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4.5 VISUAL RESOURCES

This section addresses the inventory of existing visual resources of the affected environment, the assessment of the environmental consequences of the construction, operation, and maintenance of the proposed Project on visual resources, and the LORS pertaining to the aesthetic effects of the Project.

This visual resource analysis was conducted in conformance with CEC guidelines for the inventory and assessment of visual impacts for an AFC. The CEC guidelines, in turn, comply with the CEQA documentation requirements (summarized in Section 4.5.2, Environmental Consequences). The study methods used (described in more detail in the affected environment and impact assessment sections below) were based upon those established by the Bureau of Land Management (BLM) in the Visual Resource Management Inventory and Contrast Rating System (BLM 1986), the Federal Highway Administration (FHWA) Visual Impact Assessment (FHWA 1981), and the U.S. Forest Service (USFS) Visual Management System and Scenery Management System (USFS 1974, 1995). The methodology has been tailored to meet the specific visual resource conditions associated with the proposed Project, and draft visual assessment guidance provided by the CEC.

4.5.1 Affected Environment

This section documents the existing condition of visual resources within the vicinity of the proposed Project. Specific topics include the regional and local landscape setting, identification of the visual sphere of influence (VSOI) for the Project, the methods used to inventory existing visual resource conditions, and the results of the inventory.

4.5.1.1 Regional and Local Landscape Setting

The proposed Project lies within the Sonoran Desert Physiographic Province on a narrow stretch of foothills between the Santa Ana Mountains and the Pacific Ocean. The Sonoran Desert is defined by mountain ranges and intervening desert plains. Rock pediments are more prevalent than in the Basin and Range Physiographic Province and undrained basins are less common (Fenneman 1931). A large portion of this province lies between sea level and the 1,000-foot contour. In a general way the elevation declines in all directions toward the Gulf of California. Elevated terrain ranges from hills and buttes to mountains rising 4,000 feet above sea level. The Santa Ana Range is located halfway between the San Jacinto Mountains and the ocean, a spur from the great granitic highland called the Lower California Province. It is a fault block tilted seaward, the steep straight scarp on the northeast side being still preserved. Its altitude declines toward the northwest where the uplift runs out into the low complex anticline of the Puente Hills and reaches almost to Los Angeles (Fenneman 1931).

Figure 2.1-1 is an aerial photograph of the proposed Project showing the locations of the proposed power plant (plant) site, the 230kV gen tie, 230kV utility switchyard, and 8-inch natural gas pipeline lateral in relationship to the surrounding area. The Project is bounded by SR 52, the San Clemente Canyon Freeway, on the south, Sycamore Landfill Road to the west, the Sycamore Landfill to the north, and open undeveloped lands to the east. Primary access to the Project is from Sycamore Landfill Road.

The local landscape in the vicinity of the Project is characterized by a series of canyons that generally trend from north to south, with intervening ridges. The ridges typically have steep slopes and local drainage that is relatively well developed, although many of the stream channels rarely have active flow. Most of the canyons are undeveloped and are dominated by native vegetation including sage scrub, chaparral, native grassland and oak communities, and sycamore woodland (City of San Diego Planning Division 2006).

The Project is within Little Sycamore Canyon, which slopes to the south toward Mission Gorge. Little Sycamore Canyon is generally about 0.5 mile wide (based on the distance between ridgetops) and up to approximately 500 feet deep. The ridge along the east side of the canyon reaches elevations of approximately 900 feet, and is somewhat higher than the ridge on the east side of the canyon. Vegetation in the canyon consists of native scrub and introduced grasses and trees (BRG Consulting 2008). Sycamore Canyon is located to the east of Little Sycamore Canyon, and Spring Canyon is to the west. Kwaay Paay Summit, a locally prominent mountain (elevation approximately 1,200 feet) within Mission Trails Regional Park, is located approximately .25 mile southwest of the Project. Other prominent higher-elevation points in the local area include Cowles Mountain (elevation 1,592 feet) about 2.5 miles to the south of the site and North Fortuna Mountain (1,291 feet) 2 miles to the west of the site (City of San Diego Park and Recreation Department 2006).

In general, the Project is comprised of primarily natural, open desert landscapes with no visible structures. Several areas of developed land uses surround the Project at distances ranging from 0.25 to 0.75 miles. Those include developed areas within the City of Santee to the east and southeast, the community of Mission View to the south, and the Highlands and Pleasant Valley mobile home parks to the south/southeast. Other than a few locations on the outskirts of Santee and the mobile home parks south of the Project, none of these areas exhibit direct views to the Project.

Land within 1 mile of the Project is primarily used for industrial purposes, particularly the Sycamore Landfill, or for informal recreation. The Project is located approximately 0.25 mile to the north of Mission Trails Regional Park, and receives current use as unofficial recreational lands. No structures are currently located on the proposed Project site. Adjacent small structures associated with the landfill operation are located north and northwest of the plant site. The nearest single-family dwellings are located approximately 0.3 miles to the southeast of the plant site, 0.8 miles to the southwest, 1.0 mile to the east, and 4.0 miles to the northwest.

Multiple existing high-voltage transmission lines are present within the vicinity of the Project. Two SDG&E 230kV transmission lines on lattice steel towers follow a southwest-northeast path that crosses through the landfill property. Another four SDG&E 230kV transmission lines are within an east-west corridor located about 1.6 mile to the northeast of the site.

Existing night lighting in the area is scattered and generally limited to exterior lights at residences. The few major sources of night lighting in the region include residents in the Mission View Estates and the City of Santee, which is visible and noticeable from the Project and surrounding area. Adjacent to the plant site, the existing landfill produces no noticeable amounts of night lighting. Overall, the region is primarily dark with numerous light sources that, while visible, do not tend to light the night sky significantly. Downtown San Diego is a significant source of night lighting but is located far enough from the Project that there is only a slight glow on the horizon to the west of the Project.

4.5.1.2 Visual Sphere of Influence

The VSOI for a project represents the area within which the Project could be seen and could potentially cause visual impacts. The size and configuration of the VSOI depends on the visibility of the Project features (the distance at which they are visible, which is largely a function of their size) and the extent to which the physical characteristics of the surrounding area permit long-distance views. The extent of the sphere of influence for the Project was investigated through a viewshed analysis of the Project within the surrounding landscape.

The viewshed analysis was conducted as a standard computerized application in an ArcView 10-based geographical information system (GIS). A three-dimensional terrain model of the local area was developed in GIS using 1:24,000-scale Digital Elevation Model (DEM) data, with a 10-meter-grid cell resolution, from the USGS. Once the DEM surface was created in GIS, the Spatial Analyst extension was used to run a line-of-sight visibility analysis from the plant site to every point on the terrain surface. The plant's tallest structures, the 100-foot tall stacks, were used as the basis for the viewshed model. The results identify the viewshed for the Project, i.e., the locations in the area surrounding the Project from which there would be a straight-line view to the highest point of the Project, accounting only for the view limitations created by the local topography (Figure 4.5-1).

Based on the characteristics and configuration of the power plant, it was not necessary and would not have been effective to include other Project components in the viewshed analysis. Because other plant components are considerably smaller in size and visibility than the stacks, the line-of-sight analysis for any other plant component would show a less-extensive visible area than for the stacks. The proposed gen tie will be supported on single monopole structures approximately 70 feet in height and follow a route to the north, west and north from the plant site. While a portion of this route is located in Spring Canyon, immediately to the west of Little Sycamore Canyon, visibility of the gen tie would be limited to a portion of Spring Canyon that is completely undeveloped and does not provide access for potential public viewers. Therefore, assessment of potential Project visibility for the purpose of identifying representative viewpoint locations was based on locations with a direct line of sight to the proposed plant stack height.

Overall, the viewshed analysis indicated that virtually all points with a straight-line view to the plant site are located within 2.5 miles of the site, and that large portions of the area within 2.5 miles are blocked from view by topography. The hills southeast of the plant site and south of SR 52 block views from the southeast and east of the site, including most of the developed areas within the City of Santee. The map of the viewshed analysis results shows the plant site could be visible from within a relatively narrow strip within Little Sycamore Canyon north of the site, and from some areas within an arc extending from southeast to west of the site. Most of the latter areas are undeveloped lands within Mission Trails Regional Park, while some are developed areas in the western part of Santee. Close review of the viewshed analysis indicated that some areas shown in blue shading on Figure 4.5-1 have a direct line of sight to the 100-foot elevation above the plant site, but not to the site itself; from these locations, it is likely that only the tops of the stacks would be visible. This situation applies to the portion of Santee located south of SR 52 and west of SR 125.

The VSOI or Project viewshed represents the maximum area for possible visual impacts based on potential Project visibility from visually sensitive areas. Within the VSOI, actual visibility of Project components would vary based on viewing distance and a variety of other factors. Other

variables affecting potential visibility of a project include the orientation of the viewer (such as whether the viewer is in an elevated vantage point), duration of view, view blockage or screening by structures and/or vegetation, atmospheric conditions, and lighting conditions (daylight versus nighttime). In general, visibility is highest when the viewer is immediately adjacent to the Project, is a permanent stationary viewer, and there is no screening. Conversely, visibility is much less when the viewer is located at greater distances, is traveling at a high rate of speed and in partial to fully screened conditions.

With respect to viewing distances, the following view ranges are typically applied:

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

4.5.1.3 Viewpoint Identification

Potential visual impacts are typically assessed by evaluating the visual effects of an action from a number of viewpoints that represent the range of applicable viewing conditions. The standard approach is to identify viewpoints that represent sensitive viewing areas that account for the following types of viewing locations:

- Important public use areas such as schools, parks, wildlife areas, visitor centers or areas used for camping, picnicking, bicycling, or other recreational activities
- Residential areas
- Travel routes such as major roads or highways used primarily by origin/destination travelers

Potential viewpoints for use in the visual resource analysis of the Project were identified based on the results of the viewshed analysis and review of existing maps, land use data, and aerial photographs. The review indicated that specific areas for investigation of potential viewpoints included key locations within Mission Trails Regional Park; a multi-family residential development and the Highland Mobile Home Park to the south of the Project (representing the residences located closest to the Project); and SR 52, Mission Gorge Road, and Father Junipero Serra Trail as key travel routes.

Identification of viewpoints was refined based on a field inventory of conditions within the 2.5-mile radius of the plant site, following the results of the viewshed analysis. The field inventory indicated that Project visibility would most likely be limited to specific areas within foreground and near middleground viewing distance of the Project. The topography blocks possible views to the plant site from virtually all locations beyond 2.5 miles. In addition, the size and character of the Project components indicate their visibility would be quite limited at longer viewing distances.

4.5.1.4 Summary of Representative Viewpoints

Based on the desktop review and field survey described in Section 4.5.1.3, seven viewpoints were selected to represent the character of the landscape and the range of viewing conditions surrounding the Project. As discussed in Section 4.5.2, one of these viewpoints was subsequently identified as a KOP in consultation with CEC staff, as required. The KOP selected is representative of viewers who will be most susceptible to visual impact as a result of the Project. A simulation of the Project from this viewpoint was prepared as a key component of the Project visual impact analysis. The viewpoint inventory work included three components: (1) identification of the viewpoints and their land use characteristics, and photo-documentation of existing views from those locations; (2) classification of the visual sensitivity level for each viewpoint; and (3) description of plant site visibility from each viewpoint.

Viewer sensitivity is a measure of the degree of concern for change in the visual character of a landscape. Viewer sensitivity considers the type of use, user attitude or preferences, the volume of use, adjacent land use, existing visual quality, and special management classifications (see Section 4.5.2.1 for additional discussion). Viewer sensitivity is commonly categorized as high, moderate, or low based on the above attributes. High-sensitivity viewpoints typically are associated with viewers in existing residential and recreation areas as well as people on important travel routes who have a strong tourism or recreation orientation. Moderate viewer sensitivity is often associated with rural areas and travelers on secondary roadways. Low-sensitivity viewers often include people in industrial, commercial, and agricultural use areas and commuters or other high-speed travelers who are not highly focused on their surroundings.

Visibility relates to whether and how the Project will be seen from a particular location. The inventory of Project visibility documented the distance from the viewpoint to the plant site and the expected effect of that distance on the ability to notice Project components. Perception of details (e.g., form, line, color, and texture) diminishes with increasing distance. As discussed above, the inventory categorized distance based on foreground (0 to 0.5 mile), middleground (0.5 to 5 miles), and background (beyond 5 miles) distance zones. In addition, the inventory noted whether views were open and unobstructed, partially screened (filtered), or blocked (e.g., by the presence of hillside terrain, vegetation, and/or buildings).

Figure 4.5-2 shows the distribution of the seven viewpoints in relation to the plant site. The viewpoints are numbered consecutively, with the viewpoint number generally increasing with distance from the plant site. A brief characterization of existing visual conditions inventoried for the viewpoints follows.

Viewpoint 1: SR 52

Viewpoint 1 represents the view to the plant site for motorists traveling eastbound on SR 52, the San Clemente Canyon Freeway (with a specific location adjacent to the south side of the freeway used as the photo point). This viewpoint is located approximately 800 feet (0.15 mile) southwest of the plant site (Figure 4.5-2). SR 52 is a four-lane (two lanes in each direction), divided, controlled access freeway with a posted speed limit of 55 miles per hour near the plant site. It is a major travel route in the Project vicinity and has the highest traffic volume among all travel routes in the local area. SR 52 connects with Interstates 15, 805 and 5 to the west, and with SR 67 to the east of Santee. The segment of SR 52 from I-5 to SR 67 is listed as eligible for designation as a State Scenic Highway but has not been so designated (CALTRANS 2011).

This location best represents views available to commuters and other travelers on the freeway. As shown in Figure 4.5-3, highway travelers at this location have an unobstructed view to the plant site at a close foreground viewing distance. Viewpoint 1 is the closest viewpoint to the plant site and represents the location at which the plant would be most visible. Viewers at this location are typically traveling at high speeds (averaging in excess of 55 miles per hour), however, and the view duration is very brief.

Views to the plant site would also be possible for westbound travelers at Viewpoint 1. Westbound travelers at Viewpoint 1 would not be able to see the site until they were past it, however, and would have to turn to look behind them or view the plant site in a vehicle mirror.

As indicated in Figure 4.5-1, clear views from SR 52 to the plant site are primarily limited to a stretch of freeway that is approximately 0.25 mile long and includes Viewpoint 1. The viewshed analysis indicates there are three other small areas along SR 52 with views to the plant site, located approximately 1.0, 1.4 and 2 miles west of the site. Views from these locations would be quite brief and from relatively long distances. To the southeast of the plant site there is a stretch of SR 52 from which there is a direct line of sight to the maximum Project facility height. This stretch of SR 52 runs from approximately 1 mile away from the plant site to approximately 1.5 miles away. The terrain blocks views toward the plant site at other locations on SR 52 in the vicinity of the site.

Topographic relief across the panoramic setting seen from Viewpoint 1 consists of a high relief composition varying from relatively undulating terrain to more dramatic distant background terrain. The undulating terrain within the foreground frames views of the Sycamore Landfill in the foreground/midground (if or when viewers are looking more to the north) and allows for focal views of the adjacent area. There are no natural water features in the Project area. The area is characterized by little color variation (desert tan, gray, olive green), and has low contrast of generally flat tones. A variety of cultural modifications including storage tanks, other industrial structures, overhead utility lines, high-voltage transmission lines, and the active landfill area are visible in foreground and midground views that are available at this location. Views from this viewpoint consist of natural desert scrubland juxtaposed against an altered urbanized landscape.

Viewpoint 2: MTRP, Grasslands Section

Viewpoint 2 is located approximately 0.4 miles southwest of the plant site (Figure 4.5-2). It is near and west of the equestrian staging area in the Grasslands section in the northeastern part of MTRP. MTRP is a large park of nearly 6,000 acres and is one of three major regional parks (in addition to Mission Bay and Balboa) operated by the City of San Diego.

Viewpoint 2 represents the closest views available to recreational users in the vicinity of the plant site. As shown in Figure 4.5-4, trail users and other recreationists at this location have an obstructed view toward the plant site. Because of the local topography, Viewpoint 2 is at an inferior (lower elevation) viewing position relative to the Project site. While the site is at a foreground viewing distance, hillside terrain and vegetation in the foreground blocks the site from view from some specific locations in this area. Similarly, views toward the Sycamore Landfill in the middleground are largely screened by intervening vegetation and the bridge on SR 52 than spans Spring Canyon.

Topographic relief across the setting for Viewpoint 2 consists of low-elevation, almost flat riparian topography, relatively flat to undulating terrain in the immediate surrounding area, and more dramatic distant terrain. The latter adds to the panoramic visual appeal of the area, although background topography is partially blocked by man-made development. There are no natural water features in this area. A variety of cultural modifications (including trail signage, fences, high-voltage transmission lines, a landfill, and the freeway bridge) are visible in foreground and middleground views in various directions from this point. The area is characterized by little color variation (desert tan, gray, olive green, brown), and has moderate contrast of generally flat tones. Views from this location consist of natural desert scrub land juxtaposed against an altered landscape and man-made development.

Viewpoint 3: MTRP, Old Mission Dam

A scenic lookout in the historic Old Mission Dam area within MTRP is the location for Viewpoint 3. The lookout is a short distance from a parking area adjacent to Father Junipero Serra Trail, a primary road within MTRP (Figure 4.5-2). This location is slightly more than 1 mile southwest of the plant site.

Viewpoint 3 represents views available to recreational visitors in a key use area in MTRP. As shown in Figure 4.5-5, recreationists at this location have a panoramic but partially screened view toward the plant site (which is in the vegetated minor canyon near the center of the photo). This viewpoint was selected due to its somewhat superior (elevated) topographic position and location within a key recreational use area.

The characteristics of the landscape seen from Viewpoint 3 are similar to those described previously for Viewpoints 1 and 2. A variety of cultural modifications (including trail signage, fences, hiking trails, high-voltage transmission lines, a landfill, and distant man-made structures of geometric shape) are visible in foreground and middleground views in various directions.

Viewpoint 4: MTRP, Kumeyaay Campground

Viewpoint 4 is located at the Kumeyaay Campground within MTRP. The campground and viewpoint is adjacent to Kumeyaay Lake a short distance north of Father Junipero Serra Trail, approximately 0.6 mile south of the plant site (Figure 4.5-2).

Similar to Viewpoint 3, Viewpoint 4 represents views available to recreational visitors in a key use area in MTRP. As shown in Figure 4.5-6, recreationists at this location have foreground views screened by vegetation around the lake, but clear views beyond that. This was chosen as a representative viewpoint because it is relatively close to the proposed plant site and is a high concentration area for sensitive recreational viewers. The view duration at this location is considered moderate overall, as the campers are overnight visitors but are present for limited stays. Under current MTRP operating procedures, the campground is only open on weekends.

The characteristics of the landscape seen from Viewpoint 4 are generally similar to those described previously for the other viewpoints. The sweeping and undulating topography of the foreground and middleground gives way to more dramatic terrain in the background in this area and allows for very open, panoramic views of the adjacent area.

Kumeyaay Lake is a natural water feature in the immediate foreground, though not visible from the viewpoint due to riparian vegetation around the lake. A variety of cultural modifications including trail signage, fences, hiking trails, high-voltage transmission lines, the Sycamore Landfill, and distant man-made structures of geometric shape can be seen in foreground and middleground views. The high-voltage transmission towers visible from this location are skylined on a ridge, which detracts from the scenic quality. This area is characterized by moderate to high color contrasts, with desert tan, gray, olive green, and brown contrasted against large clumps of deep green vegetation in the foreground.

Viewpoint 5: Mission Gorge Road

Viewpoint 5 is located at the triangular intersection of Mission Gorge Road and Father Junipero Serra Trail, approximately 0.9 mile south of the plant site (Figure 4.5-2). This location is adjacent to Mission Trails Regional Park and a short distance to the southeast of Kumeyaay Campground (Viewpoint 4). The viewpoint is within the City of Santee.

Viewpoint 5 represents views available from two key travel routes in the local area. It also represents the closest residential views of the Project site, as Viewpoint 5 is adjacent to the multi-family residential area located south of Father Junipero Serra Trail and west of Mission Gorge Road. As shown in Figure 4.5-7, viewers at this location have an unobstructed view toward the Project site. This was chosen as a representative viewpoint because it is relatively close to the proposed plant site and is indicative of views for both local travelers and residential viewers. The view duration at this location is brief for travelers, but long for residents.

The characteristics of the landscape seen from Viewpoint 5 are generally similar to those described previously for the other viewpoints. The undulating terrain of the foreground and middleground frames views of the Sycamore Landfill in the middleground, which is evident primarily as modified slopes that create dark gray and light-colored patches against the tan and green of undisturbed areas. In addition to the landfill, a variety of other cultural modifications (including trail signage, fences, hiking trails, high-voltage transmission lines, and distant man-made structures of geometric shape) are visible in foreground and middleground views. This area is characterized by moderate contrasting color variations (desert tan, gray, olive green, and brown contrasted against large clumps of deep green vegetation near Kumeyaay Lake in the foreground). Viewpoint 5, located on Mission Gorge Drive south of the Project, was selected as the KOP for the analysis and the location for the simulation (see Section 4.5.2.3).

Viewpoint 6: Highlands Mobile Home Park

Viewpoint 6 is located in the Highlands Mobile Home Park within the City of Santee (Figure 4.5-2). This location is approximately 1.2 miles south of the plant site, and is at a somewhat higher elevation than Viewpoints 3, 4, and 5.

Viewpoint 6 was chosen because it has a higher-elevation superior view, and represents a high concentration of sensitive residential viewers. This location provides a long duration view considering the permanence of residential dwellings. As shown in Figure 4.5-8, viewers at this location have a partially obstructed view toward the Project Site.

The characteristics of the landscape seen from Viewpoint 6 are generally similar to those described previously for the other viewpoints. The sweeping and undulating topography of the

foreground and middleground gives way to more dramatic terrain in the background in this area and allows for very open, panoramic views of the adjacent area.

A variety of cultural modifications including the residential subdivision, paved roads, transmission lines, and the Sycamore Landfill are visible in foreground and middleground views. The area is characterized by moderate to high color contrasts, with desert tan, gray, olive green, and brown contrasted against large clumps of deep green and flowering vegetation with bright chromas in the foreground.

Viewpoint 7: MTRP, Fortuna Mountain

Viewpoint 7 is located in the Fortuna Mountain section of MTRP. This location is on the Fortuna Saddle Trail, approximately 1.2 mile west of the plant site (Figure 4.5-2).

Viewpoint 7 represents a common, high-elevation view available to MTRP trail users in the vicinity of the plant site. As shown in Figure 4.5-9, trail users at this location have panoramic views over the surrounding area, and in this particular location, those include views toward the plant site. This viewpoint was chosen due to its relative proximity to the proposed plant site and high elevation superior view. This location provides views of moderate duration, considering the transience of recreational users.

The characteristics of the landscape seen from Viewpoint 7 are generally similar to those described previously for the other viewpoints. The undulating terrain and mottled dominant vegetation of the foreground and middleground partially screen views of SR 52 and Sycamore Landfill in the middleground. A variety of cultural modifications including numerous high voltage transmission lines, residential clusters, and the landfill are visible in foreground and middleground views. The transmission lines and landfill draw attention away from much of the surrounding terrain and detract from the scenic quality. The area is characterized by moderate color contrasts, with desert tan, gray, olive green, and brown vegetation with dull or flat chromas in the foreground and middleground.

Table 4.5-1 Summary of Inventoried Viewpoints

Viewpoint Number	Location	Distance to Project Site	Project Site Visibility
1	SR 52, Northwest of Mast Boulevard	0.15 mi.	High (indirect)
2	MTRP, Grasslands Section	0.4 mi.	Low
3	MTRP, Old Mission Dam	1.0 mi.	High
4	MTRP, Kumeyaay Campground	0.6 mi.	High
5	Mission Gorge Road at Father Junipero Serra Trail	0.9 mi.	High
6	Highlands Mobile Home Park	1.2 mi.	Moderate
7	MTRP, Fortuna Mountain	1.1 mi.	Moderate

4.5.2 Environmental Consequences including Cumulative Analysis

This section documents the assessment of potential impacts to visual resources within the vicinity of the Project. Specific topics include the methods used to conduct the impact assessment, the visual character of the Project and its visibility, and the results of the impact analysis relative to the Project itself and potential cumulative impacts.

4.5.2.1 Visual Impact Assessment Methodology

The visual resources study included the assessment of impacts on scenic attractiveness and sensitive viewing areas within the VSOI related to the construction, operation, maintenance, and long-term presence of the Project.

The consideration of significant visual impacts was based predominantly on the requirements of CEQA. Appendix G of the CEQA Guidelines states that potential impacts to visual resources would be significant if a proposed project results in:

- A substantial adverse effect on a scenic vista
- Substantial damage of scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings
- Substantial degradation of the existing visual character or quality of the site and its surroundings
- Creation of a new source of substantial light or glare that would adversely affect day or nighttime views in the area

Additionally, the CEC requires that consideration be given to the following:

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

The CEC (2011) has prepared a draft internal guidance addressing methods CEC staff use for conducting an assessment of a proposed Project to determine if it will potentially create a substantial adverse aesthetic impact. CEC staff provided this draft guidance document as reference information that may be applicable to this analysis, particularly with regard to selection of KOPs. In summary, the process involves selecting a KOP, or multiple KOPs, that would most clearly represent the visual effects of the Project or a Project feature from publicly accessible offsite locations. Photographs of existing conditions from the KOP(s) and photographic simulations of the proposed project or project feature as it would appear are used, along with supporting documentation, to display the visual effects of the Project on the existing environment.

The evaluation process for the identified visual effects at each KOP involves the combined assessment of two key factors:

- Overall Visual Sensitivity
- Overall Visual Change

These two factors themselves include multiple components. Overall Visual Sensitivity incorporates three elements:

- Visual Quality (existing)
- Viewer Concern
- Overall Viewer Exposure, based on the Visibility of the change, the Number of Viewers, and the Duration of View

Similarly, Overall Visual Change incorporates three measures of project effects:

- Contrast
- Dominance
- View Blockage

For each KOP, ratings for the eight individual factors in the evaluation process are assigned on a five-point scale ranging from Low to High, consistent with a variety of scales and related guidance addressing the individual factors. Treating these ratings as equally weighted, the individual factors are aggregated to derive ratings for Overall Viewer Exposure, Overall Visual Sensitivity, and Overall Visual Change. At the conclusion of the process, a matrix indicates the visual impact significance determination that is applicable for any combination of Overall Visual Sensitivity and Overall Visual Change ratings.

4.5.2.2 Project Visual Character and Visibility

The Project description, which provides the basis for the visual impact assessment, identifies the specific Project components that are important for the visual analysis as follows:

- An engine hall approximately 370 feet long, 70 feet wide, and 32 feet high to house the 11 Wartsila reciprocating engines, with an exterior painted tan and light brown to blend with the surrounding landscape colors
- An adjacent 2-story building, 92 feet long by 44 feet wide, and 32 feet high housing electrical, control, and administrative equipment and offices
- Eleven (11) exhaust stacks (one for each engine), each 4 feet in diameter and 100 feet high, comprised of steel that has also been painted tan to blend with the surrounding landscape colors
- Multiple tanks for storage of water, fuel, lubricating oils and other liquids
- A facility switchyard located on the north side of the main plant site, with switchgear and a step-up voltage transformer
- A 230kV transmission line up to approximately 1.5 mile long, supported on galvanized steel monopole structures up to approximately 70 feet in height
- A utility switchyard at the point of interconnection with an existing SDG&E 230kV transmission line, with circuit breakers and disconnect equipment

Table 4.5-2 summarizes the visual attributes of the components that are the most visible elements of the Project, and therefore of greatest significance for the visual analysis. Facility components that are not listed in the table would likely be blocked from view by other, larger Project components, such as the engine hall, and/or would be visible only to people very close to the specific facility.

Operation of the generating facility would not create any visible plumes of water vapor or smoke; therefore, plumes are not identified in Table 4.5-2 or depicted in the Project simulation. Non-reflective paints and materials will be used for exterior surfaces, so the Project will not be a source of glare noticed in off-site locations. Exterior light fixtures will be shielded and directed downward and toward the plant property, consistent with City of San Diego building requirements, to minimize lighting that is visible off site.

Table 4.5-2 Design Characteristics of Major Project Components

Component (number)	Height (feet)	Dimensions (length x width, feet)	Material/Color ¹
Engine hall (1)	32 at eaves	365 x 70	Pre-engineered metal/tan-brown
Control house (1)	32	92 x 44	Pre-engineered metal/tan-brown
Fire water storage tank (1 600,000 gallon)	25	15 in diameter	Metal/medium brown
Stacks (11)	100	4 in diameter	Painted steel (desert tan)
Switchyard dead-end structures (2)	60	Poles 45 apart	Steel/dark
Transmission poles (13 - 15)	70	1 foot thick at base	Steel monopole

Notes:

¹ Steel will be treated to minimize glare

The Project description incorporates the following design measures intended to reduce the potential visual effects of the Project:

Power Plant

- Structures, stacks, buildings, and storage tanks will be painted in accordance with CEC guidelines and colors will be selected to blend in with the existing visual conditions.
- The colors will provide for subtle variations and contrast. The selected color will help the Project to blend more naturally with the natural setting.
- Reflectivity of surfaces will be reduced by using non-reflective elements where practical.

Lighting

- Lighting on the Project will be limited to areas required for safety, will be directed on site to avoid backscatter, and will be shielded from public view to the extent practical.
- All lighting that is not required to be on during nighttime hours will be controlled with sensors or switches operated so that the lighting will be on only when needed.
- High-pressure sodium vapor fixtures will be used. These lights typically produce low-intensity amber light, which will reduce visual contrast with the night sky.

Natural Gas Pipeline and Transmission Line Right of Way

- After construction, areas where vegetation has been temporarily removed will be restored to be consistent with the surrounding area.

The viewshed analysis indicated that, based on the stack height and appearance, the Project will be clearly visible in close views from the south and west, with scattered areas of visibility from middleground areas located to the southwest and southeast within approximately

2.5 miles. Given the scale of the plant (a main plant structure of approximately 176,000 square feet on a plant site of 21.6 acres), and the height of some of the structures onsite (primarily the stack height of 100 feet), the potential for visual impacts is present. In addition, the Project components include a new 230kV gen tie that will extend generally northward from the Project site for approximately 1 mile. Section 2.5 Generation Tie-Line Description, Engineering, and Operation, contains additional information regarding the electrical transmission system.

4.5.2.3 Project Visual Impacts

While the plant site will be visible from some locations in the vicinity, the terrain surrounding the site will block views from the west/northwest and east/northeast of the site, with the exception of intermittent areas within Little Sycamore Canyon to the north (within and beyond the landfill area). In addition, landscapes inventoried within the VSOI typically retain low distinctive or diverse natural amenities or lacking substantial positive cultural modifications. There are a number of existing cultural modifications (e.g., highway, industrial facilities and altered topography, existing power transmission lines, etc.) within the VSOI that detract from scenic quality. While the Project will change the existing character of the site, significant impacts to the scenic attractiveness of the VSOI as a whole are not anticipated due to adjacent industrial scenery and other man-made developments. Therefore, less than significant impacts will occur relative to existing scenic attractiveness. This section presents the results of the analysis for the Project, following the methods outlined in Section 4.5.2.1.

Construction-Period Impacts

Plant site preparation will include site grading to accommodate the plant on the existing landscape. Excavation work will consist of the removal, storage, and/or manipulation of earth, sand, gravel, vegetation, organic matter, loose rock, and debris to the lines and grades necessary for construction. This analysis is based on the site details provided in the draft grading plan for the Project, which indicates the main plant site area would be situated toward the rear of the property at a base elevation of 464 feet. See also Section 2.0, Project Description, for more information relating to earthwork.

Construction of the power plant, from mobilization through site preparation and grading to commercial operation, is expected to take place from March 2013 until June 2014. During the Project construction period, construction activities, construction materials, equipment, trucks, temporary structures, and vehicles, will be visible to surrounding areas to the south and southwest and some areas to the southeast due to the undulating, but open viewing conditions surround the plant site which offer a variety of seen and unseen opportunities. Because the plant site is currently undeveloped, such construction activities at the site will contrast moderately with the existing character of the surrounding area, which has a mixture of natural and industrial elements. While visual changes associated with construction activities at the plant site and along the gen tie route will introduce activities and structures not currently occurring in the area, construction activities will be conducted within a 18-month period. Therefore, visual impacts from Project construction are considered temporary and thus, less than significant.

Operations Impacts

As described in Section 4.5.2.1, visual impact assessment for the Project involved evaluating the overall visual sensitivity applicable to the existing conditions and the overall visual change expected to result from the Project. Both elements of the assessment include multiple components. Overall visual sensitivity includes consideration of the existing visual quality, the level of viewer concern, and the degree of viewer exposure; the latter factor is based on the visibility of the Project, the number of viewers, and the duration of the view. The visual change component (the Project effect) is based on the visual contrast created by the Project components, their degree of dominance in the landscape, and the extent to which they would block existing views.

Baseline information for the overall visual sensitivity component of the assessment was collected through the desktop analysis and field inventory efforts, and is reported in Section 4.5.1. A photo simulation of the proposed Project was developed to assist in the visual change component of the assessment. In consultation with CEC staff, Viewpoint 5, located on Mission Gorge Drive south of the Project, was selected, as the KOP for the analysis and the location for the simulation. Based on the distribution of locations from which the Project is expected to be visible, Viewpoint 5/KOP 1 represents both (1) the location with the closest direct, stationary (and therefore longer-duration) view of the Project, and (2) a location common to residential viewers and viewers on a key travel route near the plant site. This location also provides a view that is similar to the views from key use areas in MTRP, and the simulation for KOP 1 is indicative of the appearance of the Project from other nearby locations.

Figure 4.5-10 is the simulation of the Project as it would be seen from KOP 1. The simulation is based on the design characteristics identified in Table 4.5-2 and a landscaping screen designed to shield some ancillary structures and reduce the contrast created by the plant. The simulation was used to derive specific ratings for the degree of anticipated change to the landscape created by the Project, based on the following factors incorporated into the Overall Visual Change rating as discussed in Section 4.5.2.1:

- The degree of Project contrast with the existing visual environment (based on the elements of form, line, color, and texture)
- Scale and spatial dominance of the Project components
- Extent of view blockage or screening created by the Project, and night lighting

The visual change ratings developed for the Project as seen from KOP 1 were then extrapolated to the expected views from the other six viewpoints to provide a more comprehensive assessment of potential visual effects for the range of potentially affected viewers. In effect, the contrast and dominance ratings for KOP 1 were adjusted as appropriate based on the documented views of the landscape from each viewpoint and differences in viewing distance. The contrast, dominance and view blockage ratings were then combined to develop a rating for overall visual change at each viewpoint, using a scale ranging from low to high.

Table 4.5-3 identifies the assessment of the Project components relative to these variables for each of the inventoried viewpoints.

Table 4.5-3 Summary of Expected Visual Change, by Viewpoint

Viewpoint	Contrast				Scale Dominance	Spatial Dominance	View Blockage Night Lighting	Overall Visual Change
	Form	Line	Color	Texture				
KOP 1/Viewpoint 5, Mission Gorge Road	Moderate	Moderate	Low	Low	Low/Moderate	Low	Low	Low to Moderate
Viewpoint 1, SR 52	Moderate	Moderate	Low/Moderate	Low/Moderate	Moderate/High	Moderate	Moderate	Moderate
Viewpoint 2, Mission Trails Regional Park, Grasslands	Low	Low	Low	Low	Moderate	Low	Low	Low
Viewpoint 3, MTRP, Old Mission Dam	Low/Moderate	Low/Moderate	Low/Moderate	Low/Moderate	Low	Low	Low/Moderate	Low to Moderate
Viewpoint 4, MTRP, Kumeyaay Campground	Low/Moderate	Low/Moderate	Low	Low	Low/Moderate	Low	Low	Low to Moderate
Viewpoint 6, Highlands Mobile Home Park	Low	Low	Low	Low	Low	Low	Low	Low
Viewpoint 7, MTRP, Fortuna Mountain	Low/Moderate	Low/Moderate	Low	Low	Low	Low	Low	Low

The final part of the assessment involved evaluating the respective ratings for overall visual change in the context of overall visual sensitivity for the respective viewpoints. The results of this process are discussed below. Ratings assigned to the respective components of Overall Visual Sensitivity are summarized in Table 4.5-4.

Table 4.5-4 Summary of Overall Visual Sensitivity Ratings, by Viewpoint

Viewpoint	Visual Quality	Viewer Concern	Overall Viewer Exposure			Overall Visual Sensitivity
			Visibility	Number of Viewers	Duration	
KOP 1/Viewpoint 5, Mission Gorge Road	Moderate	Moderate to High	High	High	High	Moderate to High
Viewpoint 1, SR 52	Low to Moderate	Low to Moderate	High	High	Low	Moderate
Viewpoint 2, MTRP, Grasslands Section	Low to Moderate	Moderate to High	Low	Moderate	Low to Moderate	Moderate
Viewpoint 3, MTRP, Old Mission Dam	Moderate	Moderate to High	High	Moderate to High	Moderate	Moderate to High
Viewpoint 4, MTRP, Kumeyaay Campground	Low to Moderate	High	High	Moderate to High	Moderate	Moderate to High
Viewpoint 6, Highlands Mobile Home Park	Low to Moderate	High	Moderate	High	High	Moderate to High
Viewpoint 7, MTRP, Fortuna Mountain	Low to Moderate	High	Moderate	Low to Moderate	Low to Moderate	Moderate

KOP 1/Viewpoint 5, Mission Gorge Drive

This KOP, at the intersection of Mission Gorge Road and Father Junipero Serra Trail, represents potential effects for viewers on a key travel way near the Project and viewers in the adjacent residential areas. (Neither street is designated as a scenic corridor or scenic route.) Based on the information presented in Section 4.5.1.4, key elements of the overall visual sensitivity for this location are summarized as follows:

- Existing visual quality is moderate. Existing lattice-steel transmission towers are skylined on ridges visible to the north. The operating area of the Sycamore Landfill is relatively prominent in the view to the north, beyond the plant site. Landfill features are evident primarily as modified, unnatural-appearing slopes that create horizontal and angular lines, and dark gray and light-colored patches against the tan and green of undisturbed areas.
- Viewer concern is considered moderate to high. Concern levels would be moderate for travelers on Mission Gorge Drive and high for residents.
- Located approximately 0.9 mile to the south of the Project site, the Project would be seen at middleground distances and visibility of the components would be high, as indicated in Table 4.5-1.

- The number of viewers is rated high. A traffic count recorded for this area in 2008 indicated an average daily traffic volume of 14,700 vehicles. Several hundred residences are located within a short distance of KOP 1.
- View duration is considered moderate to high overall. Travelers on the road would have short viewing durations, while residents would have long durations.

Given the visibility (high), viewer number (high) and view duration (moderate to high) conditions, the overall viewer exposure level for KOP 1 is considered high. Combined with the moderate visual quality and moderate to high viewer concern levels, the overall visual sensitivity for KOP 1 is rated as moderate to high.

As indicated in Table 4.5-3, the overall visual change rating for KOP 1 is low to moderate. The Project facility components that are most evident in the simulation for KOP 1 (Figure 4.5-10) are the engine hall, stacks, and the dead-end structure in the facility switchyard. (The Project gen tie line is also included in the simulation, but is visible only with close inspection of an enlarged view of the simulation. The monopole structures for this line are considerably shorter and lower in profile than the existing lattice-steel transmission structures in the area, and they are difficult to identify as the line crosses Little Sycamore Canyon.) The form and line of the stacks and the engine hall are the most noticeable source of contrast introduced by the Project. Most of the project facilities blend well into the surrounding landscape due to the color of the paint used on those structures. The engine hall creates noticeable horizontal lines, but there is enough color and texture similarity with the adjacent landscape to reduce the overall prominence of the building. Similarly, the stacks create noticeable vertical lines, but their color and texture blend enough with the adjacent landscape to reduce the overall prominence of the stacks. A water tank near the southwest corner of the plant is effectively screened by the landscaping, and the dead-end structure in the switchyard is barely visible. A short, curving section of the plant access road is visible a short distance above the freeway but is not prominent, and a cut slope above the access road can be distinguished by its comparatively dark shading.

With respect to dominance, the facility appears large relative to other visible landscape features, and is relatively conspicuous because it is near the center of the view and slightly elevated relative to the viewer. View blockage is minimal, however, and the dominance of the facility is reduced by its location in a panoramic setting and adjacent to the working area of the Sycamore landfill. The contrast created by the Project is viewed within the context of existing landscape modifications, including the horizontal line of the freeway, numerous transmission towers on adjacent ridges, and the modified landfill slopes with their contrasting lines, colors and textures.

Although the overall visual sensitivity rating for KOP 1 is moderate to high (see Table 4.5-4), in conjunction with the low to moderate rating for overall visual change the visual impact of the Project from this location is classified as less than significant.

Viewpoint 1, SR 52

This location is the closest viewpoint to the Project and represents views from a major travel way; SR 52 is not a designated scenic route. SR 52 travelers have close foreground views to the Project, located approximately 0.15 mile to the east. The existing landscape seen from this viewshed has already been altered with the presence of cultural modifications, including the freeway, the Sycamore Landfill (in the view to the north) and transmission lines in ridgetop

locations; existing visual quality is low to moderate. Viewer concern is low to moderate, as the freeway travel activity of the viewers is assumed to be primarily commuting and other local trips. Project visibility is quite high and the number of viewers is high (more than 10,000 per day), while the view duration is very brief (less than 10 seconds). As a result, the overall viewer exposure is moderate to high, and overall visual sensitivity is moderate. Because the overall visual change would be moderate (see Table 4.5-3), the visual impact at this location is classified as less than significant.

Viewpoint 2, MTRP, Grasslands Section

This location represents the closest stationary views to the Project. Located approximately 0.4 mile southwest of the plant site, this viewpoint has screened foreground views of the Project. The local topography around Viewpoint 2 and existing vegetation will obstruct clear or full views of the Project components. Views to the plant site at other specific locations in this area are less obstructed but typically include some development features, primarily the existing freeway bridge. It is possible that the upper portions of the stacks would be skylined above the hilly terrain, however.

The existing landscape seen from this viewpoint has already been modified with the presence of several cultural modifications, and existing visual quality is low to moderate. Viewer concern is moderate to high, based on the recreational activity of the viewers. The number of viewers is assumed to be in the range of 51 to 100 per day (moderate), and their average view duration is likely less than 20 seconds. With low to moderate overall viewer exposure, overall visual sensitivity is moderate. Because the overall visual change would be low (see Table 4.5-3), the visual impact at this location is classified as insignificant.

Viewpoint 3, MTRP, Old Mission Dam

This location in the Old Mission Dam area of MTRP also represents views of recreational users near the Project. The viewpoint has middleground views to the plant site approximately 1.0 mile to the northwest. The existing landscape seen from this viewshed has some evidence of cultural modifications, including transmission towers along the ridge behind the plant site, the freeway and modified slopes in the landfill area, and existing visual quality is moderate. Viewer concern is high. Viewer numbers are assumed to be 100 to 200 per day (moderate to high) and their view duration is expected to be from 20 to 60 seconds (moderate). Based on the comparative viewing distances, from this location the plant would appear somewhat smaller than it does in Figure 4.5-10. Overall viewer exposure is moderate to high, resulting in an overall visual sensitivity of moderate to high. Because the overall visual change would be low to moderate (see Table 4.5-3), the visual impact at this location is classified as less than significant.

Viewpoint 4, MTRP, Kumeyaay Campground

Viewpoint 4 represents a recreational user view at the Kumeyaay Lake Campground, which has 46 primitive campsites. This facility is located approximately 0.6 miles south of the Project, at a near middleground viewing distance. The existing landscape seen from this viewshed has evidence of several cultural modifications, including transmission towers skylined on a ridge, modified slopes in the land fill area, and the freeway and development to the east of the freeway; existing visual quality is low to moderate. Because the viewing distance is about the same, from this location the plant would appear very similar to what is indicated in

Figure 4.5-10. Viewer concern is high and overall viewer exposure is moderate to high, resulting in an overall visual sensitivity of moderate to high. Because the overall visual change would be low to moderate (see Table 4.5-3), the visual impact at this location is classified as less than significant.

Viewpoint 6, Highlands Mobile Home Park

This location provides a higher-elevation superior view to the Project and represents views from a residential area. Located approximately 1.2 mile south of the plant site, Viewpoint 6 has middleground views to the site and long viewing durations. The existing landscape has been modified with the presence of a residential subdivision, utility and transmission lines, landfill development, the freeway and other development features, and visual quality is low to moderate. Viewer concern is high, based on the residential use at this location. Project visibility is moderate because of vegetative screening (and possibly topographic screening in some specific locations). The number of viewers (more than 100 residences in this neighborhood) and view duration are both rated as high, resulting in a moderate to high overall viewer exposure. Combined with the visual quality and concern levels, overall visual sensitivity is considered to be moderate to high. The Project will create some visual contrast with the existing setting, but the components will be seen behind the freeway and against a backdrop of hilly terrain and landfill modification; as a result, the overall visual change is rated as low. In addition, because the viewing distance is nearly double that for KOP 1, from this location the plant would appear considerably smaller than what is indicated in Figure 4.5-10. Therefore, the expected visual impact from Viewpoint 6 is classified as insignificant.

Viewpoint 7, MTRP, Fortuna Mountain

Viewpoint 7 represents another recreational user view to the Project, in this case from a high-elevation (superior) vantage point in the western part of MTRP. The specific location is on the Fortuna Saddle Trail approximately 1.1 miles to the west of the site. Visual quality in this location is low to moderate, as this viewpoint is near several high-voltage transmission lines and has foreground views to SR 52. Viewer concern is high, based on the recreational use at this location. Project visibility is moderate because of the viewing distance and partial screening created by local topography. The number of viewers (assumed to be less than 50 per day) and view duration (assumed to be less than 20 seconds) are both low to moderate, resulting in an overall viewer exposure rating of low to moderate. Combined with the visual quality and concern levels, overall visual sensitivity is considered to be moderate. The Project will create some visual contrast with the existing setting, but the components will be seen against a backdrop of hilly terrain and within the same view as the freeway and transmission lines; as a result, the overall visual change is rated as low. Therefore, the expected visual impact from Viewpoint 6 is classified as less than significant.

Project Impact Summary

The evaluation process described above indicated that visibility of the Project would predominantly be associated with the stacks and engine hall, as other facility components would create relatively little contrast and/or would have limited exposure to potential viewers. Based on the assessment of visual change and viewer sensitivity, the evaluation resulted in the following determinations of impact significance for the seven viewpoints:

- Viewpoint 1, SR 52 – Less than significant
- Viewpoint 2, MTRP, Grasslands Section – Insignificant
- Viewpoint 3, MTRP, Old Mission Dam – Less than significant
- Viewpoint 4, MTRP, Kumeyaay Campground – Less than significant
- KOP 1/Viewpoint 5, Mission Gorge Road – Less than significant
- Viewpoint 6, Highlands Mobile Home Park – Insignificant
- Viewpoint 7, MTRP, Fortuna Mountain – Less than significant

In summary, impacts were classified as less than significant at five viewpoints, including the KOP selected for the analysis, and insignificant at two viewpoints. The analysis indicated that significant visual impacts from the Project are not expected.

4.5.2.4 Cumulative Visual Impacts

The Project and other projects in the vicinity (see Section 4.17 Cumulative Impacts) are not expected to result in significant cumulative impacts to visual resources during the construction or operation phases. The areas within the VSOI are generally characterized by residential developments, landfill activities, and other industrial facilities, park use, and open desert terrain. Typical land use actions within the VSOI can be characterized primarily as zone changes, lot line/property line adjustments, roadway improvements, and home remodeling. Much of the undeveloped land around the Project is expected to remain as open space under the planning direction established in the City of San Diego Multiple Species Conservation Program. Consequently, substantial new residential development that would generate additional sensitive viewers in the vicinity of the Project is not anticipated. The City of San Diego is updating the master plan for MTRP; the new plan is not expected to result in actions that would substantially change pertinent visual resource conditions in and near the park. Expansion of the Sycamore Landfill as proposed would result in noticeable changes in the existing visual conditions in the vicinity of the Project, primarily through modification of the natural landforms within the landfill operations area.

The addition of the Project will alter the existing landscape and visual setting at and near the plant site. The additional visual effects of the Project, in conjunction with the effects of the other activities discussed above, are not expected to result in cumulatively significant impacts to the visual setting within the VSOI. While future activities within the local area may result in visual impacts that are significant in their own context, the incremental contribution of the Project is not likely to measurably change the overall result.

4.5.3 Mitigation Measures

Project planning and design inherently includes measures intended to mitigate the potential effects of project development and operation. For example, the plant site location was chosen because of its proximity to existing industrial land use, specifically the Sycamore Landfill, so as to minimize potential concerns over compatibility with adjacent land uses. In addition, as discussed previously in Section 4.5.2.2, Project plans include a number of design features intended to help minimize the visual impacts of the plant.

The Project visual impact analysis documented in Section 4.5.2 specifically accounts for adopted design features that would reduce the visual impacts from the Project. The assessment concluded that visual impacts from the construction and/or operation of the Project are not anticipated to be significant, based on consideration of visual sensitivity and the degree of visual change at KOP 1 (the location of the nearest residential viewers to the Project) or the other viewpoints. As a result of this conclusion, specific measures intended to mitigate visual impacts from the Project (beyond those already incorporated into the Project description) have not been identified or proposed.

The following mitigation measures will be implemented to reduce impacts to less than significant levels.

VIS-1: A conceptual landscaping plan at a 1:40 scale will be provided if landscaping is proposed for screening purposes. The plan shall include information on the type of plant species proposed, their size, quantity, and spacing at planting, expected heights at 5 years and maturity, and expected growth rates. Based on the expected site conditions with the Project, features of the landscaping plan will include the following:

- Use of native, limited-height landscaping materials around the facility perimeter to ensure that proposed landscaping does not obstruct views from nearby properties.
- Painting the generating plant structures and equipment colors that would blend with the surrounding environment, including shades of off-white, beige, desert tan, and gray, and using non-glare finishes on project equipment.
- Using minimal signage and project construction signs; signs that would be installed would be made of non-glare materials and unobtrusive colors. The design of any signs required by safety regulations will need to conform to the criteria established by those regulations.
- Minimizing lighting to areas required for safety, security, or operations, and shielding of lighting from public view to the extent possible. Manual switches, timers and/or motion sensors will be used to minimize the amount of time that lights are on in areas where lighting is not normally needed for safety, security, or operation.
- Direction and shielding of lighting to reduce light scatter and glare. Highly directional light fixtures will be used.
- The equipment in the switchyard will have a neutral gray finish.
- After construction of the linears is complete, disturbed ground surfaces will be restored to their original condition, and paving that had been removed during the construction process will be replaced.

4.5.4 Laws, Ordinances, Regulations, and Standards

The Applicant reviewed LORS and adopted government plans to identify provisions that are applicable to evaluation of the effects of the proposed Project on visual resources. The discussion below summarizes the initial review process and results, describes expected

Project conformance with the specific provisions identified as applicable, and addresses required permits that relate to visual resources.

4.5.4.1 Initial Review for Applicability

The scope of the initial review included LORS at the federal, state, and local government levels considered to have potential applicability to the Project based on visual resource considerations. The initial review concluded that applicable LORS for visual resources were limited to four plans and ordinances adopted by the City of San Diego. Those items are addressed in Sections 4.5.4.2 through 4.5.4.5. With respect to LORS determined not to be applicable to the Project-specific evaluation of visual resources, key points are summarized as follows:

- Federal LORS that address visual resources are not applicable to the Project.
- The California Coastal Act of 1976 (as updated in 2006) is not applicable to the Project. The jurisdiction of the California Coastal Commission under the Act generally extends inland 1,000 yards from the mean high tide line of the sea, and is typically less than 1,000 yards in urban developed areas (Public Resources Code, Division 20, Section 30103). The Project is located more than 12 miles inland and is well beyond the jurisdiction of the Coastal Act.
- The Legislature established the State Scenic Highway Program in 1963, for the purpose of protecting and enhancing the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment (Caltrans 2011). The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263. The Code identifies highways in the state that are designated as scenic highways or are eligible for such designation. There are no officially designated scenic highways within the viewshed of the Project. SR 52 from I-5 to SR 67 is identified as eligible for designation. The status of a proposed state scenic highway changes from eligible to officially designated when the local governing body (the City of San Diego, in this case) applies to Caltrans for scenic highway approval, adopts a Corridor Protection Program, and receives notification that the highway has been officially designated a Scenic Highway.

4.5.4.2 City of San Diego General Plan

The City of San Diego General Plan contains 10 elements that provide a comprehensive record of citywide policies for growth and development (City of San Diego, Planning Division 2011). The current plan was updated in 2008. The General Plan provides an overall framework for the City, and works in concert with community plans for individual planning areas (see Section 4.5.4.3) to provide location-specific policies and development guidelines.

Among the 10 elements of the General Plan, the respective scopes of the Land Use and Community Planning, Urban Design, Recreation and Conservation Elements indicate they may include provisions that can be interpreted as applicable to visual resources. The Land Use and Community Planning Element addresses a range of topics, including the “City of Villages” strategy that the City has adopted to guide future growth, land use categories applied in the plan, community planning, planning for coastal resources, airport land use compatibility, and environmental justice (City of San Diego, Planning Division 2008). None of the goals or policies stated in the Land Use and Community Planning Element are directly applicable to visual resources.

The purpose of the Urban Design Element is to “guide physical development toward a desired scale and character that is consistent with the social, economic and aesthetic values of the City” (City of San Diego, Planning Division 2008). While much of the content of this element focuses on the built environment, the document notes that the aesthetic character of San Diego is tied to the natural setting, and particularly to the network of small canyons that creates a distinctive system of natural open spaces. The document describes an urban design strategy that identifies the natural environment and “the City’s extraordinary setting, defined by its open spaces, natural habitat and unique topography” as core values related to urban form. Consistent with that strategy, the Urban Design Element establishes policies aimed at respecting the natural environment, preserving open space systems, and targeting new growth into compact villages.

The Urban Design Element includes six components; the General Urban Design section identifies goals and policies that are applicable to visual resources. (The remaining five sections of the element apply to aspects of the built environment that are not applicable to the Project; they address Distinctive Neighborhoods and Residential Design, Mixed-Use Villages and Commercial Areas, Office and Business Park Development, Public Spaces and Civic Architecture, and Public Art and Cultural Amenities.) Among the six goals for general urban design are the following:

- A built environment that respects San Diego’s natural environment and climate
- Utilization of landscape as an important aesthetic and unifying element throughout the City

In support of the goals, the Urban Design Element establishes 17 policies to be applied in the design review process to all commercial, industrial, institutional, and residential and mixed-use developments, and that are intended to influence project design. Specific elements of those policies that are or may be applicable to potential Project effects on visual resources are identified in Table 4.5-5, along with a discussion of Project conformance with those policies.

Table 4.5-5 Conformance with San Diego General Plan Policies

Provision	Conformance
Urban Design Element, General Urban Design Policies	
<i>Natural Features</i>	
UD-A.1. Preserve and protect natural landforms and features. <ul style="list-style-type: none"> a. Protect the integrity of community plan designated open spaces. b. Continue to implement the MSCP to conserve San Diego’s natural environment and create a linked open space system. 	Development plans for the Project are intended to minimize the alteration of natural landforms. The Project will not adversely affect open spaces designated in community plans, or the ability to implement the MSCP.
<i>Development Adjacent to Natural Features and Parklands</i>	
UD-A.3. Design development adjacent to natural features in a sensitive manner to highlight and complement the natural environment in areas designated for development. <ul style="list-style-type: none"> a. Integrate development on hillside parcels with the natural environment to preserve and enhance views, and protect areas of unique topography. b. Minimize grading to maintain the natural topography, while contouring any landform alterations to blend into the natural terrain. 	Project plans are intended to minimize grading and conform to the natural terrain to the extent practicable. The plant is sited in a steep hillside area. The Project will conform with the San Diego Land Development Code Steep Hillside Guidelines (City of San Diego 2004) Exterior materials and colors have been selected to blend with the existing landscaping terrain to the extent practicable.

Provision	Conformance
<ul style="list-style-type: none"> c. Provide increased setbacks from canyon rims or open space areas to ensure that the visibility of new development is minimized. d. Screen development adjacent to natural features as appropriate so that development does not appear visually intrusive, or interfere with the experience with the open space system. The provision of enhanced landscaping adjacent to natural features could be used to soften the appearance of or buffer development from the natural features. e. Use building and landscape materials that blend with and do not create visual or other conflicts with the natural environment in instances where new buildings abut natural areas. This guideline must be balanced with a need to clear natural vegetation for fire protection to ensure public safety in some areas. f. Ensure that the visibility of new development from natural features and open space areas is minimized to preserve the landforms and ridgelines that provide a natural backdrop to the open space systems. For example, development should not be visible from canyon trails at the point the trail is located nearest to proposed development. g. Design and site buildings to permit visual and physical access to the natural features from the public right-of-way. h. Protect views from public roadways and parklands to natural canyons, resource areas and scenic vistas. 	<p>As indicated by the Project simulation (Figure 4.5-10), the exterior treatment of the engine hall and cooling towers is similar to the predominant tan color of the adjacent natural landscape.</p> <p>The Project components will not affect existing visual access to natural features in the surrounding area, and will not diminish existing public views to natural canyons, resource areas or scenic vistas.</p>
Recreation Element Policies	
<p>RE-F.2. Provide for sensitive development of recreation uses within and adjacent to City-owned open space lands.</p> <ul style="list-style-type: none"> a. Include only those development features and amenities that do not encroach upon or harm the feature or resource that inspires the open space or resource-based park. b. (Not applicable) c. Preserve designated public open space view corridors, such as views to the Pacific Ocean, other bodies of water, and significant topographic features. 	<p>The Project does not include development of new recreational uses. Designated public open space view corridors are not known to exist in the vicinity of the Project, and it will not affect any such view corridors.</p>
Conservation Element Policies	
<p>CE-B.1. Protect and conserve the landforms, canyon lands, and open spaces that: define the City’s urban form; provide public views/vistas; serve as core biological areas and wildlife linkages; are wetland habitats; provide buffers within and between communities; or provide outdoor recreational opportunities.</p> <ul style="list-style-type: none"> c. Protect urban canyons and other important community open spaces including those that have been designated in community plans for the many benefits they offer locally, and regionally as part of a collective open space system. 	<p>The Project will not adversely affect important community open spaces designated in community plans.</p>
<p>CE-B.3. Use natural landforms and features as integrating elements in project design to complement and accentuate the City’s form.</p>	<p>Project plans are intended to conform to the natural terrain to the extent practicable.</p>

The Recreation Element addresses goals and policies intended to preserve, protect, acquire, develop, operate, maintain and enhance public recreation opportunities and facilities throughout the City for all users (City of San Diego, Planning Division 2008). As a result of that focus, the goals and policies are predominantly oriented toward City actions regarding park and open space resources, rather than private development actions in relation to those resources. Elements of one of the seven identified recreation policies to a degree can be applicable to development near park and open space areas, as discussed in Table 4.5-4.

Similarly, the Conservation Element is oriented toward regulatory and planning actions taken by the City. One of the six conservation policies incorporates a design principle from the Urban Design Element, however, as noted in Table 4.5-4.

4.5.4.3 City of San Diego East Elliott Community Plan

The City of San Diego originally adopted the Elliott Community Plan in April 1971 (City of San Diego, Planning Division 2006). In 1982 most of the land within the original Elliott planning area was placed under the jurisdiction of the Tierrasanta Community Plan and the Mission Trails Regional Park Plan. The much smaller remaining planning area, generally the area located north of SR 52, south of MCAS Miramar and west of the City of Santee, was identified as the East Elliott area. There is very little developed land use in the planning area; undeveloped open space accounts for nearly 80 percent of the acreage, and the Sycamore Landfill for another 17 percent.

The proposed Project is designated as Open Space in the updated plan posted in 2006. The plan identifies nine guidelines for open space management, of which two have some applicability to the consideration of Project effects on visual resources (see Section 4.2 Land Use, for additional discussion):

- 7. Disturbed areas designated for open space should be recontoured where feasible, to recreate the natural topography. These areas should also be restored or enhanced where feasible with natural vegetation to return these areas to a natural appearance.
- 9. Transition areas should be established between urban uses and the open space system, along traffic corridors and canyon overlooks, where feasible and appropriate. Such transition areas may be developed by providing additional maintenance and planting non-invasive grass, shrubs and trees that provide a sensitive transition between uses.

Development plans for the Project are intended to minimize grading and fit with the existing terrain to the extent practicable. Areas of the site that are temporarily disturbed during construction and not occupied by permanent facilities will be reclaimed following construction and planted with native vegetation. The Project site is adjacent to an existing industrial use; it is not situated where a buffer or transition area would be needed to protect open space areas, traffic corridors or canyon overlooks.

4.5.4.4 City of San Diego Zoning Code

The City of San Diego Zoning Code (Chapter 13 of the San Diego Municipal Code [SDMC]) does not include requirements specifically applicable to visual quality or protection of visual resources. The development regulations contained in the zoning code are primarily oriented to characteristics such as the density of development, lot size and dimensions and building setbacks permitted in the respective zones. The zoning code includes a feature that relates to the visibility of development actions, which is a limit on maximum structure height.

The plant site is currently zoned RS-1-8. This is a single-unit residential zone with a minimum lot size of 40,000 square feet. The maximum structure height permitted in the RS-1-8 zone is 35 feet. As noted in Section 2.1, the proposed Project includes a building enclosure 32 feet in height and 11 exhaust stacks 100 feet in height. The total structure height is not consistent with the current zoning limitation, although a proposed rezone to an appropriate use classification will be undertaken for the Project (see Section 4.2 for additional discussion).

4.5.4.5 City of San Diego Mission Trails Design District Ordinance

The City of San Diego adopted the Mission Trails Design District Ordinance in 1981 to provide supplemental development regulations applicable to property surrounding MTRP. The ordinance created the Design District, an area of approximately 2,000 acres, within which the regulations apply. The ordinance also defined three subareas within the district, identified as Subarea 1 – Opportunity Areas, Subarea 2 – Hillside Areas, and Subarea 3 – Mission Gorge Areas. The proposed plant site is within the Design District and Subarea 2. The City approved revised design guidelines and boundary changes for the District in September 2003.

The intent of the regulations is to ensure that development along the edges of MTRP enhances the park's natural qualities and promotes the aesthetic and functional quality of park/urbanization relationships, while recognizing the right to reasonable development within the Design District (SDMC 13:132.1201). The regulations are based on the assumption that most of the District will be developed for residential use, and the adopted design guidelines are intended to assist in the evaluation of new residential development (City of San Diego, Planning Department 2007). The guidelines specific to Subarea 2, which includes primarily the steep undeveloped hillside areas adjacent to the park, reflect concerns over potential impacts associated with hillside development and attendant grading.

The Design Manual developed under the ordinance identifies six policies applicable to all subareas in the Design District. The guidelines for Subarea 2 define one policy, that hillside development should retain the natural character of the land, with three component sections addressing land preparation and site planning, circulation and parking, and building design considerations. Provisions from the Design Manual that are applicable to the visual resource evaluation of the Project are addressed in Table 4.5-6.

Table 4.5-6 Conformance with Mission Trails Design District Guidelines

Provision	Conformance
<i>Policies for All Subareas: New development should relate to the park and existing landscaping in the park.</i>	
A. Contiguous public access	The plant site is not immediately adjacent to MTRP and will not affect conditions along the park edge.
C. New landscaping	Landscaping at the plant site will be planned to reflect the appearance of the existing natural vegetation in adjacent areas.
D. Architectural materials and colors	Architectural materials and colors for the Project components will be selected to blend into the natural backdrop as much as possible (see Figure 4.5-10).
E. Structure height	The engine hall for the Project will have a maximum height of 32 feet, substantially less than the 50-foot guideline in the manual. The Project stacks must be 100 feet in height to meet the dispersion requirements of air quality regulations, however.
<i>Policies for Subarea 2 – Hillside Areas</i>	
A. Land Preparation/Site Planning	
1. Standard prepared pads	The Project grading plan is intended to minimize removal of natural groundcover, and will not result in a terraced hillside.
2. Retaining walls	Retaining walls will be used in plant site preparation, particularly where appropriate to meet drainage requirements.
3. Fir buildings to hillsides	The Project grading plan is intended to minimize alteration of the natural slope.
4. Contoured grading	The Project grading plan is intended to preserve the natural slope to the extent practicable.
5. Replanting	Areas of the site that are temporarily disturbed during construction and not occupied by permanent facilities will be reclaimed following construction and planted with native vegetation to retard erosion.
6. Man-made banks	The Project grading plan is intended to avoid creation of straight, unnatural slopes.
7. Hill or ridge crest development	The plant site is not on the crest of a hill or ridge.
10. Slope limitation	Slopes on the plant site are much less than 50 percent.
14. Structures sited below the crest of a hill	The Project facilities will in general be well below the crest of the adjacent hill; the upper portions of some stacks will likely extend above the crest when viewed from selected locations.
18. Structure/vegetation equilibrium	Projected facilities will occupy approximately 50 percent of the total site area.
B. Circulation/Parking (None applicable)	
C. Building Design Considerations	
1. Irregular edges	The Project involves a single primary structure and does not offer opportunities for using irregular edges to create interlocking structures.
2. Height/width relationship	Based on the nature of the proposed facility, it is not feasible to stack the units to make the structure higher than it is wide.
3. Varied rooftop treatments	The Project involves a single primary structure and does not offer opportunities for using varied rooftop treatments.

4.5.5 Agencies and Agency Contacts

Table 4.5-7 lists the agency contacts for visual resources.

Table 4.5-7 Agencies and Agency Contacts for Visual Resources

Agency	Name	Title	Phone	Email	Mailing Address
CEC	Mark Hamblin	Visual Resources	(916) 654-5107	mhamblin@energy.state.ca.us	1516 Ninth Street, MS 15 Sacramento, CA 95814-5512

4.5.6 Required Permits

The Applicant has not identified any required governmental permits for the Project that relate specifically to visual resources. The Applicant assumes the Project proposal will be reviewed against the Mission Trails Design District guidelines.

4.5.7 References

BLM. 1986. *Manual H-8410-1 – Visual Resource Inventory, Manual H-8431 – Visual Resource Contrast Rating*. Available online at: <http://www.blm.gov/nstc/VRM/8410.html>

BRG Consulting. 2008. Sycamore Landfill Master Plan Final Environmental Impact Report (EIR). Filed with the City of Santee, California. September 2008.

California Department of Transportation (Caltrans). 2011. California Scenic Highway Program. Available at: http://www.dot.ca.gov/hq/LandArch/scenic_highways/scenic_hwy.htm. Accessed June 30, 2011.

California Energy Commission (CEC). 2011. Appendix VR-1. Unpublished narrative and graphs describing CEC staff approach to evaluating visual impacts of a proposed project. Draft, June 17, 2011.

City of San Diego. 2004. San Diego Land Development Code Steep Hillside Guidelines. Amended August 2004. Available at <http://www.sandiego.gov/development-services/industry/pdf/landdevmanual/ldmsteephillides.pdf>. Accessed August 1, 2011.

City of San Diego, Park and Recreation Department. 2006. Mission Trails Regional Park Trails Map. San Diego, California.

City of San Diego, Planning Division. 2006. East Elliott Community Plan. November 2006 update. San Diego, California.

City of San Diego, Planning Division. 2007. Mission Trails Design District Ordinance and Design Manual. March 2007 update. San Diego, California.

City of San Diego, Planning Division. 2008. City of San Diego General Plan. March 2008. City of San Diego, Development Services Department, Planning Division. San Diego, California.

City of San Diego, Planning Division. 2011. General Plan. Available at: <http://www.sandiego.gov/planning/genplan/>. Accessed June 14, 2011.

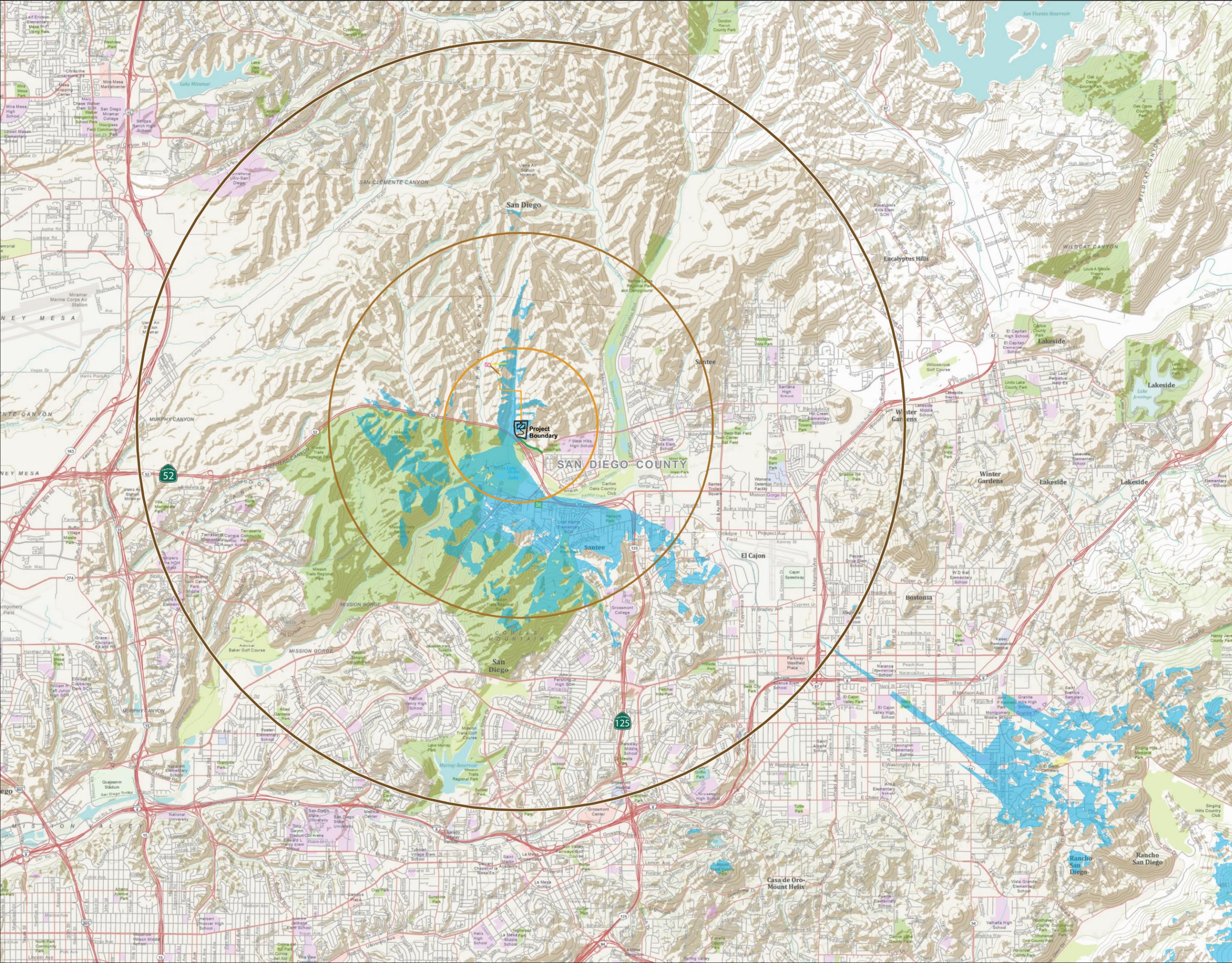
Fenneman, Nevin M. 1931. *Physiography of the Western United States*. McGraw Hill. London, England.

Federal Highway Administration (FHWA). 1988. *Visual Impact Assessment for Highway Projects*. U.S. Department of Transportation, Federal Highway Administration, Office of Environmental Policy. Washington, D.C.

U.S. Department of Agriculture, Forest Service (USFS). 1995. *Landscape Aesthetics, a Handbook for Scenery Management*. Agriculture Handbook Number 701. U.S. Department of Agriculture, Forest Service. Washington, D.C.

_____. 1974. *Agriculture Handbook Number 462 –National Forest Landscape Management, Volume 2, Chapter 1, The Visual Management System*. U.S. Department of Agriculture, Forest Service. Washington, D.C.

FIGURES

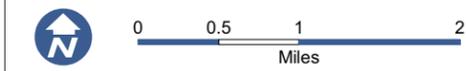


Vicinity Map

Legend

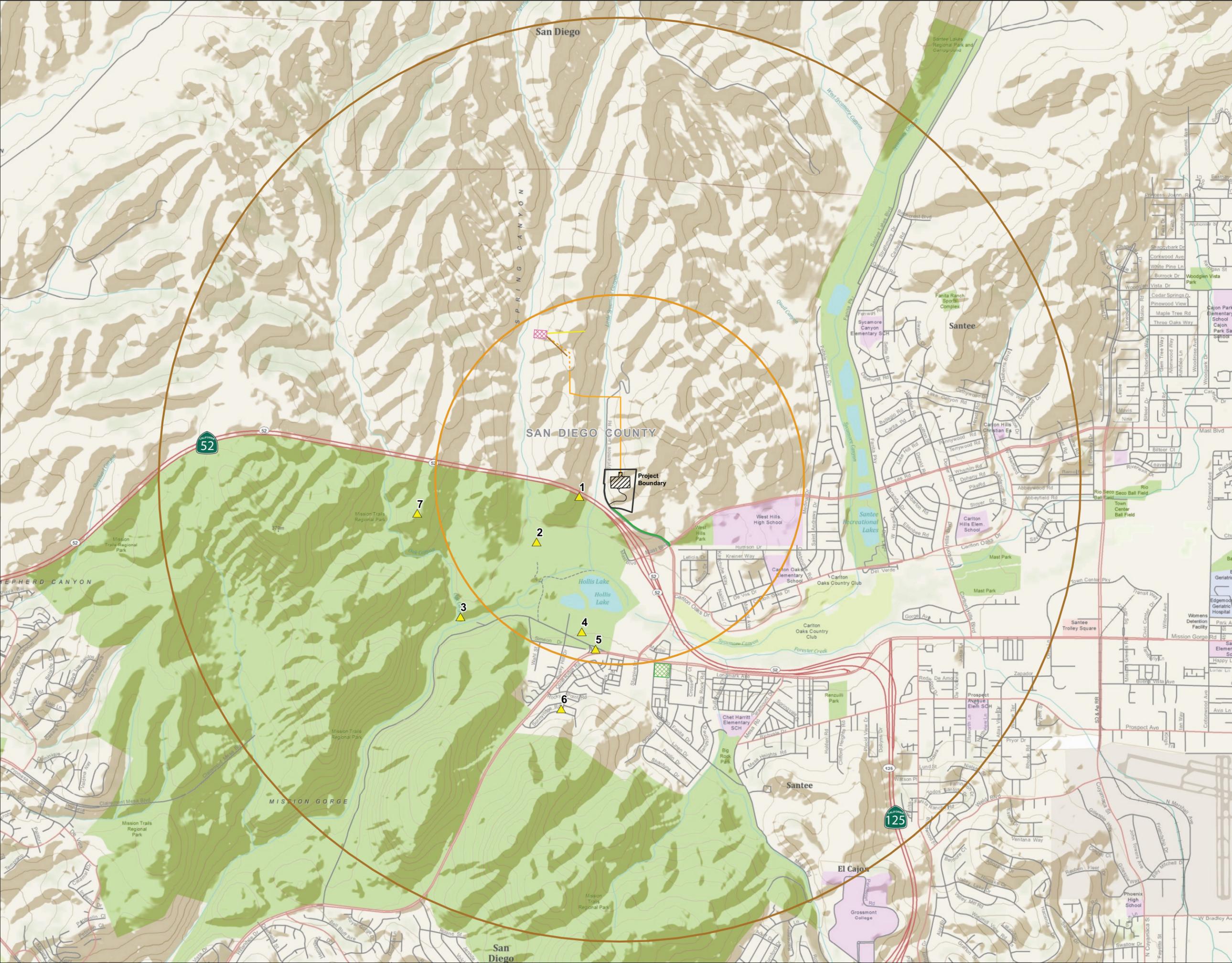
-  Project Boundary
-  1 Mile Radius from Center of Site
-  2.5 Mile Radius from Center of Site
-  5 Mile Radius from Center of Site
-  Areas with Direct Line of Sight to Maximum Proposed Structure Height (100 Feet)
-  Park and Recreational Area
-  Proposed Gas Lateral
-  Overhead Gen Tie
-  North Loop Overhead Line
-  South Loop Overhead Line
-  Underground Gen Tie
-  Plant Site Access Road
-  Plant Site
-  Offsite Parking
-  Preliminary SDG&E Switchyard

Note: Color shades not identified in the legend are from the underlying ArcGIS Community topo base and reflect their standard conventions.



QUAIL BRUSH GENERATION PROJECT

**FIGURE 4.5-1
VIEWSHED MAP**



Vicinity Map

Legend

-  Project Boundary
-  1 Mile Radius from Center of Site
-  2.5 Mile Radius from Center of Site
-  Park and Recreational Area
-  Viewpoints
-  Proposed Gas Lateral
-  Overhead Gen Tie
-  North Loop Overhead Line
-  South Loop Overhead Line
-  Underground Gen Tie
-  Plant Site Access Road
-  Plant Site
-  Offsite Parking
-  Preliminary SDG&E Switchyard

Note: Color shades not identified in the legend are from the underlying ArcGIS Community topo base and reflect their standard conventions.



QUAIL BRUSH GENERATION PROJECT

**FIGURE 4.5-2
VIEWPOINT MAP**

FIGURE 4.5-3
Viewpoint 1: SR 52 Existing Conditions (eastbound, looking northeast)



Arrow indicates approximate location of Project Site.

FIGURE 4.5-4
Viewpoint 2: MTRP, Grasslands Section Existing Conditions (looking northeast)



Arrow indicates approximate location of Project Site.

FIGURE 4.5-5
Viewpoint 3: MTRP, Old Mission Dam Existing Conditions (looking northeast)



Arrow indicates approximate location of Project Site.

FIGURE 4.5-6
Viewpoint 4: MTRP, Kumeyaay Campground Existing Conditions (looking north)



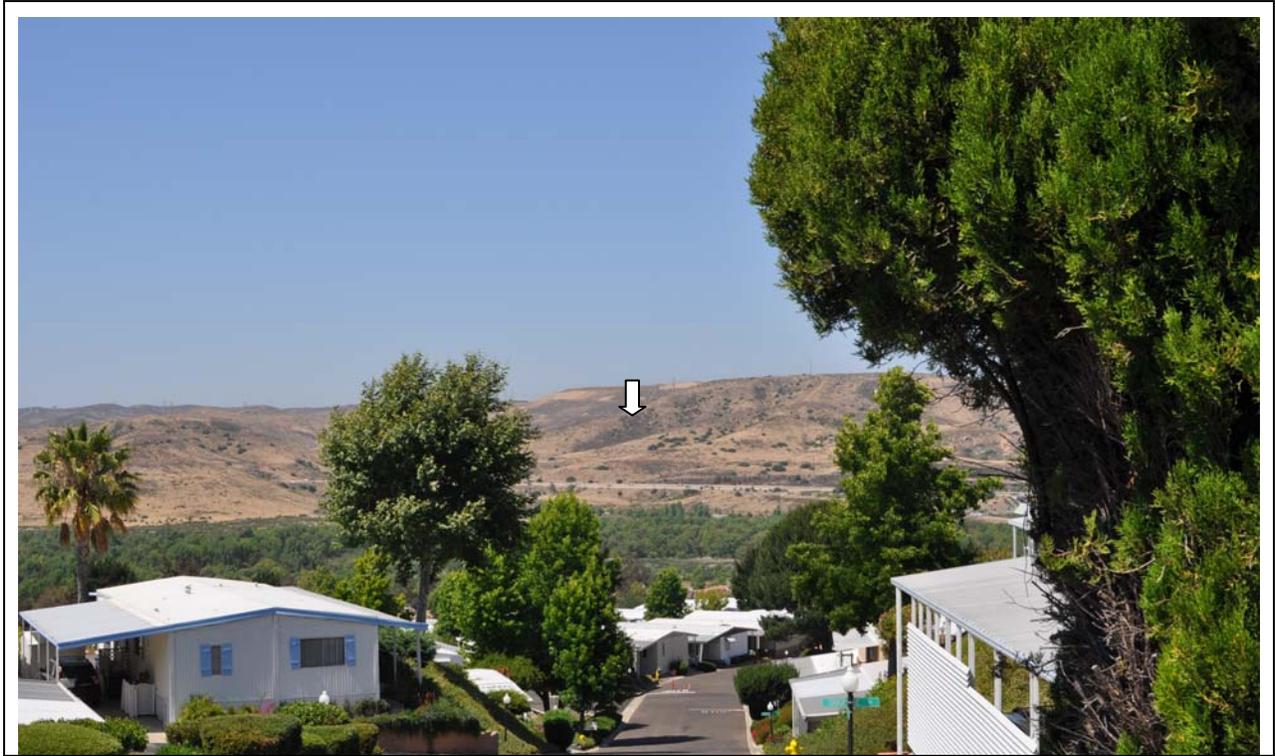
Arrow indicates approximate location of Project Site.

FIGURE 4.5-7
Viewpoint 5: Mission Gorge Road Existing Conditions
(intersection with Father Junipero Serra Trail looking north)



Arrow indicates approximate location of Project Site.

FIGURE 4.5-8
Viewpoint 6: Highlands Mobile Home Park Existing Conditions (looking north)



Arrow indicates approximate location of Project Site.

FIGURE 4.5-9
Viewpoint 7: MTRP, Fortuna Mountain Existing Conditions (looking east)



Arrow indicates approximate location of Project Site.



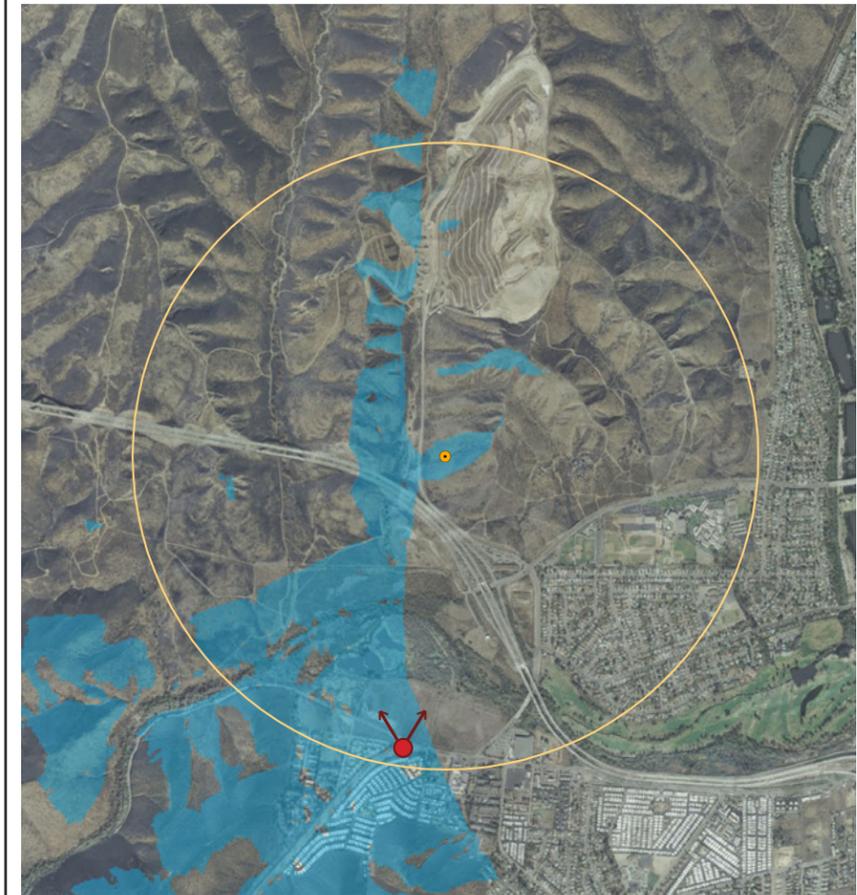
Above photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper.

Proposed Project



Existing Conditions

Figure 4.5-10 Photographic Simulation, KOP 1/Viewpoint 5, Mission Gorge Road.



Legend

- Proposed Site Center Point
- 1 Mile Radius from Site
- Areas Where Tallest Proposed Structures are Visible
- ↔ Photo Point Location for Simulation



Photograph Information

- Viewpoint Number: 5
- Date of Photograph: 5/10/2011
- Time of Photograph: 1:27 PM
- Weather Condition: Partly Cloudy
- Viewing Direction: North
- Distance to Nearest Proposed Structure in View: 0.91 Mile
- Latitude: -117.03 N
- Longitude: 32.837 W
- Photo Location: 0.65 miles west of State Highway 52.

QUAIL BRUSH GENERATION PROJECT



DATA ADEQUACY WORKSHEETS

Adequacy Issue: Adequate _____ Inadequate _____
 Technical Area: **Visual Resources**
 Project Manager: Eric Solorio

DATA ADEQUACY WORKSHEET

Revision No. 0 Date _____
 Technical Staff: _____
 Technical Senior: _____

Project: _____
 Docket: _____

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	4.5.1, 4.5.2, 4.5.3		
Appendix B (g) (6) (A)	Descriptions of the existing visual setting of the vicinity of the proposed project site and the proposed routes for any project-related linear facilities. Include:	4.5.1		
Appendix B (g) (6) (A) (i)	Topographic maps at a scale of 1:24,000 that depict directions from which the project would be seen, the view areas most sensitive to the potential visual impacts of the project, and the locations where photographs were taken for (g)(6)(C); and	Figure 4.5-1, Figure 4.5-2		
Appendix B (g) (6) (A) (ii)	Description of the existing visual properties of the topography, vegetation, and any modifications to the landscape as a result of human activities, including existing water vapor plumes, above-ground electrical transmission lines, and nighttime lighting levels in the project viewshed.	4.5.1.1, 4.5.2.2		
Appendix B (g) (6) (B)	An assessment of the visual quality of those areas that would be affected by the proposed project. For projects proposed to be located within the coastal zone, the assessment should also describe how the proposed project would be sited to protect views to and along the ocean and scenic coastal areas, would minimize the alteration of natural land forms, would be visually compatible with the character of surrounding areas.	4.5.1.1, 4.5.1.4		

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (6) (C)	In consultation with Energy Commission staff, identify: i) any designated scenic roadways or scenic corridors and any visually sensitive areas that would be affected by the proposed project, including recreational and residential areas; and ii) the locations of the key observation points to represent the most critical viewing locations from which to conduct detailed analyses of the visual impacts of the proposed project. Indicate the approximate number of people using each of these sensitive areas and the estimated number of residences with views of the project. Also identify any major public roadways and trails of local importance that would be visually impacted by the project and indicate the types of travelers (e.g., local residents, recreationists, workers, commuters, etc.) and the approximate number of vehicles, bicyclists, and/or hikers per day.	4.5.1.3, 4.5.1.4, 4.5.2.3		
Appendix B (g) (6) (D)	A table providing the dimensions (height, length, and width, or diameter) and, proposed color(s), materials, finishes, patterns, and other proposed design characteristics of each major component visible from off the project site, including any project-related electrical transmission line and/or offsite aboveground pipelines and metering stations.	Table 4.5.2		

Adequacy Issue: Adequate _____ Inadequate _____
 Technical Area: **Visual Resources**
 Project Manager: Eric Solorio

DATA ADEQUACY WORKSHEET

Revision No. 0 Date _____
 Technical Staff: _____
 Technical Senior: _____

Project: _____
 Docket: _____

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (6) (E)	Provide the cooling tower and heat recovery steam generator (HRSG) exhaust design parameters that affect visible plume formation. For the cooling tower, data shall include heat rejection rate, exhaust temperature, exhaust mass flow rate, liquid to gas mass flow ratio, and, if the tower is plume-abated, moisture content (percent by weight) or plume-abated fogging curve(s). The parameters shall account for a range of ambient conditions (temperature and relative humidity) and proposed operating scenarios, such as duct firing and shutting down individual cells. For the heat recovery steam generator exhausts, data shall include moisture content (percent by weight), exhaust mass flow rate, and exhaust temperature. The parameters must correspond to full-load operating conditions at specified ambient conditions, and shall account for proposed operating scenarios, such as power augmentation (i.e., evaporative coolers, inlet foggers, or steam injection) and duct firing, or proposed HRSG visible plume abatement, such as the use of an economizer bypass. For simple-cycle projects, provide analogous data for the exhaust stack(s).	n/a		

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (6) (F)	Provide: i) full-page color photographic reproductions of the existing site, and ii) full-page color simulations of the proposed project at life-size scale when the picture is held 10 inches from the viewer's eyes, including any project-related electrical transmission lines, in the existing setting from each key observation point. If any landscaping is proposed to comply with zoning requirements or to mitigate visual impacts, include the landscaping in simulation(s) representing sensitive area views, depicting the landscaping five years after installation; and estimate the expected time until maturity is reached.	Figure 4.5-3, Figure 4.5-4, Figure 4.5-5, Figure 4.5-6, Figure 4.5-7, Figure 4.5-8, Figure 4.5-9, Figure 4.5-10		
Appendix B (g) (6) (G)	An assessment of the visual impacts of the project, including light, glare, and any modeling of visible plumes. Include a description of the method and identify any computer model used to assess the impacts. Provide an estimate of the expected frequency and dimensions (height, length, and width) of the visible cooling tower and/or exhaust stack plumes. Provide the supporting assumptions, meteorological data, operating parameters, and calculations used.	4.5.2.3		
Appendix B (g) (6) (H)	If any landscaping is proposed to reduce the visual impacts of the project, provide a conceptual landscaping plan at a 1:40 scale (1"=40'). Include information on the type of plant species proposed, their size, quantity, and spacing at planting, expected heights at 5 years and maturity, and expected growth rates.	4.5.3		

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	4.5.4		
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	4.5.5		
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	4.5.5		
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	n/a		