> Develop property maintenance standards to ensure proper upkeep of all residential properties.	Ensure that residential areas are not blighted and pose a health and safety risk.	Section 5.13.4

**TABLE 5.13-1  
(CONTINUED)**

<b>LORS</b>	<b>Applicability</b>	<b>Section</b>
<b>Policy LU3-2.7</b> Develop housing programs to retrofit and improve existing homes.	Ensure that residential areas are not blighted and pose a health and safety risk.	Section 5.13.4
<b>OBJECTIVE LU5-2</b> Encourage the construction of high-quality, well-designed industrial developments through the adoption of property development standards and provisions of community services and utilities.	Adopt development standards to ensure new industrial developments are of high quality and visual integrity.	Section 5.13.4
<b>Policy LU5-2.1</b> New industrial developments shall provide landscaping is to be permanently maintained.	Ensure that landscaping beautifies all new industrial developments.	Section 5.13.4
<b>Policy LU5-2.2</b> All outdoor storage shall be properly screened by masonry walls and landscaping.	Provide visual buffers around outdoor storage areas.	Section 5.13.4
<b>OBJECTIVE LU5-3</b> Encourage the rehabilitation of existing substandard blighted industrial areas through the combined efforts of private and public sectors.	Maximize both private and public sector beautification opportunities to revitalize deteriorated industrial areas.	Sections 5.13.1.2 and 5.13.4
<b>Policy LU5-3.1</b> Revitalize and upgrade industrial areas, which contain aesthetic or functional deficiencies in such areas as landscaping, off-street parking, or loading areas.	Improve the visual integrity of deteriorated industrial areas.	Sections 5.13.1.2, 5.13.4, and 5.13.4.2
<b>OBJECTIVE LU7-1</b> Provide the highest and most efficient level of public services and public infra-structure financially possible.	Not applicable.	
<b>Policy LU7-1.3</b> Develop, adopt, and implement a street lighting plan, which provides a uniform and high quality of street lights in all areas of the City.	Require consistent and unified lighting throughout the City.	Section 5.13.4
<b>Policy LU7-1.7</b> Develop standards for wireless communication facilities, to regulate their location and design, to protect the public safety, general welfare and quality of life in the City, (Ord. 1272, GPA 97-1, 6/17/97).	Not applicable.	
<b>OBJECTIVE LU7-2</b> Promote City appearance and cultural heritage programs.	Adopt programs to enhance the visual integrity of the City.	Sections 5.13.1.2, 5.13.3.4.2, and 5.13.4.2
<b>Policy LU7-2.1</b> Coordinate public improvements and beautification efforts with service groups, citizen groups, and organizations that are interested in upgrading the community.	Not applicable.	

**TABLE 5.13-1  
(CONTINUED)**

<b>LORS</b>	<b>Applicability</b>	<b>Section</b>
<p><b>Policy LU7-2.2</b> Continue long-term programs in conjunction with Southern California Edison and the Los Angeles Department of Water and Power for eventually placing all utilities that they are responsible for under-ground.</p>	Improve City aesthetics by placing utility lines under-ground.	Section 5.13.1.2
<p><b>Policy LU7-2.3</b> All new development shall place utilities under-ground.</p>	Require all new development to improve City aesthetics by placing utility lines underground.	Sections 5.13.1.2 and 5.13.1.4
<p><b>Policy LU7-2.5</b> All public facilities and utilities should be designed to enhance the appearance of the surrounding areas in which they are located.</p>	Require all public facilities and utilities to be designed in a manner that will complement their surroundings.	Sections 5.13.1.2 and 5.13.1.4
<p><b>Section 30251</b> The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. 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.</p>	Protect and maintain the scenic and visual qualities of coastal areas. Require new development to be designed to protect coastal views and scenery and, where possible, to improve visual quality in degraded areas.	Sections 5.13.1.2 and 5.13.4, 5.13.4.1, and 5.13.4.2
<b>CITY OF MANHATTAN BEACH</b>		
<p><b>Policy 1.1</b> Limit the height of new development to three stories where the height limit is 30 feet or to two stories where the height limit is 26 feet, in order to protect the privacy of adjacent properties, reduce shading, protect views of the ocean, and preserve the low profile image of the community.</p>	Impose height limits on new development to promote visual compatibility with existing uses and maintain low-profile visual character of the community.	Sections 5.13.1.2, 5.13.2.2.3, 5.13.4, and 5.13.4.
<p><b>Policy 1.2</b> Require the design of all new construction to utilize notches, or balconies or other architectural details to reduce the size and bulk.</p>	Require architectural design that minimizes bulk.	Sections 5.13.1.2, 5.13.4, and 5.13.4.1
<p><b>Policy 1.3</b> Require the use of landscaping and setbacks to reduce the bulk in new buildings and add visual interest to the streetscape.</p>	Require landscaping and setbacks to minimize bulk and add visual interest.	Sections 5.13.1.2, 5.13.4, and 5.13.4.1

**TABLE 5.13-1  
(CONTINUED)**

<b>LORS</b>	<b>Applicability</b>	<b>Section</b>
<b>Policy 2.1</b> Protect the existing mature trees in all planning areas and encourage their replacement with specimen trees whenever they are lost due to public or private construction activity.	Maintain and promote use of trees as a means of beautification.	Sections 5.13.1.2, 5.13.4, and 5.13.4.1
<b>Policy 5.2</b> Require the separation or buffering of low density residential areas from businesses that produce noise, odors, high traffic volumes, light or glare, and parking, through the use of landscaping, setbacks, and other techniques.	Protect residential uses from non-residential by using buffers, which may include visually appealing elements such as landscaping and/or landscaped open space.	Sections 5.13.1.2, 5.13.4, 5.13.4.1, and 5.13.4.2
<b>COUNTY OF LOS ANGELES</b>		
<b>Goal:</b> To provide commercial and industrial lands sufficient to accommodate the projected work-force	Not applicable	Section 5.13.2.2.1
<b>Land Use Policy 8:</b> Where appropriate, promote more intensive use of industrial sites, especially in areas requiring revitalization.	Maintain and reduce existing industrial sites	Section 5.13.2.2.1
<b>Goal:</b> To encourage high quality design in all development projects, compatible with, and sensitive to, the natural manmade environment.	Design should reflect environment and values	Sections 5.13.1, 5.13.2, 5.13.2.2.1
<b>Land Use Policy 14:</b> Assure that new development is compatible with the natural and manmade environment by implementing appropriate locational controls and high quality design standards.	Development should be compatible with existing environment	Sections 5.13.1, 5.13.2, 5.13.2.2.1
<b>Land Use Policy 16:</b> Promote planned industrial development in order to avoid land use conflicts with neighboring activities.	Development should be consistent with existing and planned uses	Section 5.13.2.2.1
<b>Land Use Policy 17:</b> Establish and implement regulatory controls that ensure compatibility of development adjacent to or within major public open space or recreational areas including National Forests, the National Recreational Area, and State and regional parks.	Ensure adjacent uses are compatible with development	Sections 5.13.1, 5.13.2.2.1

### 5.13.2.1 Los Angeles County LORS Compliance

The Los Angeles County Development Code implements the goals and policies of the General Plan by regulating land uses within the unincorporated areas of the county. Each piece of the property is assigned a “zone” or “land use district” which describes the rules under which that land may be used. However, the El Segundo Redevelopment Project is within the incorporated city limits of the City of El Segundo. Therefore, per conversation

with Lee Stark from the Los Angeles County Regional Planning Department on December 7, 2000, the projects compliance with the County of Los Angeles Laws, Ordinances, Regulations and Standards is not applicable.

#### **5.13.2.2 City of El Segundo LORS Compliance**

The City of El Segundo Community Economic and Development Services Department regulates land uses, applies development standards for new and existing projects, implements the building code, and enforces zoning and other Municipal Ordinances within the City of El Segundo. Criteria for industrial projects including landscaping, building elevations, compatibility of design, etc., are reviewed by the City planners during the development process.

**General Plan.** The General Plan adopted in 1992 dictates overall land use in the City of El Segundo. The sections that provide guiding policies and implementing policies applicable to visual resources that may be impacted by the proposed project are Section 6.0-Open Space and Recreation Element, subsections 6.2-Summary of Existing Conditions and Section 7.0-Conservation Element, subsection 7.8-Urban Landscape.

**Section 3.0-Land Use Element, subsections 3.9-Proposed Land Use Plan, 3.23-Provision of a Stable Tax Base for El Segundo through Commercial Uses, and 3.29-Provision of Quality Infrastructure.** ESPR's property is designated as zone M-2, Industrial. ESPR's proposed project is a permitted use, and no special permits are required. In the absence CEC jurisdiction, however, ESPR would be required to apply for a Development Plan Approval. ESPR is required to comply with applicable provisions of the General Plan, discussed here, and the Municipal Code, discussed below. Apart from a required CEQA environmental review, the Development Plan approval would be a ministerial approval subject to ESPR's compliance with relevant sections of the City of El Segundo Municipal Code discussed below.

Specific policies that are incorporated into the design of the project, including landscaping, are identified in Table 5.13-1. These policies include the incorporation of trees and landscaping and maintenance of the architectural design characteristics of to the surrounding area. Additional policies address new industrial developments to encourage high-quality design and visual integrity.

**Section L, Visual Resources and Special Communities, Subsection 30251** of the City of El Segundo Local Coastal Program addresses scenic and visual resources.

**Municipal Code.** The City of El Segundo Municipal Code sets forth detailed standards for development projects. The requirements for the M-2 zone are provided in section 20.41 Heavy Industrial Zone. Pursuant to the Development Agreement and the General Plan, ESPR

will work with the City of El Segundo to ensure that the plan complies with the General Plan discussed above.

### **5.13.2.3 City of Manhattan Beach LORS Compliance**

The City of Manhattan Beach Community Development Department regulates land uses, applies development standards for new and existing projects, implements the building code, and enforces zoning and other Municipal Ordinances within the City of Manhattan Beach. Criteria for industrial projects including landscaping, building elevations, compatibility of design, etc., are reviewed by the City planners during the development process.

**General Plan.** The General Plan adopted February 1988, dictates overall land use in the City of Manhattan Beach. The specific sections that set forth guiding policies and implementing policies applicable to visual resources that may be impacted by ESPR's proposed projects is the Land Use Element section, Subsection LU-14-goals and Policies.

The Land Use Element, subsections LU-14-Goals and Policies reflect the expectations of the City of Manhattan Beach. ESPR's property is designated as zone M-2, Industrial. ESPR's proposed project is a permitted use, and no special permits are required. In the absence CEC jurisdiction, however, ESPR would be required to apply for a Development Plan Approval. The Development Agreement that exists is between ESPR and the City of El Segundo, and provides ESPR with a vested right to develop the site to the extent allowed in M-2 Industrial zones. ESPR is required to comply with applicable provisions of the General plan of the City of El Segundo. Apart from a required CEQA environmental review, the Development Plan approval would be a ministerial approval subject consideration of compliance with relevant sections of the City of Manhattan Beach Municipal Code discussed below.

The project will comply with the Land Use Element section of the City of Manhattan Beach General Plan by working with the City to reach expectations.

### **5.13.3 Agencies and Agency Contacts**

Agencies with jurisdiction to issue applicable permits and/or enforce LORS related to visual resources and included in Table 5.13-2.

**TABLE 5.13-2****AGENCY CONTACTS**

<b>Agency</b>	<b>Contact</b>	<b>Title</b>	<b>Telephone</b>
California Energy Commission	Dale Edwards	Visual Specialist	(916) 654-3861
California Department of Parks and Recreation	Russ Daemon	Planner	(818) 880-0350
County of Los Angeles	Lee Stark	Planner	(213) 974-6417
City of El Segundo	Lauri Truitt	Planner	(310) 524-2344
City of Manhattan Beach	Lauri Jester	Planner	(310) 802-5510
City of Los Angeles	Andy Montealegre	Planner	(213) 977-6083

**5.13.4 Permits Required and Permit Schedule**

No specific permits are believed to be required for visual resources for this project (See Table 5.13-3). Section 5.9, Land Use, includes appropriate land use LORS and permit discussion. A Landscaping Plan must be approved as part of the City of El Segundo compliance period design approvals.

**TABLE 5.13-3****APPLICABLE PERMITS**

<b>Jurisdiction</b>	<b>Potential Permit Requirements</b>
Federal	None required
State	None required
Local	None required

**5.13.5 Environmental Consequences****5.13.5.1 Analysis Methodology**

The visual assessment was conducted in accordance with CEQA documentation requirements, local goals, policies, or designations, and CEC Guidelines for preparing visual impact assessments for Application for Certifications. The extent and implications of the visual changes were assessed by selecting sensitive views and comparing the views before and after project construction using computer generated visual simulations. The following paragraphs summarize guidelines used in the visual impact assessment for the proposed project.

**Appendix G of the CEQA Guidelines (California Resources Agency 1998).** Appendix G indicates that a project will have a significant effect on the environment if it will “have a substantial, demonstrable negative aesthetic effect”. More specifically, the CEQA Guidelines indicate that a project will have a negative aesthetic effect if it creates an objectionable public view or obstructs a scenic vista or public view.

**Local LORS.** Conflicts with local goals, policies or designations regarding visual resources were considered to determine if the proposed project would create significant visual impacts. See Section 5.13.2 for a discussion of applicable local LORS.

**CEC Guidelines (CEC 1999c).** The CEC assesses the existing visual setting and the types of visual change that a project will cause to determine impact significance. In accordance with these guidelines, four elements of the existing visual setting were first assigned a value and the values were combined to determine the overall measure of the existing setting. Second, the visual simulations of the proposed project from the sensitive receptors were evaluated by assigning a value to four visual change factors and combining the values to determine the overall measure of visual impacts. The following visual elements and visual change factors were considered to assess the existing visual setting.

### **Visual Elements**

Analysis of the results of visual simulations is a key input in determining visual impact severity. In general, the process of creating visual simulations includes: photographing the project location from various viewpoints; developing a three-dimensional (3-D) model of the proposed project structures; and superimposing the modeled structures into the photographs.

**Visual Quality.** The visual quality of a setting is the value of visual resources, for example, the landscapes that are visually pleasing or that are assigned a high public value (CEC 1999c).

**Visual Sensitivity.** This is a measure of the level of interest or concern of viewers regarding the visual resources in an area (CEC 1999c). One of the main indicators of viewer sensitivity is land use. Uses associated with parks, wilderness areas, scenic highways/corridors, recreation, or residences are considered highly sensitive, while commercial uses are considered moderately sensitive (CEC 1999c). Industrial uses are generally considered the least sensitive. Three levels of viewer sensitivity (high, moderate, and low) were used to describe the sensitivity of viewers within the study area. High-sensitivity viewing areas identified in the study area include existing and future residences, beaches and bike paths, and major roads that provide scenic views of Santa Monica Bay and the adjacent coastline and/or city skyline. Moderate-sensitivity viewing areas consist of commercial areas and arterial roads. Low-sensitivity viewing areas include active industrial areas and vacant

parcels not managed as open space or for recreational purposes. The low sensitivity viewing areas have not been evaluated in detail because they would not likely result in significant visual impacts. The approximate number of viewers was determined by calling appropriate sources (i.e., City of El Segundo, City of Manhattan Beach, California State Parks Department, etc.). In order to approximate the number of residences with views of the proposed project, the number of residential buildings within the surrounding viewing area were counted from aerial photos and reviewed in the field.

**Visibility.** The degree of visibility is a factor of screening. Angle of view, distance, meteorological conditions, and the time of day can affect the degree of screening. The smaller the degree of screening, the higher a feature's visibility (CEC 1999a). For example, the closer the feature is to the center of the view area, the greater the impact. Perception of details (i.e., form, line, color, and texture) diminishes with increasing distance. The distance zones established for this study were—foreground (0 to ½ mile), middleground (½ to 3 miles), and background (beyond 3 miles). In addition, the analysis took into account whether views were open, partially screened (filtered), or screened (i.e., presence of hillside terrain, vegetation, and/or buildings blocking the view). Alternatively, fog can make a cooling tower or stack plume unnoticeable, lessening the visibility value.

**Viewer Exposure.** This is a measure of the degree to which viewers are exposed to a view. The value is affected by distance, number of viewers, and duration of view (CEC1999c).

### **Visual Change Factors**

**Contrast.** This is a measure of the contrast with existing structures, vegetation, and land/water in regard to color, form, line, texture, and scale (CEC 1999a). The degree of contrast can range from high to low.

**Dominance.** This is a measure of the apparent size of an object relative to the visible expanse of the total field of view and the dominance of an object in relation to its location in the landscape (CEC 1999c). Dominance can range from subordinate to dominant.

**View Blockage.** This is the blockage of view or elimination by project of any previously visible components. Blockage of higher quality visual elements with lower quality visual elements would be a significant impact (CEC 1999c). The degree of view blockage can range from strong to none.

### **Visual Setting Assessment**

Representative Key Observation Points (KOPs) were chosen from those sensitive receptors within the project viewshed which were determined to have the potential to be significantly impacted by the project. In consultation with the Energy Commission staff, six KOPs were

chosen to provide the basis for evaluation of project impacts by comparing the appearance of the project site before and after construction. The visual setting analysis follows. On Figure 5.13-1, the location of the KOPs used in this analysis correspond as follows: KOP #1 – Dockweiler Beach State Park; KOP #2 – Manhattan Beach State Park; KOP #3 – Views from Manhattan Beach; KOP #4 – Manhattan Beach State Park Pier; KOP #5 – Vista Del Mar; and KOP #6 – a plume rendering analysis of Manhattan Beach State Park.

The existing structures are painted a flat gray color. The proposed structures will be painted the same color to blend in with existing structures and surrounding uses. Use of a flat finish will reduce the reflectivity of the surfaces and color tones proposed will help the plant blend in with the middleground and background views. To reduce the offsite impacts from nighttime lights, the lights will be directed towards the middle of the property and away from the outer site boundaries to reduce light or glare (see Table 5.13-4). Additionally, fixtures will be a non-glare type. The most prominently visible features of the proposed equipment are heat recovery steam generator stacks which are 250 feet high and 18.5 inches wide, and the heat recovery steam generator which is 95 feet wide 130 feet in length and 45 feet in width. For a complete listing of all proposed equipment dimensions, please refer to Table 5.13-5.

**KOP #1 - Dockweiler Beach State Park.** This KOP represents views to the south from the beach, bike path, and parking lots, which are located approximately 0.25 to 0.5 mile north of the proposed project site. For the purposes of depicting project staging and the degree to proposed project impact, an interim stage is depicted in Figure 5.13-4C. This view shows the project from KOP 1 without the two stacks that are proposed to be replaced. Only the two stacks will remain and their pertinent equipment will be depicted in this view.

**Visual Quality.** Views of the proposed project are primarily open with the LADWP Scattergood Power Plant and Water Treatment Facility visible to the east, Chevron Refinery visible to the southeast and the existing ESGS visible to the south, and Santa Monica Bay visible to the west.

**Visual Sensitivity.** This KOP would be considered High sensitivity due to the volume of use and recreational nature of the area.

**Visibility.** Although recreational users of the beach have a direct view of the project site, the existing ESGS already has a dominating effect. Therefore, the visibility of the project is considered to have a Low value.

**Viewer Exposure.** The existing power plant is within range of recreation users of the beach. Users of the beach will have an unobstructed view of the power plant structures due to the open nature of the beach. Due to the relatively short distance, and high number of users, the viewer exposure value is considered high.

**KOP #2 - Manhattan Beach State Park.** This KOP represents views to the north from the beach, bike path, parking lots, and adjacent residences, which are located approximately 0.25 to 0.5 mile south of the proposed project site

**Visual Quality.** Views of the proposed project are primarily open with the existing ESGS visible to the north, and Santa Monica Bay visible to the west.

**Visual Sensitivity.** This KOP would be considered High sensitivity due to the volume of use and recreational nature of the area.

**Visibility.** The existing power plant currently has a dominating effect. Therefore, the visibility of the project is considered to have a Low value.

**Viewer Exposure.** The existing power plant is within range of recreation users of the beach. Users of the beach will have an unobstructed view of the power plant structures due to the open nature of the beach. Due to the relatively short distance, and high number of users, the viewer exposure value is considered High.

**KOP #3 - Views from Manhattan Beach.** This KOP represents northward views from residences (first and second story), as well as a main travel road Vista Del Mar near its intersection with 45<sup>th</sup> Street. Views of the proposed project are within 0.25 mile and are primarily open to partially screened by adjacent vegetation and development.

**Visual Quality.** The existing ESGS and a Chevron Convenience Store are visible to the northwest, as well as residences and Santa Monica Bay visible to the west.

**Visual Sensitivity.** This KOP would be considered High sensitivity due to the volume of use, residential nature of the area, and commuter travel along Vista Del Mar.

**Visibility.** Although Manhattan Beach residences have a direct view of the proposed project, the views of the structure will be partially obscured by the existing power plant structures. The distance to the edge residences is less than 0.5 miles, therefore the visibility of the project is considered to have a Low to Moderate value.

**Viewer Exposure.** The existing power plant is within range of the residences. Because the view area is in a residential area, the duration of the view is considered long. Considering

the distance, the number of viewers, and the long view duration, the view exposure is considered moderate to High.

**KOP #4 - Manhattan Beach State Park Pier.** This KOP would represent northward views from the pier.

**Visual Quality.** Views of the proposed project are approximately 2 miles away and are open. The existing ESGS, Scattergood Power Plant, and Manhattan Beach are visible to the north, and the Redondo Beach Generating Station is visible to the south.

**Visual Sensitivity.** This KOP would be considered High sensitivity due to the volume of use and recreational nature of the area.

**Visibility.** The power plant can be seen in the view of this KOP. The view is predominantly Manhattan Beach open space. Additionally, the distance from this KOP to the project is approximately 2 miles. Therefore, the visibility from this KOP is considered Low to Moderate.

**Viewer Exposure.** Due to the extensive volume and use of the KOP, the project will be visible to numerous recreational users of the pier. The project site is visible, but is over two miles away. Based on the lack of visible intervening structures, the view exposure is considered Moderate to High.

**KOP #5 - Vista Del Mar.** This KOP would represent southbound views from the roadway, as well as the adjacent sidewalks. The most sensitive views of the proposed project range from approximately 500 feet to 0.25 mile and are partially screened due to vegetation, utility lines, surrounding development, and fences. The existing ESGS is visible to the south, the Chevron Refinery visible to the east, and Santa Monica Bay is visible to the south

**Visual Quality.** The most sensitive views of the proposed project range from approximately 500 feet to 0.25 mile and are partially screened due to vegetation, utility lines, surrounding development, and fences. The existing ESGS is visible to the south, the Chevron Refinery visible to the east, and Santa Monica Bay is visible to the south.

**Visual Sensitivity.** This KOP would be considered High sensitivity due to the volume of traffic and panoramic views of Santa Monica Bay.

**Visibility.** The power plant can be seen in this KOP. Due to the relatively short distance to the KOP, the visibility is considered Moderate to High.

**Viewer Exposure.** Travelers on the road do not have an unobstructed view due to the presence of the existing power plant, the power poles and transmission lines. Additionally,

the project will not be in the center of the road users' field of vision. Therefore, the view exposure is considered Low.

**KOP #6 – Plume Rendering Analysis of Manhattan Beach State Park.** This KOP represents views to the north from the beach, bike path, parking lots, and adjacent residences, which are located approximately 0.25 to 0.5 mile south of the proposed project site. This KOP analyzed the effects of the vapor plumes emitted from the power plants stacks.

**Visual Quality.** Views of the proposed project are primarily open with the existing ESGS visible to the north, and Santa Monica Bay visible to the west.

**Visual Sensitivity.** This KOP would be considered High sensitivity due to the volume of use and recreational nature of the area.

**Visibility.** The existing power plant currently has a dominating effect. The visibility of the vapor plumes is insignificant due to the existing vapor plumes from the ESGS existing stacks. Therefore, the visibility of the project is considered to have a Low value.

**Viewer Exposure.** The existing power plant is within range of recreation users of the beach. Users of the beach will have an unobstructed view of the power plant structures due to the open nature of the beach. Due to the nature of the project site, with a high degree of overcast and foggy days due to the coastal presence, the vapor plumes will have a negligible impact. Due to the relatively short distance, and high number of users, the viewer exposure value is considered High.

**TABLE 5.13-4**

**SUSCEPTIBILITY TO IMPACT**

<b>KOP</b>	<b>Visual Quality</b>	<b>Viewer Sensitivity</b>	<b>Visibility</b>	<b>View Exposure</b>	<b>Overall Susceptibility</b>
KOP 1	High	High	Low	High	Moderate to High
KOP 2	High	High	Low	High	Moderate to High
KOP 3	Moderate	High	Low to Moderate	Moderate to High	Moderate to High
KOP 4	High	High	Low to Medium	Moderate to High	Moderate to High
KOP 5	Moderate	High	Moderate to High	Low	Moderate to High
KOP 6	High	High	Low	High	Moderate to High

### **5.13.5.2 Site Preparation and Construction Impacts**

Site preparation and construction at the power plant is not expected to result in significant visual impacts due to the temporary nature of the construction. Site preparation and construction will involve the use of typical heavy construction equipment, temporary storage and office facilities, and temporary laydown/staging facilities. These structures and pieces of equipment will be stored on and adjacent to the project site in an existing industrial/commercial area, with few sensitive receptors. Additionally, structures and equipment related to construction activities would be visually subordinate within the context of the existing features surrounding the project site, such as the transmission lines, power blocks, and power plant buildings.

Construction equipment and staging areas related to pipeline construction would be temporary in nature. In addition, the pipeline routes are in areas with low scenic quality (within existing street rights-of-way). Therefore, visual impacts from pipeline construction are not expected to be significant.

### **5.13.5.3 Project Site Features**

The features of the proposed ESPR Project are described in Section 3.4 Facility Description. Figure 3.4-2A and 3.4-2B provide a site development plan depicting the layout of the project features on the site. Figure 3.4-3C illustrates the elevation of the major plant structures. Table 5.13-5 summarizes the dimensions of the power plant's structures.

### **Landscape Character**

The purpose of identifying the landscape character of the area is to establish a consistent baseline describing the natural and cultural aesthetic characteristics for different landscape units (image types) within the proposed project area. Image types vary from the natural environment (undeveloped areas, beaches, and Santa Monica Bay) to the built environment (developed areas), each having distinct and recognizable landscape character.

To identify the landscape character for a specific image type, several criteria describing its natural or cultural aesthetic characteristics are used. Image types consisting primarily of natural characteristics are determined by evaluating the uniqueness and diversity of interest in landform, vegetation, water, cultural features, and influence of adjacent scenery. Image types consisting primarily of developed or cultural characteristics are defined by planning concepts (i.e., land uses, building types, density, circulation, and landscape design themes). Existing visual conditions (e.g., the presence of power plants, overhead transmission lines or other modifications) that may affect the character of an image type were also considered in the evaluation of landscape character.

TABLE 5.13-5

## SIGNIFICANT STRUCTURES AND EQUIPMENT

Quantity	Description	Dimension (ft)		
		Length	Width	Height
2	Combustion gas turbine with starter package	50	45	20
2	CT air inlet filter with air cooling	57	20	35
2	CT generator with enclosure	40	20	25
2	Fuel gas filter – separator	10	10	40
2	Heat recovery steam generator (HRSG)	130	45	95
2	HRSG stack	--	18.5 diameter	250 AFG
2	Aqueous ammonia vaporizer skid (SCR)	20	15	10
2	CT generator breakers	20	15	15
1	Steam turbine pedestal w/turbine and condenser	193	96	40
2	Auxiliary transformer	15	10	20
3	Step-up transformer	35	20	25
2	Secondary unit substation / transformer	28	20	15
1	Demineralized water storage tank	--	40 diameter	36
1	Gas compressor	60	70	18
1	Fire/Service water storage tank	--	44 diameter	40
1	Condensate storage tank	--	40 diameter	36
1	Aqueous ammonia storage tank <sup>1</sup> (existing)	--	--	--
1	Administration / Maintenance building	120	60	54
1	Fire pump structure	30	15	12
2	Electrical/control center	36	12	15

<sup>1</sup> Underground storage tank.

For the purposes of meeting CEC requirements (Appendix B(g)(6)(B) of the Siting Regulations), an interpretation of the visual quality associated with the landscape character and image types found in the study area has been made. This assessment of visual quality is provided in the discussion of the inventory results. Within the context of the greater Santa Monica Bay Area, the image types encountered in the study area have been classed as follows:

**High Quality.** Regionally significant landscapes of high distinctiveness or integrity, which exhibit vivid natural or man-made features, undisturbed natural landscape features, high

levels of attention to development and landscape design, and/or are recognized as superior visual quality in government policies or regulations.

**Moderate Quality.** Typical or common landscapes found in the region, which appear intact with relatively few discordant modifications, average levels of attention to development and landscape design, and/or are not recognized as exhibiting high visual quality in government policies or regulations.

**Low Quality.** Heavily disturbed or utilitarian landscapes, often characterized by intense visual clutter and evident lack of attention to the appearance of development and landscape design (e.g., in heavily industrialized landscapes) and/or government policies or regulations designating industrialized development.

#### 5.13.5.4 **Assessment of Visual Effects**

**Key Observation Point #1 - Dockweiler Beach State Park.** Figure 5.13-4B is a simulation that represents the view of the completed project as it would appear from KOP 1. Figure 5.13-4A shows the existing view from KOP 1. The most prominent structures in the existing view are the existing stacks and boiler structures. For the purposes of depicting project staging and the degree of influence to proposed project impact, an interim stage is depicted in Figure 5.13-4C. This view shows the project from KOP 1 without the two stacks that are proposed to be replaced. Only the two stacks remain and their pertinent equipment is depicted in this view.

**Contrast with Existing Structures.** The proposed exhaust stacks and cooling towers will be in the middleground view and will appear slightly taller and wider than the existing stacks and cooling towers. Due to the form and line of the proposed structures to mask the ancillary facilities of the power plant, the proposed cooling towers and exhaust stacks would cause low contrast with the existing structures.

**Contrast with Vegetation.** Vegetation in this view consists of scattered trees in the foreground. The proposed structures would only add incrementally to the contrast with vegetation caused by the existing structures. Therefore the contrast with vegetation is considered low.

**Contrast with Land and Water.** The existing structures contrast with the flat, open beaches and waterways surrounding the plant. The proposed structures would only add incrementally to the contrast with the surrounding land caused by the existing structures. Therefore, the contrast with land and water would be low.

**Scale/Spatial Dominance.** The scale dominance of the proposed structures would be insignificant because their height appears similar to the existing structures. The spatial

dominance of the proposed structures would be insignificant in relation to the composition of the view because they are similar to the shape and size of the existing structures.

**View Blockage.** The severity of the view blockage is low due to the proposed stacks masking many unsightly appurtenances of the existing power plant. The proposed structures are also in similar locations the previous structures.

**Visual Impact Severity.** The overall impact severity of the proposed structures in this view is Low due to the presence of the existing structures (see Table 5.13-6). Additionally, due to the color and material used, visual impacts due to glare will be negligible. The equipment that will be implemented will not have a greater effect than existing structures due to the lack of reflective materials (glass, polished metallic surfaces, etc.). Therefore, no significant visual impacts are expected from this view.

**Key Observation Point #2 – Manhattan Beach State Park.** Figure 5.13-5B is the simulation that represents the view of the completed project as it would appear from KOP 2. Figure 5.13-5A shows the existing view from KOP 2. Significant features include the existing stacks and boiler structures.

**Contrast with Existing Structures.** The proposed exhaust stacks and cooling towers will be in the background view and will appear in the same size and shape as the existing stacks, with the exception of the rear stacks being spaced slightly farther apart. Due to the form and line of the proposed structures to mask the ancillary facilities of the power plant, the proposed cooling towers and exhaust stacks would cause low contrast with the existing structures.

**Contrast with Vegetation.** Vegetation in this view consists of scattered trees in the background. The proposed structures would only add incrementally to the contrast with vegetation caused by the existing structures. Therefore the contrast with vegetation is considered low.

**Contrast with Land and Water.** The existing structures contrast with the flat, open beaches and waterways surrounding the plant. The proposed structures would only add incrementally to the contrast with the surrounding land caused by the existing structures. Therefore, the contrast with land and water would be low.

**Scale/Spatial Dominance.** The scale dominance of the proposed structures would be insignificant because their height appears similar to the existing structures. The spatial dominance of the proposed structures would be insignificant in relation to the composition of the view because they are similar to the shape and size of the existing structures, with the exception of the rear stacks appearing to be slightly farther apart.

**View Blockage.** The severity of the view blockage is low due to the proposed stacks appearing to be of similar size and shape from KOP 2. The rear stacks are slightly taller, and spaced farther apart, yet do not block any viewpoints from this vantage point.

**Visual Impact Severity.** The overall impact severity of the proposed structures in this view is Low due to the presence of the existing structures (see Table 5.13-6). The proposed equipment does not have the capability to produce a visual impact due to glare from this KOP. The only portions of the proposed equipment that will be visible from this KOP are the new stacks, which do not have any reflective surfaces or coatings. Therefore, no significant visual impacts are expected from this view.

**Key Observation Point #3 – Views from Manhattan Beach.** Figure 5.13-6B is the simulation of the completed project as it would appear from KOP 3. Figure 5.13-6A shows the existing view from KOP 3. The proposed stacks are visible, however, the Heat Recovery Steam Generators (HRSG) are obstructed. Existing features include the view of Unit 4's structure and the exhaust stacks for Units 1-4.

**Contrast with Existing Structures.** The proposed power plant structures visible in the middleground view appear slightly taller than the existing stacks. The form and line of the proposed structures blend with the existing facility, but contrast with the residential character of this KOP. However, the ESPR Project will be of a similar overall scale and character as the existing plant. Therefore, the proposed structures would cause a Low to Moderate contrast with existing structures.

**Contrast with Vegetation.** No vegetation is visible immediately surrounding the power platform at this view. Additionally, there is no vegetation near the viewpoint. Therefore, the contrast with vegetation is Low.

**Contrast with Land and Water.** No water is visible from this KOP, therefore, contrast with water was not assessed. The landform in this view consists of land on a slight downhill slope, with multistory residential units visible. The existing structures contrast highly with the residential character of the KOP. However, the proposed structures would only add incrementally to the contrast with the surrounding land caused by the existing structures. Therefore, contrast with land would be considered Low.

**Scale/Spatial Dominance.** The scale dominance of the proposed structures from this view would be insignificant because their height appears similar to other industrial structures in the background. The spatial dominance of the proposed power plant structures would be insignificant in relation to the composition of the view because they are a similar shape and size as other industrial facilities located in the background.

**View Blockage.** The severity of the view blockage would be Low to Moderate from this viewpoint, in consideration of the following: the slight change in appearance with the ESPR project; the relative dominance of power poles in comparison to ESPR stacks, and that existing ESGS stacks partially block the views to a similar degree.

**Visual Impact Severity.** The overall severity of the impact of the proposed structures in this viewpoint would be Low based upon the presence of other industrial structures in the background and relative similarity to existing power plant structures (see Table 5.13-6). The portions of the new equipment that will be visible from this KOP are the stacks and top section of the HRSG units. These units do not have any reflective surfaces or coating so impacts due to glare are insignificant. Therefore, no significant visual impacts are expected from this view.

**Key Observation Point #4 – Manhattan Beach State Park Pier.** Figure 5.13-7B is the simulation that represents the view of the completed project as it would appear from KOP 4. Figure 5.13-7A shows the existing view from KOP 4. Significant features include the existing stacks and boiler structures.

**Contrast with Existing Structures.** The proposed exhaust stacks and cooling towers will be in the background view and will appear in the same size and shape as the existing stacks, with the exception of the rear stacks being spaced slightly farther apart. Due to the form and line of the proposed structures to mask the ancillary facilities of the power plant, the proposed cooling towers and exhaust stacks would cause Low contrast with the existing structures.

**Contrast with Vegetation.** Vegetation in this view consists of shrubs and grasses along the coastline. No vegetation is visible immediately surrounding the power platform this view. Therefore, the contrast with vegetation is low. The proposed structures would only add incrementally to the contrast with vegetation caused by the existing structures. Therefore the contrast with vegetation is considered Low.

**Contrast with Land and Water.** The existing structures contrast with the flat, open beaches and waterways surrounding the plant. The proposed structures would only add incrementally to the contrast with the surrounding land caused by the existing structures. Therefore, the contrast with land and water would be Low.

**Scale/Spatial Dominance.** The scale dominance of the proposed structures would be insignificant because their height appears similar to the existing structures. The spatial dominance of the proposed structures would be insignificant in relation to the composition of the view because they are similar to the shape and size of the existing structures, with the exception of the rear stacks appearing to be slightly farther apart.

**View Blockage.** The severity of the view blockage is Low due to the proposed stacks appearing to be of similar size and shape from KOP 4. The stacks block the mountains in the background, yet are no more of a blockage than the existing stacks.

**Visual Impact Severity.** The overall impact severity of the proposed structures in this view is Low due to the presence of the existing structures (see Table 5.13-6). Due to the distance to the project site from this KOP, the amount of glare would be insignificant due to the lack of new reflective surfaces and coatings. Therefore, no significant visual impacts are expected from this view.

**Key Observation Point #5 – Vista Del Mar.** Figure 5.13-8B is the simulation of the project as it would appear from KOP 5. In this view, the proposed structures are visible. Figure 5.13-8A shows the existing view from KOP 5. The existing view includes views of the existing units at ESGS, with wooden power poles and asphalt paved road.

**Contrast with Existing Structures.** The proposed structures, visible in the middleground view appear slightly taller and wider than the existing equipment. With a more defined shape and screened appearance, the proposed stacks and HRSG would cause Low contrast with the existing power plant structures.

**Contrast with Vegetation.** Vegetation visible in this view consists of shrubs and trees along the sides of the roadway. The vertical forms of the existing power plant structures and wooden power poles in the view have a low contrast moderately with the trees and shrubs. Therefore, the contrast with vegetation is considered Low.

**Contrast with Land and Water.** Water is only visible in the background of this view, and is mostly blocked by the trees and shrubs along the roadway. The contrast with water is low due to the limited viewshed of water in this KOP. The landform in this view consists of flat land paved with asphalt in a two lane highway configuration. The existing structures contrast highly with the flat character of the land. However, the proposed structures would only add incrementally to the contrast with surrounding land caused by the existing structures. Therefore, the contrast with land would be Low.

**Scale/Spatial Dominance.** The scale dominance of the proposed structures would be moderate due to the slightly taller and wider configuration of the HRSG and stacks. The spatial dominance of the proposed structures would be Moderate due to the slightly increased size of the proposed structures.

**View Blockage.** The severity of the view blockage is Moderate from this viewpoint, because the proposed power plant structures will partially block the view of the Pacific Ocean. However, the existing ESGS stacks and HRSG unit have a similar level of view blockage.

**Visual Impact Severity.** The overall severity of the proposed structures on this viewpoint would be Low to Moderate due to partial blockage of the Pacific Ocean, and the slight increase in size of the proposed equipment (see Table 5.13-6). The existing ESGS stacks and HRSG unit have a similar visual impact from this KOP. The amount of glare generated by the proposed equipment would be insignificant due to the lack of reflective coatings and surfaces. No visual impacts are expected from this view.

**Key Observation Point #6 – Plume Analysis of Manhattan Beach State Park.** Figure 5.13-9 is the simulation that represents the view of the completed project as it would appear from KOP 2. Significant features include the existing stacks and boiler structures.

**Contrast with Existing Structures.** The proposed exhaust stacks and cooling towers will be in view and will appear in the same size and shape as the existing stacks, with the exception of the rear stacks being spaced slightly farther apart. Due to the form and line of the proposed structures to mask the ancillary facilities of the power plant, the proposed cooling towers and exhaust stacks would cause Low contrast with the existing structures. The vapor plumes emanating from the stacks would be of the same degree and scale as the existing vapor plumes.

**Contrast with Vegetation.** Vegetation in this view consists of scattered trees. The proposed structures would only add incrementally to the contrast with vegetation caused by the existing structures. The vegetation in the area is not of the same scale and height as the top of the stacks, therefore the vapor plumes would not interfere with existing vegetation. Consequently, the contrast with vegetation is considered Low.

**Contrast with Land and Water.** The existing structures contrast with the flat, open beaches and waterways surrounding the plant. The proposed structures would only add incrementally to the contrast with the surrounding land caused by the existing structures. The water itself adds to the visible blockage of the site by creating fog, therefore the contrast with land and water would be Low.

**Scale/Spatial Dominance.** The scale dominance of the proposed structures would be insignificant because their height appears similar to the existing structures. The vapor plumes from the proposed equipment would be of the same size and scale as the plumes emitted from the existing equipment. The spatial dominance of the proposed structures would be insignificant in relation to the composition of the view because they are similar to the shape and size of the existing structures, with the exception of the rear stacks appearing to be slightly farther apart.

**View Blockage.** The severity of the view blockage is Low due to the proposed stacks appearing to be of similar size and shape from KOP 2. Since the vapor plumes are emitted

through the top of the stacks and dissipate in a horizontal or upward direction, they would not present any visible degree of blockage. The rear stacks are slightly taller, and spaced farther apart, yet do not block any viewpoints from this vantage point.

**Visual Impact Severity.** The overall impact severity of the proposed structures in this view is Low due to the presence of the existing structures, and the vapor plumes being of the same size and scale as the existing vapor plume (see Table 5.13-6). Additionally, due to the coastal nature of the site, and the high incidence of fog, no significant visual impacts are expected from this view.

### 5.13.5.5 Visible Plumes

The analysis of the visible plumes from the ESPR Project Heat Recovery Steam Generator (HRSG) required the use of a non-standard model, since no standardized models exist. We used the Combustion Stack Visible Plume (CSVP) model developed by MFG and used previously in an analysis for the CEC.

**TABLE 5.13-6**

#### **OVERALL IMPACT SEVERITY**

<b>KOP</b>	<b>Contrast w/ Existing Structures</b>	<b>Contrast w/ Existing vegetation</b>	<b>Contrast w/ Land &amp; Water</b>	<b>Scale Dominance</b>	<b>Spatial Dominance</b>	<b>View Blockage</b>	<b>Overall Visual Impact Severity</b>
KOP 1	Low	Low	Low	Insignificant	Insignificant	Low	Low
KOP 2	Low	Low	Low	Insignificant	Insignificant	Low	Low
KOP 3	Low to Moderate	Low	Low	Insignificant	Insignificant	Low to Moderate	Low
KOP 4	Low	Low	Low	Insignificant	Insignificant	Low	Low
KOP 5	Low	Low	Low	Moderate	Moderate	Moderate	Low to Moderate
KOP 6	Low	Low	Low	Insignificant	Insignificant	Low	Low

The model consists of a series of programs, which ultimately calculate the distance downwind the visible plume can extend, the plume height and width. The model requires ambient temperature, relative humidity, wind direction, wind speed and stability for hour of the input data record. The HRSG stack parameters are listed in Table 5.13-8.

Table 5.13-7 is a summary of results of the visible plume modeling for the El Segundo Power Redevelopment Project gas turbines/HRSGs. Plume visibility was evaluated under three turbine operating conditions: full load operation without duct firing; full load operation with

duct firing; and minimum load operation. Each condition was evaluated as if it occurred 8760 hours per year.

With the maximum plume being 162 meters in height and 53 meters in diameter at minimum (50%) load, the impact can be significant. However, this is under a worst case scenario, and the average plume will only be 8 meters in height and 3 meters in diameter under minimum (50%) load. The nighttime plume impacts can follow the same scenario of height and diameter under the same operating conditions. Due to the coastal nature of the site, the plume impacts will not have an overall significant effect due to the plume from the neighboring LADWP Scattergood plant and the fog and haze generated by coastal climate conditions.

To determine if the plume condenses at any point in its path from the exhaust conditions to the ambient conditions, an analysis is performed in exactly the same method as a manual plot on a psychrometric chart. The exit conditions and ambient conditions are plotted, a straight line is drawn between the two points, and if the line crosses the saturation curve during its travel, condensation is assumed. The two intersection points of the line and the saturation curve are returned as the output from this program, which are the point where the plume becomes saturated and the point where the plume stops being saturated, the re-evaporation point.

**TABLE 5.13-7**

**PLUME ANALYSIS SUMMARY**

	Turbine Operating Condition		
	Full Load, no duct firing	Full Load, with duct firing	Minimum (50%) Load
Total number of hours with visible plume	5	3	19
Number of Daylight Hours with visible plume	2	1	4
Number of Nighttime Hours with visible plume	3	2	15
Maximum Plume Height (meters)	*	*	162
Average Plume Height (meters)	*	*	8
Maximum Plume Diameter (meters)	41 – 83 <sup>(1)</sup>	41 – 83 <sup>(1)</sup>	53
Average Plume Diameter (meters)	24 – 35 <sup>a</sup>	24 – 35 <sup>a</sup>	3

Notes:

\* Meteorological conditions result in unlimited plume height.

<sup>1</sup> Range of nominal plume diameters for a similar project.

TABLE 5.13-8

## HRSG STACK PARAMETERS

Parameter	HRSG Stack
Stack height (m)	75
Stack diameter (m)	0.47
Exhaust temperature (K) <sup>1</sup>	368
Exit velocity (m/s)	19.9
Exhaust mass flow rate (1000 lb/hr)	3,791
Percentage by weight water in exhaust (%) <sup>1</sup>	15

<sup>1</sup>Conservative exhaust parameters were chosen with a higher probability of producing visible plumes.

Using the specific humidity ( $g_{\text{water}}/g_{\text{air}}$ ) from the initial and final saturation point, the concentration of water in the atmosphere ( $g/m^3$ ) can be calculated using the ideal gas law;  $PV=nRT$  where  $P$  is the pressure,  $V$  is the volume,  $n$  is the number of gram-moles of gas,  $R$  is the gas constant and  $T$  is the temperature. The molecular weight of air is assumed to be 28.97 grams per gram mole, and the pressure is assumed to be 1 atmosphere. The conversion from grams of water per gram of air to grams of water per cubic meter of air at saturation is performed using the following equation:

$$\mathcal{X}\left(\frac{g_{\text{water}}}{m^3}\right) = \mathcal{X}\left(\frac{g_{\text{water}}}{g_{\text{air}}}\right) \frac{MW_{\text{air}} \left(\frac{g_{\text{air}}}{gmole_{\text{air}}}\right) P(\text{atm})}{R\left(\frac{m^3 \cdot atm}{gmole \cdot K}\right) T(K)} \quad (1)$$

Where:  $\mathcal{X}$  = specific humidity ( $g_{\text{water}}/g_{\text{air}}$ )

$T$  = temperature in Degrees Kelvin

$MW$  = molecular weight in grams per gram mole = 28.97 g/gmole

$P$  = pressure in atmospheres = 1 atm

$R$  = gas constant = 0.00008205 ( $m^3 \text{ atm}/(gmole \text{ K})$ ).

The calculation of plume dimensions is based on the Gaussian Plume assumption for atmospheric dispersion. The basic equation for the Gaussian Plume is:

$$\mathcal{X} = \frac{Q}{2\pi\sigma_y\sigma_z u} e^{-\frac{1}{2}\left(\frac{y}{\sigma_y}\right)^2} \left[ e^{-\frac{1}{2}\left(\frac{z-h}{\sigma_z}\right)^2} + e^{-\frac{1}{2}\left(\frac{z+h}{\sigma_z}\right)^2} \right] \quad (2)$$

Where:  $X$  = the concentration in ( $\text{g}/\text{m}^3$ )

$Q$  = the emission rate in ( $\text{g}/\text{s}$ )

$\pi$  = the mathematical constant pi = 3.14159

$\sigma$  = the standard deviation of the concentration in the horizontal crosswind direction (a function of downwind distance and atmospheric stability class) in meters

$\sigma$  = the standard deviation of the concentration in the vertical direction (a function of downwind distance and atmospheric stability class) in meters

$u$  = the wind speed in m/s

$h$  = the height of the plume centerline above ground in meters

$z$  = the height of the calculation point (receptor) above ground in meters

$y$  = the horizontal cross-wind distance from the calculation point to the plume centerline in meters

For the current analysis, we are interested in finding the point at which a downwind plume will re-evaporate. The above equation is used to determine how far downwind that water concentration lies. The highest concentration is always at the plume centerline, so the maximum plume length is defined by the point at the plume centerline where this water concentration occurs. The plume centerline is defined by the points at which  $y = 0$  and  $z = h$ . For this case the above equation simplifies to the following form:

$$X = \frac{Q}{2\pi\sigma_y\sigma_z u} \left[ 1 + e^{-\frac{1}{2}\left(\frac{z-h}{\sigma_z}\right)^2} \right]$$

(3) For each meteorological condition, the program steps out 5000 meters from the stack in increments of 1 meter. At each point it computes the water concentration using equation (3) above and compares it to the value of the concentration from equation (1). The distance downwind where these two values match most closely is taken as the maximum plume length.

This program also computes the plume height using the transitional plume rise formulae from the Industrial Source Complex (ISC) model. Subroutines from ISC were extracted and used in the program. Since the above analysis needs the plume height at each of the 5000 steps along the plume centerline, the plume height is calculated before the concentration in each step. This program is also used to compute the plume width. The plume width here is taken as the maximum crosswind dimension of the plume at any point in its downwind travel. The plume width at each of the 5000 steps can be determined from equation (2) above by setting the concentration on the left hand side of the equation to the re-evaporation concentration, setting the value of  $z$  equal to the plume height,  $h$ , and solving the equation for  $y$ . The resulting equation for  $y$  is:

$$y = \sigma_y \left[ -2 \ln \left( \frac{\chi^2 \pi \sigma_y \sigma_z u}{Q \left( 1 + e^{-0.5 \left( \frac{2h}{\sigma_y} \right) \left( \frac{2h}{\sigma_z} \right)} \right)} \right) \right]^{\frac{1}{2}} \quad (4)$$

Where:  $\ln$  is the natural logarithm

Equation (4) is solved for each downwind distance where a plume is present. If the quantity inside the large brackets is negative, no condensed plume is present and  $y$  is set to zero. Equation (4) calculates the radius of the plume and must be multiplied by 2 to compute the width of the plume.

#### 5.13.5.6 Abandonment/Closure

No significant visual impacts are expected due to the closure of the power plant. The future closure/contingency plan that will be prepared for the project will address this issue.

#### 5.13.5.7 Cumulative Impacts

The proposed project would add an overall slightly noticeable level of change to the existing industrial character of this area of the Santa Monica Bay shoreline. Cumulative impacts to the character of the landscape and views within the landscape resulting from the proposed project in combination with other existing facilities would not be significant. Overall, cumulative visual impacts of this project and other known approved projects are not expected to be significant. Section 5.20 presents a comprehensive cumulative impacts analysis.

#### 5.13.6 Stipulated Conditions

As a means of cooperating with the CEC and establishing a conciliatory relationship, and an open efficient AFC process that allows the Commission to utilize its resources in the most efficient manner possible, ESPR expresses a willingness to stipulate to and accept the following CEC standard general conditions as promulgated by the CEC that apply to the issue area of Visual Resources.

**VIS-1:** Prior to the first electricity generation, the project owner shall treat the new project structures, buildings, and tanks visible to the public in non-reflective colors to blend with the agricultural setting.

**Protocol:** The project owner shall submit a treatment plan for the project to the CPM for review and approval. The treatment plan shall include:

- Specification, and 11x17 color simulations of the treatment proposed for use on project structures, including structures treated during manufacture
- A detailed schedule for completion of the treatment
- A procedure to ensure proper treatment maintenance for the life of the project.

If the CPM notifies the project owner that revisions of the plan are needed before the CPM will approve the plan, the project owner shall submit to the CPM a revised plan. After approval of the plan by the CPM, the project owner shall implement the plan according to the schedule and shall ensure that the treatment is properly maintained for the life of the project. For any structures that are treated during manufacture, the project owner shall not specify the treatment of such structures to the vendors until the project owner receives notification of approval of the treatment plan by the CPM. The project owner shall not perform the final treatment on any structures until the project owner receives notification of approval of the treatment plan from the CPM. The project owner shall notify the CPM within one week after all pre-colored structures have been erected and all structures to be treated in the field have been treated and the structures are ready for inspection.

**Verification:** Not later than 60 days prior to ordering any structures that are to be color treated during manufacture, the project owner shall submit its proposed plan to the CPM for review and approval.

If the CPM notifies the project owner that any revisions of the plan are needed before the CPM will approve the plan, within 30 days of receiving that notification, the project owner shall submit to the CPM a revised plan.

Not less than thirty days prior to first electricity generation, the project owner shall notify the CPM that all structures treated during manufacture and all structures treated in the field are ready for inspection. The project owner shall provide a status report regarding treatment maintenance in the Annual Compliance Report.

**VIS-2:** Any new fencing for the project shall be non-reflective.

**Protocol:** At least 30 days prior to ordering the fencing the project owner shall submit to the CPM for review and approval the specifications for the fencing documenting that such fencing will be non-reflective. If the CPM notifies the project owner that revisions of the specifications are needed before the CPM will approve the submittal, the project owner shall submit to the CPM revised specifications.

The project owner shall not order the fencing until the project owner receives approval of the fencing submittal from the CPM.

The project owner shall notify the CPM within one week after the fencing has been installed and is ready for inspection.

**Verification:** At least 60 days prior to ordering the non-reflective fencing, the project owner shall submit the specifications to the CPM for review and approval.

If the CPM notifies the project owner that revisions of the submittal are needed before the CPM will approve the submittal, within 30 days of receiving that notification, the project owner shall prepare and submit to the CPM a revised submittal.

The project owner shall notify the CPM within seven days after completing installation of the fencing that the fencing is ready for inspection.

**VIS-3:** Project Owner shall design and install all new lighting, so that it is not visible from public viewing areas and illumination of the vicinity and the nighttime sky is minimized.

**Protocol:** The project owner shall develop and submit a lighting plan for the project to the CPM and the City of El Segundo for review and approval. The lighting plan shall require that:

- Lighting is designed so that exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of this outdoor lighting shall be such that the luminescence or light source is shielded to prevent light trespass outside the project boundary
- High illumination areas not occupied on a continuous basis such as maintenance platforms or the main entrance are provided with switches or motion detectors to light the area only when occupied
- A lighting complaint resolution form (similar in general format to that in Visual Attachment 1, which follows these Conditions) will be used by plant operations, to record all lighting complaints received and document the resolution of those complaints. All records of lighting complaints shall be kept in the on-site compliance file. If the CPM notifies the project owner that revisions of the plan are needed before the CPM will approve the plan, the project owner shall prepare and submit to the CPM a revised plan.
- Lighting shall not be installed before the plan is approved. The project owner shall notify the CPM when the lighting has been installed and is ready for inspection.

**Verification:** At least 60 days before ordering the exterior lighting, the project owner shall provide the lighting plan to the CPM and to the City of El Segundo Planning for review and approval.

If the CPM notifies the project owner that any revisions of the plan are needed before the CPM will approve the plan, within 30 days of receiving that notification the project owner shall submit to the CPM a revised plan.

The project owner shall notify the CPM within seven days of completing exterior lighting installation that the lighting is ready for inspection.

**VIS-4:** By December 1 of the year in which ground disturbance related to construction of the power plant begins, the project owner shall implement a landscape plan that meets the requirements of the City of El Segundo and provides a continuous screen of the proposed power plant from sensitive view areas.

**Protocol:** The project owner shall submit to the CEC CPM for review and approval a specific plan describing its landscaping proposal, stating that it conforms to the City of El Segundo Zoning Code and has been approved by the City. The plan shall include, but not be limited to:

- A detailed landscape plan, at a reasonable scale, which includes a list of proposed tree and shrub species and sizes and a discussion of the suitability of the plants for the site conditions and mitigation objectives.
- One objective shall be to provide year-round screening. To meet this objective evergreen species shall be used. This may require a berm to raise the tree roots above the water table. Another objective shall be to provide screening at least 75 feet tall for the total distance to be screened, except where clearance beneath the proposed transmission line requires shorter trees. Another objective shall be to use species that grow rapidly. The plan shall propose species and spacing to achieve these objectives. Trees to be planted shall be the optimal size to reach full height as rapidly as possible.
- Maintenance procedures, including any needed irrigation; and
- A procedure for replacing unsuccessful plantings.

If the CPM notifies the project owner that revisions of the plan are needed before the CPM will approve the plan, the project owner shall prepare and submit to the CPM a revised plan. The trees and shrubs shall not be planted before the plan is approved. The project owner shall notify the CPM when the trees and shrubs have been planted and are ready for inspection.

**Verification:** At least 90 days prior to the start of commercial operation of the project, the project owner shall submit the proposed landscape plan for the project to the CPM for review and approval. The CPM will respond to the project owner within 15 days of receipt of the landscaping plan. The project owner shall submit any required revisions within 30 days of notification by the CPM. The CPM will respond to the project owner within 15 days of receipt of the revised documents. The project owner shall notify the CPM within seven days after completing the proposed planting that the planting is ready for inspection.

### **5.13.7 Mitigation**

The above standard CEC conditions provide appropriate assurances that ESPR will be built in a manner that will minimize visual disturbance. Because no significant impacts are identified in the area of visual resources, no other specific mitigation is provided.

### **5.13.8 References**

Bureau of Land Management. 1986. Visual Resource Management Inventory and Contrast Rating System.

California Energy Commission. 2000. *Rules of Practice and Procedure & Power Plant Site Certification Regulations*, August 2000.

1999a. *Final Staff Assessment, High Desert Power Project*, January 20, 1999.

1999b, *Final Staff Assessment, La Paloma Power Project*, April 7, 1999.

1999c. *Final Staff Assessment, Elk Hills Power Project*, November 1, 1999.

California Resources Agency, 1998, California Environmental Quality Act Guidelines and Documentation, December, 1998.

City of El Segundo General Plan. 1992. *Land Use Element*.

1980. Local Coastal Program, July 1, 1980.

City of Manhattan Beach General Plan. 1988. *Land Use Element*.

County of Los Angeles General Plan, *Land Use*, January 9, 1990.

U.S. Forest Service, 1974. Visual Management System.

U.S. Forest Service, 1995. Scenery Management System.

Adequacy Issue: Adequate \_\_\_\_\_ Inadequate \_\_\_\_\_

**DATA ADEQUACY WORKSHEET**

Revision No. \_\_\_\_\_ Date \_\_\_\_\_

Technical Area: **Visual Resources**

Project: \_\_\_\_\_

Technical Staff: \_\_\_\_\_

Project Manager: \_\_\_\_\_

Docket: \_\_\_\_\_

Technical Senior: \_\_\_\_\_

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 5.13.1.1, 5.13.1.2, 5.13.1.3, 5.13.1.4		
Appendix B (g) (6) (A)	Descriptions of the existing visual setting of the vicinity of the project, the region that can be seen from the vicinity of the project, and the proposed project site. Include:	Section 5.13.1, 5.13.2		
Appendix B (g) (6) (A) (i)	Topographic maps at a scale of 1:24,000 of the areas from which the project may be seen, identification of the view areas most sensitive to the potential visual impacts of the project, and the locations where photographs were taken for (g)(6)(E);	Figure 5.13-1		
Appendix B (g) (6) (A) (ii)	Elevations of any existing structures on the site; and	Section 3.4.2, Figures 3.4-3A, 3.4-3B, Appendix F		
Appendix B (g) (6) (A) (iii)	The visual properties of the topography, vegetation, and any modifications to the landscape as a result of human activities.	Section 5.13.4.1		
Appendix B (g) (6) (B)	An assessment of the visual quality of those areas that will be impacted by the proposed project.	Sections 5.13.3.1 and 5.13.3.4.2		

Adequacy Issue: Adequate \_\_\_\_\_ Inadequate \_\_\_\_\_

**DATA ADEQUACY WORKSHEET**

Revision No. \_\_\_\_\_ Date \_\_\_\_\_

Technical Area: **Visual Resources**

Project: \_\_\_\_\_

Technical Staff: \_\_\_\_\_

Project Manager: \_\_\_\_\_

Docket: \_\_\_\_\_

Technical Senior: \_\_\_\_\_

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (6) (C)	After discussions with staff and community residents who live in close proximity to the proposed project, identify the scenic corridors and any visually sensitive areas potentially affected by the proposed project, including recreational and residential areas. Indicate the approximate number of people using each of these sensitive areas and the estimated number of residences with views of the project. For purposes of this section, a scenic corridor is that area of land with scenic natural beauty, adjacent to and visible from a linear feature, such as a road, or river.	5.13.1.2 5.13.5.3 5.13.5.4		
Appendix B (g) (6) (D)	A description of the dimensions, color, and material of each major visible component of the project.	Section 5.13.3.1, 5.13.5.5		
Appendix B (g) (6) (E)	Full-page color photographic reproductions of the existing site, and full-page color simulations of the proposed project in the existing setting from each location representative of the view areas most sensitive to the potential visual impacts of the project.	Figures 5.13-1 through 5.13-4		
Appendix B (g) (6) (F)	An assessment of the visual impacts of the project, including light and glare, and visible plumes.	Sections 5.13.3.2 and 5.13.3.4.3		

Adequacy Issue: Adequate \_\_\_\_\_ Inadequate \_\_\_\_\_

**DATA ADEQUACY WORKSHEET**

Revision No. \_\_\_\_\_ Date \_\_\_\_\_

Technical Area: **Visual Resources**

Project: \_\_\_\_\_

Technical Staff: \_\_\_\_\_

Project Manager: \_\_\_\_\_

Docket: \_\_\_\_\_

Technical Senior: \_\_\_\_\_

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Section 5.13.2.1, 5.13.2.2,5.13.2.3 Table 5.13-1		
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Sections 5.13.2 and 5.13.2.1		
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Sections 5.13.2.1, 5.13.2.2, 5.13.2.3		
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 5.13-2		
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 5.13.4 Table 5.13-3		