C.2 Aesthetics

This section analyzes whether the Revised Project and PG&E Upgrades result in any new significant impacts to aesthetic resources that were not previously identified and disclosed in the 2010 Final EIR, or whether there has been a substantial increase in the severity of any previously identified impacts. It considers changes to the existing visual landscape in the study area, changes to the aesthetic character of the Approved Project, and changes to potential aesthetic impacts and related mitigation measures associated with construction and operation.

C.2.1 Environmental Setting

This section describes changes to the environmental setting that have occurred since 2010. Section C.2.1.1 describes any changes to the environmental setting that was presented in the 2010 Final EIR. Section C.2.1.2 describes the environmental setting for the area surrounding the PG&E transmission system upgrades.

C.2.1.1 Revised Solar Project

The aesthetic environmental setting for the Revised Project site has remained substantially unchanged since approval of the 2010 Final EIR. Panoche Valley remains generally undeveloped and pastoral in character. No new development has occurred, and no major new structures have been built in the valley. Grazing remains the primary land use in the area. The viewshed for the site remains confined to Panoche Valley including residences and roads within the valley, as well as facing slopes and ridges of the surrounding hills. No new parks or other sensitive viewing areas have been established within the project viewshed.

C.2.1.2 PG&E Upgrades

The PG&E Upgrades associated with the Revised Project include installation of approximately 17 miles of optical ground wire (OPGW) primarily on existing transmission towers between the Panoche Valley Solar Project site and the existing Panoche Substation in Fresno County. The telecommunications system upgrades also include construction of up to three new microwave communication towers and upgrades to an existing microwave tower. The PG&E transmission system upgrades would include eight new transmission structures that are required to tie the existing Moss Landing–Panoche 230 kV transmission line into the proposed PG&E switchyard, located within the Revised Project site boundaries. The new transmission structures would be installed by PG&E after site preparation is completed by the Applicant.

The environmental setting for these upgrades includes the area surrounding the Moss Landing–Panoche 230 kV transmission line between the project site and the Panoche Substation, the Call Mountains (west of the Panoche Valley), Panoche Mountain (east of the Panoche Valley), and the area surrounding the Helm Substation (approximately 13 miles southwest of the City of Fresno).

The upgraded portion of the Moss Landing–Panoche transmission line runs east to west, beginning at the Panoche Substation and ending adjacent to the project substation. The eastern portion of the line traverses mainly agricultural lands before crossing Interstate 5 and Panoche Creek. The line then traverses private and BLM land within the Panoche Hills, north and west of the Tumey Hills, and enters Panoche Valley from the east. Construction activities would be visible to hikers, campers, and other recreational users on BLM land in the Panoche Hills and Tumey Hills both north and south of the transmission line upgrades. Construction activities for the western portion of the proposed transmission line upgrades would be visible to Panoche Valley residents and visitors. Construction activities would be

highly visible to motorists on West Panoche Road, which runs immediately adjacent to the proposed transmission line upgrades both east and west of Interstate 5. Similarly, construction activities would be visible to motorists on Interstate 5 near to where the highway crosses under the transmission line. Motorists on Panoche Road, which begins west of Interstate 5 and runs roughly parallel to and south of the proposed transmission line upgrades, would also have intermittent views of construction activities. Finally, construction activities for the western portion of the transmission line upgrades would be visible to motorists on Little Panoche Road.

A new microwave communication tower would be constructed within the fence line of the proposed Panoche Valley Solar Project substation. This new communication tower would be 100 feet tall, similar to the height of the lattice transmission towers.

The Call Mountains site is in an area of uninhabited mixed forest and shrubland open space located west of the Panoche Valley. At this location, a microwave dish would be added to an existing microwave communication tower. Call Mountain facilities may be intermittently visible from Panoche Road, which runs east to west approximately 3 miles north of the Call Mountain site. Because a dish would be added to an existing tower, the aesthetic landscape as seen by a motorist 3 miles away would remain essentially unchanged.

Panoche Mountain, northeast of the project site, consists of uninhabited grassland and shrubland open space. Panoche Mountain currently has two existing microwave communication towers, and a new tower, up to 100 feet tall, may be required if existing towers cannot be used. Panoche Mountain facilities are located 4 miles to the west of Interstate 5 and 4 miles to the south and east of Little Panoche Road. The distance between the Panoche Mountain facilities and the nearest roadways, as well as the presence of intervening topography, would likely result in only intermittent visibility of the facilities. Additionally, the proposed microwave communication tower would be located adjacent to two existing towers. The aesthetic landscape as seen by a motorist 4 miles away would remain essentially unchanged. The Panoche Mountain site is surrounded by BLM land, and the proposed tower would be visible to recreational users. However, the potential structural contrast of the proposed tower would be reduced by the presence of existing towers.

Helm Substation is surrounded by agricultural lands, 13 miles southwest of the City of Fresno. There is currently no microwave communication tower at the substation. A new tower would be constructed within the fence line of the substation, and would be 100 feet tall. The tower would be visible from nearby roads, including West Manning Avenue 0.75 miles to the north.

C.2.2 Applicable Regulations, Plans, and Standards

No changes have occurred to the regulatory setting for aesthetics since 2010. However, the PG&E facilities upgrades traverse land in the jurisdiction of Fresno County.

C.2.2.1 Fresno County

Code of Ordinances. Applicable ordinances include Chapter 13.12.040 Director of Public Works and Planning or Designee-Duties, which provides direction that it is unlawful for any person to plant, trim, prune, or remove any tree located upon a designated scenic drive without first obtaining a permit from the Director of Public Works and Planning or Designee.

The Revised Project would be subject to Section 816 “AE” Exclusive Agricultural District requirements; however, none of the requirements pertain to scenic resources or aesthetic concerns.

General Plan. The County of Fresno Draft General Plan contains policies[1] aimed at preserving scenic views and panoramas and designating and maintaining scenic roadways including highways, scenic drives, and landscaped drives. The County of Fresno Draft General Plan identifies roadways and highways that are County Designated Scenic Drives and Highways[2]. State Designated Scenic Highways in the County of Fresno include portions of State Route (SR) 180, SR-168. None of these highways have views of the PG&E work areas. The nearest Designated Scenic Highway, Highway 180 is located approximately 14 miles east of the Panoche Substation. The County of Fresno has additionally designated Scenic Drives and Scenic Highways. These include: portions of State Route 180, SR-168, and SR-198 as well as portions of Interstate-5 rural roads.[3] With the exception of Interstate 5, none of these roadways are located in visual proximity to the PG&E ROW.

C.2.3 Environmental Impacts and Mitigation Measures

This section addresses whether the changes to the Approved Project would result in any new significant aesthetic impacts or increase the severity of previously identified aesthetic impacts. Section C.2.3.1 restates the significance criteria used in 2010 to determine whether any project changes result in new or more severe significant impacts. Section C.2.3.2 summarizes the impacts and mitigation measures presented in the 2010 Final EIR for ease of reference. Section C.2.3.3 presents the updated impact analysis for the Revised Project, and Section C.2.3.4 addresses changes to two APMs. Section C.2.3.5 addresses the environmental impacts that would occur as a result of the PG&E Upgrades, and Section C.2.3.6 describes cumulative impacts.

C.2.3.1 Significance Criteria

The following significance criteria for aesthetics were derived from the Environmental Checklist in CEQA Appendix G. These significance criteria have been amended or supplemented, as appropriate, to address the nature of solar photovoltaic (PV) and transmission facilities in general, and the full range of potential impacts related to this Revised Project in particular. An impact of the solar project and PG&E Upgrades would be considered significant and would require mitigation if it would:

- Cause a substantial adverse effect on a scenic vista.
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings with a State scenic highway.
- Substantially degrade the existing visual character or quality of the site and its surroundings.
- Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.

Also given consideration are any General Plan goals, policies, or designations that are designed to reduce aesthetic impacts. Conflicts with such laws, ordinances, regulations, and standards can constitute evidence

[1] Refer to Policies: OS-K.1 through OS-K.4; OS-L.1 through OS-L.9; and LU-B.10. These policies are available here: http://www2.co.fresno.ca.us/4510/4360/General_Plan/GP_Final_policy_doc/Open_Space_Element_rj.pdf and http://www.co.fresno.ca.us/ViewDocument.aspx?id=54226

[2] A full list and maps of Fresno County Designated Scenic Drives and County Designated Scenic Highways can be found in the Draft General Plan, accessible here: http://www.co.fresno.ca.us/ViewDocument.aspx?id=60071

[3] A full list and maps of Fresno County Designated Scenic Drives and County Designated Scenic Highways can be found in the Draft General Plan, accessible here: http://www.co.fresno.ca.us/ViewDocument.aspx?id=60071

of a significant aesthetic impact. Lastly, a significant aesthetic impact could occur if the Revised Project's incremental aesthetic impact would be cumulatively considerable.

C.2.3.2 Approved Project Impacts and Mitigation Measures

Table C.2-1 presents a summary of the impacts and mitigation measures applicable to the Approved Project. These conclusions are unchanged after analysis of the Revised Project.

Table C.2-1. Summary of Impacts and Mitigation: Aesthetics

Impact No. and Text	Mitigation Required	CEQA Conclusion
Impact AE-1: Long-term visibility of construction activities, equipment, and night lighting.	MM AE-1.1: Reduce night lighting impacts	Class I
Impact AE-2: Long-term visibility of land scars and vegetation clearance.	MM BR-G.3: Develop and implement a Habitat Restoration and Revegetation Plan	Class II
Impact AE-3: Project would introduce structure contrast, developed character, view blockage, and glare.	MM AE-3.1: Treat surfaces of project structures and buildings	Class I for KVPs 1–4 Class III for KVP 5
Impact AE-4: Project would introduce panel glint and glare.	None	Class III
Impact AE-5: Contribute to cumulatively considerable aesthetics impacts.	None	Class III

C.2.3.3 Revised Solar Project Impacts

The following impacts from the 2010 Final EIR are found to be either less severe due to Revised Project changes or not substantially different from the conclusions of the Final EIR.

Impact AE-1: Long-term visibility of construction activities, equipment, and night lighting (Class I)

The Revised Project would be constructed in approximately 18 months. Therefore aesthetic impacts of construction activities would occur for a shorter period of time. The construction equipment used would remain the same, but the shorter construction schedule would result in a greater number of vehicles present each day within the project area during construction. Nighttime lighting would remain the same as described in the 2010 Final EIR. While the duration of aesthetic impacts for construction activities would be reduced, the intensity would be slightly increased. This impact would remain significant (Class I) and the same mitigation measures would apply (see Table C.2-1).

Impact AE-2: Long-term visibility of land scars and vegetation clearance (Class II)

The long-term visibility of land scars and vegetation clearance would be reduced under the Revised Project. The permanent disturbance footprint of the Revised Project was reduced to 1,888 acres from the Approved Project (2,203 acres) footprint. Permanent on-site access roads would be eliminated from the project and interstitial space (dirt paths between rows of PV panels) would be utilized as transportation corridors as needed for maintenance; therefore, the intensity of land scarring within the project perimeter would be reduced. However, a graveled perimeter access road would be added to the Revised Project, which would slightly increase the long-term visibility of land scarring and vegetation clearance. This impact would remain less than significant with mitigation (Class II).

Impact AE-3: Project would introduce structure contrast, developed character, view blockage, and glare (Class I)

This impact would be reduced in intensity for distant viewers, as a result of the smaller size of the project overall. The total number of solar panels that would be installed under the Revised Project would be greatly reduced compared to the Approved Project. Overall, the mostly undeveloped and pastoral aesthetic character of the valley would still be altered to a significant degree despite the reduced project footprint.

Views from KVP 1 and KVP 2 (located immediately north and south of the project boundaries) would be nearly identical to those of the Approved Project. The alteration of views from KVP 3 (located south of the southwest corner of the project) and KVP 4 (located south of the southeastern end of the Revised Project) would be slightly reduced as compared with the Approved Project, but would remain significant (Class I). Visual photosimulations from these viewpoints were presented in the 2010 Final EIR, Figures E-5 through E-8. For KVP 5, this impact would remain less than significant (Class III).

Impact AE-4: Project would introduce panel glint and glare (Class III)

Many fewer panels would be installed under the Revised Project than under the Approved Project, and therefore this impact would be reduced in intensity. However, this impact would remain adverse, but less than significant (Class III).

C.2.3.4 Changes to Adopted Mitigation Measures

The applicant has not proposed any modifications to the mitigation measures adopted by the County in 2010. However, the applicant has proposed changes to two of the Applicant Proposed Measures (APMs) for aesthetics. These changes are shown below with underlining for proposed new text and strikeout for text proposed to be eliminated. Mitigation Measures and APMs not shown in this section have not changed and are presented for reference only in Appendix 3.

The proposed changes to APM AES-1 and APM AES-3 would not result in more severe or more extensive impacts. The changes to APM AES-1 serve only to clarify the applicability of the measure. As a result of the changes to APM AES-3, the total amount of project lighting would be reduced, and therefore the intensity of nighttime visual impacts would be reduced.

APM AES-1 "Dulled" metal finish structures, and facility buildings painted in earth tones, will be used to reduce visual impacts where feasible. The solar module cells will be blue or green toned and non-reflective. Certain electrical equipment, such as transformers and capacitors cannot be dulled. Equipment that cannot be dulled will have an ANSI gray manufacturer finish. The perimeter fence will also be galvanized steel.

APM AES-3 Operation Lighting: During operation of the project, motion-sensor lighting will be used at ~~each 2 MW block~~ the main entrance, substation and switching station. The lighting will consist of energy efficient lamps that will only be lit when human activity is detected. Motion sensors will have sensitivities set to avoid activating the lights when animal activity is occurring. This will be done to prevent startling animals and creating false alarms for security personnel. In addition to lighting, security cameras will be installed ~~near the lighting to view any activity that has caused the lighting to turn on~~ onsite. Constant lighting, at a low level, ~~will~~ may be required at the O&M building for security and safety. This will be a single lamp source near the entrance of the O&M building, which

will be activated by a timer. All lighting will have a power switch to conserve energy when the lighting is not required.

C.2.3.5 PG&E Upgrades Impacts

The temporary and permanent aesthetic impacts for the PG&E Upgrades are analyzed in this section. This analysis is based on the impact statements defined for the solar project, but only the impacts that apply to the PG&E Upgrades are discussed. The following impacts would not occur as a result of construction or operation of the PG&E Upgrades:

- Impact AE-2: Long-term visibility of land scars and vegetation clearance
- Impact AE-4: Project would introduce panel glint and glare

Impact AE-1: Visibility of construction activities, equipment, and night lighting (Class III)

The construction of the PG&E Upgrades, including installation of the optical ground wire (OPGW) and new microwave communication towers, would involve the use of helicopters, pulling and stringing equipment, and other heavy machinery. These construction activities would occur in locations along the 17-mile length of the transmission line and at the proposed microwave communication tower sites for approximately 12 to 16 weeks. PG&E would also construct up to 12 new tubular steel poles (TSPs) to tie the existing transmission line into the new PG&E switchyard located within the Revised Project boundaries. Construction at any one location would take from 2 to 3 weeks and would include the presence of typical construction equipment such as scrapers, graders, backhoes and construction vehicles. Helicopters may be used to transport workers to construction areas, deliver materials, and install OPGW on existing structures. PG&E anticipates impacts within BLM-administered land (which could be visible to recreational users) would include approximately one acre of temporary disturbance associated with pull/reel and splice sites, temporary guard structures, and the microwave tower installation at Panoche Mountain.

Construction on BLM land would be visible to hikers, campers, and other recreational users, including visitors to the Panoche and Tumey Hills. Construction activities occurring within the Panoche Valley and in the western portion of the Panoche Hills would be visible to valley residents and recreational visitors to the Panoche Hills Wilderness Study Area. Construction activities east and west of Interstate 5 would be highly visible to passing motorists. Construction activities would occur during daylight hours and would not involve the use of night lighting.

Due to the short construction period and the minor temporary disturbance areas associated with construction in areas visible to recreational users, and relatively remote location of the majority of the construction, this impact would be adverse, but less than significant (Class III).

Impact AE-3: Project would introduce structure contrast, developed character, view blockage, and glare (Class III)

The PG&E Upgrades would include the installation of new optical ground wire (OPGW) on existing transmission towers. The OPGW would replace the existing shield wire and this component of the project would not be noticeably different from the existing shield wire on the towers.

The upgrades would also include new microwave communications towers at the Panoche Valley Solar Project site and at the Helm Substation. A third tower may be constructed on Panoche Mountain. The existing tower at Call Mountain (owned by CAL FIRE) will be used to collocate equipment needed to provide telecommunications from the project site to PG&E's system. Since an existing tower will be used

there would be no increase in visual impacts in the area. The new towers in the Panoche Valley and at Helm Substation would be 100 feet tall, and may include lighting for aviation safety if required.

The new tower on Panoche Mountain would be adjacent to two existing communication towers. The two existing towers and the proposed new tower site are located approximately 4 miles from the nearest roadway. The proposed new tower likely would be only intermittently visible to passing motorists, and may be entirely invisible due to distance and intervening topography. The proposed new tower would be visible to hikers, campers, and other recreational users of BLM land in the Panoche and Tumey Hills. Although recreational use of these hills is relatively low, these recreational users would have clear views of the new tower. Due to the substantial distance from most viewers and the presence of two existing towers adjacent to the proposed tower site, this impact would be adverse, but less than significant (Class III).

The tower at the Helm Substation would be visible, but would not be much taller than any other nearby transmission structures. This tower would be seen by motorists on adjacent roads. No residences are located near the Helm Substation, and the proposed new tower would be seen only by passing motorists and agricultural workers. Due to the low number of viewers surrounding Helm Substation and the presence of existing infrastructure (such as 230 kV transmission towers), this impact would be adverse but less than significant (Class III).

The proposed microwave tower adjacent to the project substation would also be 100 feet tall, and would be located near the tubular steel poles that would interconnect the PG&E transmission line to the project substation. The tower may require night lighting for aviation safety. The proposed substation for the project would include electrical equipment that would be up to 35 feet tall, and there would be up to 12 new steel transmission poles to interconnect the solar project with the substation, each about 85 feet tall.

The 2010 Final EIR concluded that solar project structures, including the substation equipment, would result in significant (Class I) visual impacts for four of the five Key Viewpoints (KVPs) analyzed. The new microwave tower would be about the same height as other project components. In the context of those future interconnection structures, the visibility of the proposed microwave tower within the Panoche Valley would be less than significant (Class III). Avoidance and Minimization Measure (AMM) AES-1 (presented in Table B-12, Section B.11.3) would require that PG&E use “dulled” metal finish structures to reduce the visibility of the new tubular steel transmission structures and the microwave towers.

C.2.3.6 Cumulative Impacts

The projects that have been constructed or proposed in the area of potential cumulative effects have changed since 2010, as described in Section D. However, even considering the new project list, the Revised Project and the PG&E Upgrades would not combine with impacts of other projects to result in a cumulatively significant impact (Class III).

C.2.4 Summary of Impacts

The significance of impacts for aesthetics for the Revised Project and for the PG&E Upgrades is summarized in Sections C.2.4.1 and C.2.4.2. Section C.3.3 summarizes the impacts of all project components.

C.2.4.1 Revised Solar Project

There are no changes to the significance of impacts from the conclusions of the 2010 Final EIR. The impacts summarized in Table C.2-1 remain accurate.

While the Revised Project's construction period would be approximately 18 months, as opposed to the five year period originally defined, construction would still result in significant and unmitigable (Class I) impacts on aesthetics due to the visibility of construction equipment, materials, and activities. However, the visibility of residual land scars and vegetation clearance as a result of construction, though significant, could be mitigated to levels that would be less than significant (Class II) with the effective revegetation and restoration of the project site. The operation of the project and associated long-term visibility of developed features would result in significant and unmitigable (Class I) aesthetic impacts from four of the 5 key viewpoints, and adverse but less than significant impacts from the fifth viewpoint (Class III).

C.2.4.2 PG&E Upgrades

The PG&E Upgrades would result in a less than significant impact to the visibility of construction activities and equipment (Class III). The construction period would be short, and the work would not be highly visible. The presence of the new microwave towers at the Panoche Valley switchyard, Helm Substation, and Panoche Mountain would result in less than significant impacts (Class III) with implementation of AMM AES-1 and due to the presence of other similar structures immediately adjacent to the microwave towers.

C.2.4.3 Overall Significance of Impacts

The visual impacts of the Revised Project remain significant and unmitigable, even though the project is reduced in size. PG&E's installation of new OPGW and microwave towers would not create significant impacts from either construction or operation.