

## **3.12 Visual Resources**

### **3.12.1 Introduction**

As discussed in detail in the Project Description section, this Amendment proposes four modifications to the ESPR project that necessitate evaluation of environmental impacts and potential amendments to specific Conditions of Certification. The proposed project modifications are limited in scope and center around the proposed changes in 1) the plant's design to Rapid Response Combined Cycle technology; 2) the method of delivery for oversize equipment; 3) the addition of an offsite laydown and parking area for equipment staging and construction employee parking; and, 4) the modification of the plant entrance road.

This section examines whether the proposed project changes set forth in this Petition to Amend (PTA) may result in additional environmental impacts to visual resources. The environmental analysis below concludes that the proposed modifications will have limited impact on visual resources and the proposed project will comply with all applicable Laws, Ordinances, Regulations, and Standards (LORS). Proposed changes to certain Conditions of Certification will ensure that any potential impacts to visual resources associated with this Amendment are managed and mitigated.

### **3.12.2 Affected Environment**

This assessment analyzes the change in visual impacts between the previously permitted project and the proposed modified project. The four changes proposed include: 1) use of a Rapid Response Combined Cycle system. 2) beach delivery of oversize equipment during the construction phase; 3) one additional off-site laydown area and the removal of one previously analyzed off-site laydown area; and 4) modifications to the plant entrance road and entry gate area.

#### **3.12.2.1 Rapid Response Combined Cycle (R2C2) Technology**

The proposed R2C2 design will replace the previously permitted vertical Heat Recovery Steam Generators (HRSGs) with lower profile BENSON HRSGs. The units incorporate two air locked condensers (i.e., steam turbine fin/fan cooler) for steam turbine exhaust steam rejection. Additionally, two Siemens SGT6-5000F gas turbine generators (GTG) will replace the two General Electric 7FA GTGs approved in the Final Commission Decision. The new technology design will shift the HRSGs slightly to the west, as compared with the HRSG locations in the previously permitted project. Refer to Table 3.12-1 (Equipment Dimensions) for the differences in the major equipment dimensions between the previously permitted project and this PTA.

Additionally, to support the R2C2 units, new water storage tanks will be installed. A fire/service water storage tank will store water for fire hazards and plant sanitary uses. A raw water storage tank will be installed to store first pass reverse osmosis (RO) quality reclaimed water supplied by West Basin Municipal Water District (WBMWD). A third tank will be installed to store

**Table 3.12-1 Equipment Dimensions**

Quantity	Description	Previously Permitted Project Dimensions (feet)			ESPR PTA Dimensions (feet)		
		Length	Width	Height	Length	Width	Height
2	CT air inlet filter with air cooling	57	20	35	75	47	76
2	CT generator with enclosure	40	20	25	47	35	32
2	HRSG	130	34	145	123	26	88
2	HRSG stack	NA	20 <sub>1</sub>	215	NA	20 <sub>1</sub>	210
2	Steam Turbine Fin Fan Cooler	NA	NA	NA	132	84	22

HRSG = Heat Recovery Steam Generator; CT = Combustion Turbine; NA = Not Applicable  
 1 - HRSG stack diameter

demineralized water generated from the first pass RO water that ultimately will be used in the plant steam cycle. The proposed tanks will be located within the central portion of the project site, to the south of the HRSGs.

**3.12.2.2 Oversize Equipment Delivery**

Oversize plant equipment, including two HRSGs, two GTGs, two steam turbines, partial pipe rack assemblies, two air cooled condensers, and other equipment may be delivered to the facility from barges via a ramp system across the beach. Beach delivery will allow some equipment to be partially fabricated off-site, reducing the amount of construction performed at the facility. Beach delivery will require the temporary placement of a ramp structure on the beach, spanning a 60-foot wide corridor from the delivery barge to the project site. Beach delivery will likely expose sensitive viewers to additional construction-related activities associated with placing the ramp on the beach and moving equipment over it from the barges.

Mobilization, construction of the beach ramp, and up to six barge deliveries will take place over approximately six months. During mobilization of the beach delivery site, a construction barge will be pulled onto the beach at high tide with two D-6 dozers and secured via sea fastening from the barge to the dozers staged on the beach. The construction barge will then be ballasted to a grounded position.

The beach ramp will consist of geo-tech fiber, wood matting and sandbags, with a temporary access ramp constructed over the bike path to allow transport of the equipment from the beach into the facility. The access ramp will include closure gates across the bike path to prevent public access to the beach ramp during deliveries. Perimeter fencing (security barrier) will also be installed around the work zone to prevent public access to the barge, ramp, and the area surrounding the work zone. The construction barge and ramp materials will be removed immediately following the last delivery and the beach will be restored to pre-project conditions.

### **3.12.2.3 Offsite Laydown and Parking Areas**

This Amendment proposes the use of one new offsite laydown location, in addition to those already discussed in the previously permitted project. Additionally, one previously analyzed laydown area, the Fed Ex site, is no longer available for staging and will be removed from the project. The new offsite laydown area is located at 777 W. 190th Street, adjacent to the Interstate 110 – Interstate 405 interchange. This approximate 12.1-acre property (of which 10 acres are usable) is largely paved with asphalt, includes a 5,500 square foot structure, and is utilized for light industrial purposes, as well as parking and storage uses. Opaque fencing material is located along the perimeter of the property.

### **3.12.2.4 Plant Entrance Modifications**

Improvements to the entrance road and gate area will include straightening and widening the road and reducing the grade.

### **3.12.3 Environmental Analysis**

The proposed project modifications will have some different visual impacts, as compared with the previously permitted project; though, the proposed changes will not result in an overall increased impact to visual resources.

The new R2C2 equipment has a slightly different size and shape, compared to the previously permitted power blocks; the use of BENSON, rather than vertical, HRSGs, reduced stack height, the increased mass of the GTG inlet filters, and the introduction of fin/fan coolers will alter views. The footprint and overall size of the new units will not substantially change, however, as compared with the previously permitted project. Additionally, the location of fire/service water tanks will be shifted to the central portion of the project site.

The proposed beach delivery during the construction phase will create only short-term visual impacts, while onsite construction activity and its associated effect on visual resources will be reduced.

The proposed additional offsite staging area at 190th Street and plant entrance modifications will result in minimal visual impacts.

### **Viewshed**

The previously permitted project depicts the approximate region from which the power plant site may be seen, (i.e., the project viewshed). The viewshed analyzed in the AFC is larger than the viewshed of the project, as modified, since the highest proposed structures (the HRSG stacks) for the PTA will be approximately 210 feet high, while the HRSG stacks permitted in the previous project are 215 feet. Thus, the highest feature of the proposed modified project will be visible from slightly fewer offsite areas.

Sensitive uses surrounding the project site have not changed since the project was permitted. Therefore, for the purposes of this comparative analysis, the same Key Observation Points (KOPs) that were used in the AFC will also be used here, to determine any change in visual impacts between the previously permitted project and the project proposed in this Amendment: refer to Figure 3.12-1 (KOP Location Map).

As in the previously permitted project, the painting scheme for the proposed units will be flat gray, to blend in with existing structures and surrounding uses. The proposed new equipment will use a flat finish to reduce the reflectivity of the surfaces, and use color tones that will reduce the visual contrast of the plant to the middleground and background views.

To reduce the offsite impacts associated with nighttime and security lights, lights will be directed toward the middle of the property and away from the outer site boundaries, to reduce light and glare. Lighting fixtures will be a non-glare type.

The most prominent features of the proposed equipment are the HRSG stacks, 215 feet high and 20 feet in diameter in the previously permitted project, and 210 feet high and 20 feet in diameter in the proposed project modifications, and the HRSGs, which were 34 feet wide, 130 feet long, and 145 feet high in the previously permitted project, and will be 26 feet wide, 123 feet long, and 88 feet high with the proposed project changes. Other major features of the R2C2 units do not have significant visual impacts, as compared with the previously permitted project, because of their reduced dimensions, their orientation, and screening provided by the proposed modified seawall, which will be approximately 10 feet high. The following analysis describes the change in visual impacts at each KOP location which are associated with the proposed changes in technology in the Amendment, as compared with the visual impacts of the technology which was previously permitted.

#### ***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 project site; refer to Figure 3.12-2a (Existing View). Simulations were rendered to represent the view of the completed project (both the previously permitted project and the proposed modified project), as it will appear from KOP 1; refer to Figure 3.12-2b (Final View). Significant features include the HRSGs and associated stacks.

**Contrast with Existing Structures.** Although the proposed BENSON HRSGs are located slightly closer to this KOP, as compared with the vertical HRSGs of the previously permitted project, there is decreased visibility in the hardscape features of the BENSON HRSGs, as compared with the vertical layout of the HRSGs in the previously permitted project and there

will be slightly reduced stack heights in the proposed design (approximately 5 feet shorter than the previously permitted project). The proposed project modifications will also introduce larger combustion turbine air inlet filters to the east of the HRSGs. These inlet filters will be approximately 76 feet high. However, the introduced line pattern associated with the inlet filters will follow the BENSON features of the proposed HRSGs. The heights of the proposed structures will appear similar in massing and scale to the previously permitted structures, though the structures in the previously permitted project have more vertical massing, and result in a sharper contrast than the structures proposed in this Amendment. Therefore, the change in visual contrast resulting from the proposed project modifications is considered Low.

**Contrast with Vegetation.** Vegetation in this view consists of scattered trees in the foreground. The contrast with vegetation of the proposed units will remain minimal, as the landscape concept plan and the color scheme of the new units will remain unchanged. Therefore, the contrast with vegetation of the new structures, as compared with previously permitted structures, is considered Low.

**Contrast with Land and Water.** Existing units contrast with the flat, open beaches and waterways surrounding the plant. The units in the previously permitted project and this Amendment are similar, such that the modified units proposed in the PTA will not add to the contrast. Therefore, the change in contrast with land and water is Low.

**Scale/Spatial Dominance.** The scale/spatial dominance of the modified units will be less dominant than the previously permitted units, because the HRSG profiles will change from vertical to the lower profile BENSON HRSG, and there will be a reduction in stack height by 5 feet. The proposed stacks would follow similar line pattern and spacing as the stacks associated with Units 3 and 4, which would remain upon project completion. Therefore, the contrast with scale/spatial dominance would be Low.

**View Blockage.** Similarly, the severity of the view blockage associated with the proposed project changes is low due to the minimal amount of view blockage to the skyline and existing ESGS structures which are not altered with this project. The proposed BENSON HRSGs are at lower heights (approximately 57 feet lower) than those described in the approved project. However, the proposed air inlet features associated with the PTA will be approximately 41 feet higher than those described in the previously permitted project. The proposed air inlet filters will follow the visible skyline, similar to the existing surrounding structures, including the Chevron tanks located to the east and Units 3 and 4 located to the south. Additionally, the proposed 210-foot PTA HRSG stacks would result in similar view blockage as the HRSG stacks for the previously permitted project. No significant views or vistas will be screened by the proposed structures.

**Visual Impact Severity.** Similar to the previously permitted project, the resulting impact severity of this Amendment is Low due to the presence of Units 3 and 4. Additionally, glare impacts will remain negligible due to the color and materials used. Therefore, no significant visual impacts are expected from this view. There will be no significant change in the overall impact severity of the proposed modifications.

***Key Observation Point #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 project site; refer to Figure 3.12-3a (Existing View). The two large oil storage tanks visible in this KOP will be demolished, as provided in the previously permitted project and impacts to visual resources associated with the removal of the tanks do not represent a change in this Amendment. Simulations were rendered to represent the view of the completed project (both the previously permitted project and the proposed modifications) as it will appear from KOP 2; refer to Figure 3.12-3b (Final View).

**Contrast with Existing Structures.** The proposed HRSG stacks would appear similar to the stacks associated with Units 3 and 4 that would remain upon project implementation. As in the previously permitted project, Units 3 and 4 will screen most of the new equipment. Thus, there will be no change in contrast between the proposed HRSGs and stacks and those in the previously permitted project.

**Contrast with Vegetation.** Similarly, the proposed new units will only add incrementally to the contrast with vegetation caused by the existing structures. The proposed landscaping will reduce the contrast of the beach environment to the power plant structures. Furthermore, there will be no change from the previously permitted project providing for the removal of the two large oil storage tanks located within the southern portion of the project site. Therefore, the change in contrast with vegetation between the previously permitted project and the PTA is considered Low.

**Contrast with Land and Water.** The proposed new units will contrast with the flat, open beaches and waterways surrounding the plant in the same manner as the previously permitted structures would. For both the permitted and proposed project, the structures will only add incrementally to the contrast with the surrounding land caused by the existing structures. Also, with the addition of the new landscaping materials, which remains unchanged in this Amendment, the contrast of the land and water will be reduced. Therefore, the change in contrast with land and water associated with the proposed modifications is Low.

**Scale/Spatial Dominance.** The proposed R2C2 units will have reduced spatial dominance, compared with the previously permitted units due to screening by existing equipment, the relocation of the HRSGs to the west, and the reduction in stack height proposed by the PTA (by approximately 5 feet). Therefore, the proposed changes are insignificant with regard to both scale and spatial dominance from this KOP.

**View Blockage.** The proposed new units will not change the impact with regard to view blockage as most of the proposed structures will be screened from this KOP, as in the permitted project, and the two large storage tanks will be removed, significantly reducing existing view blockage. Further, the PTA proposes reduced HRSG unit heights and the relocation of the HRSGs further west, which will allow for additional screening by Units 3 and 4.

**Visual Impact Severity.** With the proposed R2C2 design, the change in overall impact severity in this view is Low due to the presence of the existing structures, the slightly reduced stack heights of the proposed new units, and relocation of the HRSGs. The visible project features will be screened further at this KOP with implementation of the proposed changes. Therefore no significant visual impacts are expected from this view with this Amendment.

***Key Observation Point #3 – Views from Manhattan Beach***

This KOP represents northward views from residences (first and second story within the El Porto community), as well as Vista Del Mar near its intersection with Shell Street; refer to Figure 3.12-4a (Existing View). Views of the proposed project are within 0.25 mile and range from being primarily open to partially screened by adjacent vegetation and structures. Simulations were rendered to represent the view of the completed project (both the previously permitted project and the proposed modified project) as it will appear from KOP 3; refer to Figure 3.12-4b (Final View).

**Contrast with Existing Structures.** The modified project will have a similar contrast with existing structures, compared to the previously permitted project, due to the similar stack heights and screening of proposed structures by the existing Units 3 and 4. This PTA will slightly reduce the proposed stack heights (by approximately 5 feet) as well as move them further west, allowing for further screening of the proposed HRSGs by existing on-site structures. Therefore, implementation of the proposed R2C2 units and their orientation will result in similar contrast with existing structures as that described in the previously permitted project (Low to Moderate contrast).

**Contrast with Vegetation.** Minimal vegetation along Vista Del Mar is visible in this view, e.g., ornamental streetscape vegetation of limited quality. As the proposed units are similar to the previously permitted project, the contrast with vegetation remains Low. Note that the replacement of landscaping in the previously permitted project remains unchanged in this

Amendment and will take place along the eastern property line, along Vista Del Mar, and will reduce the contrast of the existing power plant structures to the beach landscape.

**Contrast with Land and Water.** Minimal views to the water features are visible in the background. Proposed project structures will not obstruct views to the water from this KOP. As in the previously permitted project, the proposed equipment for the PTA will be screened by Units 3 and 4, resulting in no change in this view. Therefore, contrast with land and water with the proposed changes of this Amendment is considered Low.

**Scale/Spatial Dominance.** The proposed HRSGs will be screened by existing structures. Additionally, the proposed stack heights will be slightly reduced. Similar to the previously permitted project, the scale dominance of the modified project at this KOP will be insignificant, so there is no change in scale/spatial dominance.

**View Blockage.** From this vantage point, the existing transmission lines and stacks create a significant amount of view blockage, and therefore, partially block view to the proposed project; thus, the proposed project would have Low to Moderate view blockage itself. In addition, with the proposed project changes, the HRSGs will be relocated such that most of the new equipment will be screened by existing structures. The proposed PTA HRSG stacks are at similar heights compared to those described in the approved AFC (the PTA stacks are approximately 5 feet lower). Resulting view blockage would be similar to existing conditions. Therefore, similar to the previously permitted project, the resulting project change visual impact will be Low to Moderate with regard to view blockage.

**Visual Impact Severity.** The overall severity of the previously permitted project at this KOP is Low based upon screening of project features provided by the existing HRSG Units 3 and 4. The portions of the previously permitted project equipment that will be visible from this KOP are the stacks and HRSG units. The proposed project equipment visible from this KOP is the proposed HRSG stacks. The HRSG units will not be visible. Therefore, no significant visual impacts are expected from this view for either the previously permitted project or the PTA.

#### ***Key Observation Point #4 – Manhattan Beach State Park Pier***

This KOP represents northward views from the pier; refer to Figure 3.12-5a (Existing View). The two oil storage tanks are visible south of the ESPR site. Simulations were rendered to represent the view of the completed project (both the previously permitted project and the proposed modified project) as it will appear from KOP 4; refer to Figure 3.12-5b (Final View). Significant features include the existing Units 3 and 4 stacks and boilers. The two oil storage tanks, which appear immediately south of the ESPR site, will be removed, as provided in the previously permitted project.

**Contrast with Existing Structures.** The heights of the proposed PTA stacks appear similar in massing and scale to the existing on-site structures that would remain upon completion of the proposed improvements. In addition, the HRSGs will be screened by the existing stacks and HRSGs associated with Units 3 and 4. The proposed R2C2 units appear similar in line, form, color and texture to the existing ancillary facilities of the power plant, as were the units in the previously permitted project. Therefore, the proposed stacks not change the project's Low contrast with 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 block in this view. The proposed structures in the previously permitted project will only add incrementally to the contrast with vegetation caused by existing structures and this impact remains unchanged in the proposed modified project. Therefore the contrast with vegetation is considered Low for the PTA.

**Contrast with Land and Water.** The existing structures contrast with the flat, open beaches and waterways surrounding the project site. The proposed structures for both the previously permitted project and PTA will only add incrementally to the contrast with the surrounding land caused by the existing structures. Therefore, the contrast with land and water remains Low with the proposed project modifications.

**Scale/Spatial Dominance.** The scale dominance of the R2C2 units will be insignificant, as compared with the previously permitted units. The proposed stacks will result in reduced contrast in spatial dominance due to the relocation of the HRSGs. The spatial dominance of the proposed structures will be insignificant due to the distance from this KOP and the similarity in shape and size of the proposed HRSG stacks compared to the existing stack structures that are to remain upon project completion.

**View Blockage.** Similar to the previously permitted project, the severity of the view blockage remains Low with the proposed project changes due to the proposed stacks appearing to be of similar size and shape to the permitted stacks. View blockage of the background mountains is similar to that of the previously permitted project. The two storage tanks, which are a major source of view blockage, will be removed as part of the previously permitted project, which remains unchanged with this Amendment. This area will be used temporarily for construction staging.

**Visual Impact Severity.** The overall impact severity of both the previously permitted project and proposed structures in this view is Low due to the proximity of the project site from this KOP and the slight reduction in stack heights (approximately 5 feet) in the modified project. Therefore, similar to the previously permitted project, no significant visual impacts are expected

with implementation of the Amendment (from this KOP).

***Key Observation Point #5 – Vista Del Mar***

This KOP represents southbound views along Vista Del Mar; refer to Figure 3.12-6a (Existing View). The most sensitive views of the proposed project range from approximately 500 feet to 0.25 mile and are partially screened by vegetation, utility lines, and fencing. The project site is visible to the south from Santa Monica Bay. Simulations were rendered to represent the view of the completed project (both the previously permitted project and the proposed modified project) as it will appear from KOP 5; refer to Figure 3.12-6b (Final View).

**Contrast with Existing Structures.** The proposed HRSGs appear smaller in scale than those associated with the previously permitted project; however, they are located at a closer proximity to this KOP. The proposed stacks have vertical lines similar to the existing power pole structures. Additionally, the topmost portion of the northernmost inlet filter is visible; however, landscaping located in the foreground screens the majority of this structure. Overall, due to the reduced dominance of proposed structures, the proposed changes will have less contrast than the structures analyzed in the previously permitted project.

**Contrast with Vegetation.** Trees and shrubs visible in this view form a horizontal line pattern. The vertical forms of the previously permitted HRSGs will create a vertical element in the horizontal line pattern of the vegetation. However, compared with the previously permitted project, the proposed structures will appear more horizontal and will more closely match the form of the existing vegetation. Therefore, the proposed structures will result in less contrast with vegetation than that described in the previously permitted project.

**Contrast with Land and Water.** Water is slightly visible in the background of this view; however, existing trees and shrubs located along the roadway screen the majority of views to the water. Unlike the previously permitted project structures, the proposed units appear more horizontal in nature, similar to Vista Del Mar. Therefore, the proposed project modifications will have less contrast with land features than those described for the previously permitted project structures.

**Scale/Spatial Dominance.** The scale dominance of the previously permitted project structures is Moderate due to the wide configuration of the proposed vertical HRSG structures. On the other hand, the proposed structures are similar in mass and scale to Units 3 and 4 and the roadway along this KOP. Therefore, the proposed project changes will be Low in scale/spatial dominance at this KOP.

**View Blockage.** The severity of the view blockage with the modified is Low from this KOP due to the lower HRSG profile, which will allow more views toward the coastal skyline than the

previously permitted project. The proposed PTA HRSG stacks appear slightly lower in elevation than that described in the approved AFC.

**Visual Impact Severity.** The PTA will result in a Low visual impact severity compared to that of the previously permitted project as a result of fewer contrasting features associated with structural scale, dominance, and view blockage, as the proposed HRSG units have a lower form and profile than that described in the previously permitted project.

***Key Observation Point #6 – Plume 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; refer to Figure 3.12-7a (Existing View). The two storage tanks visible in this KOP will be demolished, as originally proposed and analyzed in the previously permitted project. Simulations were rendered to represent the view of the completed project (both the previously permitted project and the proposed modified project), as it will appear from KOP 6; refer to Figure 3.12-7b (Final View). This KOP analyzed the effects of the vapor plumes emitted from the power plants stacks.

**Contrast with Existing Structures.** The proposed PTA stacks are slightly more screened due to the existing stacks associated with Units 3 and 4. Additionally, as the PTA stack heights would be similar to the approved AFC stack heights, the plumes would appear to be of similar degree and scale. Thus, the HRSGs and stacks will have Low contrast with existing structures in both the previously permitted project and this Amendment. The vapor plumes emanating from both the previously permitted and the proposed stacks will be of the same degree and scale, thus there is no changes with this Amendment in contrast with existing structures.

**Contrast with Vegetation.** Similarly, the proposed structures will only add incrementally to the contrast with vegetation. The vegetation in the area is not of the same scale and height as the top of the stacks in both the previously permitted project and the PTA; therefore, the vapor plumes will not interfere with existing vegetation. Consequently, the contrast with vegetation remains Low for the proposed modifications.

**Contrast with Land and Water.** The proposed structures will only add incrementally to the contrast with the surrounding land as compared with the previously permitted project. The water itself adds to the visible blockage of the site by creating fog, reducing the contrast with land and water. For these reasons, contrast with land and water remain Low with the proposed project changes.

**Scale/Spatial Dominance.** The proposed project will have reduced visibility, compared with the previously permitted project, of proposed structures due to screening from existing Units 3 and 4.

The vapor plumes from the proposed equipment will be of the same size and scale as the plumes emitted from the previously permitted project. Additionally, the proposed PTA stacks would appear similar in line and scale to the existing stacks associated with Units 3 and 4. The spatial dominance of the previously permitted project and proposed structures will be insignificant in relation to the composition of the view because they are similar in shape and size to existing structures.

**View Blockage.** The severity of the view blockage is Low for the Amendment due to the proposed stacks appearing to be of similar size, shape, and line pattern as the existing stacks of Units 3 and 4. Since the vapor plumes are emitted through the top of the stacks and dissipate in a horizontal or upward direction, they will not present any visible degree of blockage as a result of the previously permitted project or the proposed modified project. Note that the revised PTA stack height of 210 feet would result in a visible plume at similar elevations as the plume emanating from Units 3 and 4. The proposed previously permitted project and PTA stacks do not block any viewpoints from this vantage point and this impact remains unchanged.

**Visual Impact Severity.** The overall impact severity of the proposed structures in this view is Low due to the presence of Units 3 and 4 and the vapor plumes being of the same size and scale as the existing vapor plumes. No significant visual impacts are expected from this view as a result of the PTA due to the coastal nature of the site and the high incidence of fog.

#### ***KOP #7 – Dockweiler Beach State Park***

This KOP is a view directly east towards the project site from Dockweiler Beach State Park; refer to Figure 3.12-8a (Existing View). The two oil storage tanks are located within the southern portion of the project site. Simulations were rendered to represent the view of the completed project (both the previously permitted project and the proposed modified project) as it will appear from KOP # 7; refer to Figure 3.12-8b (Final View). The previously permitted project and proposed new equipment will not contrast highly with the existing equipment. The primary source of view blockage associated with the proposed equipment is the HRSGs, the HRSG stacks, and the combustion turbine air inlet filters (approximately 76 feet in height). The previously permitted HRSGs appear more vertical in form, compared to the proposed HRSGs, which are in a horizontal layout.

**Contrast with Existing Structures.** The proposed HRSGs will appear slightly shorter and longer than those described in the previously permitted project. The smaller scale of the proposed HRSGs slightly contrasts with Units 3 and 4; whereas, the vertical HRSGs depicted in the previously permitted project are larger in massing and scale. The proposed modified project will also introduce visible steam turbine fin fan coolers (approximately 22 feet in height) and air inlet filters (approximately 76 feet in height) at this KOP. The 10-foot seawall located in the foreground will screen the majority of the fin fan coolers. The proposed HRSGs will also screen

portions of the air inlet filters. The proposed HRSG stacks appear similar in line, mass, and scale to the previously permitted project as well as the existing HRSG stacks associated with Units 3 and 4. Although the PTA HRSG units slightly contrast with Units 3 and 4, as did the previously permitted HRSGs the proposed structures will result in Low to Moderate contrast with the existing structures due to the screening produced by ancillary facilities.

**Contrast with Vegetation.** Similar to the previously permitted project, the PTA structures will only add incrementally to the contrast with vegetation caused by the existing structures. Therefore, the contrast with vegetation remains Low for the PTA.

**Contrast with Land and Water.** The existing structures contrast with the flat, open beaches and waterways surrounding the plant. The proposed structures will only add incrementally to the contrast with the surrounding land having similar impacts as the previously permitted project. Additionally, compared to the previously permitted project, the proposed sea wall and landscaping will soften the transition from the open beaches and waterways to the project structures. The landscape plans for the modified project remain unchanged. Therefore, the contrast with land and water remains Low for the PTA.

**Scale/Spatial Dominance.** The scale dominance of the proposed structures will be insignificant due to the lower structural features and horizontal appearance. The previously permitted units differ from the proposed units in scale and spatial dominance in that the previously permitted HRSGs appear vertical in profile, whereas the proposed HRSGs have a horizontal profile. The height and massing of proposed structures will appear slightly smaller in scale and dominance compared to the previously permitted HRSGs. The spatial dominance of the PTA structures will be insignificant, as the HRSGs will complete a line pattern of vertical stack structures in a horizontal line sequence. Therefore, the Scale/Spatial Dominance value for the proposed project change is Insignificant.

**View Blockage.** The severity of the view blockage is considered Low for the proposed modified project since the proposed equipment will have a reduced bulk and not result in an increase in dominance compared to the previously permitted equipment.

**Visual Impact Severity.** Similar to the previously permitted project, the overall impact severity of the proposed structures in this view is considered Low due to the presence of Units 3 and 4. Additionally, the proposed HRSGs will be smaller in mass and scale than the previously permitted HRSG units, the spatial dominance of the proposed structures compared to the existing structures will be Low and they will complete a line pattern of vertical stack structures in a horizontal line sequence. Therefore, no significant visual impacts are expected from this view as compared with the previously permitted project.

### ***Key Observation Point #8 – Vista Del Mar***

This KOP represents southbound views along Vista Del Mar heading towards the project site; refer to Figure 3.12-9a (Existing View). Simulations were rendered to represent the view of the completed project (both the previously permitted project and the proposed modified project) as it will appear from KOP 8; refer to Figure 3.12-9b (Final View).

**Contrast with Existing Structures.** The proposed HRSGs appear smaller in scale than those associated with the previously permitted project; however, they are located at a closer proximity to this KOP. The previously permitted project HRSGs and associated stacks appear to be a more prominent source of view blockage compared to the proposed structures. The PTA proposes to introduce inlet filter features as an additional structure; however, only the topmost portion of the northernmost inlet filter is visible due to screening provided by landscaping located in the foreground. The proposed HRSGs and stacks will have a horizontal line pattern and will more closely blend with the form of Vista Del Mar and the adjacent fence line. Additionally, the vertical line pattern of the proposed HRSG stacks remain similar to the existing stacks at HRSG Units 3 and 4 as well as existing power poles. Therefore, the contrast with existing structures remains Low for the proposed project changes from this KOP.

**Contrast with Vegetation.** There is little vegetation visible surrounding the existing power plant structures. Unlike the previously permitted project, the PTA structures will appear more horizontal in line similar to that in the existing roadway and proposed vegetation. Therefore, the proposed structures will result in less contrast with the existing vegetation along the western property boundary as compared to the previously permitted project.

**Contrast with Land and Water.** Water is partially visible in the background of this view, and is mostly screened by existing trees and shrubs located along the roadway. Unlike the previously permitted structures, the structures proposed in this Amendment appear more horizontal in nature, similar to the horizontal line of both the ocean skyline and the curvilinear roadway. Therefore, the proposed structures will result in less contrast with land and water features than those in the previously permitted project.

**Scale/Spatial Dominance.** The scale dominance of the previously permitted project structures will be Moderate due to the wider configuration of the HRSG structures. In contrast, the proposed structures appear lower and closer in proximity at this KOP resulting in a Low to Moderate impact for scale/spatial dominance.

**View Blockage.** Unlike the previously permitted project, the severity of the view blockage for the proposed modified project is Low from this KOP due to the lower HRSG profile, which will maintain more views toward the coastal skyline than that proposed in the previously permitted project.

**Visual Impact Severity.** Unlike the previously permitted project, the visual impact severity resulting from the Amendment is Low. Proposed structures will appear smaller in structural scale and dominance and will have less view blockage than those in the previously permitted project. Additionally, PTA structural features will appear horizontal in line and form, which will appear similar to the existing roadway, whereas, the vertical nature of the previously permitted structures contrasts to the horizontal line pattern associated with the roadway and vegetation in the foreground.

### ***Plumes***

The PTA would require similar stack heights compared to the approved AFC. Additionally, the proposed plant will operate at higher exhaust temperatures for the turbine condition, for all operating modes compared to the gas turbines (GE 7FA) analyzed in the previously permitted project. Thus, it is anticipated that there will be similar, if not fewer, visual impacts resulting from visible plume conditions compared to those described for the previously permitted project. Therefore, the plume impacts will not have an overall significant effect due to the existing plumes from the neighboring Los Angeles Department of Water and Power (LADWP) Scattergood plant and the fog and haze generated by coastal climate conditions.

### ***3.12.4 Cumulative Impacts***

The proposed project changes will not result in any significant cumulative impacts to land use beyond those addressed in the CEC's Final Decision for ESPR. In general, the proposed project modifications will result in reduced long-term visual impacts as opposed to the design associated with the previously permitted project; refer to Table 3.12-2 (Resultant Change in Visual Impact Severity). The PTA proposes to reorient the new structures so that more views are afforded beyond those currently provided. The PTA will result in reduced contrast with existing structures, and will have slightly reduced stack heights (by 5 feet), scale, and dominance due to the lower profile of the HRSG units. Additionally, the proposed HRSGs will not require architectural treatments to cover up operational equipment/piping, as analyzed in the previously permitted project due to the use of the BENSON HRSGs rather than vertical HRSGs. However, as compared with the previously permitted project, the proposed HRSGs will have a slightly increased contrast with Units 3 and 4 due to the reduced scale, massing, and visible auxiliary features of the structures proposed in this Amendment.

#### ***3.12.4.1 Oversize Equipment Delivery***

##### ***Short -Term Construction Impacts***

Construction activities will create some new short-term impacts. The proposed oversize equipment delivery may include beach delivery of oversize equipment on barges sized up to approximately 300 feet long by 100 feet wide. A ramp structure will be constructed from a barge secured to the shoreline, across the beach from the Project site. Therefore, surrounding uses will

be exposed to project construction activities across the western project area, including views from recreational beach users. This activity will not require the excavation in the surf zone. Materials used to construct the beach ramp will be temporarily stockpiled along the ESGS fence line, in the northwest corner visible from the beach area and bike path adjacent to the fence line.

It is estimated that total construction of the proposed modified project will require 18 to 20 months, which reflects a slightly shorter schedule than for the previously approved project. Within that time period, beach delivery would require up to 6 months to complete.

As with the previously permitted project, demolition operations, graded surfaces, construction materials, and equipment associated with construction activities will be visible in this proposed modified project. Both the previously approved project and proposed modified project will require soil to be stockpiled and equipment for grading activities to be staged at various locations within the area.

As construction of the beach ramp may occur during night hours, surrounding uses may be exposed to light and glare. However, the proposed lighting design will ensure that lighting is the minimum brightness necessary for operational safety, and that lights are shielded and directed downward. The lighting plan will also include a "lighting complaint resolution form" to document and respond to complaints from nearby residents. Therefore, temporary light and glare impacts associated with construction activities will be less than significant.

#### ***3.12.4.2 Offsite Laydown and Parking Areas***

The PTA adds the use of one additional offsite laydown and removes one offsite laydown area that is no longer available. This proposed laydown area will be used to store equipment and construction materials. The majority of stored materials will not be visible due to screening provided by opaque perimeter fencing. Additionally, the property is currently used for light industrial and storage/parking uses; therefore, project features will appear similar to existing conditions. Use of this property will be temporary, as the property will only be used for construction purposes over approximately 18 to 20 months.

#### ***3.12.4.3 Plant Entrance Modifications***

The PTA proposes the alteration of the plant entrance road and gate entry area. The roadway will be realigned to improved roadway curvature, to facilitate large trucks entering and exiting the project site. Views of this roadway are limited as a result of onsite topography and screening provided by both existing and proposed on site structures. Limited views to the roadway exist from public beach areas or from Vista Del Mar. The proposed road modification will appear similar to the existing onsite roadway. Visual impacts associated with the proposed road modification are thus considered to be low.

**Conclusion**

In general, the proposed project modifications will result in reduced long-term visual impacts as opposed to the design associated with the previously permitted project; refer to Table 3.12-2 (Resultant Change in Visual Impact Severity). The PTA proposes to reorient the new structures so that more views are afforded beyond those currently provided. The PTA will result in reduced contrast with existing structures, and will have slightly reduced stack heights, scale, and dominance due to the lower profile of the HRSG units. Additionally, the proposed HRSGs will not require architectural treatments to cover up operational equipment/piping, as analyzed in the previously permitted project due to the use of the BENSON HRSGs rather than vertical HRSGs. However, as compared with the previously permitted project, the proposed HRSGs will have a slightly increased contrast with Units 3 and 4 due to the reduced scale, massing, and visible auxiliary features of the structures proposed in this Amendment.

**Table 3.12-2  
Resultant Change In Visual Impact Severity**

KOP	Scenario	Contrast w/ Existing Structures	Contrast w/ Existing vegetation	Contrast w/ Land & Water	Scale Dominance	Spatial Dominance	View Blockage	Overall Visual Impact Severity
KOP 1	Previously Permitted Project	Low	Low	Low	Insignificant	Insignificant	Low	Low
	PTA	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Reduced Impact	Unchanged
KOP 2	Previously Permitted Project	Low	Low	Low	Insignificant	Insignificant	Low	Low
	PTA	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Reduced Impact	Unchanged
KOP 3	Previously Permitted Project	Low to Moderate	Low	Low	Insignificant	Insignificant	Low to Moderate	Low
	PTA	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged
KOP 4	Previously Permitted Project	Low	Low	Low	Insignificant	Insignificant	Low	Low
	PTA	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged
KOP 5	Previously Permitted Project	Low	Low to Moderate	Low	Moderate	Moderate	Moderate	Low to Moderate
	PTA	Unchanged	Reduced Impact	Unchanged	Reduced Impact	Reduced Impact	Reduced Impact	Reduced Impact
KOP 6	Previously Permitted Project	Low	Low	Low	Insignificant	Insignificant	Low	Low
	PTA	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Reduced Impact	Unchanged

KOP 7	Previously Permitted Project	Low	Low	Low	Insignificant	Insignificant	Low	Low
	PTA	Low to moderate	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged
KOP 8	Previously Permitted Project	Low	Low to moderate	Low	Moderate	Moderate	Moderate	Low to Moderate
	PTA	Unchanged	Reduced Impact	Unchanged	Reduced Impact	Reduced Impact	Reduced Impact	Reduced Impact

### 3.12.5 Laws, Ordinances, Regulations, and Standards (LORS)

The Final Commission Decision certifying ESPR found the project to be in compliance with applicable LORS. As described in this PTA, the modifications proposed are consistent with all applicable LORS, and the PTA will not alter the assumptions or conclusions made in the CEC's Final Commission Decision for ESPR.

### 3.12.6 Conditions of Certification

The Conditions of Certification, VIS-2, VIS-3 and VIS-5 through VIS-9, will remain the same. The following changes to VIS-1, VIS-4, will be required for this Amendment because the R2C2 HRSGs will no longer require architectural treatments (note that deletions are depicted in strike out text and additions are depicted as bold, italicized text):

**VIS-1: Facility Visual Enhancement Plan.** Before starting construction, the project owner shall complete a comprehensive visual enhancement plan that includes, landscaping, painting, lighting, and other measures that result in an overall enhancement of views of the facility (i.e., the power plant site) from areas accessible to the public. The plan shall be made available for review and comment by the Executive Director of the California Coastal Commission for review and approve by the CPM. The plan shall include:

~~Architectural screening: All industrial equipment below elevation 125' (i.e., below the elevation of the outlet dampers on the facility's exhaust stacks) and visible from the beach, coastal waters, Vista Del Mar Avenue, and other areas accessible by the public shall be screened using panels, wire mesh, louvers or other forms of architectural screening. The screening shall be opaque or semi-transparent and have a non-glare finish, and the color shall be harmonious with the facility's setting on a public beach. If the project owner proposes, and the Energy Commission concurs, that it is infeasible to shield portions of the facility using architectural screening, the project owner may instead propose other measures such as landscaping, berms, or fencing to provide the necessary screening. Any such proposal must be based on the definition of feasibility in California Coastal Act (Public Resources Code Section 30108) and is subject to review and comment by the Executive Director of the Coastal Commission, and review and approval by the Energy Commission.~~

**Landscaping:** Where used to screen the facility, vegetation shall be selected and maintained to provide year-round screening (e.g., evergreen species). Preference shall be given to native species and/or species requiring little or no irrigation, or at a minimum, non-invasive species. Soils shall be tested, amended as needed or replaced to ensure plant survival.

**Other structural screening:** Where berms, fencing, or other structural elements are selected as the primary method to screen the facility, the structures shall harmonize with the facility's setting on a public beach. If berms are used, they shall be vegetated and maintained with evergreen, native, and/or species requiring little or no irrigation. If fencing is used, it shall include a non-glare finish and be painted in a neutral color. The Facility Visual Enhancement Plan shall include photographs showing existing conditions and simulated post-construction conditions from Key Observation Points (KOPs) around the facility (these may be the same KOPs that were used to develop the Staff Assessment). The plan shall also include anticipated costs for completing and maintaining the various visual enhancement measures and a detailed schedule for completing construction of these components.

**Conceptual Seawall Design Plan.** Before starting construction, the project owner shall complete a conceptual plan of the seawall design for review and comment by the Executive Director of the Coastal Commission, the City of Manhattan Beach, and the City of El Segundo, and review and approval by the CPM. This plan shall include:

**Final design:** The seawall along the west side of the facility shall be textured and finished in a neutral color harmonious with its location adjacent to a public bike path and beach. If painted, graffiti-resistant paint shall be used.

**Landscaping:** Where used to enhance the seawall design, vegetation chosen shall be selected or maintained to provide year-round screening (e.g., evergreen species).

Preference shall be given to native species and/or species requiring little or no irrigation.

This conceptual seawall design plan shall include photographs showing the existing conditions and simulated post-construction conditions from observation points along the bike path adjacent to the seawall, from the beach, and from other points where the seawall is highly visible. The plan shall also include anticipated costs for completing and maintaining the seawall and a schedule for construction.

**Verification:** At least 120 days prior to ground disturbance, the project owner shall submit the required Facility Visual Enhancement Plan and Conceptual Seawall Design Plan to the Executive Director of the Coastal Commission and the Cities of Manhattan Beach and El Segundo for comment, and 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, the project owner shall prepare and submit to the Coastal Commission staff, the Cities, and CPM a revised submittal.

~~**VIS 4: Architectural screening of power plant.** The project owner shall install architectural screening to cover the outer framework of the HRSG structures of the new proposed Units 5 through 7 and reduce visibility of the mechanical equipment at elevations between 10 and 125 feet of the superstructures, except where infeasible due to excessive loading on support structures or where operation or safety requirements do not allow covering of a surface area. Such screening shall conform to the requirements of the Energy Commission's decision. Such screening shall use as a baseline the Applicant's Visual Enhancement Proposals as of June 24, 2002, and preferably minimize or avoid gaps between banners.~~

~~The Project Owner shall have the burden to show infeasibility or incapability of screening by submittal of such information in the Architectural Screening Plan.~~

~~Prior to the start of construction, the project owner shall submit an architectural screening plan to the Executive Director of the California Coastal Commission (as a part of the facility Visual Enhancement Plan described in Condition VIS 1), and the Cities of El Segundo and Manhattan Beach for review and comment, and to the CPM for review and approval. The screening plan shall include:~~

- ~~1) Detailed plans and specifications sufficient to enable the CPM and Chief Building Official (CBO) to determine adequacy and performance of the proposed screening. Determination of adequacy includes confirmation of consistency with the terms of the Energy Commission's decision. Determination of adequacy also requires sufficient evidence that the screening can be installed to be stable, uniform, able to withstand anticipated wind loads, and attractively mounted, without sagging, tearing, unsightly discoloration, or adverse visual effects from the mounting system itself; and with sufficient durability to allow good performance between maintenance cycles. Required performance data shall include design information of sufficient detail and specificity to establish confidence in the design's ability to perform as desired, or to clearly establish limitations on the feasibility of particular measures.~~
- ~~2) Sufficient information to fully document and explain any areas where screening is infeasible or not possible. The information shall further include supporting engineering drawings analysis and calculations or specific safety or operational constraints or regulations.~~
- ~~3) 11" x 17" color simulations at life-size scale of the treatment proposed for use on project structures.~~
- ~~4) A detailed schedule for completion of the treatment.~~
- ~~5) A procedure to ensure proper treatment maintenance for the life of the project.~~

~~**Verification:** Not later than 120 days prior to start of construction, the project owner shall submit the final architectural screening plan and details to the Executive Director of the Coastal Commission and the Cities of El Segundo and Manhattan Beach for review and comment, and to the CPM for review and approval.~~

~~If the CPM notifies the project owner of any needed revisions before the CPM will approve the plan, the project owner shall submit a revised plan to the CPM.~~

~~Not less than thirty 30 days prior to the start of commercial operation, the project owner shall notify the CPM that the architectural screening is ready for inspection.~~

~~The project owner shall provide a status report regarding screening maintenance in the Annual Compliance Report.~~

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California Resources Agency, 1998, California Environmental Quality Act Guidelines and Documentation, December, 1998. City of El Segundo General Plan. 1992. *Land Use Element*.

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