Viewer perceptions are affected by the location of the existing 138-kV transmission line ROW, angle of view at and above eye level, and stark contrast between rigid vertical structures in the fore- and middle-grounds against the soft rolling hills. Viewer activity in this area would be largely composed of recreational users with long duration views. Similar views with a shorter viewing duration are likely experienced by motorists traveling on Avenida la Pata and Avenida Pico, which are identified as major view corridors by the City of San Clemente's General Plan (Figure 4.1-2; City of San Clemente 2014).

4.1.2 Regulatory Setting

4.1.2.1 Federal

United States Marine Corps - Camp Pendleton

The United States Navy has developed a Base Exterior Architecture Plan (BEAP) for MCB Pendleton. This plan includes objectives and guidelines for ensuring that MCB Camp Pendleton's development is both functional and visually cohesive (USMC 2010). The following objectives and guidelines of the BEAP apply to the proposed project:

Objectives

- *Place electrical utilities underground wherever possible.*
- *Screen imposing utilities such as electrical substations, transformers, propane tanks, and other highly visible utilities.*
- *Improve and provide storm drain systems.*

Guidelines

- *Locate all power and telephone distribution lines underground where possible.*
- *Screen existing substations and transformers with solid walls and planting.*
- *Locate future substations in low visibility areas.*
- *Locate all power and telephone lines within current or future easement areas*.

Section 4.29 of the BEAP contains the following recommendations for the development of utilities in the Talega area:

- *Develop a survey and analysis of the existing above grade utilities and prepare a long range plan to underground these facilities.*
- *Place utilities underground per the Utility Details and Standards in Section 8.11* (of the BEAP).
- *Provide ROW easements for these utilities in streets or alleys.*
- *Minimize utility easements through development or open space areas.*

4.1.2.2 State

State Scenic Highways

The California Department of Transportation administers the State Scenic Highway Program to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways (California Streets and Highways Code Sections 260 et seq.). The State Scenic Highway Program includes a list of highways that are designated as scenic highways or are eligible or this designation. The program entails the regulation of land use and density of development, attention to the design of sites and structures; attention to and control of signage, landscaping, and grading; and the undergrounding of utility lines within the view corridor of designated scenic roadways. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon travelers' enjoyment of the view. The local jurisdiction is responsible for adopting and implementing such regulations. Caltrans has designated I-5 and SR-74 as eligible State Scenic Highways (Caltrans 2012). If a highway is listed as eligible for official designation, it is part of the State Scenic Highway Program, and care must be taken to preserve its aesthetic character and thus its eligible status.

4.1.2.3 Regional and Local

Orange County

The Land Use Element of Orange County's General Plan (2005) includes the following policy pertaining to aesthetics and visual resources:

- ***Policy 8.*** *Enhancement of the Environment: To guide development so that the quality of the physical environment is enhanced. The purpose of the Enhancement of Environment Policy is to ensure that all land use activities seek to enhance the physical environment, including the air, water, sound levels, landscape, and plant and animal life.*

City of San Clemente

The City of San Clemente Centennial General Plan (2014) includes the following goals and policies pertaining to aesthetics and visual resources:

Urban Design Element:

- ***Primary Goal:*** *Create and enhance a high-quality, built environment that protects and enhances our treasured natural and historical resources, maintains our small town beach character, provides accessibility to residents, employees and visitors, and distinguishes San Clemente as the Spanish Village by the Sea.*
- ***Policy UD-2.11:*** *Overhead Utilities. We encourage the undergrounding of overhead utilities infrastructure in gateway areas and encourage the formation of assessment districts.*
- ***Policy UD-3.05:*** *Infrastructure Compatibility. We require public infrastructure and related facilities or equipment to be aesthetically pleasing and in context with the community character.*

Natural Resources Element – Aesthetics:

- ***Goal:*** *Preserve natural aesthetic resources of the City, including coastal bluffs, beaches, visually significant ridgelines, coastal canyons and significant public view corridors.*

- ***Policy NR-2.07:*** *Underground Utilities. The City will develop and implement a utilities undergrounding plan to avoid the adverse impacts to aesthetic resources caused by public utilities and unmanned telecommunications facilities, where feasible and where costs of such undergrounding does not pose economic hardship. Where undergrounding is determined by the City to not be physically possible, such features shall be located and designed to reduce their visibility and in developed areas, consistent with prevailing architectural character and scale. In beaches, parks and open spaces areas, such facilities shall be designed and located to blend in with natural colors, textures and landforms.*
- ***Policy NR-2.09:*** *Public View Corridors. The City will preserve and improve the view corridors, as designated in Figures NR-1 and NR-2 and encourage other agencies with jurisdiction to do so. Specifically, in its capital improvement programs and discretionary approvals, the City will seek to ensure that:*
  - *a. Development projects shall require a view analysis to ensure they do not negatively impact a public view corridor.*
  - *b. Utilities, traffic signals, and public and private signs and lights shall not obstruct or clutter views, consistent with safety needs.*
  - *c. Where important vistas of distant landscape features occur along streets, street trees shall be selected and planted so as to facilitate viewing of the distant features.*

City of San Juan Capistrano

The Community Design Element of the City of San Juan Capistrano's General Plan (1999) includes goals to enhance and define the community identity and sense of place. The Community Design Element designates all arterials within the city as scenic corridors, and the following goal and policies are applicable to the proposed project.

- ***Goal 3:*** *Preserve and enhance natural features*
- ***Policy 3.3:*** *Preserve and enhance scenic transportation corridors, including I-5 and the railroad.*
- ***Policy 3.4:*** *Preserve important viewsheds.*

The following design criterion is provided to ensure that these scenic corridors are developed with a sense of care to aesthetic values:

- *Buffer to screen existing unsightly features outside of the ROW. Use of innovative design features: for bicycle, sidewalks, equestrian trails, boundary walls, and parkways. Attention to building design features that are proposed adjacent to a scenic corridor.*

The Conservation and Open Space Element of the City of San Juan Capistrano's General Plan includes the following goal and policy regarding visual quality:

- ***Goal 4:*** *Prevent incompatible development in areas which should be preserved for scenic, historic, conservation or public safety purposes.*
- ***Policy 4.1:*** *Assure incompatible development is avoided in those areas*.

The Community Design Element of the San Capistrano's General Plan works in conjunction with the plan's Land Use Element, which includes the following goal and policies pertaining to aesthetics:

- ***Goal 7:*** *Enhance and maintain the character of neighborhoods.*
- ***Policy 7.1:*** *Preserve and enhance the quality of San Juan Capistrano neighborhoods by avoiding or abating the intrusion of non-conforming buildings and uses.*
- ***Policy 7.2:*** *Ensure that new development is compatible with the physical characteristics of its site, surrounding land uses, and available public infrastructure.*
- ***Policy 7.3:*** *Utilize programs for rehabilitation of physical development, infrastructure and undergrounding of utilities within the City to improve community neighborhoods.*
- ***Policy 7.4:*** *Protect the existing population and social character of older areas subject to rehabilitation and redevelopment.*

4.1.3 Impact Analysis

4.1.3.1 Significance Criteria

As discussed in Section 4.1.1.1, the methodology used for this visual assessment is based on the FHWA's visual impact assessment system (FHWA 1981). The significance criteria used to identify aesthetic impacts is from Appendix G of the California Environmental Quality Act Guidelines (2014). The proposed project would cause a significant impact on aesthetic resources if it would:

a) Have a substantial adverse effect on a scenic vista;

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway;

c) Substantially degrade the exiting visual character or quality of the site and its surroundings; or

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The existing setting and regulatory overview provide a baseline for assessing impacts on the following:

- Visual resources (i.e., visual character and quality) of the region and the immediate project area;
- Important viewing locations (e.g., roads, trails, and overlooks) and the general visibility of the project area and the site using descriptions and photographs;
- Viewer groups and their sensitivity; and
- Relevant federal, state, and local government policies and concerns for protection of visual resources.

Key Viewpoints

The KOPs presented in this section represent typical views from sensitive locations. The location and view direction for each KOP with respect to components of the proposed project are shown on Figure 4.1-2. As identified in the FHWA Visual Impact Assessment for Highway Projects methodology, a visual simulation was prepared for each KOP to depict views as they would appear during the operation of the proposed project. The visual simulations were produced by the applicant using computer modeling and

rendering techniques to illustrate the visual change associated with the proposed project as seen from publicly accessible KOPs within the ROI. The methodologies used to produce the simulations are described in greater detail in the proponent environmental assessment (SDG&E 2012).

4.1.3.2 Applicant Proposed Measures

The applicant has committed to the following applicant proposed measures (APMs) as part of the design of the proposed project. See Section 2.6, "Applicant Procedures, Plans, Standards, and Proposed Measures," for a complete description of each project commitment.

APM AES-1: Clean Work Areas. During construction, SDG&E would keep construction activities as clean and inconspicuous as practical.

APM AES-2: Restoring Disturbed Areas. When proposed project construction has been completed all disturbed terrain would be restored through recountouring and revegetation in order to re-establish a natural appearing landscape and reduce potential visual contrasts between disturbed areas and the surrounding landscape.

APM AES-3: Visual Screening - San Juan Capistrano Substation. The applicant would install landscaping and a screening wall would be installed in key areas along the perimeter of San Juan Capistrano Substation to partially screen views of substation structures and to visually integrate the new substation facilities with the existing setting. Figure 2-4 depicts the general location of new substation landscaping. Plant material would be appropriate to site-specific conditions and the local landscape setting. Landscaping would be consistent with technical requirements for proposed project operations and maintenance and would incorporate input from the City of San Juan Capistrano, local residents, and SDG&E's facility security.

4.1.3.3 Environmental Impacts

Impact AE-1: Substantial adverse effect on a scenic vista.
LESS THAN SIGNIFICANT WITH MITIGATION

As discussed in Section 4.1.1.4, "Scenic Vistas and Corridors," the proposed project would be located within the cities of San Juan Capistrano and San Clemente, as well as unincorporated Orange County. The City of San Clemente's General Plan identifies two scenic vistas and 20 view corridors, while the City of San Juan Capistrano's General Plan treats any view from an arterial roadway as a scenic vista. Orange County's General Plan does not identify any scenic vistas.

Construction

During construction, the following activities would be visible to sensitive viewer groups: removal of vegetation, construction of buildings, removal of distribution and transmission structures, grading and excavation of footings, trenching to install underground conduit, and clearing and grading associated with the establishment of new access roads and staging areas. The majority of these activities would require the use of various types of construction-related heavy equipment and the presence of construction personnel. Visual impacts on scenic vistas and corridors associated with the construction phase of the proposed project would occur throughout the project ROW over a 64-month period. Appendix G of this EIR provides a detailed schedule for individual construction activities, by location. As discussed in Chapter 2, the exact sequencing of proposed construction is contingent upon local electricity demands and weather.

During construction, the applicant would temporarily disturb up to 49 acres within and adjacent to the proposed double-circuit 230-kV transmission line. Temporary disturbance areas would include staging areas; laydown areas (transmission structure work areas); and conductor cable pull, tension, reel, and splicing sites (wire stringing sites). All work associated with the Talega and proposed San Juan Capistrano substations would be conducted within each substation's fence line. In addition to ground disturbing activities, visual impacts would also result from the presence of construction vehicles and equipment. The presence of construction equipment, views of construction activities, and increased visual contrast due to storage of construction materials could result in a significant impact on scenic vistas and view corridors through the introduction of new sources of visual contrast. These new sources of visual contrast would adversely affect the intactness and unity of landscapes observable from scenic vistas and view corridors, resulting in potentially significant impacts.

Visual impacts associated with construction of the proposed project would be localized and short term. These short-term impacts on scenic vistas and view corridors would be reduced with the implementation of APM AES-1 and APM AES-2, which would require the applicant to keep all worksites clean and restore disturbed areas to their pre-construction appearance as soon as possible. However, visual impacts associated with construction would remain significant because equipment would still be visible. Mitigation Measure (MM) AES-3, described further in Section 4.1.4, requires the applicant to visually screen staging areas and worksites and MM AES-2 requires the applicant to minimize clearing and ground disturbance and restore disturbed areas to pre-project conditions. Implementation of MM AES-3 and MM AES-2 would reduce visual impacts on scenic vistas and view corridors to a less than significant level. Reducing both the duration and intensity of construction activities observable from scenic vistas and view corridors would mitigate potential visual impacts during the construction phase of the project. Therefore, impacts on visual resources would be less than significant with mitigation under this criterion.

Construction of Transmission Line Segment 1a, an underground 138-kV transmission line, would require new underground conduit to be constructed across Camino Capistrano, which is a designated scenic corridor. Short-term impacts on visual resources would result from trenching activities within Camino Capistrano, as well as the presence of construction equipment and personnel. The work would be conducted along a 75-foot-wide corridor and would mostly occur at or below eye level. The construction of the proposed project would not introduce sources of visual contrast that would substantially affect views from Camino Capistrano. Therefore, there would be no impact on the Camino Capistrano view corridor from construction of Transmission Line Segment 1a.

Operations

Scenic Corridors (City of San Juan Capistrano)

The City of San Juan Capistrano does not specifically identify any scenic vistas; however, the Community Design Element specifies that all arterial roadways within the city should be treated as scenic corridors. Construction activities would be visible from the following arterial roadways within LU 1 and LU 2: Camino Capistrano, Rancho Viejo Road, and Golf Club Drive. The proposed project would cross all of these arterial roadways within an existing utility corridor. Construction and operation of the proposed project would introduce new elements of visual contrast to views along arterial roadways within the city of San Juan Capistrano. Additionally, the appearance of Capistrano Substation, as seen from Camino Capistrano, would be altered.

The introduction of new transmission infrastructure, including transmission structures and the proposed updates to the appearance of San Juan Capistrano Substation, would not degrade the visual intactness, unity, or vividness of existing views from arterial roadways within the city, as these facilities would be located in areas with a consistent use. Transmission structures would be located within an existing

transmission corridor, and the portion of the parcel being used as an electrical substation would continue to be used as such. Minor changes to the size, location, and orientation of proposed project facilities would not substantially change the viewshed of arterial roadways within the city of San Juan Capistrano. Therefore, the proposed project would have a less than significant impact on visual resources within the city of San Juan Capistrano's scenic corridors during operation.

View Corridors (City of San Clemente)

The City of San Clemente's General Plan identifies 12 view corridors within the proposed project's ROI. These view corridors are located in LU 4 and typically coincide with points along arterial roadways with either up-canyon or sea views (Figure 4.1-3). The General Plan states that utilities, such as the proposed project, should not obstruct views from these public view corridors. The three view corridors that are most likely to be impacted by construction and operation of the proposed project are located along Avenida la Pata. These three view corridors—1, 2, and 9, (Figure 4.1-3)—offer up-canyon views from Avenida la Pata. Existing transmission structures, and the proposed project, would be visible from all three viewing locations. The remaining view corridors are either oriented towards the sea and away from the project or do not include views of the proposed project due to topography. LU4 includes two golf courses, Talega Substation, several existing transmission lines, residential communities within the city of San Clemente, and the northern portion of MCB Camp Pendleton. Viewer groups include the residents of homes within the ROI, motorists, military personnel, and recreational user groups. The view corridors (1, 2, and 9) are located along Avenida la Pata and adjacent to a golf course and residential developments. Given the size and mass of the new transmission structures, they would likely be visible from all three locations and have the potential to affect all of the identified viewer groups.

The proposed project would introduce 45 new transmission structures in the vicinity of the potentially affected view corridors. The majority of these structures, 32, would be located near Talega Substation and would primarily affect View Corridor 1. All of the proposed transmission structures would be located within or adjacent to an existing transmission corridor that is currently occupied by transmission structures of a similar size and mass. Views in this area have a low level of unity due to previous development, including the presence of existing transmission structures. The proposed project would not introduce a new type of visual contrast into the viewsheds of the city of San Clemente's view corridors, and impacts associated with adding another line to an existing corridor would not constitute a substantial source of visual contrast. Therefore, the proposed project would have a less than significant impact on visual resources within the city of San Clemente view corridors during operation.

Scenic Vistas (City of San Clemente)

The City of San Clemente's General Plan identifies two scenic vistas (Figure 4.1-3). Both of the scenic vistas are located on ridgelines identified by the City of San Clemente General Plan as significant. The first scenic vista is located at the terminus of the Rancho San Clemente Trail and potentially has views of all of the proposed project infrastructure located within LU 4 (transmission structures and modifications to Talega Substation). Recreational users of the Rancho San Clemente trail and nearby residents would have distant views of the proposed project from this vantage point. While activities associated with the construction and operation of the proposed project would be visible from these areas, they would occur within either the fence line of an existing substation or an existing transmission ROW. Proposed project infrastructure would be viewed against existing transmission lines and substation modifications and would not add distinguishable features to views from these areas.

The second scenic vista is located in LU 3 on the Forester Ranch Ridgeline Trail above Avenida Vista Hermosa. Recreational users of the Forester Ranch Ridgeline Trail and nearby residents would have distant views of the proposed project from this vantage point. While activities associated with the

construction and operation of the proposed project would be visible in background (distant) views from this scenic vista, they would occur within an existing transmission ROW and be surrounded by development. Proposed project infrastructure would be viewed against this existing landscape and would not add distinguishable features to views from these areas. Therefore, the proposed project would have a less than significant impact on visual resources within the city of San Clemente's scenic vistas during operation.

Impact AE-2: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway. *LESS THAN SIGNIFICANT*

Construction

Project-related construction activities would be visible from eligible state scenic highways, I-5, and SR-74. The California Public Utilities Commission (CPUC) treats eligible state highways the same as officially designated state scenic highways. Construction activities potentially visible from I-5 include clearing and grading, removal of two existing transmission structures, and construction of two new transmission structures. Work areas for the removal and installation of transmission structures would be located above eye level for motorists on I-5 and would be largely obstructed due to topography and the presence of vegetation. Construction activities would not damage any scenic resources visible from I-5.

The applicant would remove five ornamental trees from the north side of SR-74 to establish a permanent access path to Transmission Line Pole 7. Removal of the ornamental trees would detract from the views experienced along this section of SR-74. However, removal of the ornamental trees would expose views of native oak trees growing on the hillside and would not add a new source of visual contrast, as an access path to Transmission Line Pole 7 already exists. Additionally, motorists on SR-74 would be traveling up to 40 miles per hour and would be more focused on distant views ahead than construction activities occurring on the periphery of the roadway. Therefore, removal of the ornamental trees and expansion of the existing access path to Transmission Line Pole 7 would not result in substantially damaging views from SR-74. Construction of the proposed project would have a less than significant impact on scenic resources along a state scenic highway.

Operations

Portions of Transmission Line Segment 1b would cross I-5 and SR-74 within LU 1 and LU 2. The new transmission structures would replace existing structures located within the same footprint.

Adjacent to I-5, the applicant is proposing to replace two lattice towers with tubular steel poles (TSPs) and install two new cable poles within an existing transmission corridor (see Figure 4.1-3, Photo 2). The proposed transmission structures would mimic the design of other existing transmission structures visible from I-5 in this utility corridor. Replacing the lattice structures with structures that mimic the design of other existing structures would unify these features, which in turn would marginally increase the unity of views from I-5. Potentially affected motorists would be traveling at speeds in excess of 60 miles per hour and would be focused on distant landscape features (Motloch 2001). These motorists would have difficulty perceiving the subtle change of the type of transmission structure, if they are able to detect the transmission structures on the periphery of I-5 at all. Given that operation of the project would increase unity within the landscape, and would be virtually detectable by motorists traveling at highway speeds, operation of the proposed project would have a less than significant impact on visual resources observable from I-5.

Adjacent to SR-74, the applicant is proposing to replace two lattice towers with TSPs within an existing transmission corridor. The lattice tower located closest to SR-74 is Transmission Line Pole 7 in Transmission Line Segment 1b, situated about 438 feet from the highway and 56 feet above the road surface on a small hill (see Figure 4.1-3, Photo 4). Views of this tower are largely obstructed by foliage, with only the apex of the tower visible from the highway. Changing the type and size of the transmission structure in this location would not substantially change the vividness, intactness, or unity of the current viewshed or substantially degrade other visual resources observable from SR-74. Therefore, operation of the proposed project would have a less than significant impact on visual resources observable from SR-74.

Impact AE-3: Substantially degrade the existing visual character or quality of the site and its surroundings.
LESS THAN SIGNIFICANT AFTER MITIGATION

Construction

During construction, the following activities would be visible to sensitive viewer groups: removal of vegetation, construction of buildings, removal of distribution and transmission structures, grading and excavation of footings, trenching to install underground conduit, and clearing and grading associated with the establishment of new access roads and staging areas. The majority of these activities would require the use of construction vehicles and various types of construction-related heavy equipment. Visual impacts that have the potential to degrade the existing visual character within the ROI would occur throughout the project ROW over a 64-month period. Appendix G of this EIR provides a detailed schedule for individual construction activities, by location.

As discussed in Section 2.4.1, "Construction Schedule, Personnel, and Equipment," the exact sequencing of proposed construction activities is unknown; however, it is anticipated that each phase of project construction of the proposed double-circuit 230-kV transmission line would occur consecutively, limiting the duration of visual impacts observable from a given vantage point to shorter periods. For instance, grading activities at a given transmission structure may be visible for a period of one month, followed by a period of no construction-related visual impacts before the next phase of construction occurred. Therefore, visual impacts associated with construction of much of the proposed double-circuit 230-kV transmission line are considered temporary.

The presence of construction equipment, views of construction activities, and increased visual contrast due to storage of construction materials could substantially degrade the existing character and quality of views throughout the ROI through the introduction of new sources of visual contrast. These new sources of visual contract could, in turn, degrade the unity and intactness of views throughout the ROI, resulting in potentially significant impacts.

Visual impacts associated with construction of the proposed project would be localized and short term. These short-term impacts on scenic vistas and view corridors would be reduced with the implementation of APM AES-1 and APM AES-2, which would require the applicant to keep all worksites clean and restore disturbed areas to their pre-construction appearance as soon as possible. However, visual impacts associated with construction would remain significant because equipment would still be visible. MM AES-3 requires the applicant to visually screen staging areas and worksites and MM AES-2 requires the applicant to minimize clearing and ground disturbance and restore disturbed areas to pre-project conditions. Implementation of MM AES-3 and MM AES-2 would reduce visual impacts on scenic vistas and view corridors to a less than significant level. Reducing both the duration and intensity of construction activities observable from scenic vistas and view corridors would mitigate potential visual

impacts during the construction phase of the proposed project. Therefore, impacts associated with construction of the proposed transmission line poles and 12-kV distribution line on visual resources would be less than significant with mitigation under this criterion.

San Juan Capistrano Substation

Construction of the proposed San Juan Capistrano Substation would occur continuously over a 51-month period (see Table 2-6). Since the impacts would occur over the course of several years, they would be considered temporary and long term. Temporary and long-term impacts associated with the construction of the proposed San Juan Capistrano Substation would be similar to those discussed in the operations section.

Talega Substation

Construction activities at Talega Substation would occur within the fence of the existing facility and would be minor and indistinguishable from routine maintenance of the substation. Therefore, construction activities at Talega Substation would not contribute to the degradation of existing visual resources, and therefore would have a less than significant impact on visual quality.

Operations

The proposed 230-kV transmission line poles would be steel, range in height from 80 to 160 feet, and range in diameter from 4 to 6 feet (see Tables 2-4 and 2-5, Figures 2-5a and 2-5b). The proposed 12-kV distribution line would mainly be located underground or on existing structures; however, the new structures that would be constructed as part of the 12-kV distribution line would be steel, range in height from 50 to 80 feet, and range in diameter from 3 to 4 feet. Visual simulations were used to determine if project facilities would degrade the existing visual character of the site and its surroundings. A discussion of a representative simulation from each landscape unit is presented below.

Camino Capistrano (KOP 1)

KOP 1 (Figure 4.1-7) shows the existing Capistrano Substation as seen from Camino Capistrano, as well as a visual simulation of the proposed San Juan Capistrano Substation during operation.

The current view of Capistrano Substation is a focal landscape dominated by the vertical transmission structures and the large mass of the substation building. Atmospheric conditions diminish the amount of contrast introduced by both these features. The geometric forms associated with transmission infrastructure create many non-convergent angular lines, which appear primarily horizontal and somewhat unorganized. These lines serve as visual barriers, which compartmentalize the view along both the horizontal and vertical axes. The trees and transmission structures appear coarse, while the asphalt and grass have a smooth texture. Dominant colors include beige, greys, and off white. The scale of the substation, and complexity of the associated forms and lines, make it the dominant feature in the view.

The rendering of the proposed project in the visual simulation shows a more unified landscape due to the removal of the large transmission structure above eye level. Enclosing the substation components also removes the majority of the non-convergent angular lines, which in turn makes distant views of landscape features more prominent. Reduced atmospheric effects and the introduction of bold colors and unobscured geometric features would increase the intactness and unity and add visual interest when compared to the existing view.

References: Fig. 4.1-6, Existing View and Computer Rendering from Camino Capistrano, Proponent's Environmental Assessment, SDG&E and Environmental Vision (photo sim, April 18, 2012); and, Page I5, San Juan Capistrano Substation – Conceptual Rendering, Camino Capistrano, Richard Yen & Associates



Existing View from Camino Capistrano Looking East



Computer Rendering of Proposed Project

Figure 4.1-7

Existing View and Computer Rendering from Camino Capistrano

South Orange County Reliability Enhancement Project

This page intentionally left blank.

Potentially affected user groups include motorists and pedestrians who would experience short duration views, and local residents[2] who would experience longer duration views. The proposed project would result in a more unified view from Camino Capistrano than the existing Capistrano Substation.

During public scoping, several comments were received about the appearance of the substation building, the frontage wall, and associated landscaping. As discussed Section 4.1, the applicant hosted a two-hour meeting with the local community and City of San Juan Capistrano officials on April 18, 2012. The applicant met with members of the City of San Juan Capistrano Architectural Design Review Committee in 2013 and worked with an architect to incorporate the Spanish mission style design to address the public's concerns and the City's goals and policies (see Figure 4.1-7). Because impacts on visual quality can be subjective, the design of the proposed San Juan Capistrano Substation could result in a significant impact on some viewers. Implementation of MM AES-1 would ensure that the new building and wall are consistent with the design standards of the City of San Juan Capistrano and that proposed project facilities visible from Camino Capistrano are aesthetically consistent with their surroundings. Implementation of MM AES-4 would further reduce potential impacts by reducing light reflection and color contrast to help blend the structures into the landscape setting. Implementation of MM AES-1 and MM AES-4 would reduce impacts from the proposed San Juan Capistrano Substation to less than significant.

Via Priorato (KOP 2)

KOP 2 (Figure 4.1-8) represents the view from residences along Via Priorato, near Paseo Boveda, located just south of the proposed double-circuit 230-kV transmission line route in the foreground distance zone. This location represents other residential communities located adjacent to the proposed double-circuit 230-kV transmission line route with views at or slightly above eye level.

The existing view from Via Priorato is currently dominated by the two lattice transmission structures in the foreground, which are silhouetted against the blue sky (or "skylined"), making them dominant features. The vertical structures and their associated horizontal transmission lines enclose the view, resulting in the appearance of a canopied landscape. Via Priorato itself has a flat, smooth surface and grey hues and is framed by the complex geometric features of the adjacent houses, fences, and ornamental landscaping. Vegetation, both natural and ornamental, covers the hill and softens the appearance of other features on the periphery of the view.

The proposed project would modify the size and type of transmission structures within the viewshed, but would not change the number or location. At this distance, both the new and existing transmission structures would be highly visible regardless of atmospheric conditions. Because they are silhouetted against the sky (or "skylined"), and appear as regularly spaced linear and vertical elements, contrast would be strong in form and line. However, when compared to the contrast produced by the existing transmission structures that would be replace by the proposed project, the incremental difference in the amount of visual contrast would be negligible. Operation of the proposed project would have a less than significant impact on the visual quality (vividness, intactness, and unity) of the landscape.

San Juan Creek Road (KOP 3)

KOP 3 (Figure 4.1-9) represents the view from San Juan Creek Road looking southwest toward Juliana Farms Road. This view is located just north of the proposed double-circuit 230-kV transmission line route, with transmission structures visible in both foreground and middleground distance zones. This

[2] Potentially affected residents would likely be viewing the project from adjacent collector streets. Impacts on views from collector streets are not analyzed under this criterion.

KOP is representative of residential communities located adjacent to the proposed double-circuit 230-kV transmission line route, as well as views from arterial roadways. However, residents and motorists have different levels of visual sensitivity. Residents experience long duration views and have a high level of visual sensitivity, while motorists experience short duration views and have low visual sensitivity. Aspects of the proposed double-circuit 230-kV transmission line that would be visible from this KOP, and other similar viewsheds, include transmission structures and lines, along with short-term views of maintenance activities.

The existing view from KOP 3 is dominated by a series of three transmission structures, each of a different size and type of structure. Like other views of the proposed project, the transmission structures are skylined with views of the structures above eye level, increasing their prominence. The vertical structures also appear smooth when compared to the coarse green foliage of the tree canopy below them. The road, tree canopy, and skyline break the view into three distinct features. The dominance of the transmission structures and lines diminishes the prominence of the three existing lattice transmission structures in the foreground, which are silhouetted against the sky.

The proposed project would increase the size and modify the type and number of transmission structures within the viewshed. At this distance, both the new and existing transmission structures would be highly noticeable regardless of atmospheric conditions. Because they are skylined, and appear as regularly spaced linear and vertical elements, the contrast introduced by the new transmission structures would be strong in form and line. The taller monopoles that would be constructed as part of the proposed project would have associated transmission lines on the same horizontal plane as the remaining existing transmission line, making the lines themselves a more dominant and noticeable feature. The new transmission structures would be co-dominant features with the existing transmission structures and the incremental difference in the amount of visual contrast would be negligible. Operation of the proposed project would have a less than significant impact on the visual quality (vividness, intactness, and unity) of the landscape. Implementation of MM AES-4 would further reduce potential impacts by reducing light reflection and color contrast to help blend the structures into the landscape setting.

San Juan Hills High School (KOP 4)

KOP 4 (Figure 4.1-10) represents the view from San Juan Hills High School, located just north of the proposed double-circuit 230-kV transmission line route in the foreground distance zone. Like views from residential communities, viewers at the school would experience the view for prolonged durations, making transmission infrastructure more prominent.

The current view from San Juan Hills High School is an open landscape view dominated by the two existing dead-end transmission structures in the foreground. The vertical lines form by the transmission structures are repeated at a smaller scale by the light fixtures. The ordered geometric lines formed by the parking lot, sidewalk, and landscape retaining wall tend to focus the viewer's attention on elements in the foreground of the view.

The rolling hills in the middle-ground appear smooth, with subtle changes in the color and texture of the vegetation adding visual interest. Colors include the dull browns, yellows, and greens (low chroma) of the hills against the concrete and asphalt greys and vivid greens of the ornamental landscaping.

Reference: Fig. 4.1-10, Existing View and Visual Simulation from Via Priorato, Proponent's Environmental Assessment, SDG&E and Environmental Vision (photo sim, April 18, 2012)



Existing View from Via Priorato Near Paseo Boveda Looking North



Visual Simulation of Proposed Project

Figure 4.1-8

Existing View and Visual Simulation from Via Priorato

South Orange County Reliability Enhancement Project

This page intentionally left blank.



Existing View from San Juan Creek Road at Juliana Farms Road Looking Southeast



Visual Simulation of Proposed Project

Figure 4.1-9

Existing View and Visual Simulation from San Juan Creek Road

South Orange County Reliability Enhancement Project

This page intentionally left blank.

Reference: Fig. 4.1-13, Existing View and Visual Simulation from San Juan Hills High School, Proponent's Environmental Assessment, SDG&E and Environmental Vision (photo sim, April 18, 2012)



Existing View from San Juan Hills High School Looking South



Visual Simulation of Proposed Project

Figure 4.1-10

Existing View and Visual Simulation from San Juan Hills High School

South Orange County Reliability Enhancement Project

This page intentionally left blank.

The proposed project would modify the size and number of dead-end transmission structures. At this distance, both the new and existing dead-end transmission structures would be highly noticeable, regardless of atmospheric conditions. The addition of two taller structures would increase the amount of contrast, and effectively create a visual barrier, splitting the view into two. New large structures would also have larger crossarms than the existing structures, which adds additional mass and visual weight to these features. The additions and modifications associated with the proposed project would create a moderate increase in the degree of contrast created by the existing transmission structures to be replaced, thus resulting in a less than significant impact.

Operation of the proposed project would result in a moderate increase in contrast over the existing condition; however, this moderate increase would not significantly degrade the visual character of the site and its surroundings. Undergrounding the proposed double-circuit 230-kV transmission line route adjacent to San Juan High School would have a beneficial impact on the visual quality of the surroundings by eliminating a source of visual clutter, resulting in a more unified and intact landscape when compared to baseline conditions.

Via Ceramica (KOP 5)

KOP 5 (Figure 4.1-11) represents the view from Via Ceramica, located just northwest of the proposed double-circuit 230-kV transmission line route in the foreground and middleground distance zones. Local residents experience prolonged middle-ground views and have high visual sensitivity, which would increase the impact of new sources of visual contrast—in this instance, new transmission structures. Aspects of project construction that would be visible from this KOP, and other similar views, include the removal and installation of transmission structures, as well as the clearing and grading required to establish or improve access roads and transmission pads.

Construction of the proposed project would modify the size of one of the seven transmission lines. The low H-frame structures would be replaced with larger TSPs, introducing a larger vertical element in the fore- and middle-ground views. The larger structures are most noticeable in the foreground, while these features blend in with the other transmission structures in middle-ground views. When compared to the amount of contrast introduced by the existing transmission structures that would be replaced by the proposed project, the difference in the amount of visual contrast is less than significant. Implementation of MM AES-4 would further reduce potential impacts by reducing light reflection and color contrast to help blend the structures into the landscape setting.

Talega Park (KOP 6)

KOP 6 (Figure 4.1-12) represents the view from Talega Park, located 0.25 miles north of the Transmission Line Segment 4. Recreational users of the park with high visual sensitivity would experience shorter duration views when compared to local residents; however, recreational viewers in parks are still considered to have high viewer sensitivity regardless of duration of views.

The existing view from Via Ceramica is dominated by the complex geometric forms of the housing community, park, and associated residential landscaping in the foreground. The existing transmission structures are skylined on the ridge in the middle-ground, increasing their prominence. Distant views are partially obscured by the vegetation in the foreground.

The proposed project would modify the size, number, and locations of several transmission structures. Most noticeably, additional TSPs now dominate the western portion of middle-ground views, and their associated above ground transmission lines create a horizontal barrier, which further confines the view. When compared to the amount of contrast introduced by the existing transmission structures that would be replaced by the proposed project, the incremental difference in the amount of visual contrast would be less than significant.

The placement of project infrastructure adjacent to the Talega Substation, on property owned and operated by the United States Navy, would need to be consistent with the Marine Corps' *Base Exterior Architecture Plan for Marine Corps Base Camp Pendleton* (BEAP; 2010). As stated in the regulatory overview (Section 4.1.2.1), the BEAP outlines several goals and objectives that pertain to the placement of utility infrastructure in the Talega area. Specifically, the BEAP calls for the undergrounding of electrical utilities wherever possible, and visual screening of existing substations and transformers with solid walls and planting. Because the proposed project would occur within existing ROWs, it would not create a new conflict with the BEAP.

In summary, the proposed project would have a less than significant impact on KOP 2 through KOP 6. The proposed San Juan Capistrano substation could have a significant impact on KOP 1; however, the implementation of APM AES-3 and MM AES-1 would reduce this impact to less than significant. Therefore, the operation of the proposed project would have a less than significant impact with mitigation under this criterion.

Impact AE-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.
LESS THAN SIGNIFICANT WITH MITIGATION

Construction

Construction of the proposed project may require that work be performed during nighttime or other non-standard work hours, as discussed in Section 2.4.3.1, "Nighttime and Other Non-standard Work." Any construction activity occurring after sunset would introduce new sources of light that would be visible from adjacent roadways, trails, and surrounding residential communities. Temporary construction lighting—specifically, lighting adjacent to residences and in rural areas—has the potential to significantly affect nighttime views in the ROI by introducing a new source (or sources) of visual contrast and degrading unity of nighttime views. Implementation of MM AES-5, which would require the applicant to shield or downcast construction lighting, would reduce potentially significant impacts on visual resources to less than significant levels by limiting the intensity of nighttime construction lighting.

Operations

Operation of the proposed project would modify two existing sources of light at Talega Substation and the proposed San Juan Capistrano Substation. Both of these substations are currently lit at night when needed to ensure safe operating conditions for the applicant's employees. As described in Section 2.3.1.5, "Lighting and Landscaping," LED lighting would be used at entry gates and for other substation lighting needs. The types of control shelter and dead-end structure lighting installed may vary. All lights would be shielded and aimed downward.



Existing View from Via Ceramica North of Calle Saluda Looking Northwest



Visual Simulation of Proposed Project

Figure 4.1-11

Existing View and Visual Simulation from Via Ceramica

South Orange County Reliability Enhancement Project

This page intentionally left blank.

Reference: Fig. 4.1-16, Existing View and Visual Simulation from Talega Park, Proponent's Environmental Assessment, SDG&E and Environmental Vision (photo sim, April 18, 2012)



Existing View from Talega Park Looking South



Visual Simulation of Proposed Project

Figure 4.1-12

Existing View and Visual Simulation from Talega Park

South Orange County Reliability Enhancement Project

This page intentionally left blank.

The City of San Juan Capistrano's Community Design Element (1999) discourages nighttime lighting in order to maintain the small village and rural character of the city. Existing lighting is consistent with the City of San Juan Capistrano and San Clemente's ordinances that require hooded fixtures to direct light downward. As part of the project description, the applicant has stated that substation lighting would not be left on at night during normal operations and would only be used to allow for nighttime emergency repair and maintenance access. Neither the existing nor proposed transmission line facilities include any permanent lighting. Potential glare from overhead conductors would be similar to what currently exists. Therefore, there would be a less than significant impact under this criteria during operation.

4.1.3 Mitigation Measures

MM AES-1: Architectural Review of San Juan Capistrano Substation. To ensure that the design of San Juan Capistrano Substation facilities such as walls, buildings, and landscaping are consistent with the City of San Juan Capistrano's design criteria, the applicant shall submit a revised series of elevations and a landscape plan to the City's Architectural Review Board (ARB) prior to filing for grading and building permits. The ARB shall determine if the applicant's revised plans are consistent with the City's design criteria and if any modifications are needed. The applicant shall not initiate ground disturbing activities until the ARB approves the design and landscaping plan for the proposed San Juan Capistrano Substation.

MM AES-2: Minimize Clearing and Ground Disturbance and Restore Disturbed Areas to Pre-Project Conditions. Clearing and ground disturbance required for construction, operation, and maintenance, including but not limited to, access roads, pulling sites, construction and maintenance pads, and construction laydown areas, will be the minimum required, and the applicant will consult with the CPUC to identify and implement methods to restore disturbed areas to pre-construction conditions to the extent feasible for all areas not required for operation and maintenance. For areas required for operation and maintenance, the applicant will consult with the lead agency to identify and implement methods to restore disturbed areas to conditions that would blend with the overall landscape character to the extent feasible. Areas around new or rebuilt transmission structures that must be cleared during the construction process or other areas of ground disturbance will be regraded and revegetated to restore these areas to an appearance that will help blend them into the overall landscape character.

MM AES-3: Screen or Effectively Locate Laydown Areas. Laydown areas within view of residences, scenic roads, and recreational facilities will be effectively located to limit views (aesthetic effects) of materials, equipment, vehicles, and other items used during construction. Staging and laydown areas that cannot be located away from public views will be screened using opaque fencing or landscaping to limit aesthetic effects. Where laydown areas are visible from publicly accessible areas and roads, any associated signage will be kept to the minimum necessary to communicate information about the project, safety, and security. All laydown areas will be effectively reclaimed immediately following completion of their use.

MM AES-4: Glare and Color Contrast Reduction for Transmission Structures and Conductors. To reduce potential glare and color contrast for components of the proposed project, the finish on all new transmission structures will be non-reflective (e.g., steel that has been galvanized and treated to create a dulled finish), to reduce light reflection and color contrast and help blend the structures into the landscape setting. All new transmission conductors will be non-specular to minimize conductor reflectivity and help blend them into the landscape setting.

MM AES-5: Shield or Downcast Construction Lighting. To reduce the potential for visual impacts associated with construction lighting, lighting for construction activities will be limited to an amount

required for safety of construction personnel and security of construction equipment. In order to minimize the effect of light pollution in the surrounding area, all construction lighting will be operated and oriented to mostly or fully eliminate offsite light spill at all times.