#### 4.0 AESTHETICS

#### 4.1 INTRODUCTION

This chapter describes the existing visual resources within Pacific Gas and Electric Company's Windsor Substation Project area and evaluates the potential visual impacts associated with project construction and operation. A summary of public regulations and policies pertaining to visual quality in the project vicinity is also provided.

Visual or aesthetic resources are generally defined as both the natural and built landscape features that can be seen and that contribute to the public's experience and appreciation of the environment. Depending on the extent to which a project's presence will alter the perceived visual character and quality of the environment, visual or aesthetic impacts may occur.

The changes in the appearance of the Windsor Substation Project area that will result from the presence of the new substation and related facilities will not substantially alter the existing visual character or quality of the landscape setting. With the applicant-proposed avoidance and protection measures, impacts to visual resources resulting from the project will be less than significant.

#### 4.2 METHODOLOGY

The visual analysis is based on review of technical data, including project maps and drawings provided by PG&E, aerial and ground level photographs of the project area, local planning documents, and computer-generated visual simulations. Field observations were conducted in May and July 2009 to document existing visual conditions in the project area and to identify potentially affected sensitive viewing locations.

This visual study employs assessment methods based, in part, on the U.S. Department of Transportation, Federal Highway Administration's (FHWA) and other accepted visual analysis techniques as summarized by Smardon et al. (1986). This study also addresses the California Environmental Quality Act (CEQA) Guidelines for visual impact analysis. Included are systematic documentation of the visual setting and an evaluation of visual changes associated with the project. In order to convey a sense of existing visual conditions, a set of 16 photographs show representative public views of the project area.

Consistent with FHWA methods, this impact analysis describes change to existing visual resources and assesses viewer response to that change. Central to this assessment is an evaluation of representative views from which the project will be visible to the public. In order to document the visual change that will occur, visual simulations show the project from key representative public viewpoints. The visual simulations are presented as "before" and "after" images. The visual impact assessment is based on evaluation of the changes to the existing visual resources that will result from construction and operation of the project. These changes were assessed, in part, by evaluating the "after" views provided by the computer-generated visual simulations and comparing them to the existing visual environment.

#### 4.3 PHYSICAL CHARACTERISTICS OF THE PROJECT

The substation site is 3.2 acres with the substation equipment located within a walled- and fenced-in area of approximately 268 feet by 230 feet. An 8-foot high, textured earth tone color concrete wall will enclose the substation on the northern side along Mitchell Lane, and an 8-foot-tall chain link mesh fabric fence will enclose the other three sides. Two paved driveways will connect to Mitchell Lane—a wood entry gate will be located at the northeast corner and a chain-link mesh gate will be located at the west side of the substation site. The major project components and dimensions are summarized in Table 4-1. Besides the new Tubular Steel Pole (TSP) structures, the tallest components within the substation property will be the dead-end structures, approximately 42 feet in height. The majority of the substation equipment will be 20 feet tall or lower. The equipment and structures within the substation will be neutral gray in color with a non-reflective finish. The substation components are described in further detail in Section 1.5, Project Facilities. The substation layout plan and profile are shown in Figures 1-4 and 1-5.

To connect the substation to the adjacent existing power line, one new 95-foot tall TSP will be installed within the substation site. In addition, as part of the power line connection, an approximately 95-foot-tall weathered TSP will be installed on Eagle Drive to replace an existing wood pole. Five existing wood distribution poles along Mitchell Lane at the north side of the substation site will be removed and replaced with underground cable in conduit. Additional details of the power line interconnection and distribution lines are described in Section 1.5.2.

**Table 4-1 - Approximate Dimensions of Major Project Components** 

Component (number of elements to be installed at ultimate build-out)	Height (feet)	Length (feet)	Width (feet)
Dead-end Structures (2)	42	32	1
Bus Structure Sections (6)	20	varies	18
Disconnect Switches (18)	20	18	7
Transformers (3)	18	18	16
Circuit Breakers (6)	15	12	10
Switchgear Enclosure (1)	12	75	18
Switchgear Enclosures (2)	12	28	18
Substation Loop-in TSP (1)	95		
Replacement weathered TSP (1 outside substation site)	95		

<sup>--</sup> Dimension not applicable

### 4.3.1 Project Landscaping

A landscape plan will be developed during the final project design phase, and will incorporate input from the Town of Windsor, facility security, California Public Utility Commission (CPUC), and engineering requirements. The landscape plan will be designed to expand the amount of screening with respect to public views of site facilities as well as to enhance the site's appearance, and integrate the project with its surrounding visual setting.

The new project landscaping will include ecologically appropriate species, including a mixture of native, deciduous and evergreen trees, such as Valley Oak and Coast Live Oak (*Quercus lobata* and *Quercus agrifolia*). New trees will be placed informally on all sides of the substation site. No trees will be planted under the overhead conductors on the southwest side of the site. Five mature oaks at the north edge of the substation along Mitchell Lane will be preserved; these trees partially screen views of the site. A new textured earth tone color wall will be installed along the north side of the substation. Entrance and exit gates will be installed along the northeast front and west sides of the substation. The wall will be set back approximately 50 feet from the back of the sidewalk allowing for additional trees to be planted parallel to the existing oak trees along Mitchell Lane.

In addition, project landscaping will include shrub planting along the recreation trail near Eagle Drive in order to reduce the visibility and partially screen the lower portion of one replacement pole from close range view.

#### 4.3.2 Lighting

Security lighting for the substation will consist of sodium vapor lamps. On the south side of the substation, four lights will be mounted at 9'-6", with three located on the steel gantry structure and one between the transformer and switchgear. On the north side of the substation, there will be free-standing light poles, approximately 12 feet tall. On the switchgear enclosure, doors will have fixed lights. Exterior lighting will include the use of non-glare light bulbs. Lighting fixtures will be located and designed to avoid casting light or glare toward off-site locations.

#### 4.4 EXISTING CONDITIONS

#### 4.4.1 Regional and Local Landscape Setting

Situated within north-central California, the project landscape setting lies in the Town of Windsor with a population of approximately 25,000 residents. Windsor is in the Santa Rosa Valley, situated between the Sonoma Mountains to the east and a series of coast ridges to the west. The valley generally follows the alignment of the Russian River and is world-renowned for producing wine. Much of the area is characterized by vineyards, grazing lands, and other agriculture. Ridges that enclose the valley are heavily forested and less developed than the valley floor. Highway 101 serves as the major north-south transportation corridor. The highway connects the project area to places within and beyond the region, including San Francisco, located about 60 miles south and Healdsburg to the north.

The region and the Town of Windsor have experienced rapid growth in the last decade and are now a mixture of older homes and structures, including some dating to the turn of the century, recently developed subdivisions, industry, commercial development, and agriculture. This has led to a patchwork land use pattern comprised of newer residential subdivisions and commercial development often side-by-side with agricultural lands and older farmsteads.

The project lies within southern Windsor, in a relatively flat area located between Highway 101 on the east and the Northwestern Pacific Railroad (NWPRR) corridor on the west (see Figure 4-1). The surrounding ridges and hills are partially visible in the backdrop from some places within the general vicinity. The substation site occupies the northwest corner of a larger triangular-shaped area that is located between Mitchell Lane on the north, Conde Lane on the east, Shiloh Road on the south and the Northwestern Pacific Railroad corridor on the southwest (see Figure 4-1). Although zoned for light industrial use, this area is currently undeveloped with the exception of one warehouse.

#### 4.4.2 Substation Project Site

Bordered by a railroad corridor along its southwestern edge, the substation site is adjacent to undeveloped land on the south and the east. On its northern side the project site borders Mitchell Lane for approximately 400 feet. Cameron Drive, another local street, intersects Mitchell Lane near the site's northern edge (see Figure 4-1). Both streets afford relatively unobstructed, close range views of the project site.

The substation project site occupies 3.2-acres of undeveloped land. The site is generally flat, and does not include tree cover except at the project site's northern edge where five mature oak trees are found along Mitchell Lane. In addition, there is existing tree cover along the project site's southwestern border, adjacent to the NWPRR. The site's appearance reflects evidence of previous disturbance, and is currently covered in mixed grasses.

### 4.4.3 Project Viewshed and Potentially Affected Public View Corridors

The project viewshed is defined as the general area from which the project will be visible. The project will generally not be visible from more distant locations due to intervening landform, vegetation and development. As described below, the project will be visible from some nearby locations along public roads as well as limited visibility from a residential area and public open space. Within this immediate area, several existing overhead power lines, including part of the project, are established landscape features. As seen from many places in the site vicinity, intervening mature vegetation and buildings will screen views of the project.

# Figure 4-1: Photo Viewpoint Locations

### INSERT 4-1 (THIS PAGE IS INTENDED TO BE LEFT BLANK)

### **BACK OF FIGURE 4-1**

### (THIS PAGE IS INTENDED TO BE LEFT BLANK)

Viewing distance is a key factor that affects the potential degree of project visibility. For reference, it may be noted that visual details generally become apparent to the viewer when they are seen in the foreground, at distances of 0.25 to 0.5 mile or less. For purposes of the project PEA visual analysis, the primary focus is considered this foreground viewshed area, where visual details are apparent, and up to approximately one mile from the proposed project area, where change could be noticeable.

A set of 16 photographs presented on Figures 4-2A through 4-2D portray representative visual conditions and public views in the project area. Figure 4-1 delineates the project site and photo viewpoint locations.

#### 4.4.3.1 Views from the North

The area north of the site includes an adjacent public street (Mitchell Lane) and light industrial development. The Wilson Ranch Soccer Park, a 10-acre public park with lighted soccer fields and picnic areas is located directly across Mitchell Lane. Photos 1 and 2 are views taken from Mitchell Lane looking southwest toward the site; Photo 2 shows a close range unobstructed view that includes the roadway in the foreground and mature vegetation in the backdrop. Photo 5 is an open view from the park's soccer fields and a picnic area looking toward Mitchell Lane and the site. Photo 3, taken from Mitchell Lane at Cameron Drive includes the project site on the left and part of the park, seen on the right side of the street. In this view, wood poles and the soccer field light fixtures are noticeable vertical elements that appear against the sky. Photo 4 is a close range view toward the site from Cameron Drive, taken from near the park. Across Cameron Drive to the east is a light industrial area developed with warehouse buildings, surface parking and site landscaping. Photos 6 and 7 are views taken along Mitchell from the northwest; these views include scattered oak clusters and glimpses of the ridges that surround the valley in the backdrop.

#### 4.4.3.2 Views from the East

An undeveloped open field dotted with scattered mature oaks borders the site on the east (Photo 9). Conde Lane, a divided roadway lined with mature oaks lies at the eastern edge of this area (Photo 11). Landform partially screens views from the corner of Conde and Mitchell Lane. Views toward the site across the open fields along Conde Lane are partially screened by mature oaks (Photo 10). Further to the southeast, lies a farm with open grazing land and scattered mature oaks concentrated along Pool Creek. The Highway 101 corridor lies about one-quarter mile east of the site. Photo 12, taken from northbound Highway 101 shows that mature trees and development generally screen views of the site from the roadway. Several single-family homes and commercial properties are located between Highway 101 and Conde Lane. Intervening vegetation generally screens views of the project from this area.

#### 4.4.3.3 Views from the West

Bordering the substation site on the west, the NWPRR corridor is lined with dense mature trees on both sides and a paved recreation trail runs along the west side of the railroad. Photos 13 and 16, taken from the recreation trail, show that the dense vegetation screens views toward the site.

Further west, a single-family residential area is located between Eagle Drive and the Windsor Golf Course. Views of the substation site from this neighborhood are largely screened by mature vegetation along the railroad. Photos 14 through 16 convey a sense of the neighborhood's visual character, including the presence of residential landscaping, street lights and wood utility poles. Photo 14 taken from Eagle Drive, shows the residential streetscape, including a close range unobstructed view of one pole.

#### 4.4.3.4 Views from the South

Largely undeveloped land borders the substation site on the south. Within this area there is one developed parcel, a warehouse facility located on American Way. Photos 8 and 9 are representative views from the south, taken from American Way and show open views toward the site with several scattered mature oaks providing partial visual screening. Pool Creek is a densely wooded riparian corridor located about one-quarter mile to the south. Beyond the creek corridor is Shiloh Road an east-west arterial road that provides access to the area from Highway 101. Intervening vegetation generally screens views of the project from this area.

### 4.4.4 Potentially Affected Viewers

Accepted visual assessment methods, including those adopted by FHWA and other federal agencies, establish sensitivity levels as a measure of public concern for changes to scenic quality. Viewer sensitivity, one of the criteria for evaluating visual impact significance, can be divided into high, moderate, and low categories. Factors considered in assigning a sensitivity level include viewer activity, view duration, viewing distance, adjacent land use, and special management or planning designation. According to the U.S. Department of Transportation *Visual Impact Assessment for Highway Projects,* research on the subject suggests that certain activities tend to heighten viewer awareness of visual and scenic resources, while others tend to be distracting. The project viewshed includes several types of concerned viewer groups.

Motorists, the largest viewer group that could be affected by the project, include people traveling on Mitchell Avenue, Conde Lane, Cameron Drive, Eagle Drive, and some smaller residential streets. Local travelers who are familiar with the visual setting are likely the primary motorists in the project area. Other motorists may include those using the roadway on a less regular basis. Given the posted speed limits of 30 miles per hour (mph) and 25 mph, the view duration for this group is relatively short—estimated at no more than a minute depending on traffic volume. Viewer sensitivity is considered low to moderate.

Within the project vicinity, pedestrians and cyclists are another viewer group. In addition to the paved recreation trail located on the west side of the rail corridor, Conde Lane is a posted bike route. With their travel speeds slower than those of motorists, the view duration of pedestrians and cyclists is generally longer; therefore, this viewer group may be more likely to notice detail with respect to visual change in the environment. Consequently, viewer sensitivity of pedestrians and cyclists is considered moderate.

# Figure 4-2A: Photographs of the Project Area and Vicinity

### INSERT 4-2A (THIS PAGE IS INTENDED TO BE LEFT BLANK)

### **BACK OF FIGURE 4-2A**

### (THIS PAGE IS INTENDED TO BE LEFT BLANK)

# Figure 4-2B: Photographs of the Project Area and Vicinity

### INSERT 4-2B (THIS PAGE IS INTENDED TO BE LEFT BLANK)

### **BACK OF FIGURE 4-2B**

### (THIS PAGE IS INTENDED TO BE LEFT BLANK)

# Figure 4-2C: Photographs of the Project Area and Vicinity

## INSERT 4-2C (THIS PAGE IS INTENDED TO BE LEFT BLANK)

### **BACK OF FIGURE 4-2C**

### (THIS PAGE IS INTENDED TO BE LEFT BLANK)

# Figure 4-2D: Photographs of the Project Area and Vicinity

### INSERT 4-2D (THIS PAGE IS INTENDED TO BE LEFT BLANK)

### **BACK OF FIGURE 4-2D**

### (THIS PAGE IS INTENDED TO BE LEFT BLANK)

Recreational users of Wilson Ranch Soccer Park represent the third group of potentially affected viewers. View duration for this group could range from several minutes to several hours, and viewer sensitivity is considered moderate to high. As noted in Section 4.4.3.1, mature vegetation provides considerable screening with respect to views from the park toward the site.

The fourth viewer group includes a limited number of residents within the neighborhood located west of the NWPRR corridor. Residential views tend to be long in duration, and the sensitivity of this viewer group is considered moderate to high. Photos 14 through 16 indicate that unobstructed close range views of existing wood utility poles are currently seen from a limited area near residences and along the recreation trail at Eagle Drive (refer to Figures 4-1 and 4-2D). However, as described in Section 4.4.3.3, existing mature vegetation situated along the rail line generally screens views toward the substation site from the residential area and trail.

#### 4.5 LOCAL PLANS AND POLICIES AND PROJECT CONSISTENCY

Because the CPUC has exclusive jurisdiction over the siting and design of utility facilities, local governments have no discretionary authority over utility power line or substation projects. However, as part of the environmental review process, PG&E has considered public plans and policies related to visual quality in the project area. The construction and operation of this project does not conflict with any environmental plans, policies, or regulations adopted by agencies with jurisdiction over local aesthetic regulations.

#### 4.5.1 Town of Windsor General Plan 2015

The *Town of Windsor General Plan 2015* (Plan) identifies views of the surrounding foothills, agricultural lands, open space areas and woodlands as scenic resources that should be preserved. Chapter 6, Environmental Resources, contains provisions to preserve scenic resources and designates a number of roadways as Scenic Corridors, including Conde and Mitchell Lane which run adjacent to the site. Additionally the plan has some general goals for preserving riparian vegetation and mature trees in street designs.

Figure 6-3 in the Plan identifies Conde Lane and Mitchell Lane as scenic corridors, which run adjacent to the substation site. The Scenic Resources subsection identifies the following policies to preserve visual resources along these corridors:

- I.1 Recognize and preserve significant views along major corridors.
  - *I.1.1* The Town should recognize the roads shown in Figure 6-3 as scenic corridors (also referred to as scenic routes) which enhance the visual experience for Town residents and non-residents. Additional scenic corridors may be recognized based on the following criteria:
    - a. leads to a recreational area; or

b. exhibits unusual natural or man-made features of interest, such as closeup to mid-range views of rock outcroppings, waterways, or oak woodlands.

- *I.1.2* Development proposals along scenic corridors should not detract from the visual and recreational experience, but should seek to be harmonious and subordinate to the natural features that comprise the scenic viewshed. Components of project design that should be considered in making this assessment should include building height, massing, orientation, color, building materials, rooftop appurtenances, storage areas, signage, lighting, and landscaping. The purpose of close development review along these corridors is to ensure that development within the viewshed preserves and enhances attractive natural and man-made vistas.
- *I.1.3* Development along Rural Lanes shall preserve significant views of the surrounding foothills as well as mature vegetation which contribute to the rural atmosphere.
- *I.1.5* Sound walls should be avoided as much as possible, particularly along identified scenic corridors. Where sound walls are necessary, they should be designed as attractively as possible.

The Scenic Resources subsection identifies the following implementation programs to preserve visual resources along these corridors:

- *I.1 Scenic Corridor Design Standards*. The Town shall develop more specific design guidelines to assist with the review of development proposals along scenic corridors and within the viewshed of these routes. As part of this program, the Town should distinguish between skyline ridges and intermediate ridges and may also identify the critical vantage points from which the scenic resources and corridor policies should apply.
- *I.2 Project and Environmental Review along Scenic Corridors*. Projects along designated rural lanes and scenic corridors shall be reviewed to ensure that the scenic resources are protected. The Town shall require that developers proposing to develop along scenic corridors demonstrate that their proposals will not obstruct significant views and that their project designs complement the natural views and setting, rather than dominate them. At the Town's discretion, developers may be required to have visual simulations prepared to better illustrate the "before and after" effects of a proposed project.
- *I.3 Scenic Corridor Enhancement.* The Town shall initiate a program to enhance its scenic corridors by litter removal programs; route identification signs; and provision of parking at desirable viewpoints.

The project is located on Mitchell Lane, a designated Town of Windsor scenic corridor. Project landscaping and existing trees as well as a new earth tone wall will provide substantial screening from this roadway.

#### 4.6 IMPACTS

#### 4.6.1 Significance Criteria

Standards of significance were derived from Appendix G of the CEQA Guidelines. Impacts to the visual environment may be considered significant if they were to:

- have a substantial, adverse effect on a scenic vista;
- substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway;
- substantially degrade the existing visual character or quality of the site and its surroundings; and/or
- create a new source of substantial light or glare, which will adversely affect day or nighttime views in the area.

Factors considered in applying these criteria to determine significance include the extent of project visibility from residential areas, public open space, and designated scenic routes; the degree to which the various project elements will contrast with or be integrated into the existing landscape; the extent of change in the landscape's composition and character; and the number and sensitivity of viewers. Project conformance with public policies regarding visual quality was also taken into account.

#### 4.6.2 Visual Simulation Methods

As part of the aesthetic impact evaluation of the project, three visual simulations were produced using computer-modeling and rendering techniques. The simulations illustrate the visual change associated with the project that will be seen within the project area. The visual simulations are based on project engineering data provided by PG&E. The technical methods used for producing the computer-generated simulation images are outlined below.

Digital photographs and computer modeling and rendering techniques were employed to produce visual simulations which illustrate "before" and "after" visual conditions in the project area. The simulations portray the location, scale and appearance of the proposed project as seen from representative public viewpoints. The visual simulations employ photographs taken using a digital single lens reflex (SLR) camera with a 50 millimeter (mm) equivalent lens which represents a horizontal view angle of 40 degrees. The computer-generated visual simulations are the results of an objective analytical and computer modeling process described briefly below.

Existing GIS and engineering data and digital aerial photographs provided the basis for developing an initial digital model. Three–dimensional models of the proposed substation and TSPs were developed using engineering design data supplied by PG&E and combined with the digital site model to produce a complete computer model of the proposed project. For the

simulation viewpoints, photograph locations from GPS field data were also entered into the 3-D model using 5 feet as the assumed eye level.

Computer "wireframe" perspective plots were overlaid on the photographs to verify scale and viewpoint locations. Digital visual simulation images were then produced based on computer renderings of the 3-D model combined with selected digital site photographs. The final "hardcopy" visual simulation images contained in this visual analysis were printed from the digital image files and produced in color on 8 1/2" x 11" sheets as Figures 4-3A through 4-5B.

The simulation vantage points (VP) are listed below and delineated on Figure 4-1.

•	Mitchell Lane looking southwest (VP 2)	Figures 4-3A and 4-3B
•	Cameron Drive looking south (VP 4)	Figures 4-4A and 4-4B
•	Eagle Drive (VP 14)	Figures 4-5A and 4-5B

Figures 4-3A and 4-3B illustrate the project from Mitchell Lane west of Conde Lane. Figure 4-4A and 4-4B illustrate the project-related change as seen from Cameron Drive and areas around the Wilson Ranch Soccer Park, and Figures 4-5A and 4-5B depict the project near Eagle Drive. The Figure 4-3A through 4-4B simulation view focus on the new substation, while Figures 4-5A and 4-5B focus on the replacement weathered TSP along the existing power line.

The simulations portray conceptual project landscaping and show a mixture of Coast Live Oaks and Valley Oaks at approximately 8 years of maturity with heights of 22 to 26 feet. Tree growth rate estimates are based upon *SelecTree: A Tree Selection Guide*. In addition, for Figure 4-5B, shrub height is shown at approximately 6 feet.

### 4.6.3 Visual Change

The project will introduce a new substation on a disturbed, undeveloped site. The following discussion provides an evaluation of the visual changes associated with the project as seen from key representative vantage points.

Figures 4-3A and Figure 4-3B portray a "before" and an "after" view of the project from Mitchell Lane west of Conde Lane looking southwest. The Figure 4-3A photo shows a relatively close-range, unobstructed view toward the project site which lies on the south (left) side of the roadway. Mature oaks border the roadway. The site, a flat, grass-covered field appears near the center of this view against a backdrop of mature trees and vegetation which are situated along the railroad corridor. Existing vertical elements seen from this location include two wood utility poles, sign posts and two ornamental light standards, one on either side of Mitchell Lane.

### THIS PAGE IS INTENDED TO BE LEFT BLANK

### Figure 4-3A: Existing View from Mitchell Lane

### INSERT 4-3A (THIS PAGE IS INTENDED TO BE LEFT BLANK)

### Figure 4-3B: Existing View from Mitchell Lane

### INSERT 4-3B (THIS PAGE IS INTENDED TO BE LEFT BLANK)

## Figure 4-4A: Existing View from Cameron Drive

### INSERT 4-4A (THIS PAGE IS INTENDED TO BE LEFT BLANK)

### Figure 4-4B: Existing View from Cameron Drive

# INSERT 4-4B (THIS PAGE IS INTENDED TO BE LEFT BLANK)

## Figure 4-5A: Existing View from Eagle Drive

### INSERT 4-5A (THIS PAGE IS INTENDED TO BE LEFT BLANK)

## Figure 4-5B: Existing View from Eagle Drive

## INSERT 4-4B (THIS PAGE IS INTENDED TO BE LEFT BLANK)

### THIS PAGE IS INTENDED TO BE LEFT BLANK

The simulation portrays the new substation facility on the south side of Mitchell Lane. Visible elements include taller substation elements, two 42 foot-tall dead-end structures and bus structures to the left, above and behind the trees. Near the center of this view is the 95-foot tall TSP on the substation site; behind and to the left is the 95-foot tall weathered steel replacement pole located on Eagle Drive.

The simulation also shows new trees, planted as part of the project, with a portion of the concrete wall facing Mitchell Lane and chain link fencing seen below and between the tree canopies. Substation bus structures and a transformer are partially visible through the fencing and between two trees near the center of the view. A comparison of the existing view and the simulation indicates that the project will also remove the two existing wood poles, overhead conductors, and cable television lines. It is expected that, as landscaping matures, it will provide additional screening of the facility. Potentially, development at the adjacent vacant site (zoned for light industrial use) could occur. If so, new buildings or landscaping associated with the future development could also provide additional screening.

Figure 4-4A is a view of the project looking south on Cameron Drive near the Wilson Ranch Soccer Park. The view encompasses most of the project site's frontage on Mitchell Lane, including three mature oaks. A corner of the park lawn area, sidewalk landscaping and restroom building appear on the right as well as various vertical elements, including an existing wood utility pole and a cobra-style light standard on the northeast corner of Cameron Drive and Mitchell Lane. Overhead conductors are seen above the trees against the skyline. In the distance, behind the site, mature trees and vegetation located along the railroad corridor provide a backdrop to the open, undeveloped site.

In the Figure 4-4B simulation image, mature oaks along Mitchell Lane and new project landscaping provide substantial screening of the new substation facility. Behind the trees, a textured concrete wall and wood entry gate are visible. Substation switchgear enclosures and bus structures are visible above the wall and between tree canopies in this view. As landscaping matures, additional screening will be provided. The simulation also depicts the removal of an existing wood pole and overhead utility lines. Given the nearby light industrial development on Mitchell Lane and in the area, from this vantage point, the proposed project will be noticeable, but will not appear out of context with its landscape setting.

Figure 4-5A portrays a view from Eagle Drive between 10<sup>th</sup> and 11<sup>th</sup> Hole Drives in the residential neighborhood located west of the project area. At the center of the view a single 72 foot-tall wood utility pole appears against a backdrop of sky and the mature oak trees and other vegetation that is situated along the rail corridor. The pole is located adjacent to a recreation trail that runs along the railroad corridor. Overhead conductors are visible against the sky. Other vertical elements in the image include ornamental lighting standards.

In the Figure 4-5B simulation, the wood pole has been removed and a 95-foot-tall TSP appears in nearly the same location. The simulation also includes new shrub planting near the replacement pole that is proposed as part of the project. The replacement pole is located 20 feet

to the north (left) and set back a few feet further from the recreation trail than the existing pole. Although the replacement pole is somewhat taller and larger in diameter, it is similar in form and the weathered steel surface is also similar in color to the existing utility pole. A second steel pole, located on the substation site, is partially visible on the left side of the simulation, although it is largely screened by trees located along the rail corridor. A new set of conductors connecting the two steel poles is also visible. As shown in this simulation, the substation facility will be almost completely screened from view by existing vegetation. Although the new pole in the foreground will be taller and therefore, potentially more noticeable, the change in scale will not substantially alter the existing visual character or landscape composition seen in this view. In addition, the proposed shrub planting near the replacement pole will reduce its visibility when seen at close range because the landscaping will partially screen the base portion of the structure.

#### 4.6.4 Visual Impact Assessment

#### 4.6.4.1 Construction

Construction-related visual impacts will result from the presence of equipment, materials, and work crews at the project site. Although these effects are relatively short-term, they will be most noticeable to residents who live in close proximity to the project and motorists traveling along adjacent roadways. Construction activity may also be noticeable from the Wilson Ranch Soccer Park. Project construction is anticipated to take 12 months.

During construction, PG&E and its contractors will make every effort to keep construction activities as clean and inconspicuous as practical. Construction activity will be kept within the project area. Short-term visual impacts will be less than significant, and no mitigation is required.

#### 4.6.4.2 Scenic Vista Impacts

For purposes of this evaluation, a scenic vista is defined as a distant public view along or through an opening or corridor that is recognized and valued for its scenic quality. As such, there are no recognized scenic vistas within the project viewshed. Although glimpses of the surrounding ridgelines and hills to the east and west are available from some locations in the project area, these distant views are generally screened by existing mature vegetation. The project will not substantially alter existing views of distant landform. Therefore, the project will not obstruct or substantially affect a scenic vista or substantially alter views of the hillsides and ridgelines that are currently experienced by the public and no mitigation is required.

#### 4.6.4.3 Scenic Resources

There are no designated State Scenic Highways within the project viewshed; therefore, the project will not substantially damage scenic resources within a State Scenic Highway.

Although not designated State Scenic Highways, Conde Lane and Mitchell Lane are listed as local scenic roadways in the Windsor General Plan. In views from Mitchell Lane the project will be well screened by existing and new landscaping, and Conde Lane is located almost 0.25 mile

from the project site and is outside the immediate project viewshed. The project will not have a substantial adverse effect on views from these roadways; therefore, no mitigation is required.

#### 4.6.4.4 Visual Character

The project involves installation of a new landscaped substation on a previously disturbed, undeveloped site. The new substation will not be highly visible from public-view corridors because the substation components will be largely screened from public views by project landscaping and existing vegetation. The substation will generally not be seen from existing residential areas. In public views of the site from surrounding roadways and residential areas, the project will generally not be visible beyond a distance of 0.25 mile. The scale and appearance of the project are compatible with the visual character found in the surrounding area and the height of new structures does not significantly exceed the height of existing structures in the vicinity. In addition, given the nearby light industrial development on Mitchell Lane and in the area, the proposed project will be noticeable, but will not appear out of context with the landscape setting.

Although the replacement pole along Eagle Drive will be taller and therefore, potentially more noticeable, the change will be incremental and will not substantially alter the existing visual character or landscape composition seen in the area. In addition, the proposed shrub planting near the pole will reduce its visibility when seen at close range because the landscaping will partially screen the base portion of the structure. Therefore, the project will not substantially degrade the existing visual character or quality of the site and its surroundings.

### 4.6.4.5 Project Lighting

The project proposes new nighttime lighting for safety and security purposes. Lighting fixtures will use non-glare light bulbs that will be directed on-site in order to avoid casting light or glare off-site. Dense vegetation along the NWPRR tracks will largely screen nighttime project lighting from the residential area located to the west. Project landscaping will also provide additional visual screening of project lighting from Mitchell Lane. New substation structures will be finished with a non-reflective finish and are not expected to be a source of substantial glare.

Current nighttime lighting in the project area includes both overhead and ornamental street lighting on nearby streets as well as periodic lighting at the adjacent soccer fields. Existing ornamental street lighting standards are about 9 feet tall, whereas the existing soccer field light fixtures are over 90 feet tall.

The project security lighting will create an additional source of nighttime light that may be visible from some nearby locations off-site. With project landscaping and the use of non-glare fixtures directed on-site, these project-related light and glare effects are considered incremental and less than significant.

#### 4.7 REFERENCES

Benchmark Maps. 2007. California Road and Recreation Atlas. Santa Barbara, California.

- California Department of Transportation.
  <a href="http://www.dot.ca.gov/hq/LandArch/scenic\_highways/">http://www.dot.ca.gov/hq/LandArch/scenic\_highways/</a>. Site visited May 1, 2009.
- California Public Utilities Commission (CPUC). 1995. *Public Utilities Commission of the State of California, General Order No. 131-D.* Adopted August 11, 1995. Decision 95-08-038.
- DeLorme Mapping Company. 2005. Southern California Atlas and Gazetteer, Seventh Edition. Freeport, ME.
- Reimer, Jeffrey L. and W. Mark. "SelecTree: A Tree Selection Guide." Online: <a href="http://selectree.calpoly.edu/">http://selectree.calpoly.edu/</a>. Site visited June 15, 2009.
- Smardon, Richard C., Palmer, James F., Felleman, John P., editors. 1986. *Foundations for Visual Project Analysis*. New York: Wiley.
- Sonoma County. 2008. Sonoma County General Plan 2020. Adopted September 23, 2008.
- U.S. Department of Transportation, Federal Highway Administration Office of Environmental Policy. *Visual Impact Assessment for Highway Projects.* Publication # FHWA-HI-88-054.
- USGS. 1998. Terraserver Maps. <a href="http://www.teraserver-usa.com/">http://www.teraserver-usa.com/</a> Site visited May 1, 2009.
- Windsor, Town of. 2005. *Town of Windsor General Plan 2015*. Adopted March 13, 1996, Revised July 20, 2005.
- Windsor, Town of. 2009. *Town of Windsor Web Site*. <a href="http://www.ci.windsor.ca.us/">http://www.ci.windsor.ca.us/</a> Site visited May 18, 2009.
- U.S. Census Bureau. 2009. http://www.census.gov. Site visited August 20, 2009.