

# D.14 Visual Resources

## D.14.1 Environmental Setting for the Proposed Project

### Visual Inventory Methodology

In the following analysis, the project's visual setting is described in terms of existing visual character and quality of major landscape units of the viewshed. Visual character refers to formal attributes of the visual setting and is descriptive. Visual quality is an evaluative measure that reflects a judgment of a landscape's attractiveness determined by attributes broadly recognized as valued and preferred by most viewers. The project setting is described in terms of landscape units of contiguous, broadly consistent visual character and quality, generally corresponding with physiographic types as well as land use.

Within each landscape type, Key Observation Points (KOPs) are identified to represent the most critical viewing locations and viewer groups likely to be affected by the project. Assessments of impacts are then determined from these KOPs. The existing landscape setting and its viewers are characterized in terms of their overall visual sensitivity, which is a concluding assessment as to an existing landscape's susceptibility to an adverse visual outcome. The sensitivity of the setting and its viewers reflects their susceptibility to significant impacts as a result of visual changes, or the overall measure of change in basic visual attributes such as form, line color, and texture caused by the Proposed Project. The components of visual sensitivity are the existing visual quality of the setting and anticipated level of viewer concern, which addresses the level of interest or concern of viewers regarding an area's visual resources, and is based primarily on scenic expectations associated with viewer activity types.

In the impact analysis, overall visual sensitivity of the setting is considered in combination with the level of visual change from the project at particular KOPs, to arrive at preliminary findings of potential project impact significance, as described further in Section D.14.3.1, below.

### Project Viewshed: Landscape Units and KOPs

The Proposed Project Study Area is located within the California Coast Range section of Fenneman's Pacific Border physiographic province (Fenneman, 1946) in a mountainous segment of coastline defined by the meeting of the Santa Lucia Range, the southernmost segment of the Coast Ranges, and the Pacific Ocean.

The viewshed of the Proposed Project encompasses the entire area from which the transport route might be seen, particularly from the offloading point at Port San Luis, along the access road to DCPP, and within DCPP, where staging, installation, OSG removal and storage would take place. The Proposed Project viewshed is described in terms of two primary broad landscape types: San Luis Obispo Bay; and the coastal hills and marine terrace of PG&E lands facing the Pacific Ocean between Point Buchon and Point San Luis ([see Figure D.14-1](#)). In addition, the DCPP facility itself and open offshore waters are discussed as distinct image types with their own particular viewing characteristics.

#### Landscape Unit 1: San Luis Obispo Bay

**KOP 1: Port San Luis/Harford Pier and Landing.** Figure D.14-2 shows the general character of the San Luis Obispo Bay and proposed offloading location, which is Landscape Unit 1. Project components would be exposed to public view within the populous and visually sensitive San Luis Obispo Bay and surroundings, including Port San Luis, Avila Beach, Mallagh's Landing, Pismo Beach, and portions

of Highway 101. Despite a moderate level of existing urban development, including a visually compromising tank farm, highly scenic and panoramic views of water, coastline, and harbor against a backdrop of enclosing coastal hills lend the bay high vividness and unity.

Viewer concern for visual quality is considered high. The communities of Avila Beach and Port San Luis are designated "special coastal communities" under the San Luis Obispo County Local Coastal Plan and are, with Harford Pier and Landing, important recreational visitor destinations of the region. The adjoining harbor, with 280 moorings, is an important regional recreation facility. Harford Pier has been designated a national historic structure by the State Historic Preservation Office.

In general, viewer exposure to the harbor and the DCPP Access Gate is also potentially high. Viewer exposure describes the degree to which viewers are exposed to views of the landscape, and considers landscape visibility (the ability to see the landscape), distance zones (proximity of viewers to the subject landscape), number of viewers, and the duration of view. Harford Landing directly adjoins the harbor and pier and is highly visible from all major visitor use areas. In addition, seasonal timing and weather substantially affect the level of expected viewer sensitivity. During peak tourist periods, particularly weekends from May through October, the number of viewers would be considerably higher than during off-season periods or on cold or foggy days (Port, 2003). During peak season weekends, due to the anticipated high number of visitors and the high sensitivity of both visitors and businesses to even short-term disruptions, overall sensitivity is considered to be *moderate to high*. In contrast, viewer sensitivity in off-season periods would be *low to moderate*.

Figure D.14-1. Project Viewshed: Seen Areas, Landscape Units, and KOPs  
[CLICK HERE TO VIEW](#)

*This page intentionally blank.*

Figure D.14-2. San Luis Obispo Bay, Offloading Location, and Harford Pier and Landing  
[CLICK HERE TO VIEW](#)

*This page intentionally blank.*

## Landscape Unit 2: Coastal Hills, Marine Terrace, and Shoreline

Figure D.14-3 shows the general character of the coastal hills in the vicinity of the DCPP site, which is Landscape Unit 2. The DCPP site, Access Road, and surrounding PG&E lands are located within an isolated stretch of coastline between Point Buchon, four miles to the northwest of DCPP, and Point San Luis, marking the western limit of San Luis Obispo Bay, six miles to the southeast. The steep slopes of the Irish Hills, which are the coastal portions of the Santa Lucia Range, define this landscape. The hills descend steeply from ridge-crest elevations of between 800 to 1,800 feet to a narrow marine terrace and bluffs at an elevation of roughly 100 feet, overlooking a rocky, highly articulated shoreline of numerous small coves facing the Pacific Ocean. In addition to the hills, bluffs, and coves, notable scenic features of the area include Lion Rock and other smaller rock stacks visible off-shore, and volcanic formations in the terrace north of Diablo Canyon. The volcanic formations and Lion Rock are identified in the local coastal area plan (described below) as features of outstanding scenic value.

The coastal hill and terrace landscape of the DCPP site and surrounding PG&E lands is characterized primarily by low-growing vegetation of olive, grey-green and brown colors, including coastal bluff scrub, chaparral, and non-native grassland. Isolated instances of oak and willow riparian forest are also found in Diablo Canyon and other southwest-trending drainages dissecting the coastal hills. In the broader study area, oak and pine forest may also be seen, but generally on more inland hillsides of the region, outside of the project's immediate coastal viewshed. With the exception of DCPP itself, the entire coastal hills landscape between Point Buchon and Point San Luis is highly intact, with no other significant man-made features. The entire coastal landscape outside DCPP itself is thus characterized by very high scenic quality.

This entire landscape unit, encompassing the viewshed of DCPP and the DCPP Access Road from the Access Gate westward, is highly isolated from public view by both terrain and land use. The entire stretch of coastline is visually isolated from publicly accessible viewpoints to the north of Point Buchon by the point and intervening hills and similarly from the San Luis Obispo Bay viewshed by Point San Luis and San Luis Hill. The entire coastline between the two points, and extending a considerable distance inland as well, is owned either by PG&E or its subsidiary, Eureka Energy Company. These lands are managed as restricted-access grazing lands, essentially isolating the DCPP and access road from potential foreground or middle-ground distance views by the public (PG&E, 2004). Only a short section of the publicly accessible Pecho Coast Trail, indicated on Figure D.14-1, provides visual access to portions of the coastline between the two points. As indicated by mapped areas in Figure D.14-1, the DCPP facility itself is not visible from that trail due to intervening terrain. Although portions of the transport route may also be visible from Saddle Peak, Devil's Ridge, or other high-elevation locations within Montaña de Oro State Park, these views would be from background distances of three miles or more. Thus, the principal observers of this viewshed would consist of PG&E employees and other Proposed Project workers whose level of viewer concern is presumed to be low due to their work-related activities.

**KOP 2: Pecho Coast Trail.** The Pecho Coast Trail is a short segment of coastal access trail extending from Point San Luis westward along the coast to Rattlesnake Canyon on PG&E property, and is the only portion of this landscape unit accessible or visible to the public. The public has access to this trail only via scheduled docent-led tours. At other times the trail is closed. Although the trail approaches the vicinity of the DCPP Access Road at its terminus near Rattlesnake Canyon, the access road is not visible from the trail due to the elevated position of the road in relation to the trail (Kelly, 2005). Visual quality of the scenic coastal trail environs is high. Similarly, viewer concern is likely to be high due to the scenically oriented recreational activity of trail users. Visual exposure to project components, however, would be low. Thus, overall visual sensitivity of this location would be *low*.

*This page intentionally blank.*



Figure D.14-3. Coastal Hills  
[CLICK HERE TO VIEW](#)

*This page intentionally blank.*

### Landscape Unit 3: DCPD Site

For purposes of this analysis, the DCPD site itself is treated as a distinct landscape unit, with distinct visual character, quality, and viewer sensitivity.

**KOP 3: DCPD Site.** The DCPD site and related facilities, as shown in Figure D.14-4, are the only significant existing man-made features within the project viewshed north of Point San Luis. Visually, the DCPD comprises a tightly clustered group of buildings and associated parking areas, dominated by the distinctive twin containment domes, occupying the bluff above Diablo Cove. Various smaller administrative, operational and storage facilities and associated parking lots make up the remainder of the facility. The power plant substation, filtration plant, and water storage reservoirs are visible farther east up Diablo Canyon from certain vantage points. High-voltage power lines, towers, and access roads also extend prominently from the power plant up Diablo Canyon eastward. Whitewater from the power plant outfall is visible within Diablo Cove from points nearby, and an artificial cove, the Intake Cove, created by rip-rap structures, is located immediately to the south of Diablo Cove.

Although the visual quality of the natural coastal setting of the DCPD site was obviously very high originally, existing visual quality at the plant is highly compromised by the industrial character of the plant itself and is considered moderate. In addition, viewer concern with scenic quality is considered to be low due to the work-oriented nature of viewers' activities at the plant. Viewer exposure to project components would be high because many project activities would be visible to large numbers of DCPD employees and other workers at close distances. However, because of the low level of viewer concern in this work context, and the compromised level of visual quality, overall viewer visual sensitivity at DCPD is considered *low to moderate*.

*This page intentionally blank.*

Figure D.14-4. Diablo Canyon Power Plant  
[CLICK HERE TO VIEW](#)

*This page intentionally blank.*

#### Landscape Unit 4: Open Water Viewpoints

**KOP 4: Marine View Off-Coast.** Portions of the DCPP site and the Access Road are visible to boaters both in San Luis Obispo Bay and in open water off the coast (see Figure D.14-5). Visual quality for recreational boaters in both the bay and open water is high, and viewer concern with visual change is also high due to the scenic and recreational focus of the activity. Visual exposure to project components would vary according to location and distance, and would range from moderately high in the bay to low at typical offshore distances of 0.5 miles or more. Visual conditions for boaters within San Luis Obispo Bay would be essentially similar to those of on-shore viewers along the bay. There is a security zone that restricts vessels from coming within 2,000 yards (1.14 miles) of the DCPP site. At these offshore distances, views of the DCPP site and access road are visually subordinate. Overall visual sensitivity of boaters in open water off the coast is considered to be *low to moderate*.

*This page intentionally blank.*



Figure D.14-5. Open Water Viewpoints  
[CLICK HERE TO VIEW](#)

*This page intentionally blank.*

## D.14.2 Applicable Regulations, Plans, and Standards

While various state and local policies deal with visual resources of the coastal zone, these policies are primarily concerned with controlling permanent long-term impacts on coastal scenic resources. The policies do not focus on short-term, temporary effects.

### Federal and State Standards

#### California Coastal Act

Federal authority for protection of coastal resources under the federal Coastal Zone Management Act is delegated to the state under the California Coastal Act. Scenic qualities of the coastal areas are discussed in the following sections of the Coastal Act:

- **Coastal Act Section 30251.** 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. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.
- **Coastal Act Section 30253.** New development shall . . . where appropriate, protect special communities and neighborhoods, which, because of their unique characteristics, are popular visitor destination points for recreational uses.

#### State Scenic Highway Program

Highway 101 within the project viewshed is an eligible State Scenic Highway under the state Scenic Highways Master Plan, indicating a relatively high level of existing scenic quality and viewer sensitivity. The scenic highways program establishes various land use controls for maintaining the visual quality of eligible scenic corridors, which local communities may adopt in order to have a highway segment designated as an official state scenic highway. This portion of Highway 101 has not been so designated, but the County of San Luis Obispo has adopted policies needed to qualify it as a designated scenic highway in the Scenic Highways portions of the Coastal Zone Framework and General Plan Open Space Element. Port San Luis and the DCPP Access Gate are roughly four miles from Highway 101, outside the range of perceptible visual impact.

### Local Ordinances and Policies

#### County of San Luis Obispo Local Coastal Plan

Applicable local policies within the coastal zone are found in various planning documents of the San Luis Obispo County Local Coastal Plan (LCP), including the San Luis Bay Coastal Area Plan, the Coastal Plan Policies, and the Port San Luis Harbor District Port Master Plan. These goals and policies are intended to protect coastal scenic resources in conformance with visual policies of the California Coastal Act and have been certified by the California Coastal Commission. They do not address temporary or short-term activities.

The applicable visual policies of the LCP are summarized briefly below.

***San Luis Bay Coastal Area Plan***

The San Luis Bay Coastal Area Plan identifies the project area as a Sensitive Resource Area (Coastal Terrace of Irish Hills SRA), noting that the “terrace area north of Diablo Canyon has outstanding scenic value, with volcanic formations and the offshore Lion Rock.” Upper Diablo Canyon is also identified as a Sensitive Resource Area (Upper Diablo Canyon SRA), which “includes particularly fine stands of oak and . . . a waterfall on Diablo Creek that has significant scenic value. Previously constructed roads and transmission lines from the Diablo Canyon Power Plant have damaged this area and further destruction must be prevented.”

***Coastal Plan Policies***

The Coastal Plan Policies recognize the communities on San Luis Bay (including Avila Beach, Port San Luis, and Mallagh’s Landing) as special coastal communities with important scenic value. The Coastal Plan Policies include a number of Visual and Scenic Resources policies aimed at achieving conformance with visual policies of the California Coastal Act. However, all of these are concerned with minimizing the effects of permanent coastal development on visual resources, such as minimizing the effects of new development on coastal vistas, landforms, vegetation, and the character of special coastal communities. None of the plan policies are directly applicable to actions of a temporary nature.

***Port San Luis Harbor District Port Master Plan***

The Port Master Plan includes a basic visual and scenic resources goal, to achieve a landscape that reflects the context of its use and the natural setting with minimal impacts to scenic viewshed through policies protecting waterfront character, bluffs and hillsides, historic areas, and applying long-term design solutions to achieve those objectives.

## **D.14.3 Environmental Impacts and Mitigation Measures for the Proposed Project**

### **D.14.3.1 Definition and Use of Significance Criteria**

Appendix G of the *CEQA Guidelines* identifies the following circumstances that can lead to a determination of a significant visual impact:

- The project has a substantial adverse effect on a scenic vista;
- The project substantially damages scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;
- The project substantially degrades the existing visual character or quality of the site and its surroundings;
- The project creates a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

The determination of which changes cross a threshold of “substantial adverse effect” or degradation is based upon the criteria described in the methodology summary (below), and in Table D.14-1, Visual Impact Significance Criteria.

Following professionally accepted practice in visual analysis, visual impacts are defined as a consequence of three primary factors: (a) the existing scenic quality of an area; (b) the level of viewer exposure and concern with visual change; and (c) the level of actual visual change caused by the project as seen by a given viewer group. The *visual sensitivity* of each location is first established, as in Section D.14.1 above. This rating is then considered together with the level of expected visual change caused by the project to arrive at an assessment of potential impacts and their significance in the analysis that follows below. For example, as reflected in Table D.14-1, a substantial adverse effect can occur when viewers with high levels of overall *visual sensitivity* (i.e., high viewer concern and visual exposure, in settings of high existing visual quality) encounter high levels of *visual change* (contrast) or scenic *view obstruction* as a result of the project. As stated in Section D.14.1, visual change, or visual contrast, is the measure of change in basic visual attributes as a result of the Proposed Project. Scenic view obstruction refers to the degree to which the Proposed Project would block or intrude upon scenic view corridors, especially those identified in public places.

**Table D.14-1. Visual Impact Significance Criteria**

Overall Visual Change	Overall Visual Sensitivity				
	High	Moderate to High	Moderate	Low to Moderate	Low
Very Strong	Significant (Class I or II)	Significant, May Be Mitigable (Class I or II)	Potentially Significant, Mitigable (Class II)	Less Than Significant (Class III)	Less Than Significant (Class III)
Strong	Significant, May Be Mitigable (Class I or II)	Potentially Significant, Mitigable (Class II)	Potentially Significant, Mitigable (Class II)	Less Than Significant (Class III)	Insignificant (Class III)
Moderate	Potentially Significant, Mitigable (Class II)	Potentially Significant, Mitigable (Class II)	Less Than Significant (Class III)	Insignificant (Class III)	Insignificant (Class III)
Weak	Less than Significant (Class III)	Less than Significant (Class III)	Insignificant (Class III)	Insignificant (Class III)	Insignificant (Class III)
Negligible	Less than Significant (Class III)	Insignificant (Class III)	Insignificant (Class III)	Insignificant (Class III)	Insignificant (Class III)

Overall *visual sensitivity* characterizes the existing landscape setting and its viewers. The sensitivity of the setting and its viewers reflects their susceptibility to significant impacts as a result of visual changes caused by the Proposed Project. The components of visual sensitivity are: existing *visual quality* of the setting; anticipated level of *viewer concern*, based primarily on scenic expectations associated with viewer activity types; and degree of *viewer exposure* to the project, based on duration and frequency of exposure, view conditions such as view orientation, presence of visual screening or filtering, and so on. This value is rated on a scale of Low to High.

Overall *visual change* captures the degree of visual change or impact expected as a result of the project. The fundamental elements of visual change include *visual contrast*, *visual dominance*, and *scenic view obstruction*, and are enumerated and discussed in detail as applicable or relevant in the analysis. Visual

contrast refers to formal contrast of form, line, or texture of the Proposed Project against the existing landscape. Visual dominance refers to the degree to which the Proposed Project would demand the attention of casual viewers and reflects various considerations including contrast, spatial, and orientation factors, as well as visual magnitude. Overall visual change is rated on a scale of Negligible to Very Strong.

In addition, the project is evaluated for conformance with applicable local plans and policies. Adopted expressions of local public policy pertaining to visual resources are given great weight in determining both visual quality and viewer concern.

### **D.14.3.2 Replacement Steam Generator Transport**

Under the Proposed Project, four RSGs would be offloaded at Port San Luis in the vicinity of Harford Pier on two separate occasions, once in fall of 2007, and once in fall of 2008, for Units 2 and 1, respectively. The Unit 2 shipment is expected to occur between September and November 2007, while the Unit 1 shipment is expected to occur between September and November 2008. The RSGs would be approximately 16 feet in diameter, and 68 feet long, and would be brought to Port San Luis on either one large barge each year, or two smaller barges, where they would be offloaded via a temporary bridge or ramp. Lifts or cranes would then raise the RSGs onto the overland transporters similar to those depicted in Figure B-10. Depending upon the transport scenario used, the RSGs and/or barges would remain at Harford Landing for up to four days. The RSGs would be carried overland by transporters via Avila Beach Drive, through the Access Gate and along the 7-mile DCPP Access Road to the temporary staging area (TSA). The entire route would take place on the existing paved access road. The RSGs may be transported at night as well as during daylight.

Under this transport option, the RSGs, transporters, and barge(s) would be highly visible within the bay and harbor viewshed at the point of offloading, and during transport for the short distance to the Access Gate, where the project components would become hidden from public view by intervening hilly terrain. Due to potential high viewer sensitivity and strong project contrast, this portion of the RSG transport operation could potentially result in the following adverse visual impacts.

#### **Impact V-1: Short-term visibility of RSGs and transporters to viewers at Harford Pier and San Luis Obispo Bay Viewpoints (KOP 1)**

Viewers with high levels of concern and visual exposure at Harford Pier and other recreation-oriented viewpoints on and around San Luis Obispo Bay would experience highly prominent short-term views of the RSGs and transporters at foreground distances. This temporary impact would persist for up to four days during each year of RSG delivery as the RSGs are offloaded at Port San Luis and transported onto the access road on PG&E property at Access Gate. At these near foreground distances, the project would have strong levels of visual contrast and visual change. Seasonal timing and weather would substantially affect the level of expected viewer sensitivity. According to the Port San Luis Harbor District Port Master Plan, the peak tourist period at the Port occurs from May through October, especially during, but not limited to, weekends and periods of good weather (Port, 2003). Offloading operations in either September or October 2007 (for Unit 2) or 2008 (for Unit 1) could thus potentially occur during peak visitor periods at the Port. However, the number of viewers would most likely be considerably higher during the June through August period, than during off-season periods. Due to the limited duration of viewer exposure to the RSGs, and the likelihood that such exposures would represent one-time experiences for most visitors, the overall sensitivity of viewers to this impact is considered to be low to moderate during off-season periods. During peak season weekends, because of the anticipated large number of visitors and the high sensitivity of both visitors and businesses to even short-term disruption from the

project, overall sensitivity is considered to be moderate to high. Thus, in the worst cases, during peak season weekends, the offloading and transport activities could prove disruptive to normal recreational activities at Harford Pier and vicinity, and represent a potentially significant impact to visitors and businesses. RSG offloading and transport activities could include nighttime operations, requiring bright artificial illumination. Because recreational activities in and around Harford Pier take place during both the day and evening, these temporary impacts could also occur during both day and evenings and include potentially significant impacts from project-related nighttime light and glare.

To address night lighting that might adversely affect port use, PG&E proposes to shield lighting and direct it away from sensitive areas, as shown in Section B.6. To ensure that this measure would be implemented to the satisfaction of the Port San Luis Harbor District administrators, especially in the vicinity of Harford Pier, additional clarification of PG&E's proposed measure is needed. Mitigation is identified below for providing further guidance and procedures to reduce potential impacts associated with night lighting near Harford Pier.

With measures to ensure off-season offloading and minimized glare (Mitigation Measures V-1a and V-1b), and a measure to provide advance notice of the offloading activities (Mitigation Measure N-1a, see Section D.9), the character and use of the special coastal community of Port San Luis, and particularly of the Harford Pier area, would be protected from temporary adverse visual impacts. These measures would reduce impacts to less than significant levels (Class II).

Outside of the bay and harbor viewshed, the anticipated impacts due to transport of the RSGs to the TSA would be minimal, due to the absence of public viewpoints. Although a portion of the Pecho Coast Trail (KOP 2) near its terminus at Rattlesnake Canyon is situated quite close to the DCPP Access Road, the Access Road is not visible from the trail (Kelly, 2005). Thus no impacts would be anticipated from this viewpoint.

***Mitigation Measures for Impact V-1, Short-term visibility of RSGs and transporters to viewers at Harford Pier and San Luis Obispo Bay Viewpoints (KOP 1)***

**V-1a** Offloading and transport activities during off-season time periods. RSG offloading and transport shall occur from November through April. If transport during peak recreational season (May through October) is unavoidable, RSG offloading and transport to the Access Gate shall be timed to take place during weekdays, and should be limited to the shortest feasible period of time.

**V-1b** Minimize disruptive night lighting in the vicinity of Harford Pier and San Luis Harbor. Nighttime project lighting shall be shielded and directed downward at Harford Pier to avoid subjecting vessel operators in the vicinity to night blindness. To the extent practicable, the Applicant shall also avoid evening transportation lighting between Port San Luis and the DCPP Access Gate on weekends during the peak tourist season (May through October).

**Impact V-2: Short-term visibility of RSGs and transporters to other viewers along access route west of the Access Gate**

All other potential viewers of RSG transport operations west of the Access Gate are presumed to be PG&E employees, project-related workers, or ranchers involved in lease grazing activities. Because of the work-oriented nature of all these activities, viewer concern with project-induced visual change is assumed to be low. Overall sensitivity of all these viewers is considered low, and thus impacts are considered to be less than significant (Class III).

As depicted in Figure D.14-1 (Project Viewshed), the DCPP or portions of the transport route would be visible from various high elevation locations in adjoining Montaña de Oro State Park. However, the nearest of these would be over three miles away. At these distances the entire facility and the project components would not be visually evident. Thus, no impacts would be anticipated.

#### **Impact V-3: Short-term visibility of steam generators and transporters to viewers at DCPP (KOP 3)**

Similar to Impact V-2, potential viewers of RSG transport operations at the DCPP site would be PG&E employees or other project-related workers. Because of the work-oriented nature of all activities at DCPP, viewer concern with project-caused visual change is assumed to be low. Within DCPP, the existing industrial character of the facility compromises existing visual quality. Overall sensitivity of all these viewers is considered low, and thus impacts are considered to be less than significant (Class III).

#### **Impact V-4: Short-term visibility of steam generators and transporters to recreational boats (KOP 4)**

Viewers on recreational boats within San Luis Obispo Bay and off the coast are assumed to be essentially similar to those of other viewers in the remainder of the bay viewshed, which are discussed under Impact V-1. Various phases of the RSG transport operations could be visible to one degree or another from boats off the coast between DCPP and Point San Luis. From viewpoints off the coast at typical distances from shore, the project components would appear visually subordinate, or less prominent than the existing facilities with similar visual character, and would represent weak to moderate levels of contrast. Overall visual sensitivity of boaters in open water off the coast is considered to be low to moderate because RSG transport would be viewed in motion and would be of a very short-term nature. The views would be a one-time occurrence for most or all viewers and would not strongly interfere with recreational boating activities. Thus, impacts would be less than significant (Class III).

### **D.14.3.3 Replacement Steam Generator Staging and Preparation**

Upon arrival at the TSA, the RSGs would be stored in a temporary, approximately 10,000-square-foot RSG storage enclosure. Up to 15,000 square feet of temporary warehouse structures, and up to 25,000 square feet of outdoor equipment storage and laydown areas would also comprise the TSA. Other new, staging-phase facilities would include a 5,000-square-foot mock-up facility, a 5,000-square-foot fabrication facility, 10,000 square feet of project office space, and a 10,000-square-foot containment access structure. Cumulatively, these temporary structures would clearly represent a noticeable change in the visual character of the DCPP as viewed within the facility, increasing the apparent density and industrial character of the site. However, these changes would be of a similar visual character, which is the distinctive elements or physical features that define appearance, to the existing uses. Additional parking needs of the Proposed Project are to be met within existing parking areas.

Due to their large cumulative area, the RSG staging facilities would represent a strong level of contrast and visual change as seen by the many DCPP workers (Impact V-3) viewing them at very close distances (KOP 3). However, because the existing visual quality of the current industrial setting is low to moderate, and the level of viewer concern is assumed to be low, overall visual sensitivity of the setting is low, and this impact is considered to be less than significant (Class III).

Offshore viewpoints of DCPP (KOP 4) from the minimum allowable distance of 2,000 yards (1.14 miles), the RSGs and other visible features at the TSA could be visible. However, despite the large overall area of the various structures described above, they would be relatively low in height and would remain visually subordinate to the larger existing power plant structures. At these viewing distances the



project-related visual changes of all of the various components of the Proposed Project would be difficult to distinguish for the casual observer, blending in with the existing industrial character of the power plant to the extent that most recreational viewers off-shore would not readily recognize the change. This minor level of visual change to viewers off-shore (Impact V-4) would represent a less than significant impact (Class III).

#### **D.14.3.4 Original Steam Generator Removal, Transport, and Storage**

OSG removal would entail various visually prominent activities including construction of the OSG Storage Facility, removal of the OSGs from the containment structures, and transport via site transporter to the OSG Storage Facility.

The OSG Storage Facility would be an approximately 10,000-square-foot concrete structure located at the upper (eastern) portion of the DCPP facility within Diablo Canyon, near the existing power plant switchyard. The OSG Storage Facility would thus be outside of the normal viewing area of DCPP employees, who are assumed to have low levels of viewer concern, in and around the power plant and offices. It would also be less visible from offshore vantage points than the closer and more prominent main power plant structures.

Despite the picturesque natural setting of the facility, the existing industrial character of the facility represents an already visually compromised condition, and therefore, the employees' level of viewer concern at the workplace is considered to be low. Consequently, potential impacts to DCPP employees (Impact V-3) are considered to be less than significant (Class III). OSG removal, transport, and storage would not be visually evident to offshore viewers (Impact V-4). Therefore, because such activities would go largely unnoticed, the impacts would be less than significant (Class III).

#### **D.14.3.5 Replacement Steam Generator Installation**

RSG installation would entail transport of the RSGs from the temporary storage facility to the containment structures, and would be a temporary, short-duration activity. Although this would be a visually prominent activity to onsite DCPP employees who would witness it from near foreground distances, it would not be apparent to any offsite viewers. The RSGs and transporters would not contrast markedly in character with the other, larger structures of industrial character comprising the DCPP site (Impact V-3). This temporary, moderate level of visual contrast, in the context of the already compromised visual quality of the DCPP site and the low visual sensitivity of workers at the plant, would represent a less than significant impact (Class III). With return to service, the various temporary structures built for staging and installation would be removed, resulting in a slight improvement in the visual character of the plant, and a return to a state much like that prior to the project. The only permanent change to the DCPP site would be the addition of the new OSG Storage Facility (described in Section D.14.3.4 above).

### **D.14.4 Environmental Impacts and Mitigation Measures for the Alternatives**

#### **D.14.4.1 Replacement Steam Generator Offloading Alternative**

Under the Intake Cove Alternative, the RSGs would be brought directly by barge to Intake Cove at DCPP and offloaded, thus avoiding exposure to public viewpoints in San Luis Obispo Bay and surroundings. Because of the absence of sensitive public viewpoints under this option, no adverse impacts are anticipated. Individual impacts associated with the Intake Cove Alternative are discussed below.

To viewers outside of the DCPP facilities, the Intake Cove Alternative would be essentially unnoticed, and no impacts would occur. For viewers at DCPP, the offloading would occur at near foreground distances and would be visually prominent (Impact V-3). However, the activities would be very short-term. Further, potential viewers are presumed to be PG&E employees or other project-related workers. Because of the work-oriented nature of these activities, and as previously noted, because the visual quality of the existing plant setting is already compromised, viewer concern with project-caused visual change is assumed to be low. Overall sensitivity of these viewers is thus low, and impacts would be less than significant (Class III).

Under the Intake Cove Alternative, the RSGs and barge would constitute a prominent new feature against the backdrop of the DCPP. However, the barge and RSGs would appear subordinate in scale and dominance with the existing DCPP facility, would present only moderate levels of contrast to boaters within foreground distances (Impact V-4) due to the similarity in character with the existing industrial appearance of the site, and would represent only a very short-term impact. Therefore, impacts would be less than significant (Class III).

#### **D.14.4.2 Temporary Staging Area Alternatives**

Three TSA Alternatives have been proposed in the southernmost portions of the DCPP facility. However, for purposes of analyzing the potential visual impacts of the project, the different alternatives constitute negligible differences. In each case, the staging activities would present a prominent view of the RSG storage facility and related project materials and equipment, and represent a strong level of contrast and visual change within the immediate visual foreground of large numbers of DCPP and RSG project workers (Impact V-3). However, because the visual quality of the existing plant setting is already compromised, and because the level of viewer concern among DCPP employees and project-related workers would be low, adverse impacts are not anticipated and are considered less than significant (Class III). This would be true of all of the proposed TSA location options. As discussed previously under the Proposed Project, potential offsite impacts of the TSA [e.g., as potentially witnessed by offshore recreational boaters (Impact V-4)] would be negligible, and considered less than significant (Class III). This would also be true under each of the proposed alternative locations, since they would each be visually subordinate and relatively inconspicuous to such viewers, and would blend with the existing industrial character and scale of the DCPP as a whole.

#### **D.14.4.3 Original Steam Generator Storage Facility Location Alternatives**

Similar to the TSA Alternatives, the OSG Storage Facility Location Alternatives would constitute a negligible difference compared to one another and to the Proposed Project, for purposes of analyzing the potential visual impacts. In each case, the OSG Storage Facility Location Alternatives would present prominent but temporary views of the OSGs and related project materials during transport, within the immediate visual foreground of large numbers of DCPP and RSG project workers (Impact V-3). However, because the visual quality of the existing plant setting is already compromised, the level of viewer concern for DCPP and other project-related workers would be low, and the overall visual sensitivity is low, and these impacts would be considered less than significant (Class III). This would be true for all the proposed OSG Storage Facility Location Alternatives. Therefore, potential impacts of the OSG Storage Facility Location Alternatives [e.g., as potentially witnessed by offshore recreational boaters (Impact V-4)] would be similar to the Proposed Project and would be less than significant (Class III).

#### D.14.4.4 Original Steam Generator Offsite Disposal Alternative

This alternative could have potentially adverse visual impacts, since it would entail transporting the OSGs outside of the plant boundaries, where they could potentially be seen by sensitive viewers. Although the precise appearance and configuration for this alternative are not known, the containers used to transport the OSGs would represent large and visually prominent object(s) with industrial character, and a potential to cause high levels of contrast to viewers on the way to their final destination. However, despite the mode of transport (i.e., truck, train, barge), transportation of the OSGs would most likely resemble other large truck or train containers, and would not be expected to represent an unusual or disruptive visual event to the public. In addition, such visual exposure would be temporary and short-term. Thus, OSG transport offsite would be unlikely to result in any adverse visual impacts.

#### D.14.5 Environmental Impacts of the No Project Alternative

The No Project Alternative would most likely include the continued use of the OSGs through 2013 or 2014, at which point DCPD would need to shut down and discontinue operations. After shutdown the facility would be decommissioned, although the specifics of this process are unknown at this time, the infrastructure would most likely be dismantled and removed from the site, and therefore would no longer be seen from an ocean vantage point. Other issues associated with DCPD shutdown would be the need for replacement generation. Environmental and safety concerns are anticipated to preclude the addition of new nuclear, hydroelectric, and coal- and oil-fired generation as replacement for DCPD. Thus, creation of replacement natural gas-fired generation capacity is assumed to be the most likely alternative generation scenario. Other alternative replacement technologies are also possible.

Under a gas-fired generation scenario, two (2 x 1,000 MW) to four (4 x 500 MW) replacement power plants would be required to provide generation capacity for the shutdown of DCPD. Typically, these power plants have visual impacts similar to other large-scale industrial facilities. Depending upon the setting in which they occur, they may represent potentially significant impacts. Plants within industrial settings would be less likely to result in significant visual effects. Those in rural settings are more likely to strongly contrast with landscapes of high existing scenic quality, potentially resulting in significant adverse impacts. In many cases, mitigation measures are available to reduce such impacts to less than significant levels, including landscape screening, siting modifications to reduce visual exposure of sensitive viewers, painting of the power plant, and other measures. Whether or not potentially significant impacts of a gas-fired plant can be reduced to less than significant levels is entirely a function of case-specific factors including plant design and exact location, and cannot be generalized. In addition to visual impacts caused by the physical plant facilities themselves, gas-fired plants may cause significant visual effects as a result of large-scale visible exhaust plumes, particularly from cooling towers of water-cooled plants. Whether such impacts occur is a function of plant design and climate of the specific plant location. These impacts can almost always be mitigated to less than significant levels, although at additional capital cost. Finally, new generation facilities may or may not require extensive new transmission facilities depending upon siting. Where extensive new transmission lines are required, this may often represent a potentially significant impact. Again, although various potential mitigation measures for new transmission facilities exist, the ability to successfully mitigate such impacts is entirely site-specific and cannot be generalized.

Various alternative technologies to replace DCPD capacity exist, including solar thermal, photovoltaics, wind, geothermal, hydropower, fuel cells, and biomass. All alternative technologies would similarly require new transmission facilities to connect with the grid. In many cases, the ability to effectively mitigate these technologies would be greater for facilities of smaller scale than of larger ones. Further, the pos-

sibility of replacing the entire DCPP capacity with a single facility is small or nonexistent. Rather, replacement capacity would most likely require a combination of technologies at various locations, each with different impacts and available mitigation measures. In general, by transforming landscapes into vast areas of monotonous, industrial character, many alternative technologies have the potential to cause significant adverse visual impacts. With appropriate siting, impacts of smaller individual facilities could presumably be reduced.

## D.14.6 Mitigation Monitoring, Compliance, and Reporting Table

Table D.14-2 shows the mitigation monitoring, compliance, and reporting program for Visual Resources.

**Table D.14-2. Mitigation Monitoring Program – Visual Resources**

<b>IMPACT V-1</b>	<b>Short-term visibility of RSGs and transporters to viewers at Harford Pier and San Luis Obispo Bay Viewpoints (Class II)</b>
<b>MITIGATION MEASURE</b>	<b>V-1a: Offloading and transport activities during off-season time periods.</b> RSG offloading and transport shall occur from November through April. If transport during peak recreational season (May through October) is unavoidable, RSG offloading and transport to the DCPP Access Gate shall be timed to take place during weekdays, and should be limited to the shortest feasible period of time.
<b>Location</b>	Harford Pier/Landing
<b>Monitoring / Reporting Action</b>	CPUC/Harbor District to verify that offloading and transport activities will not take place on peak season weekends.
<b>Effectiveness Criteria</b>	RSG offloading and transport will not interfere with visitor-serving businesses on peak season weekends, day or night.
<b>Responsible Agency</b>	CPUC, Port San Luis Harbor District
<b>Timing</b>	No later than 90 days prior to RSG shipment, the Port District shall be notified of schedule and arrangements shall be made to avoid weekend disturbance.
<b><u>MITIGATION MEASURE</u></b>	<b><u>V-1b: Minimize disruptive night lighting in the vicinity of Harford Pier and San Luis Harbor.</u></b> <u>Nighttime project lighting shall be shielded and directed downward at Harford Pier to avoid subjecting vessel operators in the vicinity to night blindness. To the extent practicable, the Applicant shall also avoid evening transportation lighting between Port San Luis and the DCPP Access Gate on weekends during the peak tourist season (May through October).</u>
<b><u>Location</u></b>	<u>Harford Pier/Landing</u>
<b><u>Monitoring / Reporting Action</u></b>	<u>CPUC/Harbor District to verify that RSG transport activities in general, and night lighting in particular, do not take place on peak season weekends.</u>
<b><u>Effectiveness Criteria</u></b>	<u>RSG offloading and transport will not interfere with visitor-serving businesses on peak season weekend nights.</u>
<b><u>Responsible Agency</u></b>	<u>CPUC, Port San Luis Harbor District</u>
<b><u>Timing</u></b>	<u>No later than 30 days prior to RSG shipment, the Port District shall be notified of transport operation plans, including confirmation that peak weekend night lighting shall not be required.</u>

## **D.14.7 References**

- Fenneman, Nevin M. 1946. *Physiography of the Western United States*. Washington D.C.: U.S.G.S.
- Kelly, Pat. 2005. Personal communication between Willian Kanemoto (WKA) and Pat Kelly (PG&E). January 19.
- Port (Port San Luis Harbor District). 2003. 2003 Port San Luis Harbor District Port Master Plan, Port San Luis Harbor Commission. Adopted 2003.
- PG&E (Pacific Gas & Electric Company). 2004. Proponent's Environmental Assessment of the Diablo Canyon Steam Generator Replacement Project.
- San Luis Obispo (County of San Luis Obispo). 1988. *Coastal Zone Framework for Planning, County of San Luis Obispo*. Adopted by the San Luis Obispo County Board of Supervisors, March 1, 1988.
- \_\_\_\_\_. 1988. *San Luis Bay Coastal Area Plan, County of San Luis Obispo*. Adopted by the San Luis Obispo County Board of Supervisors, March 1, 1988.
- \_\_\_\_\_. 1988. Coastal Plan Policies, County of San Luis Obispo. Adopted by the San Luis Obispo County Board of Supervisors, March 1, 1988.