

E.8 Environmental Impacts of the No Project/No Action Alternative – Contents

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E.8 Environmental Impacts of the No Project/No Action Alternative

E.8.1 Description of the No Project/No Action Alternative

E.8.1.1 No Project/No Action Alternative Scenario

Construction and operation of Sunrise Powerlink would not occur under the No Project/No Action Alternative. The identification of a definite No Project Alternative development scenario is not possible, because specific consequences that would occur in the absence of the Sunrise Powerlink Project cannot be identified without undue speculation. However, absence of the Proposed Project may lead to other energy actions that are predictable. Therefore, the No Project/No Action Alternative is not a definite development scenario but offers a menu of predictable actions (not all of which would occur in the absence of Sunrise).

The potential projects that are reasonably considered to be components the No Project/No Action Alternative as described in Section C.6. These actions are summarized in Table E.8-1. Some of the components are also described in more detail in other sections of this EIR/EIS, as stated in the last column of the table. This section summarizes the environmental impacts that would occur with the full range of predictable actions under the No Project Alternative. However, as noted above, not all of these energy projects would be required to replace the Proposed Project.

Table E.8-1. Summary of the No Project/No Action Alternative

Projects	Sponsors	Status	Described in EIR/EIS
Demand-Side Actions – Section C.6.2.1			
Increased solar photovoltaic & distributed generation (DG) deployment	Various	Ongoing	As described in New In-Area Renewable Generation Alternative (Section C.4.10.1)
Supply-Side Actions, Generation – Section C.6.2.2			
New conventional generation	LS Power, ENPEX, NRG, SDG&E, others	Under CEC and CAISO review	As described in the New In-Area All-Source Generation Alternative(Section C.4.10.2): <ul style="list-style-type: none"> • One new combined cycle power plant • Four new peaker power plants
New renewable generation	None known	Conceptual	As described in the New In-Area Renewable Generation Alternative(Section C.4.10.1): <ul style="list-style-type: none"> • Wind generation in the Crestwood area • Solar thermal generation in the Borrego Springs area • Biomass/biogas projects in San Diego and Fallbrook
Supply-Side Actions, transmission – Section C.6.2.3			
LEAPS Project Transmission	Nevada Hydro Company and Elsinore Valley Municipal Water District	Under CPUC, CAISO and FERC review	LEAPS Project Transmission-Only Alternative (Section C.4.9.2)
Path 44 Upgrades	None known	Conceptual	Path 44 Upgrade Alternative (Section C.6.2.3)
Mexico Light	None known	Conceptual	Mexico Light 230 kV Alternative (Section C.6.2.3)

E.8.1.2 Path 44 Upgrades and Mexico Light

Mexico Light. This component of the No Project/No Action Alternative would include approximately 4,000 feet of new 230 kV transmission line to connect Mexican generators (either the Sempra-owned Termoeléctrica de Mexicali (TDM) and/or the Intergen-owned La Rosita Power Complex) to the CFE grid. Reconnector 2.3-miles of the two existing 230 kV lines connecting La Rosita generators to CFE's La Rosita 230 kV Substation to increase the thermal capacity. Close the circuit breaker to connect the short 230 kV line to the CFE system in the event of an outage on the SWPL with a special protection system cross-tripping the Imperial Valley–La Rosita 230 kV line. Thus, the TDM and/or Intergen exporting generation would become connected to the CFE system and deliver power to SDG&E via CFE transmission network through the existing La Rosita-Tijuana 230 kV lines to the Miguel Substation.

The vicinity of the Mexico Light project, on the western outskirts of the city of Mexicali, is primarily open space, desert environment. There are two existing power plants, a number of existing substations, and existing transmission lines going both north and south, and east and west. In addition, Highway Mexico 2 runs adjacent to the existing power plants and there are several smaller access roads.

Path 44 Upgrades. This component No Project/No Action Alternative would involve upgrading existing transmission corridors in SCE territory to increase the import rating of a set of transmission lines called Path 44 (also known as the South of SONGS path) into SDG&E territory by approximately 300 MW. CAISO and SDG&E found that in order to increase the South of SONGS path rating, upgrades to SCE's Barre-Elis 230 kV line would be needed (see Section 4.9.4 of Appendix 1, Alternatives Screening Report). Specific upgrades needed within SCE territory have not been identified.

E.8.1.3 Summary of Environmental Impacts and Mitigation Measures

Under the No Project/No Action Alternative, construction and operation of SRPL would not occur. The baseline environmental conditions for the No Project/No Action Alternative are the same as for the Proposed Project. The baseline conditions would continue to occur into the future, undisturbed, in the absence of project-related construction activities.

The impacts of the No Project/No Action Alternative and mitigation measures are identified in tables at the end of Section E.8. The analysis of this alternative summarizes the impact analyses presented in other sections of this EIR/EIS because most components of the No Project/No Action Alternative are considered elsewhere in the EIR/EIS, including:

- Increased Solar Photovoltaic & DG Deployment (New In-Area Renewable Generation Alternative)
- New Conventional Generation (New In-Area All-Source Generation Alternative)
- New Renewable Generation (wind, solar thermal, and biomass/biogas)
- LEAPS transmission (a System Alternative).

However, there are two components of the No Project/No Action scenario that are not analyzed elsewhere in this EIR/EIS. These two components include the Path 44 Upgrades and Mexico Light transmission upgrades as described in Section C.6.2.3; impacts for these components are described in Sections E.8.2 through E.8.15.

E.8.2 Biological Resources

Mexico Light. Pre-construction surveys would be needed to delineate baseline biological resources within the area of impact for Mexico Light. The relatively short transmission system upgrades would take place along existing transmission corridors. The area is very sparsely vegetated creosote scrub habitat and there are two large combined cycle power plants in the immediate area as well as transmission corridors following both an east-west and a north-south trend. There are several dirt roads in the area, and Mexico Highway 2 is immediately adjacent. The presence of special status species is unknown although the Government of Baja California website has a general lists of endemic and threatened species in the Baja California region (See Section D.2.19.5, Environmental Setting Mexico). There are no trees or riparian corridors in the project area.

Construction activities for new towers could result in temporary and permanent losses of native vegetation (Impact B-1, Class I), and implementation of Mitigation Measures B-1d, B-1e, B-1f, B-1g, B-1h, B-1i, and B-1j would be required to, at least in part, compensate for impacts to sensitive vegetation. Similarly, construction activities could result in direct or indirect loss of listed or sensitive wildlife or a direct loss of habitat for listed or sensitive wildlife (Impact B-7, Class I), and implementation of Mitigation Measures B-1e, B-1f, B-1i, B-2b, B-6a, B-6b, B-6c, and B-6d would be necessary to reduce this significant and unavoidable impact. As with other alternatives to the project, construction could result in a potential loss of nesting birds, a violation of the Migratory Bird Treaty Act (Impact B-8, Class II), and this would require Mitigation Measure B-8a to reduce the impact to a less than significant level. Given the minimal presence of undisturbed habitat and the existing land uses, other potential impacts to biological resources are not likely to occur.

Path 44 Upgrades. Pre-construction surveys would be needed to delineate baseline biological resources within the area of impact for the Path 44 Upgrades. The [13-mile](#) Barre-Ellis transmission upgrade would require installation of new conductors and possibly some replacement towers within existing transmission line ROWs and existing substations in Orange County. The Barre-Ellis area is highly developed, and corridors have residential and commercial development immediately adjacent. Potential impacts to biological resources would occur from reconductoring activities, where pull sites or new tower pads would require removal of vegetation. The Talega Substation loop would require construction of a short section of new transmission line adjacent to an existing major transmission corridor.

Because this transmission upgrade would occur within existing transmission corridors, new impacts from the presence of a transmission line would be limited. For the Barre-Ellis upgrade, impacts are considered mitigable to less than significant levels due to the presence of the existing lines. For the Talega Substation loop, there would be areas of temporary vegetation loss of about 500 square feet at each of approximately 8 new towers in relatively undisturbed habitat. Pre-construction surveys are recommended, and if sensitive habitat is identified, significant and unavoidable impacts could occur as follows:

- Impact B-1 (Construction activities would result in temporary and permanent losses of native vegetation) would require implementation of Mitigation Measures B-1a, B-1c, B-1d, and B-1f through B-1j to reduce impacts to sensitive vegetation communities (Class I).
- Impact B-5 (Construction activities would result in direct or indirect loss of listed or sensitive plants or a direct loss of habitat for listed or sensitive plants) would require implementation of Mitigation Measures B-1a, B-1c, B-1d, B-1f through B-1i, B-2a, B-2c, and B-5a through B-5d to compensate for impacts to special status plant species (Class I).
- Impact B-7 (Construction activities would result in direct or indirect loss of listed or sensitive wildlife or a direct loss of habitat for listed or sensitive wildlife) would require implementation of Mitigation Measures B-1a, B-1c, B-1f, B-1i, B-2a, B-2b, B-6a through B-6d, and B-7a to reduce impacts to wildlife (Class I).

E.8.3 Visual Resources

Mexico Light

The Mexico Light project would occur in an area with substantial energy infrastructure. There are two large power plants, each with a transmission switchyard, and numerous transmission lines to carry the power to the U.S. and to other areas of Mexico. The overall scenic quality of the Mexico Light area is compromised by the noticeable presence of the steel-lattice transmission lines with industrial character. It is also compromised by the noticeable presence of two large power plants with industrial character and the linear form of Highway Mexico 2. As a result, the addition of approximately 5 new transmission towers and reconductoring of existing towers would result in a minimally visible change. The construction or long-term presence of the Mexico Light project would cause no substantial effect on any existing vista, nor would it substantially degrade the existing visual character or quality of the site and surrounding landscape. Therefore, impacts would be less than significant (Class III) and no mitigation is required.

Path 44 Upgrades

Impact V-NP2: Short-term Visibility of construction activities, equipment, and night lighting (Class III)

The Path 44 Upgrades would require reconductoring of existing transmission lines. Construction impacts to visual resources would be minor and adversely affect any scenic vista. In addition, reconductoring would not require staging areas or facilities with night lighting and would therefore not create a new source of substantial light or glare. Therefore, in accordance with the significance criteria detailed in Section D.3.4, this impact would be less than significant (Class III), and no mitigation is required.

Impact V-NP3: Increased structure contrast and industrial character of reconducted transmission lines (Class III)

Operational impacts would be minimally noticeable because the new components (insulators and conductors) would appear similar (insulators) or identical (conductors) when compared to the components that would be replaced. Additional towers and modifications to existing towers within the Barre-Ellis corridor would appear similar to the existing towers. To the extent that any change is noticed as a result of the reconductoring and replacement of insulators and “interest-towers,” the impact would be adverse but less than significant (Class III) according to the significance criteria as detailed in Section D.3.4. No mitigation is recommended or required.

E.8.4 Land Use

Mexico Light

Land uses in the immediate vicinity of the transmission upgrades are primarily industrial: power plants, substations, and transmission corridors. There is open space between these facilities, and agricultural areas with scattered residences and a large cemetery approximately 1,000 feet to the east. Because of the distance between the construction of the project and any sensitive receptors (specifically residences) and because construction would occur along existing transmission line ROW, Impact L-1 (Construction could temporarily disturb the land uses at or near the alignment) would not occur. Mexico Light would not create a physical division to an established community. It would not establish a physical barrier or

obstacle between uses such that a physical division would occur. Because new structures would occur adjacent to existing structures, movement between and around these facilities would be possible and would not block or impede travel or connections within the community. Therefore Impact L-2 (Presence of a transmission line or substation would divide an established community or disrupt land uses at or near the alignment) would not occur, and no mitigation is required.

Path 44 Upgrades

Impact L-1: Construction would temporarily disturb the land uses at or near the alignment (Class II)

Construction of the Barre-Ellis reconductoring portion of the Path 44 Upgrades would temporarily disturb the surrounding areas as a result of reconductoring activities. The corridors adjacent to the recondored lines include residential and commercial land uses, and construction in the ROW would cause a noticeable disruption. While this disturbance would be short-term and temporary at any one location, it could be significant if construction is not carefully managed and residents are not notified of construction activities. The Talega Substation loop would occur on Marine Corps Base Camp Pendleton (MCB Camp Pendleton) in an area already intensely developed with electricity infrastructure, a major transmission corridor (taking power from the San Onofre Generating Station), and a major substation (Talega).

Incorporation of Mitigation Measures L-1d, L-1e, and L-1f would help minimize land use impacts relating to construction activities along the reconductoring corridor by ensuring that (1) limits of construction determined prior to the start of construction activities would be adhered to, (2) owners and tenants of properties within 300 feet of proposed construction activities would be notified, (3) avenues for the public to gain more information on the construction schedule and scope and to register complaints about construction activities would be provided, and (4) owners and tenants of properties potentially obstructed by construction activities would be notified and access facilitated by providing alternative access where feasible. Mitigation Measure L-1a would be required to ensure that impacts would not be significant. With incorporation of these measures, construction-related land use impacts to residential uses along the Path 44 Upgrades would be less than significant (Class II).

Mitigation Measures for Impact L-1: Construction would temporarily disturb the land uses at or near the alignment

- L-1a Prepare Construction Notification Plan.**
- L-1d Provide advance notice and appoint public affairs officer.**
- L-1e Notify property owners and provide access.**
- L-1f Flag ROW boundary and environmentally sensitive areas.**

Impact L-2: Presence of a transmission line or substation would divide an established community or disrupt land uses at or near the alignment (No Impact)

The Barre-Ellis reconductoring work would occur within existing transmission corridors. The Talega Substation loop would expand an existing transmission corridor to affect only a small area of adjacent open space. Therefore, the upgrades would not create a physical division to an established community. It would not establish a physical barrier or obstacle between uses such that a physical division would occur. Because new structures would occur adjacent to existing structures, movement between and around these facilities would be possible and would not block or impede travel or connections within the community. As such, no land use impacts relating to the division of an established community would occur for the Path 44 Upgrades (No Impact), and no mitigation would be required.

E.8.5 Wilderness and Recreation

Mexico Light

The transmission line upgrades would occur adjacent to existing power plants, transmission corridors and substations. While the general Municipality of Mexicali has many recreation areas and some wilderness areas, there are no Mexican Federal wilderness areas, wilderness study areas, and nor official recreation in the vicinity of the Mexico Light project (GobBC, 2007). As such Impact WR-1 (Construction activities would temporarily reduce access and visitation to recreation areas) would not occur. Because the Mexico Light project would occur adjacent to existing power plants, transmission corridors and substations and not in the vicinity of recreation or wilderness areas Impact WR-2 (Presence of a transmission line or substation would change the character of a recreation area, diminishing its recreational value) and WR-3 (Presence of a transmission line would permanently preclude recreational activities) and WR-4 (Presence of a transmission line in a designated wilderness or wilderness study area would result in loss of wilderness land) would not occur.

Path 44 Upgrades

The Path 44 Upgrades would occur within existing transmission corridors and substations and not in the vicinity of wilderness areas. With the existing transmission lines in place, Impacts WR-2 (Presence of a transmission line or substation would change the character of a recreation area, diminishing its recreational value), WR-3 (Presence of a transmission line would permanently preclude recreational activities), and WR-4 (Presence of a transmission line in a designated wilderness or wilderness study area would result in loss of wilderness land) would not occur.

Impact WR-1: Construction activities would temporarily reduce access and visitation to recreation areas (Class II)

The Talega Substation loop would occur about 1,000 feet east of the Pacific Golf and Country Club, but on MCB Camp Pendleton where access is restricted; therefore no recreation impacts would occur. The Barre-Ellis reconductoring would occur within highly developed residential and commercial areas in the Cities of Fountain Valley, Huntington Beach, and Westminster, with scattered small parks adjacent to the established transmission corridor. Construction noise would adversely affect the urban parks as isolated new towers would be built and new conductor strung on existing towers.

For Barre-Ellis reconductoring, construction would create a number of temporary impacts that would diminish the recreation value of adjacent parks. Noise, dust and traffic generated during construction activities would negatively affect a visitor's enjoyment of these recreation areas. Recreationists may be less likely to visit these resources during project construction. Construction-related impacts to recreation at the open space preserves would be mitigated to a less than significant level through implementation of Mitigation Measures WR-1a (Coordinate construction schedule and activities with the authorized officer for the recreation area), WR-1b (Provide temporary detours for trail users) and WR-1c (Coordinate with local agencies to identify alternative recreation areas).

Mitigation Measure for Impact WR-1: Construction activities would temporarily reduce access and visitation to recreation areas

- WR-1a** **Coordinate construction schedule and activities with the authorized officer for the recreation area.**
- WR-1b** **Provide temporary detours for trail users.**
- WR-1c** **Coordinate with local agencies to identify alternative recreation areas.**

E.8.6 Agriculture

Mexico Light

The Mexico Light transmission upgrades would be on undeveloped desert land, with two existing power plants, substations, and transmission lines adjacent to the upgrades. Agricultural land is located approximately 0.5 miles east of the potential transmission corridor and completely surrounds one of the existing power plants. There are no State of California DOC lands or Williamson Act Lands in the vicinity of the Mexico Light upgrades, and therefore there would be no impacts to such lands. New and re-conducted transmission lines would be placed on already existing transmission corridors, and there would be no impacts once construction was complete. Given the proximity between the existing power plants and active agriculture lands, Impact AG-1 (Construction activities would temporarily interfere with Active Agricultural Operations) would require implementation of Mitigation Measures AG-1a through AG-1d, L-1d, L-1e, and L-1f to reduce impacts to a less than significant level (Class II).

Path 44 Upgrades

The Barre-Ellis reconductoring activities would occur within existing transmission corridor, surrounded by residential and commercial development. No agricultural lands, DOC lands, nor Williamson Act Lands would be affected. Similarly, the Talega Substation loop would occur over undeveloped land within Marine Corps Base Camp Pendleton where no agricultural development exists. Therefore, there would be no impact to agriculture from the Path 44 Upgrades, and no mitigation is required.

E.8.7 Cultural and Paleontological Resources

Mexico Light

Pre-construction surveys would need to be conducted to determine the potential presence of cultural or paleontological resources in the areas where the Mexico Light transmission line would occur. Cultural resources studies for the Mexico Light project would need to be coordinated with the Mexicali office of the *Instituto Nacional de Historia y Antropología* (INAH) to ensure compliance with Mexican law. As the construction of the new transmission line and re-conducted transmission line would occur in existing transmission corridors, adjacent to two existing power plants and substations, significant impacts to cultural resources are unlikely, however a pre-construction survey is recommended. Construction of the Mexico Light component could cause an adverse change to unknown significant buried prehistoric and historical archaeological sites or buried Native American human remains (Impact C-3). While impacts to most unknown significant prehistoric and historic archaeological sites could be mitigated to a level that is less than significant by implementing Mitigation Measures C-1c, C-1d, C-1f, C-2a and C-3a, effects related to Native American human remains would be significant (Class I) even with mitigation.

Path 44 Upgrades

Pre-construction surveys would need to be conducted to identify resources in the Barre-Ellis corridor or the Talega Substation connection area. However, even with information on known resources in the corridor, impacts also could occur based on the potential for discovering unknown resources.

Impact C-1: Construction of the project would cause an adverse change to known historic properties (Class I or II)

The Path 44 Upgrades could impact historic properties directly during construction activities such as excavating and grading. When archaeological resources, both historic and prehistoric, are found eligible for the NRHP and CRHR it is usually because of their potential for containing data that contribute to important research issues. Mitigation through data-recovery excavations can salvage a portion of those important data, and apply them to relevant research. However, as data recovery mitigation is, in itself, destructive, avoidance is preferred wherever possible. Nonetheless, if destruction of significant archaeological resources is unavoidable, data recovery is considered adequate mitigation, under NEPA and CEQA, to reduce impacts to a less than significant level (Class II).

The potential for the Path 44 Upgrades to cause an adverse change to known historic properties would be mitigable to less than significant levels (Class II), except as noted below for human remains (Class I), by implementing Mitigation Measures C-1a, C-1b, C-1c, C-1d, C-1e, and C-1f (Train construction personnel).

Mitigation Measures for Impact C-1: Construction of the project would cause an adverse change to known historic properties

- C-1a** **Inventory and evaluate cultural resources in Final APE.**
- C-1b** **Avoid and protect potentially significant resources.**
- C-1c** **Develop and implement Historic Properties Treatment Plan.**
- C-1d** **Conduct data recovery to reduce adverse effects.**
- C-1e** **Monitor construction at known ESAs.**
- C-1f** **Train construction personnel.**

Impact C-2: Construction of the project would cause an adverse change to sites known to contain human remains (Class I)

While no specific sites with human remains are expected in the area of the Path 44 Upgrades, sites with human remains could exist. Impacts to Native American human remains are considered an adverse effect, even after mitigation (36 CFR 800) (Class I). Adverse effects would be reduced by implementing, Mitigation Measure C-2a (Properly treat human remains), as well as the measures required for Impact C-1.

Mitigation Measures for Impact C-2: Construction of the project would cause an adverse change to sites known to contain human remains

- C-2a** **Properly treat human remains.**

Impact C-3: Construction of the project would cause an adverse change to unknown significant buried prehistoric and historical archaeological sites or buried Native American human remains (Class I)

Types of subsurface features that could be encountered along the Path 44 Upgrades include prehistoric resources such as buried living surfaces, trash deposits, hearths, agave roasting pits, burials and cremations. Historical resources that could be unearthed during project construction include refuse pits and privies. Buried archaeological resources may be encountered during vegetation removal at tower and pull site locations, grading of access roads, or excavation associated with tower construction. Impacts to most unknown significant prehistoric and historic archaeological sites would be mitigated to

a level that is less than significant (Class II) by implementing the following Mitigation Measures: C-1c, C-1d, C-1f, C-2a, and C-3a. However, as explained for Impact C-2, effects related to Native American human remains would be significant (Class I) even with mitigation.

Mitigation Measures for Impact C-3: Construction of the project would cause an adverse change to unknown significant buried prehistoric and historical archaeological sites or buried Native American human remains

- C-1c Develop and implement Historic Properties Treatment Plan.**
- C-1d Conduct data recovery to reduce adverse effects.**
- C-1f Train construction personnel.**
- C-2a Properly treat human remains.**
- C-3a Monitor construction in areas of high sensitivity for buried resources.**

E.8.8 Noise

Mexico Light

The addition of transmission upgrades in this remote area has the potential to increase corona noise, but there are no sensitive receptors within 1,000 feet of the transmission corridors. Impacts to wildlife are addressed in Section E.8.2. Therefore, there would be no construction or operational noise impacts.

Path 44 Upgrades

Reconductoring of existing transmission lines would result in construction noise impacts similar to those of constructing a new transmission line but over a shorter duration. Nearby sensitive receptors include numerous residences, commercial facilities, and parks bordering the right-of-way. Construction of the new towers and installation of conductors would adversely affect nearby residences by causing a substantial noise increase (Impact N-1). This would be a significant impact. By establishing best management practices, Mitigation Measure N-1a, in combination with the notification required by Mitigation Measure L-1a, would reduce the impact of construction noise to the extent feasible, but the substantial noise increase at adjacent residences would be significant (Class I). A significant groundborne vibration impact (Impact N-2) would not occur due to sufficient distance.

Noise from operating the upgraded transmission line (Impact N-3) and noise from maintenance activities (Impact N-4) would not change notably from existing conditions or adversely affect any Noise-Sensitive receptors, and therefore these impacts would be less than significant (Class III).

E.8.9 Transportation and Traffic

Mexico Light

Construction of new towers and reconductoring existing towers for Mexico Light would require use of existing highways and local roads to move construction materials and workers to each tower site. There are a number of access roads connecting the existing power plants and substations. Reconductoring of an existing line would cause less than significant impacts (Class III) because no road closures would be required (Impact T-1), emergency service providers would not be disrupted (Impact T-2), bus transit would not be disrupted (Impact T-3), pedestrian movement would not be impaired (Impact T-4), park-

ing spaces would not be eliminated (Impact T-7), and access to properties would not be restricted (Impact T-10). There is no rail service in the vicinity of Mexico Light so no impacts to rail service (Impact T-6) are not expected. Because construction vehicles and equipment could cause physical damage to roads in the project area (Impact T-5), implementation of Mitigation Measure T-5a (repair damaged roads) would be required to reduce this impact to less than significant level (Class II).

Path 44 Upgrades

The Barre-Ellis reconductoring and installation of new towers would occur in densely populated areas of Orange County, from the vicinity of Ellis Avenue near the 405 Freeway at the south and the intersection of Beach Boulevard and Chapman Avenue at the north. Construction would occur within the existing ROW, not on or in roadways, but construction vehicles would enter and exit the ROW from public roads. Construction of the Talega Substation loop would be south of East Avenida Pico and northwest of Talega road, in the City of San Clemente. Construction of the Talega Substation loop would not directly affect public roads due to the location of the transmission loop in undeveloped land on MCP Camp Pendleton.

For both areas of this upgrade project, Impacts T-2 through T-4 and T-6 through T-9 would not be significant. Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Impact T-1), but with implementation of Mitigation Measure T-1a (restrict lane closures) impacts would be reduced to less than significant levels (Class II). There would be no permanent lane closures or disruption of emergency services, and bus or pedestrian access would not be substantially affected. No rail traffic would be disrupted. Despite the low level of construction activity, it is possible that Impact T-5 could occur. Because construction vehicles and equipment could cause physical damage to roads in the project area (Impact T-5), implementation of Mitigation Measure T-5a (repair damaged roads) would be required to reduce this impact to less than significant level (Class II).

E.8.10 Public Health and Safety

Mexico Light

Pre-construction surveys would need to be conducted to determine the presence of hazardous materials in soil or groundwater in the immediate vicinity of the Mexico Light upgrades. There is significant information about hazardous materials along the U.S./Mexico border, including the Mexicali region. Mexican domestic industries and businesses in Mexicali, from car repair shops to large chemical plants produce a significant amount of pollution. Only a portion of the waste is properly treated, much is discarded into sewer systems, solid waste dumps, or simply dumped in canyons or other open space (Ganster, 1996). Near the Mexicali region there is also concern about agricultural pollution and wastes (Ganster, 1996). If hazardous materials are identified during pre-construction surveys, mitigation would be required to reduce impact to less than significant levels. The anticipated impacts and mitigation measures are the following:

- Impact P-2 (Residual pesticides and/or herbicides could be encountered during grading or excavation on currently or historically farmed land in agricultural areas) would require implementation of Mitigation Measures P-2a, P-2b, P-2c, and P-2d to reduce the impact to a less than significant level (Class II).

- Impact P-3 (Previously unknown soil and/or groundwater contamination could be encountered during excavation or grading) would require implementation of Mitigation Measures P-2b, P-2c, P-2d, P-3a, and P-3b to reduce the impact to a less than significant level (Class II).

Path 44 Upgrades

Pre-construction surveys of hazardous material databases would need to be conducted for the transmission corridor of the Barre-Ellis reconductoring and for the area west of the Talega Substation where the transmission line loop would occur. Reconductoring the existing transmission line and installing the new towers into the Talega Substation would require access road improvements, installation of some new towers, and replacement of the conductors. No impacts would occur from residual herbicide or pesticide contamination (Impact P-2) as there is no agriculture within the Path 44 Upgrades vicinity. If hazardous materials are identified during pre-construction surveys, mitigation would be required to reduce impact to less than significant levels.

Impact P-1: Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities ~~Improper handling and/or storage of hazardous materials during construction could cause soil or groundwater contamination~~ (Class II)

Hazardous materials such as vehicle fuels and oils and paints would be used and stored during construction of the Path 44 Upgrades, which results in a potential for environmental contamination due to improper handling and/or storage of these materials, a significant impact. Soil or groundwater contamination resulting from spills or leaks of hazardous materials during project construction would be a significant impact. Mitigation measures similar to Applicant Proposed Measures identified for the Proposed Project would be recommended for the Path 44 Upgrades to reduce the significant environmental impacts of hazardous material spills to less than significant (Class II).

Mitigation Measure for Impact P-1: Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities ~~Improper handling and/or storage of hazardous materials during construction could cause soil or groundwater contamination~~

- P-1a** Implement Environmental Monitoring Program.
- P-1b** Maintain emergency spill supplies and equipment.
- P-1c** Personnel trained in proper use and safety procedures for the chemicals used. [HS-APM-1]
- P-1d** Personnel trained in refueling of vehicles. [HS-APM-2]
- P-1e** Preparation of environmental safety plans including spill prevention and response plan. [HS-APM-3]
- P-1f** Applicant's and/or General Contractor environmental/health and safety personnel. [HS-APM-8]
- P-1g** Proper storage and disposal of generated waste. [HS-APM-10]

Impact P-3: Unanticipated preexisting soil and or groundwater contamination could be encountered during excavation or grading (Class II)

Ground disturbance for grading of access roads (west of Talega Substation) and excavations for new or replaced towers near Talega Substation or along the Barre-Ellis corridor could encounter unknown soil

contamination during construction due to unreported spills or illegal dumping. The Talega Substation loop would be located within the boundaries of the MCB Camp Pendleton and historically areas of Camp Pendleton have been used for bombing and munitions testing. There is a potential for lead waste and lead contaminated soil to occur at gun and artillery ranges and bombing and munitions testing areas due to the breakdown of lead ordnance and ammunition in the soil. Mitigation measures would need to be implemented in order to reduce the significance of this impact by stopping work if suspected contamination is identified by visual staining or odor, cordoning off suspected areas of contamination and taking appropriate health and safety measures, sampling and testing of suspected material conducted, and if contamination is found to be greater than regulatory limits the appropriate agency shall be notified. These measures would reduce the impact from encountering unknown contamination to less than significant (Class II).

Mitigation Measure for Impact P-3: Unanticipated preexisting soil and or groundwater contamination could be encountered during excavation or grading

- P-2b Stop work if contamination is detected.**
- P-2c Cordon off contaminated areas.**
- P-2d Notification of regulatory agencies.**
- P-3a Appoint individuals with correct training for sampling, data review, and regulatory coordination.**
- P-3b Documentation of compliance with measures for encountering unknown contamination.**

Impacts P-4: Areas used by the military may contain unexploded ordnance (UXO) and could explode and injure workers or the public during construction (Class II)

The Talega Substation loop would be located within the boundaries of the MCB Camp Pendleton. Historically areas of Camp Pendleton have been used for bombing and munitions testing, resulting in a potential of encountering UXO during excavations for the new towers. Because this could result in death or injury to workers, a significant impact would occur. Implementation of Mitigation Measures P-4a and P-4b would reduce the impacts to be less than significant (Class II).

Mitigation Measure for Impact P-4: Areas used by the military may contain unexploded ordnance (UXO) and could explode and injure workers or the public during construction

- P-4a Unexploded ordnance to be removed by trained personnel. [HS-APM-6]**
- P-4b Train project personnel to recognize unexploded ordnance. [HS-APM-7]**

Impact P-7: Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites (Class II)

Sites with known contamination are expected in the vicinity of the Barre-Ellis corridor, which is highly urbanized. The presence of a contaminated site adjacent to the alignment results in a significant potential for contaminated soil and/or groundwater to have migrated to the ROW and thus be encountered during excavation for “inter-set” towers, a significant impact. Mitigation measures identified below would be required for contaminated sites near the project ROW, and these would reduce environmental impacts to less than significant (Class II).

Mitigation Measures for Impact P-7: Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites

- P-1g** Proper storage and disposal of generated waste. [HS-APM-10]
- P-7a** Evaluate contaminated sites.
- P-7b** Investigate contaminated sites. [HS-APM-5]

E.8.11 Air Quality

Mexico Light

Most urban areas along the U.S./Mexico border do not meet the U.S. EPA air quality standards for ozone, carbon monoxide, and particulate matter. The contaminants in this border region come from a variety of sources such as open air burning (trash, residential heating, and brick ovens) dirt roads, energy plants, industrial sites, and transportation activities (U.S.EPA, 2003). In addition, the Mexico Light region is adjacent to two existing power plants. New tower construction and reconductoring in Mexico would create air emissions similar to those of the Proposed Project. The air quality impacts associated with the construction, operation, and maintenance of the Mexico Light upgrades would be significant if not mitigated. Similar to construction-phase impacts of the Proposed Project, Mitigation Measures AQ-1a and AQ-1b would reduce the impact, but the construction-phase emissions (Impact AQ-1) would be significant and unavoidable (Class I). No notable source of emissions would be associated with operation of the modified line (Impact AQ-2, Class III).

Air quality impacts related to power generated during operation of Mexico Light (Impact AQ-3) would be adverse because Mexico Light would allow increased operation of Mexican power plants that would otherwise shut down during an outage of the SWPL. This impact would be less than significant because the power plant operations would be within previously permitted limits (Class III). An overall net increase of GHG emissions (Impact AQ-4) would occur due to construction activities and the increased operation of conventional power plants, a significant impact. Mitigation measures identified for overall air quality impacts of the Proposed Project [Mitigation Measures AQ-1h (obtain NO_x and particulate matter offsets), AQ-4a (offset construction-phase greenhouse gas emissions), AQ-4b (offset operation-phase greenhouse gas emissions), and AQ-4c (avoid sulfur hexafluoride emissions)] would be required for the Mexico Light project, but as with the Proposed Project, the GHG impact would remain significant and unavoidable (Class I).

Path 44 Upgrades

The reconductoring of existing facilities and construction of a few new towers near Talega Substation would use equipment and construction methods similar to those of the proposed new transmission line components of the Proposed Project. The air quality impacts associated with the construction, operation, and maintenance of the reconductor would be similar to those of the Proposed Project. Mitigation Measures AQ-1a and AQ-1b would reduce these impacts, but the construction-phase emissions (Impact AQ-1) would be significant and unavoidable (Class I). No notable source of emissions would be associated with operation of the Path 44 Upgrades (Impact AQ-2, Class III).

Air quality impacts related to power generated during operation of the Path 44 Upgrades (Impact AQ-3) would be adverse but less than significant since the power plant operations would be within previously permitted limits (Class III). An overall net increase of GHG emissions (Impact AQ-4) would occur due to construction activities, a significant impact. Studies have not been conducted to determine if increased

operations of conventional power plants would occur with the Path 44 Upgrades. Mitigation measures identified for overall air quality impacts of the Proposed Project [Mitigation Measures AQ-1h (obtain NOx and particulate matter offsets), AQ-4a (offset construction-phase greenhouse gas emissions), AQ-4b (offset operation-phase greenhouse gas emissions), and AQ-4c (avoid sulfur hexafluoride emissions)] would be required for the Path 44 Upgrades, but as with the Proposed Project, the GHG impact would remain significant and unavoidable (Class I).

E.8.12 Water Resources

Mexico Light

The environmental setting of the Mexico Light project would be similar to that surrounding the Imperial-Mexicali 230 kV transmission line, described in the Environmental Consequences (Volume 1, Section 4.2) of the Imperial-Mexicali 230 kV transmission line FEIS (Imperial-Mexicali, 2004). Impact H-3 and Impact H-4 are unlikely to occur because of the expected depth to groundwater in this desert region. The impervious areas created by the Mexico Light project would be minimal and therefore Impact H-5 is unlikely to occur. Impact H-7 and Impact H-8 are unlikely to occur because there would be no facility that could lead to an accidental release, and no underground lines would be built. Based on the information in that analysis and map surveys of the area, the following impacts would occur:

Impact H-1: Construction activity could degrade water quality due to erosion and sedimentation (Class II)

Construction of towers, pull stations, and access roads would require excavation and grading that could result in soil erosion and lowered water quality through increased turbidity and sediment deposition into surface water. This impact would be significant but could be reduced to less than significant (Class II) with adoption of mitigation measures.

Mitigation Measures for Impact H-1: Construction activity could degrade water quality due to erosion and sedimentation

- H-1a** Prepare substation grading and drainage plan; construct during the dry season.
- H-1c** Minimize construction and maintenance disturbance to riparian areas. [WQ-APM-1]
- H-1d** Avoid watercourses to the maximum extent possible. [WQ-APM-2]
- H-1e** Identify and mark sensitive areas for avoidance. [WQ-APM-3]
- H-1f** Develop and implement construction Best Management Practices. [WQ-APM-4]
- H-1g** Stream crossings at low flow periods. [WQ-APM-5]
- H-1h** Compliance with NPDES regulations. [WQ-APM-14]
- H-1i** Construction routes to avoid and minimize disturbance to stream channels. [WQ-APM-15]

Impact H-2: Construction activity could degrade water quality through spills of potentially harmful materials (Class II)

Accidental spills or disposal of potentially harmful materials used during construction could wash into and pollute surface waters or groundwater. Materials that could potentially contaminate the construction area or spill or leak include lead-based paint flakes, diesel fuel, gasoline, lubrication oil, hydraulic fluid, antifreeze, transmission fluid, lubricating grease, and other fluids. Degradation of water quality through the spill of potentially harmful materials would be a significant impact. Mitigation would be required, as identified to reduce this impact to less than significant (Class II).

Mitigation Measures for Impact H-2: Construction activity could degrade water quality through spills of potentially harmful materials

- H-1c** Minimize construction and maintenance disturbance to riparian areas.
- H-1d** Avoid watercourses to the maximum extent possible.
- H-1e** Identify and mark sensitive areas for avoidance.
- H-1f** Develop and implement construction Best Management Practices.
- H-1g** Stream crossings at low flow periods.
- H-1h** Compliance with NPDES regulations.
- H-1i** Construction routes to avoid and minimize disturbance to stream channels.
- H-2a** Groundwater testing and treatment before disposal. [WQ-APM-8]
- H-2b** No storage of fuels and hazardous materials near sensitive water resources. [WQ-APM-9]
- H-2c** Proper disposal and clean-up of hazardous materials. [WQ-APM-13]
- H-2d** **Maintain vehicles and equipment.**
- P-1a** Implement Environmental Monitoring Plan.
- P-1b** Maintain emergency spill supplies and equipment.

Path 44 Upgrades

The impacts of construction within the existing Barre-Ellis corridor and adjacent to the Talega Substation would be similar to those of the Proposed Project but at a smaller scale. Impacts H-1, H-2, and H-3 would be likely to occur. Impact H-4 is unlikely to occur because of depth to groundwater in this region. The impervious areas created by the Path 44 Upgrades would be minimal and therefore Impact H-5 is unlikely to occur. Impact H-7 and Impact H-8 are unlikely to occur because there would be no facility related with the Path 44 Upgrades that would accidentally release contaminants, and because there would be no underground portions of the lines.

Impact H-1: Construction activity could degrade water quality due to erosion and sedimentation (Class II)

Construction of towers, pull stations, and access roads would require excavation and grading that could result in soil erosion and lowered water quality through increased turbidity and sediment deposition into local streams. This impact would be significant but could be reduced to less than significant (Class II), with adoption of mitigation measures similar to the APMs for the Proposed Project. With implementation of mitigation measures identified, this impact would be less than significant (Class II).

Mitigation Measures for Impact H-1: Construction activity could degrade water quality due to erosion and sedimentation

- H-1a** Prepare substation grading and drainage plan; construct during the dry season.
- H-1c** Minimize construction and maintenance disturbance to riparian areas. [WQ-APM-1]
- H-1d** Avoid watercourses to the maximum extent possible. [WQ-APM-2]
- H-1e** Identify and mark sensitive areas for avoidance. [WQ-APM-3]
- H-1f** Develop and implement construction Best Management Practices. [WQ-APM-4]
- H-1g** Stream crossings at low flow periods. [WQ-APM-5]
- H-1h** Compliance with NPDES regulations. [WQ-APM-14]

H-1i Construction routes to avoid and minimize disturbance to stream channels. [WQ-APM-15]

Impact H-2: Construction activity could degrade water quality through spills of potentially harmful materials (Class II)

Accidental spills or disposal of potentially harmful materials used during construction could wash into and pollute surface waters or groundwater. Materials that could potentially contaminate the construction area or spill or leak include lead-based paint flakes, diesel fuel, gasoline, lubrication oil, hydraulic fluid, antifreeze, transmission fluid, lubricating grease, and other fluids. Degradation of water quality through the spill of potentially harmful materials would be a significant impact. Mitigation would be required, as identified to reduce this impact to less than significant (Class II).

Mitigation Measures for Impact H-2: Construction activity could degrade water quality through spills of potentially harmful materials

- H-1c** Minimize construction and maintenance disturbance to riparian areas.
- H-1d** Avoid watercourses to the maximum extent possible.
- H-1e** Identify and mark sensitive areas for avoidance.
- H-1f** Develop and implement construction Best Management Practices.
- H-1g** Stream crossings at low flow periods.
- H-1h** Compliance with NPDES regulations.
- H-1i** Construction routes to avoid and minimize disturbance to stream channels.
- H-2a** Groundwater testing and treatment before disposal. [WQ-APM-8]
- H-2b** No storage of fuels and hazardous materials near sensitive water resources. [WQ-APM-9]
- H-2c** Proper disposal and clean-up of hazardous materials. [WQ-APM-13]
- H-2d** Maintain vehicles and equipment.
- P-1a** Implement Environmental Monitoring Plan.
- P-1b** Maintain emergency spill supplies and equipment.

Impact H-3: Excavation could degrade groundwater quality in areas of shallow groundwater (Class II)

This impact is anticipated in the Barre-Ellis corridor because some towers would need to be installed in this area of low elevation, near surface water drainages. To avoid a significant impact, it would be necessary to: ensure proper disposal of excavated groundwater contaminated by construction (water will be treated or disposed away from the natural groundwater or surface water); ensure that materials that could contaminate groundwater are kept at least 200 feet from wells; and determine the depth of groundwater prior to construction, avoiding shallow groundwater where possible. With Mitigation Measures H-1c, H-2a and H-3a in place, this impact would be less than significant (Class II).

Mitigation Measures for Impact H-3: Excavation could degrade groundwater quality in areas of shallow groundwater

- H-1c** Minimize construction and maintenance disturbance to riparian areas.
- H-2a** Groundwater testing and treatment before disposal.
- H-3a** Detect and avoid groundwater with project excavations. [WQ-APM-11]

E.8.13 Geology, Mineral Resources, and Soils

Mexico Light

Surveys of the geologic formations and seismic conditions surrounding the Mexicali power plants would need to be conducted to determine potential hazards. Based on the information identified in the Environmental Consequences analysis (Volume 1, Section 4.2) of the Imperial-Mexicali 230 kV transmission line Final Environmental Impact Statement (Imperial-Mexicali, 2004) major geological or soil impacts are not anticipated. However, that analysis covers the Imperial-Mexicali 230 kV transmission line north of the Mexico border and does not analyze the impacts within Mexico. The flat topography of the Mexico Light area and lack of active faults result in most construction or operational impacts being less than significant. The following impacts would occur:

- Construction activities could cause damage to desert pavement (Impact G-2), which is a special concern and would result in a significant impact. Mitigation Measure G-2a would need to be implemented to protect desert pavement in areas underlain by desert soils with potential for desert pavement and reduce this impact to less than significant (Class II).
- There is also the possibility that improper design of new towers could expose people or structures to potential substantial adverse effects as a result of problematic soils (Impact G-3). Collapse of project structures with inappropriate design would be a significant impact. Accordingly, implementation of Mitigation Measure G-3a (Conduct geotechnical studies for soils to assess characteristics and aid in appropriate foundation design) would ensure that impacts associated with problematic soils are reduced to less than significant levels (Class II).
- Moderate to strong groundshaking in the region should be expected in the event of an earthquake (Impact G-4). However, to ensure that impacts associated with strong groundshaking and seismically induced ground failures would be mitigated to less than significant levels (Class II), implementation of Mitigation Measures G-4a and G-4b (to reduce the effects of groundshaking and conduct geotechnical investigations for liquefaction) would be required.

Path 44 Upgrades

Known conditions in the Barre-Ellis corridor or the Talega Substation connection area indicate that the following impacts could occur if these upgrades are implemented.

Impact G-1: Erosion would be triggered or accelerated due to construction activities (Class II)

Soils along the Barre-Ellis corridor are not expected to be erosive due to the flat topography in the area. However, in the area of the Talega Substation there is a potential hazard of erosion due to the hilly topography for off-road/off-trail ranging from slight to very severe and for on roads/trails ranging from slight to severe. Excavation and grading for tower foundations and access roads would potentially loosen soil and accelerate erosion, resulting in a significant impact. Mitigation measures would be required to limit grading of existing roads in areas with sensitive soils (Mitigation Measure G-1a) and use erosion control procedures such as sand bags and road bars to control water erosion (Mitigation Measure G-1b). The implementation of these measures would reduce the impact to less than significant levels (Class II).

Mitigation Measure for Impact G-1: Erosion would be triggered or accelerated due to construction activities

G-1a **Limit modification of access roads.** [GEO-APM-1 in section D.13.4.2]

G-1b **Implement erosion control procedures.** [GEO-APM-2 in section D.13.4.2]

Impact G-3: Project would expose people or structures to potential substantial adverse effects as result of problematic soils (Class II)

Soils in the Orange County area have a potential to corrode steel and concrete. Corrosive subsurface soils may exist in places along Barre-Ellis route and in the area of the Talega Substation. There is also a risk project structures would be built on expansive soils. Standard construction procedures would partially reducing the adverse affects of problematic soils by avoiding placement of structures in areas of high shrink/swell potential. However, actual locations of high shrink/swell (expansive) soils and the presence, absence, and location of corrosive soils would need to be determined to fully reduce the potential for adverse affects of problematic soils to less than significant. Unidentified expansive and corrosive soils would potentially damage project structures and facilities resulting in collapse. Collapse of project structures would result in a significant impact. Accordingly, implementation of Mitigation Measure G-3a (Conduct geotechnical studies for soils to assess characteristics and aid in appropriate foundation design) would be applied to reduce impacts to less than significant (Class II).

Mitigation Measure for Impact G-3: Project would expose people or structures to potential substantial adverse effects as result of problematic soils

G-3a **Conduct geotechnical studies for soils to assess characteristics and aid in appropriate foundation design.**

Impact G-4: Project would expose people or structures to potential substantial adverse effects as a result of seismically induced groundshaking and/or ground failure (Class II)

Moderate to strong groundshaking is expected in the event of an earthquake on the faults in the Orange County area and from other major faults in the region. It is likely that the project facilities would be subjected to at least one moderate or larger earthquake occurring close enough to produce strong groundshaking. The Path 44 Upgrade area would be subject to local strong groundshaking with vertical and horizontal ground accelerations that could exceed lateral wind loads, resulting in damage or collapse of project structures. Collapse of project structures would result in power outages, damage to nearby roads or structures, and injury or death to nearby people, a significant impact. Therefore, to ensure that project structures are not damaged by strong to severe groundshaking, implementation of Mitigation Measure G-4a (Reduce effects of groundshaking) would be applied to reduce impacts to less than significant (Class II). Mitigation Measures G-4b (Conduct geotechnical investigations for liquefaction) and G-6a (Conduct geotechnical surveys for landslides and protect against slope instability) would be applied.

Mitigation Measure for Impact G-4: Project would expose people or structures to potential substantial adverse effects as a result of seismically induced groundshaking and/or ground failure

G-4a **Reduce effects of groundshaking.**

G-4b **Conduct geotechnical investigations for liquefaction.**

G-6a **Conduct geotechnical surveys for landslides and protect against slope instability.**

Impact G-6: Project would expose people or structures to potential substantial adverse effects as a result of slope instability created during excavation and/or grading (Class II)

In the area of the Talega Substation loop, construction consisting of grading and excavation along and adjacent to slopes underlain by landslide prone or potentially unstable units would potentially cause slope instability. Excavation associated with tower foundation construction and grading for work areas could potentially result in slope instability, that could undermine foundations, cause distortion and distress to overlying structures, and displace or destroy project components. This would be a significant impact. Mitigation Measure G-6a (Conduct geotechnical surveys for landslides and protect against slope instability) would be applied to reduce the impact to less than significant (Class II).

Mitigation Measure for Impact G-6: Project would expose people or structures to potential substantial adverse effects as a result of slope instability created during excavation and/or grading

G-6a Conduct geotechnical surveys for landslides and protect against slope instability.

E.8.14 Socioeconomics, Public Services, and Utilities

Mexico Light

Construction and operation of the Mexico Light project would occur along existing transmission corridors, adjacent to two existing power plants. As such, it is unlikely that the construction and operation would impact revenue for businesses, tribes, or governments (Impact S-1 and Impact S-4). It is unlikely that construction and operation would increase the need for public services and utilities as the construction and modification required for this project is minimal. In addition it is unlikely that the operation of Mexico Light would decrease property values due to the existing transmission lines, power stations, and substations in the Mexico Light vicinity. Because the construction would occur adjacent to existing power plants, and would require connection to the Comisión Federal de Electricidad grid, construction activity could disrupt the existing utility systems or cause a collocation accident (Impact S-2, Class II). Implementation of Mitigation Measures S-2a and S-2b would help to reduce impacts to existing utility systems to a less than significant level.

Path 44 Upgrades

The Path 44 Upgrades would occur in existing SCE transmission corridors and adjacent to the SDG&E Talega Substation. The additional infrastructure may increase the contribution of these utilities to local governments via property taxes, but the new facilities and changes to existing transmission lines would be relatively small compared to the existing ones, so no new demands on public services would occur. Construction activity could disrupt existing utility systems in the urban corridors or cause a collocation accident (Impact S-2, Class II). Implementation of Mitigation Measures S-2a and S-2b would help to reduce impacts to existing utility systems to a less than significant level.

E.8.15 Fire and Fuels Management

Mexico Light

The Mexico Light transmission upgrades would occur in the desert environment, where minimal vegetation exists and fire hazard is very low. Existing electricity infrastructure (transmission lines, substations, and power plants) exists in the immediate area, and the addition of the new towers would not change

the fire fighting approach in the area. Impacts F-1 through F-3 would therefore be less than significant (Class III). As Mexico Light would be built adjacent to existing power stations and transmission lines, and adjacent to an agriculture region Impact F-4 (Project activities would introduce non-native plants, which would contribute to an increased ignition potential and rate of fire spread) would be less than significant given the already high use level and disturbed nature of the area (Class III).

Path 44 Upgrades

The Barre-Ellis reconductoring and the Talega Substation loop would both be constructed in areas with extensive transmission infrastructure and urban development. The Path 44 Upgrades would occur in a coastal area of higher humidity than most areas of the Proposed Project. There is a limited fuels inventory near the Talega Substation, and an irrigated golf course is located just to the west of the transmission corridor. As a result, these facilities are not found to present an increase in fire risk and Impacts F-1 through F-4 would be less than significant (Class III).

Table E.8-1. No Project/No Action Alternative Impact Analysis Summary

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
BIOLOGICAL RESOURCES				
Increased Solar Photovoltaic & DG Deployment	Impact B-8: Construction activities would result in a potential loss of nesting birds (Violation of the Migratory Bird Treaty Act)	B-8a: Conduct pre-construction surveys and monitoring for breeding birds.	Class II	Section E.5.2
New Conventional Generation <ul style="list-style-type: none"> • One new combined cycle power plant • Four new peaker power plants 	Impact B-1: Construction activities would result in temporary and permanent losses of native vegetation	B-1a: Provide restoration/compensation for impacted sensitive vegetation communities. B-1b: Implement appropriate avoidance/minimization/compensation strategies for vernal pools and <u>listed</u> fairy shrimp habitat. B-1c: Conduct biological monitoring. B-1d: Perform protocol surveys. B-1e: Train project personnel. B-1f: Construction and survey activities shall be restricted based on final design engineering drawings. B-1g: Build access roads at right angles to streambeds and washes. B-1h: Comply with all applicable environmental laws and regulations. B-1i: Restrict the construction of access and spur roads. B-1j: Protect and restore vegetation.	Class II for sensitive vegetation	Section E.6.2
	Impact B-2: Construction activities would result in adverse effects to jurisdictional waters and wetlands through vegetation removal, erosion, sedimentation, and degradation of water quality	B-1c, B-1d, B-1e, B-1f, and B-1g: See New Conventional Generation, Impact B-1 above. B-2a: Provide restoration/compensation for impacted jurisdictional areas. B-2b: Identify environmentally sensitive times and locations for tree trimming. B-2c: Avoid sensitive features.	Class II	Section E.6.2

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	Impact B-3: Construction and operation/maintenance activities would result in the introduction of invasive, non-native, or noxious plant species	B-1a and B-1j: See New Conventional Generation, Impact B-1 above. B-2a: Provide restoration/compensation for affected jurisdictional areas. B-3a: Prepare and implement a Weed Control Plan.	Class II	Section E.6.2
	Impact B-4: Construction activities would create dust that may result in degradation of vegetation	B-1c and B-1j: See New Conventional Generation, Impact B-1 above.	Class II	Section E.6.2
	Impact B-5: Construction activities would result in direct or indirect loss of listed or sensitive plants or a direct loss of habitat for listed or sensitive plants	B-1a, B-1b, B-1c, B-1e, B-1f, and B-1i: See New Conventional Generation, Impact B-1 above. B-2a and B-2b: See New Conventional Generation, Impact B-2 above. B-5a: Conduct rare plant surveys, and implement appropriate avoidance/minimization/compensation strategies. B-5b: Delineate sensitive plant populations. B-5c: No collection of plants or wildlife. B-5d: Salvage sensitive species for replanting or transplanting.	Class I for SDCPP & peakers Class II for SBRP	Section E.6.2
	Impact B-7: Direct or Indirect Loss of Listed or Sensitive Wildlife or a Direct Loss of Habitat for Listed or Sensitive Wildlife	B-1a, B-1b, B-1c, B-1e, B-1f, and B-1i: See New Conventional Generation, Impact B-1 above. B-2a and B-2b: See New Conventional Generation, Impact B-2 above. B-6a: Littering is not allowed. B-6b: Survey areas for brush clearing. B-6c: Protect mammals and reptiles in excavated areas. B-6d: Reduce construction night lighting on sensitive habitats. B-7a: Cover all steep-walled trenches or excavations used during construction to prevent the entrapment of wildlife (e.g., reptiles and small mammals). B-7d: Conduct burrowing owl surveys, and implement appropriate avoidance/minimization/compensation strategies. (SBRP only)	SBRP: Class II SDCPP & peakers: Class I for listed species; Class II for non-listed sensitive species	Section E.6.2

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
		<p>B-7e: Conduct least Bell's vireo and southwestern willow flycatcher surveys, and implement appropriate avoidance/minimization/compensation strategies. (SDCPP only)</p> <p>B-7i: Conduct coastal California gnatcatcher surveys, and implement appropriate avoidance/minimization/compensation strategies. (SDCPP only)</p>		
	<p>Impact B-8: Construction activities would result in a potential loss of nesting birds (Violation of the Migratory Bird Treaty Act)</p>	<p>B-1e, B-1f, B-1g, B-1h and B-1i: See New Conventional Generation, Impact B-1 above.</p> <p>B-2b and B-2c: See New Conventional Generation, Impact B-2 above.</p> <p>B-6b: Survey areas for brush clearing.</p> <p>B-8a: Conduct pre-construction surveys and monitoring for breeding birds.</p> <p>B-8b: Removal of raptor nests.</p>	<p>Class I for SBRP</p> <p>Class II for SDCPP & peakers</p>	<p>Section E.6.2</p>
	<p>Impact B-9: Adverse Effects to Linkages or Wildlife Movement Corridors, the Movement of Fish, and/or Native Wildlife Nursery Sites</p>	<p>B-1e: Train project personnel.</p> <p>B-2c: Avoid sensitive features.</p> <p>B-6d: Reduce construction night lighting on sensitive habitats.</p>	<p>Class II for SBRP & peakers</p>	<p>Section E.6.2</p>
	<p>Impact B-10: Presence of power plant and associated transmission lines may result in electrocution of, and/or collisions by, listed or sensitive bird species</p>	<p>B-10a: Utilize collision-reducing techniques in installation of transmission lines.</p>	<p>Class I for collision for listed species</p> <p>Class II for collision for non-listed sensitive species or daytime migration</p>	<p>Section E.6.2</p>
	<p>Impact B-15: Power plant operation and maintenance activities would result in disturbance to wildlife and could result in wildlife mortality</p>	<p>B-1b, B-1f, B-1h, and B-1i: See New Conventional Generation, Impact B-1 above.</p> <p>B-2b: Identify environmentally sensitive times and locations for tree trimming.</p> <p>B-5c: No collection of plants or wildlife.</p>	<p>SBRP: Class II for green sea turtles and</p> <p>Class IV for fish and aquatic</p>	<p>Section E.6.2</p>

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
		<p>B-6a and B-6b: See New Conventional Generation, Impact B-7 above.</p> <p>B-12a: Conduct maintenance activities outside the general avian breeding season.</p> <p>B-12d: Protect wildlife.</p>	invertebrates	
	<p>Impact B-16: Power plant operation and maintenance activities would result in disturbance to wildlife and could result in wildlife mortality)</p>	<p>B-1b, B-1f, B-1h, and B-1i: See New Conventional Generation, Impact B-1 above.</p> <p>B-2b: Identify environmentally sensitive times and locations for tree trimming.</p> <p>B-5c: No collection of plants or wildlife.</p> <p>B-6a and B-6b: See New Conventional Generation, Impact B-7 above.</p> <p>B-7h: Implement appropriate avoidance/minimization strategies for eagle nests.</p> <p>B-12a and B-12b: See New Conventional Generation, Impact B-15 above.</p> <p>B-12c: Maintain access roads and clear vegetation in quino checkerspot butterfly habitat.</p> <p>B-12d: Protect wildlife.</p>	<p>Class I for emissions</p> <p>Class II for operations noise and maintenance activities</p>	Section E.6.2
<p>New Renewable Generation</p> <ul style="list-style-type: none"> • Wind generation in the Crestwood area 	<p>Impact B-1: Construction activities would result in temporary and permanent losses of native vegetation</p>	<p>B-1a, B-1b, B-1c, B-1d, B-1f, B-1g, B-1h, B-1i and B-1j: See New Conventional Generation, Impact B-1 above.</p>	Class I for sensitive vegetation communities	Section E.5.2
	<p>Impact B-2: Construction activities would result in adverse effects to jurisdictional waters and wetlands through vegetation removal, erosion, sedimentation, and degradation of water quality</p>	<p>B-1c and B-1g: See New Conventional Generation, Impact B-1 above.</p> <p>B-2a, B-2b and B-2c: See New Conventional Generation, Impact B-2 above.</p>	Class II	Section E.5.2
	<p>Impact B-3: Construction and operation/maintenance activities would result in the introduction of invasive, non-native, or noxious plant species</p>	<p>B-1a and B-1j: See New Conventional Generation, Impact B-1 above.</p> <p>B-2a: Provide restoration/compensation for affected jurisdictional areas.</p> <p>B-3a: Prepare and implement a Weed Control Plan.</p>	Class II	Section E.5.2
	<p>Impact B-4: Construction activities would create dust that may result in degradation of vegetation.</p>	<p>B-1i: Restrict the construction of access and spur roads.</p>	Class II	Section E.5.2

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	Impact B-5: Construction activities would result in direct or indirect loss of listed or sensitive plants or a direct loss of habitat for listed or sensitive plants	B-1a, B-1c, B-1d, B-1f, B-1g, B-1h, and B-1i: See New Conventional Generation, Impact B-1 above. B-2a and B-2c: See New Conventional Generation, Impact B-2 above. B-5a, B-5b, B-5c and B-5d: See New Conventional Generation, Impact B-5 above.	Class I	Section E.5.2
	Impact B-7: Direct or Indirect Loss of Listed or Sensitive Wildlife or a Direct Loss of Habitat for Listed or Sensitive Wildlife	B-1a, B-1b, B-1c, B-1e, B-1f, and B-1i: See New Conventional Generation, Impact B-1 above. B-2a and B-2b: See New Conventional Generation, Impact B-2 above. B-6a, B-6b, B-6c, B-6d and B-7a: See New Conventional Generation, Impact B-7 above. B-7i: Conduct quino checkerspot butterfly surveys and implement appropriate avoidance/minimization/compensation strategies.	Class II Transmission line: Class I for construction impacts to non-listed, sensitive species. Other impact classes depend on species; see individual discussions	Section E.5.2
	Impact B-7A: Direct or indirect loss of quino checkerspot butterfly or direct loss of habitat	B-1c: Conduct biological monitoring. B-7i: Conduct quino checkerspot butterfly surveys and implement appropriate avoidance/minimization/compensation strategies.	Class I for transmission line only	Section E.5.2
	Impact B-7O: Direct or indirect loss of barefoot banded gecko or direct loss of habitat	B-1a and B-1c: See New Conventional Generation, Impact B-1 above	Class I for transmission line only	Section E.5.2
	Impact B-8: Construction activities would result in a potential loss of nesting birds (Violation of the Migratory Bird Treaty Act)	B-1e, B-1f, B-1g, B-1h and B-1i: See New Conventional Generation, Impact B-1 above. B-2b and B-2c: See New Conventional Generation, Impact B-2 above. B-6b, B-8a and B-8b: See New Conventional Generation, Impact B-8 above.	Class II	Section E.5.2
	Impact B-9: Adverse Effects to Linkages or Wildlife Movement Corridors, the Movement of Fish, and/or Native Wildlife Nursery Sites	B-1g and B-1i: See New Conventional Generation, Impact B-1 above. B-2c: Avoid sensitive features. B-6d: Reduce construction night lighting on sensitive habitats. B-9a: Survey for bat nursery colonies.	Class II for bat colonies	Section E.5.2

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	Impact B-10: Presence of transmission lines may result in electrocution of, and/or collisions by, listed or sensitive bird species	B-10a: Utilize collision-reducing techniques in installation of transmission lines.	Class I for collision for listed species Class II for collision for non-listed sensitive species or daytime migration	Section E.5.2
	Impact B-12: Maintenance activities would result in disturbance to wildlife and wildlife mortality	B-1f, B-1h and B-1i: See New Conventional Generation, Impact B-1 above. B-2b: Identify environmentally sensitive times and locations for tree trimming. B-3a: Prepare and implement a Weed Control Plan. B-5c: No collection of plants or wildlife. B-6a: Littering is not allowed. B-6b: Survey areas for brush clearing. B-12a: Conduct maintenance activities outside the general avian breeding season. B-12c: Maintain access roads and clear vegetation in quino checkerspot butterfly habitat.	Class II	Section E.5.2
	Impact B-13: Operation of the Wind component would lead to avian mortality from collision with turbines	B-13a: Implement measures to reduce avian impacts from turbine activities.	Class I	Section E.5.2
	Impact B-14: Operation of the Wind component would lead to bat mortality from collision with turbines	B-14a: Implement a scientifically defensible monitoring program to estimate bat fatality rates from new turbines.	Class I	Section E.5.2
New Renewable Generation • Solar thermal generation in the Borrego Springs area	Impact B-1: Construction activities would result in temporary and permanent losses of native vegetation	B-1a, B-1c, B-1d, B-1f, B-1g, B-1h, B-1i and B-1j: See New Conventional Generation, Impact B-1 above.	Class I for sensitive vegetation communities;	Section E.5.2
	Impact B-2: Construction activities would result in adverse effects to jurisdictional waters and wetlands through vegetation removal, erosion, sedimentation, and degradation of water quality	B-1c and B-1g: See New Conventional Generation, Impact B-1 above. B-2a, B-2b and B-2c: See New Conventional Generation, Impact B-2 above.	Class II	Section E.5.2

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	Impact B-3: Construction and operation/maintenance activities would result in the introduction of invasive, non-native, or noxious plant species	B-1a and B-1j: See New Conventional Generation, Impact B-1 above. B-2a and B-3a: See New Renewable Generation, Impact B-3 above.	Class II	Section E.5.2
	Impact B-4: Construction activities would create dust that may result in degradation of vegetation	B-1i: Restrict the construction of access and spur roads.	Class II	Section E.5.2
	Impact B-5: Construction activities would result in direct or indirect loss of listed or sensitive plants or a direct loss of habitat for listed or sensitive plants	B-1a, B-1c, B-1d, B-1f, B-1g, B-1h, and B-1i: See New Conventional Generation, Impact B-1 above. B-2a and B-2c: See New Conventional Generation, Impact B-2 above. B-5a, B-5b, B-5c and B-5d: See New Conventional Generation, Impact B-5 above.	Class I	Section E.5.2
	Impact B-7: Direct or Indirect Loss of Listed or Sensitive Wildlife or a Direct Loss of Habitat for Listed or Sensitive Wildlife	B-1a, B-1c, B-1f, and B-1i: See New Conventional Generation, Impact B-1 above. B-2a and B-2b: See New Conventional Generation, Impact B-2 above. B-6a, B-6b, B-6c, B-6d and B-7a: See New Conventional Generation, Impact B-7 above.	Class I construction impacts to non-listed, sensitive species. Other impact classes depend on species; see individual discussions	Section E.5.2
	Impact B-7B: Direct or indirect loss of Peninsular bighorn sheep or direct loss of habitat	B-1a and B-1c: See New Conventional Generation, Impact B-1 above. B-2a: Provide restoration/compensation for affected jurisdictional areas. B-7c: Minimize impacts to Peninsular bighorn sheep and provide compensation for loss of critical habitat.	Class I	Section E.5.2
	Impact B-7D: Direct or indirect loss of least Bell's vireo or direct loss of habitat	B-1a and B-1c: See New Conventional Generation, Impact B-1. B-2a: Provide restoration/compensation for affected jurisdictional areas. B-7e: Conduct least Bell's vireo and southwestern willow flycatcher surveys, and implement appropriate avoidance/minimization /compensation strategies.	Class II	Section E.5.2

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	Impact B-7H: Direct or indirect loss of golden eagle or direct loss of habitat	B-7h: Implement appropriate avoidance/minimization strategies for eagle nests.	Class I for nests within 4,000 feet Class II in existing transmission corridor	Section E.5.2
	Impact B-7J: Direct or indirect loss of quino checkerspot butterfly or direct loss of habitat	B-1a and B-1c: See New Conventional Generation, Impact B-1. B-2a: Provide restoration/compensation for affected jurisdictional areas. B-7i: Conduct quino checkerspot butterfly surveys, and implement appropriate avoidance/minimization/compensation strategies.	Class I	Section E.5.2
	Impact B-7O: Direct or indirect loss of barefoot banded gecko or direct loss of habitat	B-1a and B-1c: See New Conventional Generation, Impact B-1. B-2a: Provide restoration/compensation for affected jurisdictional areas.	Class I	Section E.5.2
	Impact B-8: Construction activities would result in a potential loss of nesting birds (Violation of the Migratory Bird Treaty Act)	B-1f, B-1g, B-1h and B-1i: See New Conventional Generation, Impact B-1 above. B-2b and B-2c: See New Conventional Generation, Impact B-2 above. B-6b, B-8a and B-8b: See New Conventional Generation, Impact B-8 above.	Class II	Section E.5.2
	Impact B-9: Adverse Effects to Linkages or Wildlife Movement Corridors, the Movement of Fish, and/or Native Wildlife Nursery Sites	B-1g and B-1i: See New Conventional Generation, Impact B-1 above. B-2c, B-6d, and B-9a: See New Renewable Generation, Wind, Impact B-9 above.	Class II for bat colonies	Section E.5.2
	Impact B-10: Presence of transmission lines would result in electrocution of, and/or collisions by, listed or sensitive bird species	B-10a: Utilize collision-reducing techniques in installation of transmission lines.	Class I for collision for listed species Class II for collision for non-listed sensitive species or daytime	Section E.5.2

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
			migration	
	Impact B-11: Presence of transmission lines would result in increased predation of listed and sensitive wildlife species by ravens that nest on transmission towers	B-11b: Prepare and implement a Raven Control Plan for ABDSP.	Class II for ravens	Section E.5.2
New Renewable Generation <ul style="list-style-type: none"> • Biomass/biogas projects in San Diego and Fallbrook 	Impact B-1: Construction activities would result in temporary and permanent losses of native vegetation	B-1a, B-1b, B-1c, B-1d, B-1e, B-1f, B-1g, B-1h, B-1i and B-1j: See New Conventional Generation, Impact B-1 above.	Class II for sensitive vegetation communities;	Section E.5.2
	Impact B-2: Construction activities would result in adverse effects to jurisdictional waters and wetlands through vegetation removal, erosion, sedimentation, and degradation of water quality	B-1c: Conduct biological monitoring. B-2a, B-2b and B-2c: See New Conventional Generation, Impact B-2 above.	Class II	Section E.5.2
	Impact B-3: Construction and operation/maintenance activities would result in the introduction of invasive, non-native, or noxious plant species	B-1a and B-1j: See New Conventional Generation, Impact B-1 above. B-2a and B-3a: See New Renewable Generation, Impact B-3 above.	Class II	Section E.5.2
	Impact B-4: Construction activities would create dust that may result in degradation of vegetation	B-1c and B-1i: See New Conventional Generation, Impact B-1 above.	Class II	Section E.5.2
	Impact B-5: Construction activities would result in direct or indirect loss of listed or sensitive plants or a direct loss of habitat for listed or sensitive plants	B-1a, B-1c, B-1d, B-1e, B-1f, B-1g, B-1h, and B-1i: See New Conventional Generation, Impact B-1 above. B-2a and B-2c: See New Conventional Generation, Impact B-2 above. B-5a, B-5b, B-5c and B-5d: See New Conventional Generation, Impact B-5 above.	Class I	Section E.5.2
	Impact B-6: Construction activities, including the use of access roads, would result in disturbance to wildlife and result in wildlife mortality	B-1c and B-1f: See New Conventional Generation, Impact B-1 above. B-2b: Identify environmentally sensitive times and locations for tree trimming. B-6a, B-6b, B-6c, B-6d and B-7a: See New Conventional Generation, Impact B-7 above.	Class II	Section E.5.2
	Impact B-7: Direct or Indirect Loss of Listed or Sensitive Wildlife or a Direct Loss of Habitat for Listed or Sensitive Wildlife	B-1a, B-1b, B-1c, B-1e, B-1f, and B-1i: See New Conventional Generation, Impact B-1 above. B-2a and B-2b: See New Conventional Generation,	Class I	Section E.5.2

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
		Impact B-2 above. B-6a, B-6b, B-6c, B-6d, B-7a, B-7d, B-7e, and B-7i: See New Conventional Generation, Impact B-7 above. B-7i: Conduct quino checkerspot butterfly surveys and implement appropriate avoidance/minimization/compensation strategies. B-7j: Conduct arroyo toad surveys, and implement appropriate avoidance/minimization/compensation strategies.		
	Impact B-8: Construction activities would result in a potential loss of nesting birds (Violation of the Migratory Bird Treaty Act)	B-1e, B-1f, B-1g, B-1h and B-1i: See New Conventional Generation, Impact B-1 above. B-2b and B-2c: See New Conventional Generation, Impact B-2 above. B-6b, B-8a and B-8b: See New Conventional Generation, Impact B-8 above.	Class II	Section E.5.2
	Impact B-9: Adverse Effects to Linkages or Wildlife Movement Corridors, the Movement of Fish, and/or Native Wildlife Nursery Sites	B-1e, B-1g and B-1i: See New Conventional Generation, Impact B-1 above. B-2c, B-6d, and B-9a: See New Renewable Generation, Wind, Impact B-9 above.	Class II	Section E.5.2
	Impact B-10: Presence of transmission lines would result in electrocution of, and/or collisions by, listed or sensitive bird species	B-10a: Utilize collision-reducing techniques in installation of transmission lines.	Class I for collision for listed species Class II for collision for non-listed sensitive species or daytime migration	Section E.5.2
	Impact B-12: Maintenance activities would result in disturbance to wildlife and wildlife mortality	B-1f, B-1h and B-1i: See New Conventional Generation, Impact B-1 above. B-2b, B-5c, B-6a, B-6b, B-12a and B-12c: See New Renewable Generation, Wind, Impact B-12 above. B-7h: Implement appropriate avoidance/minimiza-	Class II	Section E.5.2

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
		<p>tion strategies for eagle nests.</p> <p>B-12b: Conduct maintenance when arroyo toads are least active.</p> <p>B-12d: Protect wildlife.</p>		
LEAPS Transmission	Impact B-1: Construction activities would result in temporary and permanent losses of native vegetation	<p>USFS-38: Habitat Mitigation Plan.</p> <p>FERC-12: Habitat Mitigation Plan.</p> <p>B-1a(LE): Provide restoration/compensation for affected sensitive vegetation communities.</p> <p>B-1c(LE): Conduct biological monitoring.</p>	Class I for sensitive vegetation communities;	Section E.7.1.2
	Impact B-2: Construction activities would result in adverse effects to jurisdictional waters and wetlands through vegetation removal, erosion, sedimentation, and degradation of water quality	<p>USFS-15: Erosion Control Plan.</p> <p>USFS-35: Surface Water Resources Management Plan.</p> <p>B-1c(LE): Conduct biological monitoring.</p> <p>B-2a(LE): Provide restoration/compensation for affected jurisdictional areas.</p>	Class II	Section E.7.1.2
	Impact B-3: Construction and operation/maintenance activities would result in the introduction of invasive, non-native, or noxious plant species	<p>USFS-29: Annual Employee Awareness Training.</p> <p>USFS-33: Vegetation and Invasive Weed Management Plans.</p> <p>FERC-9: Invasive Weed Management Plan.</p> <p>FERC-14: Employee Awareness Training.</p> <p>B-3a(LE): Prepare and implement a Weed Control Plan.</p> <p>B-15a: Permanently close access roads along the transmission alignment.</p> <p>B-15b: Develop and implement an Invasive Weed Management Plan</p>	Class II	Section E.7.1.2
	Impact B-4: Construction activities would create dust that may result in degradation of vegetation	<p>USFS-15: Erosion Control Plan.</p> <p>B-4a(LE): Erosion Control Plan.</p>	Class II	Section E.7.1.2
	Impact B-5: Construction activities would result in direct or indirect loss of listed or sensitive plants or a direct loss of habitat for listed or sensitive plants	<p>USFS-15: Erosion Control Plan.</p> <p>USFS-30: Special Status Species.</p> <p>USFS-35: Surface Water Resources Management Plan.</p>	Class I	Section E.7.1.2

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
		<p>USFS-38: Habitat Mitigation Plan. FERC-12: Habitat Mitigation Plan. FERC-14: Employee Awareness Training. FERC-15: Consult with USFWS. B-1a(LE): Provide restoration/compensation for affected sensitive vegetation communities. See Table D.2-7 for compensation ratios. B-1c(LE): Conduct biological monitoring. B-2a(LE): Provide restoration/compensation for affected jurisdictional areas. See Table D.2-7 for compensation ratios. B-4a(LE): Erosion Control Plan. B-5a(LE): Conduct rare plant surveys, and implement appropriate avoidance/minimization/compensation strategies. B-1d, B-1e, B-1f, B-1g, B-1h, and B-1i: See New Conventional Generation, Impact B-1 above. B-2c: Avoid sensitive features. B-5b, B-5c and B-5d: See New Conventional Generation, Impact B-5 above.</p>		
	<p>Impact B-7: Direct or Indirect Loss of Listed or Sensitive Wildlife or a Direct Loss of Habitat for Listed or Sensitive Wildlife</p>	<p>USFS-15, USFS-30, USFS-35, USFS-38, FERC-12, FERC-14, FERC-15, B-1a(LE), B-1c(LE), B-2a(LE) and B-4a(LE): See LEAPS Transmission, Impact B-5 above. USFS-29: Annual Employee Awareness Training FERC-11: Special Status Species Surveys. FERC-13: Consult with USFS. B-7a(LE): Cover all steep-walled trenches or excavations used during construction to prevent the entrapment of wildlife (e.g., reptiles and small mammals). B-1e, B-1f and B-1i: See New Conventional Generation, Impact B-1 above. B-2b: Identify environmentally sensitive times and locations for tree trimming. B-6a, B-6b, B-6c, B-6d: See New Conventional</p>	<p>Class I construction impacts to non-listed, sensitive species. Other impact classes depend on species; see individual discussions</p>	<p>Section E.7.1.2</p>

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
		Generation, Impact B-7 above.		
	Impact B-7D: Direct or indirect loss of least Bell's vireo or direct loss of habitat	B-7e(LE): Conduct least Bell's vireo and southwestern willow flycatcher surveys, and implement appropriate avoidance/minimization/compensation strategies.	Class II	Section E.7.1.2
	Impact B-7E: Direct or indirect loss of southwestern willow flycatcher or direct loss of habitat	B-7e(LE): See LEAPS Transmission, Impact B-7D above.	Class II	Section E.7.1.2
	Impact B-7H: Direct or indirect loss of golden eagle or direct loss of habitat	B-7h: Implement appropriate avoidance/minimization strategies for eagle nests.	Class I	Section E.7.1.2
	Impact B-7J: Direct or indirect loss of quino checkerspot butterfly or direct loss of habitat (Class I)	USFS-15, USFS-35, USFS-38, FERC-12, FERC-14, FERC-15, B-1a(LE), B-1c(LE), B-2a(LE) and B-4a(LE): See LEAPS Transmission, Impact B-5 above. B-7i(LE): Conduct quino checkerspot butterfly surveys and implement appropriate avoidance/minimization/compensation strategies.	Class I	Section E.7.1.2
	Impact B-7K: Direct or indirect loss of arroyo toad or direct loss of habitat	B-1a(LE), B-1c(LE), and B-2a(LE): See LEAPS Transmission, Impact B-5 above.	Class II	Section E.7.1.2
	Impact B-7L: Direct or indirect loss of Stephens' kangaroo rat or direct loss of habitat	FERC-14, FERC-15, B-1a(LE), B-1c(LE), B-2a(LE) and B-7a(LE): See LEAPS Transmission, Impact B-5 above. B-7k(LE): Conduct Stephens' kangaroo rat surveys, and implement appropriate avoidance/minimization/compensation strategies. B-17a: Pay the Stephens' kangaroo rat fee assessment per the current Riverside County rate.	Class II	Section E.7.1.2
	Impact B-7M: Direct or indirect loss of coastal California gnatcatcher or direct loss of habitat	USFS-38, FERC-12, FERC-14, FERC-15, B-1a(LE), B-1c(LE), and B-2a(LE): See LEAPS Transmission, Impact B-5 above. B-7l(LE): Conduct coastal California gnatcatcher surveys, and implement appropriate avoidance/minimization/compensation strategies.	Class II	Section E.7.1.2
	Impact B-7N: Direct or indirect loss of San Diego fairy shrimp (and/or Riverside fairy shrimp) or direct loss of habitat	B-1c(LE), and B-2a(LE): See LEAPS Transmission, Impact B-5 above. B-1b(LE): Implement appropriate avoidance/minimi-	Class II	Section E.7.1.2

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
		zation/compensation strategies for vernal pools and <u>listed</u> fairy shrimp habitat.		
	Impact B-8: Construction activities would result in a potential loss of nesting birds (Violation of the Migratory Bird Treaty Act)	FERC-14 and FERC-15: See LEAPS Transmission, Impact B-5 above. B-1f, B-1g, B-1h and B-1i: See New Conventional Generation, Impact B-1 above. B-2a, B-2b and B-2c: See New Conventional Generation, Impact B-2 above. B-6b and B-8b: See New Conventional Generation, Impact B-8 above. B-8a(LE): Conduct pre-construction surveys and monitoring for breeding birds.	Class II	Section E.7.1.2
	Impact B-9: Construction or operational activities would adversely affect linkages or wildlife movement corridors, the movement of fish, and/or native wildlife nursery sites	B-9a: Survey for bat nursery colonies.	Class I for mountain lion Class II for bat colonies	Section E.7.1.2
	Impact B-10: Presence of transmission lines would result in electrocution of, and/or collisions by, listed or sensitive bird species	USFS-34: Wildlife Management. FERC-15: Consult with USFWS. FERC-26: Avian Protection. B-10a(LE): Utilize collision-reducing techniques in installation of transmission lines.	Class I for collision for listed species Class II for collision for non-listed sensitive species or daytime migration	Section E.7.1.2
	Impact B-12: Maintenance activities would result in disturbance to wildlife and wildlife mortality	FERC-14 and B-4a(LE): See LEAPS Transmission, Impact B-5 above. FERC-13: Consult with USFS. USFS-29: Annual Employee Awareness Training B-1b(LE): Implement appropriate avoidance/minimization/compensation strategies for vernal pools and <u>listed</u> fairy shrimp habitat. B-3a(LE): Prepare and implement a Weed Control Plan.	Class II for general maintenance	Section E.7.1.2

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
		<p>B-7i(LE): Conduct quino checkerspot butterfly surveys and implement appropriate avoidance/minimization/compensation strategies.</p> <p>B-12a(LE): Conduct maintenance activities outside the general avian breeding season.</p> <p>B-15b: Develop and implement an Invasive Weed Management Plan.</p> <p>B-7h: Implement appropriate avoidance/minimization strategies for eagle nests.</p> <p>B-12b: Conduct maintenance when arroyo toads are least active.</p>		
VISUAL RESOURCES				
Increased Solar Photovoltaic & DG Deployment	No Class I or II impacts. See Section E.5.3 for discussion of Class III impacts.			
New Conventional Generation <ul style="list-style-type: none"> • One new combined cycle power plant • Four new peaker power plants 	Impact V-1: Short-term visibility of construction activities, equipment, and night lighting	<p>V-1a: Reduce visibility of construction activities and equipment.</p> <p>V-1b: Reduce construction night lighting impacts</p> <p>V-1d: Screen the power plant construction areas. (SDCPP only)</p>	Class II	Section E.6.3
	Impact V-2: Long-term visibility of land scars and vegetation clearance in arid and semi-arid landscapes	<p>V-2a: Reduce in-line views of land scars.</p> <p>V-2b: Reduce visual contrast from unnatural vegetation lines.</p> <p>V-2c: Reduce color contrast of land scars on non-Forest lands.</p> <p>V-2e: Minimize vegetation removal. [APM BIO-23]</p> <p>V-2fG-1b: Restrict vehicle travel and restore landImplement erosion control procedures. [APM GEO-2]</p>	Class II for SDCPP and peakers (except Miramar) only	Section E.6.3
	Impact V-NW9: Reduced structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 71 near the Chula Vista Marina View Park and Bayfront Park (VS-VC)	<p>V-3a: Reduce visual contrast of towers and conductors</p> <p>V-NW9a: Develop and implement architectural treatment for the power plant.</p> <p>V-NW9b: Develop and implement a Landscape Concept Plan.</p>	Class II for SBRP only	Section E.6.3
	Impact V-NW11: Reduced structure contrast, indus-	V-3a, V-NW9a and V-NW9b: See New Conventional	Class IV for	Section E.6.3

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	trial character, view blockage, and skylining when viewed from Key Viewpoint 73 on the Silver Strand (SR 75) adjacent to the bayfront recreational trail and the South Bay Marine Biology Study Area (VS-VC)	Generation, Impact V-NW9 above.	SBRP only	
	Impact V-NW12: Increased structure contrast, industrial character, view blockage, and skylining	V-3a, V-NW9a and V-NW9b: See New Conventional Generation, Impact V-NW9 above. V-NW12a: Site the power plant to take advantage of topography for screening. V-NW12b: Reduce visual plumes from power plant.	Class I for SDCPP only	Section E.6.3
	Impact V-NW14: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 76 on eastbound SR 76 (VS-VC)	V-NW13a: Reduce peaker visibility.	Class II for Pala Peaker only	Section E.6.3
	Impact V-NW15: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 77 at Founders Park in Ladera Ranch (VS-VC)	V-NW13a: Reduce peaker visibility.	Class II for Margarita Peaker only	Section E.6.3
	Impact V-NW16: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 78 on Northbound Borrego Valley Road (VS-VC)	V-NW13a: Reduce peaker visibility.	Class II for Borrego Springs Peaker only	Section E.6.3
New Renewable Generation • Wind generation in the Crestwood area	Impact V-2: Long-term visibility of land scars in arid and semi-arid landscapes	V-2a, V-2b, V-2c, V-2e and V-2fG-1b: See New Conventional Generation, Impact V-2.	Class I	Section E.5.3
	Impact V-NW4: Increased structure contrast, industrial character, view blockage, and skylining associated with substation development	V-3a: Reduce visual contrast of towers (second bullet of mitigation only applies). V-3b: Use non-specular design to reduce conductor visibility and visual contrast. [APM VR-2] V-3c: Coordinate with affected property owners on structure siting. [APM VR-5]	Class I	Section E.5.3
	Impact V-NW5: Long-term visibility of Wind component turbines and associated facilities from Interstate 8	V-3a, V-3b, and V-3c: See New Renewable Generation, Wind, Impact V-NW4 above.	Class I	Section E.5.3

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	Impact V-NW6: Increased structure contrast, industrial character, view blockage, and skylining when viewing the Wind component turbines and associated facilities from nearby residences and public roads	V-3a, V-3b, and V-3c: See New Renewable Generation, Wind, Impact V-NW4 above.	Class I	Section E.5.3
	Impact V-NW7: Inconsistency with BLM VRM Class II Management objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 60 on McCain Valley Road South of Cottonwood Campground (VRM)	V-3a, V-3b, and V-3c: See New Renewable Generation, Wind, Impact V-NW4 above.	Class I or III	Section E.5.3
	Impact V-NW8: Inconsistency with BLM VRM Class II Management objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 61 on at Carrizo Overlook (VRM)	V-3a, V-3b, and V-3c: See New Renewable Generation, Wind, Impact V-NW4 above.	Class I or III	Section E.5.3
New Renewable Generation • Solar thermal generation in the Borrego Springs area	Impact V-1: Short-term visibility of construction activities, equipment, and night lighting	V-1a and V-1b: See New Conventional Generation, Impact V-1. V-1c: Prohibit construction marking of natural features. [APM VR-4]	Class II for the Solar Thermal component	Section E.5.3
	Impact V-2: Long-term visibility of land scars in arid and semi-arid landscapes	V-2a, V-2b, V-2c, V-2e and V-2f: See New Conventional Generation, Impact V-2.	Class II	Section E.5.3
	Impact V-NW1: Increased structure contrast, industrial character, view blockage, and skylining	V-3a: Reduce visual contrast of towers.	Class I for generation facility and Option 2 transmission line only	Section E.5.3
New Renewable Generation • Biomass/biogas projects in San Diego and Fallbrook	Impact V-3BM/BG: Increased structure contrast and industrial character	V-3a: Reduce visual contrast of towers.	Class II for the Fallbrook Facility only	Section E.5.3
LEAPS Transmission	Impact V-S-1: Long-term visibility of land scars in arid and semi-arid landscapes (SMS and VS-VC)	V-2a, V-2b, and V-2c – See New Renewable Generation, Wind, Impact V-2 above. V-2d: Construction by helicopter.	Class I for CNF land; Class II for other lands	Section E.7.1.3

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	Impact V-S-2: Introduction of substation and transmission line structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint L1, on DePalma Frontage Road and Southbound Interstate 15	V-2c: Reduce color contrast of land scars. V-2d: Construction by helicopter. V-7a: Reduce visual contrast associated with ancillary facilities.	Class I	Section E.7.1.3
	Impact V-S-3: Introduction of structure contrast and industrial character associated with the Lake-Pendleton 500 kV transmission line, when viewed from Key Viewpoint L2 on Lake Elsinore and I-15	V-2a, V-2b, and V-2c – See New Renewable Generation, Wind, Impact V-2 above V-2d: Construction by helicopter. V-3a: Reduce visual contrast of towers. USFS-37: Scenery Conservation Plan FERC-20: Scenery Conservation Plan.	Class I	Section E.7.1.3
	Impact V-S-4: Inconsistency with USFS Scenic Integrity Objective due to the introduction of transmission line structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint L3, southbound on South Main Divide Road	V-2a and V-2b – See New Renewable Generation, Wind, Impact V-2 above V-3a and USFS-37: See LEAPS Transmission, Impact V-S-3.	Class I	Section E.7.1.3
	Impact V-S-5: Inconsistency with USFS Scenic Integrity Objective due to the introduction of transmission line structure contrast, industrial character, view blockage, skylining, and unnatural vegetative clearing when viewed from Key Viewpoint L4, northbound on South Main Divide Road	V-2a and V-2b – See New Renewable Generation, Wind, Impact V-2 above V-3a and USFS-37: See LEAPS Transmission, Impact V-S-3.	Class I	Section E.7.1.3
	Impact V-S-6: Inconsistency with USFS Scenic Integrity Objective due to the introduction of transmission line structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint L5, on Ortega Highway	V-2b: Reduce visual contrast from unnatural vegetation lines. V-3a and USFS-37: See LEAPS Transmission, Impact V-S-3.	Class I	Section E.7.1.3
	Impact V-S-7: Inconsistency with USFS Scenic Integrity Objective due to the introduction of transmission line structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint L6, on Hombre Lane in LaCresta Subdivision	V-2a and V-2b: See New Renewable Generation, Wind, Impact V-2 above V-3a and USFS-37: See LEAPS Transmission, Impact V-S-3. V-2d: Construction by helicopter.	Class I	Section E.7.1.3

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
LAND USE				
Increased Solar Photovoltaic & DG Deployment	No Class I or II impacts. See Section E.5.4 for discussion of Class III impacts.			
New Conventional Generation <ul style="list-style-type: none"> • One new combined cycle power plant • Four new peaker power plants 	Impact L-1: Construction would temporarily disturb land uses at or near the alignment	L-1a: Prepare Construction Notification Plan. Sections D.4.5 and D.4.11 include descriptions of mitigation measures for land use impacts. L-1c: Coordinate with MCAS Miramar. (SDCPP only) L-1d: Provide advance notice and appoint public affairs officer. [APM LU-1] (SDCPP and peakers only) L-1e: Notify property owners and provide access. [APM LU-4] (SDCP and peakers only)	Class II	Section E.6.4
New Renewable Generation <ul style="list-style-type: none"> • Wind generation in the Crestwood area 	Impact L-1: Construction would temporarily disturb nearby land uses	L-1a: Prepare Construction Notification Plan.	Class II for residences within 1,000 feet	Section E.5.4
New Renewable Generation <ul style="list-style-type: none"> • Solar thermal generation in the Borrego Springs area 	Impact L-1: Construction would temporarily disturb nearby land uses	L-1a, L-1d and L-1e: See New Conventional Generation, Impact L-1. L-1f: Flag ROW boundary and environmentally sensitive areas. [APM LU-6]	Class II	Section E.5.4
New Renewable Generation <ul style="list-style-type: none"> • Biomass/biogas projects in San Diego and Fallbrook 	Impact L-1: Construction would temporarily disturb nearby land uses	L-1a, L-1d and L-1e: See New Conventional Generation, Impact L-1. L-1f: Flag ROW boundary and environmentally sensitive areas. [APM LU-6]	Class II	Section E.5.4
LEAPS Transmission	Impact L-1: Construction would temporarily disturb land uses at or near the alignment	L-1a, L-1d, L-1e and L-1f: See New Conventional Generation, Impact L-1. USFS-1: Requirement to Obtain a Forest Service Special-Use Authorization. USFS-3: Forest Service Approval of Final Design. USFS-4: Approval of Changes. USFS-37: Scenery Conservation Plan. L-1h: Consult with Department of the Navy.	Class II for nearby residences	Section E.7.1.4
	Impact L-2: Presence of a transmission line or substation would disrupt land uses at or near the alignment	USFS- 5: Consultation. USFS-6: Surrender of License or Transfer of Ownership. USFS-16: Valid Claims and Existing Rights.	Class II for CNF and Camp Pendleton	Section E.7.1.4

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
		USFS-17: Compliance with Regulations. USFS-18: Protection of United States Property. USFS-20: Surveys, Land Corners. USFS-21: Damage to Land, Property, and Interests of the United States. L-1h: Consult with Department of the Navy.		
WILDERNESS AND RECREATION				
Increased Solar Photovoltaic & DG Deployment	Impact WR-1: Construction activities would temporarily reduce access and visitation to recreation or wilderness areas	WR-1a: Coordinate construction schedule and activities with the authorized officer for the recreation area. WR-1c: Coordinate with local agencies to identify alternative recreation areas.	Class II	Section E.5.5
New Conventional Generation <ul style="list-style-type: none"> • One new combined cycle power plant • Four new peaker power plants 	Impact WR-1: Construction activities would temporarily reduce access and visitation to recreation or wilderness areas.	L-1a: Prepare Construction Notification Plan. N-1a: Implement best management practices for construction noise.	Class II for SBRP only	Section E.6.5
New Renewable Generation <ul style="list-style-type: none"> • Wind generation in the Crestwood area 	Impact WR-1: Construction activities would temporarily reduce access and visitation to recreation or wilderness areas	WR-1a and WR-1c: See Increased Solar Photovoltaic & DG Deployment, Impact WR-1. WR-1b: Provide temporary detours for trail users.	Class II	Section E.5.5
	Impact WR-2B: Presence of the wind towers/turbines and associated facilities would permanently change the character of a recreation area, diminishing its recreational value	V-3a: Reduce visual contrast of towers and conductors (second bullet of mitigation only applies)	Class I	Section E.5.5
New Renewable Generation <ul style="list-style-type: none"> • Solar thermal generation in the Borrego Springs area 	Impact WR-1: Construction activities would temporarily reduce access and visitation to recreation or wilderness areas	WR-1a and WR-1c: See Increased Solar Photovoltaic & DG Deployment, Impact WR-1. WR-1b: Provide temporary detours for trail users.	Class I	Section E.5.5
	Impact WR-2: Presence of a transmission line or substation would change the character of a recreation area, diminishing its recreational value	V-3a: Reduce visual contrast of towers and conductors	Class I for generation facility and Option 2 transmission line	Section E.5.5

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
New Renewable Generation • Biomass/biogas projects in San Diego and Fallbrook	No impacts; see Section E.5.5.			
LEAPS Transmission	Impact WR-1: Construction activities would temporarily reduce access and visitation to wilderness or recreation areas	USFS-13: Safety during Project Construction. USFS-23: Crossings. USFS-37: Scenery Conservation Plan.	Class II	Section E.7.1.5
	Impact WR-2: Presence of the transmission line would change the character of a recreation or wilderness area, diminishing its recreational value	None proposed.	Class I	Section E.7.1.5
	Impact WR-3: Presence of a transmission line would permanently preclude recreational activities	None proposed.	Class I	Section E.7.1.5
AGRICULTURE				
Increased Solar Photovoltaic & DG Deployment	No impacts; see Section E.5.6.			
New Conventional Generation • One new combined cycle power plant • Four new peaker power plants	Impact AG-2: Operation would permanently convert DOC Farmland to non-agricultural use	AG-2a: Avoid interference with agricultural equipment. (Peakers only)	Class I for SDCPP only Class II for peakers	Section E.6.6
New Renewable Generation • Wind generation in the Crestwood area	Impact AG-1: Construction activities would temporarily interfere with agricultural operations	AG-1a: Avoid interference with agricultural operations. AG-1c: Coordinate with grazing operators. AG-1d: Compensate farmers for lost crops along ROW. [APM LU-3] AG-3e: Install project facilities along borders. L-1d: Provide advance notice and appoint public affairs officer. [APM LU-1] L-1e: Notify property owners and provide access. [APM LU-4] L-1f: Flag ROW boundary and environmentally sensitive areas. [APM LU-6]	Class II	Section E.5.6
New Renewable Generation • Solar thermal generation in the Borrego Springs area	Impact AG-1; Construction activities would temporarily interfere with Active Agricultural Operations	AG-1a, L-1d, L-1e, and L-1f: See New Renewable Generation, Wind, Impact AG-1 above	Class II	Section E.5.6

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
New Renewable Generation • Biomass/biogas projects in San Diego and Fallbrook	Impact AG-1: Construction activities would temporarily interfere with Active Agricultural Operations	AG-1a: Avoid interference with agricultural operations. AG-1b: Restore compacted soil.	Class II for the Fallbrook Facility	Section E.5.6
	Impact AG-2: Operation would permanently convert DOC Farmland to non-agricultural use	None proposed.	Class I for the Fallbrook Facility	Section E.5.6
	Impact AG-3: Operation would permanently interfere with Active Agricultural Operations	None proposed.	Class I for the Fallbrook Facility	Section E.5.6
LEAPS Transmission	Impact AG-1: Construction activities would temporarily interfere with Active Agricultural Operations	AG-1e: Prepare Construction Notification Plan. AG-1f: Avoid interference with agricultural equipment. AG-1g: Coordinate with grazing operators	Class II	Section E.7.1.6
CULTURAL AND PALEONTOLOGICAL RESOURCES				
Increased Solar Photovoltaic & DG Deployment	Impact C-1: Construction of the project could cause an adverse change to known historic properties	C-1a: Inventory and evaluate cultural resources in Final Area of Potential Effect (APE). C-1b: Avoid and protect potentially significant resources. C-1c: Develop and implement Historic Properties Treatment Plan. C-1d: Conduct data recovery to reduce adverse effects. C-1e: Monitor construction at known ESAs. C-1f : Train construction personnel.	Class II	Section E.5.7
	Impact C-4: Construction of the project could cause an adverse change to Traditional Cultural Properties	C-4a: Complete consultation with Native American and other Traditional Groups.	Class I or II	Section E.5.7

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
New Conventional Generation <ul style="list-style-type: none"> • One new combined cycle power plant • Four new peaker power plants 	Impact C-1: Construction of the project could cause an adverse change to known historic properties	C-1a through C-1f: See Increased Solar Photovoltaic & DG Deployment, Impact C-1.	Class II	Section E.6.7
	Impact C-2: Construction of the project could cause an adverse change to sites known to contain Native American human remains	C-1b through C-1f: See Increased Solar Photovoltaic & DG Deployment, Impact C-1. C-2a: Properly treat human remains.	Class I	Section E.6.7
	Impact C-3: Modifications to the project could cause an adverse change to unknown significant buried prehistoric and historical archaeological sites or buried Native American human remains	C-1c, C-1d, and C-1f: See Increased Solar Photovoltaic & DG Deployment, Impact C-1. C-2a: Properly treat human remains. C-3a: Monitor construction in areas of high sensitivity for buried resources.	Class I or II	Section E.6.7
	Impact C-4: Construction of the project could cause an adverse change to Traditional Cultural Properties	C-4a: Complete consultation with Native American and other Traditional Groups.	Class II for SBRP & peakers Class I or II for SDCPP	Section E.6.7
	Impact C-5: Project operation and maintenance would cause an adverse change to known historic properties	C-1b and C-1c: See Increased Solar Photovoltaic & DG Deployment, Impact C-1 C-2a: Properly treat human remains. C-4a: Complete consultation with Native American and other Traditional Groups. C-5a: Protect and monitor NRHP and/or CRHR-eligible properties.	Class II for SDCPP only	Section E.6.7
	Impact PAL-1: Construction of the project could destroy or disturb significant paleontological resources	PAL-1a: Inventory and evaluate paleontological resources. PAL-1b: Develop Paleontological Monitoring and Mitigation Plan. PAL-1c: Monitor construction for paleontology. PAL-1d: Conduct paleontological data recovery. PAL-1e: Train construction personnel.	Class II for SBRP & peakers only	Section E.6.7
New Renewable Generation <ul style="list-style-type: none"> • Wind generation in the Crestwood area 	Impact C-1: Construction of the project could cause an adverse change to known historic properties	C-1a through C-1f: See Increased Solar Photovoltaic & DG Deployment, Impact C-1.	Class II	Section E.5.7
	Impact C-2: Construction of the project could cause an adverse change to sites known to contain Native American human remains	C-1b through C-1f: See Increased Solar Photovoltaic & DG Deployment, Impact C-1. C-2a: Properly treat human remains.	Class I	Section E.5.7

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	Impact C-3: Modifications to the project could cause an adverse change to unknown significant buried prehistoric and historical archaeological sites or buried Native American human remains	C-1c, C-1d, and C-1f: See Increased Solar Photovoltaic & DG Deployment, Impact C-1. C-2a: Properly treat human remains. C-3a: Monitor construction in areas of high sensitivity for buried resources.	Class I or II	Section E.5.7
	Impact C-4: Construction of the project could cause an adverse change to Traditional Cultural Properties	C-4a: Complete consultation with Native American and other Traditional Groups.	Class I or II	Section E.5.7
	Impact PAL-1: Construction of the project could destroy or disturb significant paleontological resources	PAL-1a through PAL-1e: See New Conventional Generation, Impact PAL-1.	Class II	Section E.5.7
	Impact C-5: Project operation and maintenance would cause an adverse change to known historic properties	C-1b and C-1c: See Increased Solar Photovoltaic & DG Deployment, Impact C-1 C-2a, C-4a, and C-5a: See New Conventional Generation, Impact C-5.	Class II	Section E.5.7
	Impact C-6: Long-term presence of the project would cause an adverse change to known historic architectural (built environment) resources	C-6a: Reduce adverse visual intrusions to historic built environment properties.	Class II	Section E.5.7
New Renewable Generation • Solar thermal generation in the Borrego Springs area	Impact C-1: Construction of the project could cause an adverse change to known historic properties	C-1a through C-1f: See Increased Solar Photovoltaic & DG Deployment, Impact C-1.	Class II	Section E.5.7
	Impact C-2: Construction of the project could cause an adverse change to sites known to contain Native American human remains	C-1b through C-1f: See Increased Solar Photovoltaic & DG Deployment, Impact C-1. C-2a: Properly treat human remains.	Class I	Section E.5.7
	Impact C-3: Modifications to the project could cause an adverse change to unknown significant buried prehistoric and historical archaeological sites or buried Native American human remains	C-1c, C-1d, and C-1f: See Increased Solar Photovoltaic & DG Deployment, Impact C-1. C-2a: Properly treat human remains. C-3a: Monitor construction in areas of high sensitivity for buried resources.	Class I or II	Section E.5.7
	Impact C-4: Construction of the project could cause an adverse change to Traditional Cultural Properties	C-4a: Complete consultation with Native American and other Traditional Groups. C-4b: Conduct cultural resources survey of the entirety of the identified cultural landscape within a portion of the Anza-Borrego Link of the Proposed Project and prepare a report documenting the resources present as well as the ethnographic use of the area. V-3a: Reduce visual contrast of towers and conductors.	Class I or II	Section E.5.7

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	Impact PAL-1: Construction of the project could destroy or disturb significant paleontological resources	PAL-1a through PAL-1e: See New Conventional Generation, Impact PAL-1.	Class II	Section E.5.7
	Impact C-5: Project operation and maintenance would cause an adverse change to known historic properties	C-1b and C-1c: See Increased Solar Photovoltaic & DG Deployment, Impact C-1 C-2a, C-4a, and C-5a: See New Conventional Generation, Impact C-5.	Class II	Section E.5.7
	Impact C-6: Long-term presence of the project would cause an adverse change to known historic architectural (built environment) resources	C-6a: Reduce adverse visual intrusions to historic built environment properties.	Class II	Section E.5.7
New Renewable Generation • Biomass/biogas projects in San Diego and Fallbrook	Impact C-3: Modifications to the project could cause an adverse change to unknown significant buried prehistoric and historical archaeological sites or buried Native American human remains	C-1c, C-1d, and C-1f: See Increased Solar Photovoltaic & DG Deployment, Impact C-1. C-2a: Properly treat human remains. C-3a: Monitor construction in areas of high sensitivity for buried resources.	Class I or II	Section E.5.7
	Impact C-4: Construction of the project could cause an adverse change to Traditional Cultural Properties	C-4a and V-3a: See New Renewable Generation, Wind, Impact C-4.	Class I or II for Fallbrook facility only	Section E.5.7
	Impact C-5: Project operation and maintenance would cause an adverse change to known historic properties	C-1b and C-1c: See Increased Solar Photovoltaic & DG Deployment, Impact C-1 C-2a, C-4a, and C-5a: See New Conventional Generation, Impact C-5.	Class II for Fallbrook facility only	Section E.5.7
	Impact C-6: Long-term presence of the project would cause an adverse change to known historic architectural (built environment) resources	C-6a: Reduce adverse visual intrusions to historic built environment properties V-3a: Reduce visual contrast of towers and conductors.	Class II for Fallbrook facility only	Section E.5.7

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
LEAPS Transmission	Impact C-1: Construction of the project could cause an adverse change to known historic properties	C-1a through C-1f: See Impact C-1, Increased Solar Photovoltaic & DG Deployment. FERC-25: Environmental Measure 25. USFS-28: Heritage Resources Management Plan.	Class II	Section E.7.1.7
	Impact C-3: Modifications to the project could cause an adverse change to unknown significant buried prehistoric and historical archaeological	C-1c, C-1d, and C-1f: See Impact C-1, Increased Solar Photovoltaic & DG Deployment C-2a: Properly treat human remains. C-3a: Monitor construction in areas of high sensitivity for buried resources. FERC-25: Environmental Measure 25. USFS-28: Heritage Resources Management Plan	Class I or II	Section E.7.1.7
	Impact C-4: Construction of the project could cause an adverse change to Traditional Cultural Properties	C-4a: Complete consultation with Native American and other Traditional Groups. FERC-25: Environmental Measure 25. USFS-28: Heritage Resources Management Plan.	Class I or II	Section E.7.1.7
	Impact C-5: Project operation and maintenance would cause an adverse change to known historic properties	1b, 1c, 2a, 4a, and 5a: See New Renewable Generation, Wind, Impact C-5. FERC-25: Environmental Measure 25. USFS-28: Heritage Resources Management Plan.	Class II	Section E.7.1.7
	Impact C-6: Long-term presence of the project would cause an adverse change to known historic architectural (built environment) resources	C-6a: Reduce adverse visual intrusions to historic built environment properties. V-S-8a: Relocate 500 kV transmission Lines Away from Tenaja Trailhead and Guard Station.	Class II	Section E.7.1.7
	Impact PAL-1: Construction of the project could destroy or disturb significant paleontological resources	PAL-1a through PAL-1e: See New Conventional Generation, Impact PAL-1. USFS-28: Heritage Resources Management Plan.	Class II	Section E.7.1.7

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
NOISE				
Increased Solar Photovoltaic & DG Deployment	Impact N-1: Construction noise would substantially disturb sensitive receptors and violate local rules, standards, and/or ordinances	L-1a: Prepare Construction Notification Plan. N-1a: Implement best management practices for construction noise.	Class II	Section E.5.8
New Conventional Generation <ul style="list-style-type: none"> • One new combined cycle power plant • Four new peaker power plants 	Impact N-1: Construction noise would substantially disturb sensitive receptors and violate local rules, standards, and/or ordinances	L-1a and N-1a: See Increased Solar Photovoltaic & DG Deployment, Impact N-1.	Class I	Section E.6.8
	Impact N-3: Permanent noise levels would increase due to corona noise from operation of the transmission lines and noise from other project components	N-3c: Silence noise from steam blows during power plant commissioning. N-3d: Incorporate noise reduction features with power plant design. N-3e: Verify proper power plant noise control.	Class II	Section E.6.8
	Impact N-4: Routine inspection and maintenance activities would increase ambient noise levels	None proposed.	Class I	Section E.6.8
New Renewable Generation <ul style="list-style-type: none"> • Wind generation in the Crestwood area 	Impact N-1: Construction noise would substantially disturb sensitive receptors and violate local rules, standards, and/or ordinances	L-1a and N-1a: See Increased Solar Photovoltaic & DG Deployment, Impact N-1.	Class I	Section E.5.8
	Impact N-3: Permanent noise levels would increase due to corona noise from operation of the transmission line and noise from other project components	N-3a: Respond to complaints of corona noise. N-3b: Perform Operational Noise Study	Class II	Section E.5.8
	Impact N-4: Routine inspection and maintenance activities would increase ambient noise levels	None proposed.	Class I	Section E.5.8
New Renewable Generation <ul style="list-style-type: none"> • Solar thermal generation in the Borrego Springs area 	Impact N-1: Construction noise would substantially disturb sensitive receptors and violate local rules, standards, and/or ordinances	L-1a and N-1a: See Increased Solar Photovoltaic & DG Deployment, Impact N-1.	Class I for transmission lines only	Section E.5.8
	Impact N-2: Construction activity would temporarily cause groundborne vibration	L-1a: Prepare Construction Notification Plan. N-2a: Avoid blasting where damage to structures could occur.	Class II for transmission lines only	Section E.5.8
	Impact N-4: Routine inspection and maintenance activities would increase ambient noise levels	None proposed.	Class I for transmission lines only	Section E.5.8

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
New Renewable Generation • Biomass/biogas projects in San Diego and Fallbrook	Impact N-1: Construction noise would substantially disturb sensitive receptors and violate local rules, standards, and/or ordinances	L-1a and N-1a: See Increased Solar Photovoltaic & DG Deployment, Impact N-1.	Class I for Fallbrook facility only	Section E.5.8
	Impact N-3: Permanent noise levels would increase due to corona noise from operation of the transmission lines and noise from other project components	N-3d and N-3e: See New Conventional Generation, Impact N-3.	Class II for Fallbrook facility only	Section E.5.8
LEAPS Transmission	Impact N-1: Construction noise would substantially disturb sensitive receptors and violate local rules, standards, and/or ordinances	L-1a and N-1a: See Increased Solar Photovoltaic & DG Deployment, Impact N-1.	Class I	Section E.7.1.8
	Impact N-2: Construction activity would temporarily cause groundborne vibration	L-1a and N-2a: See New Renewable Generation, Solar, Impact N-2.	Class II	Section E.7.1.8
	Impact N-3: Permanent noise levels would increase due to corona noise from operation of the transmission lines and noise from other project components	N-3a: Respond to complaints of corona noise.	Class I	Section E.7.1.8
	Impact N-4: Maintenance activities during transmission line operation would increase ambient noise levels	None proposed.	Class I	Section E.7.1.8
TRANSPORTATION AND TRAFFIC				
Increased Solar Photovoltaic & DG Deployment	Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area	T-5a: Repair damaged roads.	Class II	Section E.5.9
New Conventional Generation • One new combined cycle power plant • Four new peaker power plants	Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow	T-1a: Restrict lane closures. T-1b: Prepare detour plans. [T-APM-2b] (SDCPP & peakers only) T-1c: Obtain required permits. [T-APM-2a] (SDCPP & peakers only)	Class II	Section E.6.9
	Impact T-2: Construction would temporarily disrupt the operation of emergency service providers	T-2b: Coordinate with Emergency Service Providers. [T-APM-4a].	Class II	Section E.6.9
	Impact T-3: Construction would temporarily disrupt bus transit services	T-3b: Consult with bus and transit services. [T-APM-5a]	Class II	Section E.6.9
	Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle movement and safety	T-4a: Ensure pedestrian and bicycle circulation and safety	Class II	Section E.6.9
	Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area	T-5a: Repair damaged roads.	Class II	Section E.6.9

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	Impact T-7: Construction would result in the short-term elimination of parking spaces	T-7a: Notify public of potential short-term elimination of parking spaces.	Class II	Section E.6.9
	Impact T-9: Construction would generate additional traffic on the regional and local roadways	T-9a: Prepare Construction Transportation Plan. T-9b: Prepare Traffic Impact Study (TIS).	Class II	Section E.6.9
	Impact T-10: Underground construction could restrict access to properties and businesses	T-10b: Ensure access to properties and businesses. [T-APM-10a]	Class II for SBRP & SDCPP only	Section E.6.9
New Renewable Generation • Wind generation in the Crestwood area	Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow	T-1a: Restrict lane closures.	Class II	Section E.5.9
	Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle movement and safety	T-4a: Ensure pedestrian and bicycle circulation and safety WR-1b: Provide temporary detours for trail users.	Class II	Section E.5.9
	Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area	T-5a: Repair damaged roads.	Class II	Section E.5.9
	Impact T-7: Construction would result in the short-term elimination of parking spaces	T-7a: Notify public of potential short-term elimination of parking spaces.	Class II	Section E.5.9
	Impact T-9: Construction would generate additional traffic on the regional and local roadways	T-9a: Prepare Construction Transportation Plan. T-9b: Prepare Traffic Impact Study (TIS).	Class II	Section E.5.9
	Impact T-10: Underground construction could restrict access to properties and businesses	T-1a: Restrict lane closures. T-1b: Prepare detour plans. [T-APM-2b]	Class II	Section E.5.9
New Renewable Generation • Solar thermal generation in the Borrego Springs area	Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow	T-1a, T-1b and T-1c: See New Conventional Generation, Impact T-1.	Class II	Section E.5.9
	Impact T-2: Construction would temporarily disrupt the operation of emergency service providers	T-2b: Coordinate with Emergency Service Providers. [T-APM-4a]	Class II	Section E.5.9
	Impact T-3: Construction would temporarily disrupt bus transit services	T-3b: Consult with bus and transit services [T-APM-5a].	Class II	Section E.5.9
	Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle movement and safety	T-4a and WR-1b: See New Renewable Generation, Wind, Impact T-4.	Class II	Section E.5.9
	Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area	T-5a: Repair damaged roads.	Class II	Section E.5.9

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	Impact T-7: Construction would result in the short-term elimination of parking spaces	T-7a: Notify public of potential short-term elimination of parking spaces. T-7b: Comply with County Parking Restrictions.	Class II	Section E.5.9
	Impact T-10: Underground construction could restrict access to properties and businesses	T-10b: Ensure access to properties and businesses. [T-APM-10a]	Class II	Section E.5.9
New Renewable Generation • Biomass/biogas projects in San Diego and Fallbrook	Impact T-2: Construction would temporarily disrupt the operation of emergency service providers	T-2b: Coordinate with Emergency Service Providers [T-APM-4a].	Class II	Section E.5.9
	Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area	T-5a: Repair damaged roads.	Class II	Section E.5.9
	Impact T-9: Construction would generate additional traffic on the regional and local roadways	T-9a: Prepare Construction Transportation Plan	Class II	Section E.5.9
LEAPS Transmission	Impact T-2: Construction would temporarily disrupt the operation of emergency service providers	T-2b: Coordinate with Emergency Service Providers [T-APM-4a].	Class II	Section E.7.1.9
	Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle movement and safety	T-4a and WR-1b: See New Renewable Generation, Wind, Impact T-4.	Class II	Section E.7.1.9
	Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area	T-5a: Repair damaged roads.	Class II	Section E.7.1.9
	Impact T-6: Construction activities would cause a temporary disruption to rail traffic or operations	T-6b: Obtain railroad right-of-way permit.	Class II	Section E.7.1.9
	Impact T-7: Construction would result in the short-term elimination of parking spaces	T-7a: Notify public of potential short-term elimination of parking spaces. T-7b: Comply with County Parking Restrictions.	Class II	Section E.7.1.9
	Impact T-9: Construction would generate additional traffic on the regional and local roadways	FERC-22: Traffic Management Plan: Forest. FERC-23: Traffic Management Plan: Non-Forest. T-9a: Prepare Construction Transportation Plan. T-9b: Add Traffic Lanes on Grand Avenue.	Class II	Section E.7.1.9
	Impact T-11: Construction of the transmission Lines would Penetrate Airport Influence Area	None proposed.	Class II	Section E.7.1.9

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
PUBLIC HEALTH AND SAFETY				
Increased Solar Photovoltaic & DG Deployment	No Class I or II impacts; see Section E.5.10 for discussion of Class III impacts.			
New Conventional Generation <ul style="list-style-type: none"> • One new combined cycle power plant • Four new peaker power plants 	Impact P-1: Soil or groundwater contamination results due to improper handling and/or storage of hazardous materials during construction activities	P-1a: Implement Environmental Monitoring Program. P-1b: Maintain emergency spill supplies and equipment. P-1c: Personnel trained in proper use and safety procedures for the chemicals used. [HS-APM-1] P-1d: Personnel trained in refueling of vehicles. [HS-APM-2](SDCPP & peakers only) P-1e: Preparation of environmental safety plans including spill prevention and response plan. [HS-APM-3] (SDCPP & peakers only) P-1f: Applicant's and/or General Contractor environmental/health and safety personnel. [HS-APM-8] (SDCPP & peakers only) P-1g: Proper storage and disposal of generated waste. [HS-APM-10] (SDCPP & peakers only) P-1NWg: Prepare power plant construction waste management plan. (SBRP only)	Class II	Section E.6.10
	Impact P-2: Residual pesticides and or herbicides could be encountered during grading or excavation in agricultural areas	P-2a: Test for residual pesticides/herbicides.	Class II for Peakers only	Section E.6.10
	Impact P-3: Previously unknown soil and/or groundwater contamination could be encountered during excavation or grading	P-2b: Stop work if contamination is detected. [HS-APM-15] P-2c: Cordon off contaminated areas. [HS-APM-16] P-2d: Notification of regulatory agencies. [HS-APM-17] P-2e: Observe exposed soil. (SBRP only) P-3a: Appoint individuals with correct training for sampling, data review, and regulatory coordination. (SDCPP & peakers only)	Class II	Section E.6.10

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
		P-3b: Documentation of compliance with measures for encountering unknown contamination. (SDCPP & peakers only)		
	Impact P-4: Areas used by the military may contain unexploded ordnance (UXO) and could explode and injure workers or the public during construction	P-4a: Unexploded ordnance to be removed by trained personnel. P-4b: Train project personnel to recognize unexploded ordnance.	Class II for SDCPP only	Section E.6.10
	Impact P-5: Soil or groundwater contamination could result from accidental spill or release of hazardous materials during operation and maintenance	P-1a, P-1b and P-1c: See New Conventional Generation, Impact P-1. P-1e: Preparation of environmental safety plans including spill prevention and response plan. P-1g: Proper storage and disposal of generated waste. P-7a: Prepare Offsite Consequence Analysis and Emergency Action Plan. (SBRP only)	Class I for Borrego Peaker Class II all others	Section E.6.10
	Impact P-6: Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites	P-1g: Proper storage and disposal of generated waste. P-6a: Evaluate contaminated sites. P-6b: Identify site-specific contamination. P-7a: Evaluate contaminated sites. (SBRP) P-7b: Identify site-specific contamination. (SBRP)	Class II for SBRP	Section E.6.10
	Impact P-7: Use and storage of hazardous materials at power plant sites would create public health and safety hazards	P-1a, P-1b and P-1c: See New Conventional Generation, Impact P-1. (SBRP only) P-1e and P-1g: See New Conventional Generation, Impact P-5. P-7a: Prepare Offsite Consequence Analysis and Emergency Action Plan. P-7b: Investigate contaminated sites. (SDCPP & peakers only)	Class I for SBRP Class II for SDCPP & peakers	Section E.6.10
New Renewable Generation • Wind generation in the Crestwood area	Impact P-1: Soil or groundwater contamination results due to improper handling and/or storage of hazardous materials during construction activities	P-1a and P-1b: See New Conventional Generation, Impact P-1. P-1g: Proper storage and disposal of generated waste. [HS-APM-10]	Class II	Section E.5.10

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
		H-2b: No storage of fuels and hazardous materials near sensitive water resources. [WQ-APM-9] H-2c: Proper disposal and clean-up of hazardous materials. [WQ-APM-13]		
	Impact P-2: Residual pesticides and/or herbicides could be encountered during grading or excavation in agricultural areas	P-2a: Test for residual pesticides/herbicides. P-2b, P-2c, and P-2d: See New Conventional Generation, Impact P-3.	Class II	Section E.5.10
	Impact P-3: Previously unknown soil and or groundwater contamination could be encountered during excavation or grading	P-2b, P-2c, P-2d and P-3a: See New Conventional Generation, Impact P-3.	Class II	Section E.5.10
	Impact P-5: Soil or groundwater contamination could result from accidental spill or release of hazardous materials during operation and maintenance	P-1c, P-1e and P-1g: See New Conventional Generation, Impact P-5.	Class II	Section E.5.10
	Impact P-6: Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites	P-6a and P-6b: See New Conventional Generation, Impact P-6.	Class II	Section E.5.10
New Renewable Generation • Solar thermal generation in the Borrego Springs area	Impact P-1: Soil or groundwater contamination results due to improper handling and/or storage of hazardous materials during construction activities	P-1a through P-1g: See New Conventional Generation, Impact P-1. H-2c: Proper disposal and clean-up of hazardous materials. [WQ-APM-13]	Class II	Section E.5.10
	Impact P-3: Previously unknown soil and or groundwater contamination could be encountered during excavation or grading	P-2b, P-2c, P-2d, P-3a and P-3b: See New Conventional Generation, Impact P-3. H-2c: Proper disposal and clean-up of hazardous materials. [WQ-APM-13]	Class II	Section E.5.10
	Impact P-5: Soil or groundwater contamination could result from accidental spill or release of hazardous materials during operation and maintenance	P-1c, P-1e and P-1g: See New Conventional Generation, Impact P-1. P-5a: Include HTF in spill response plans and remediate contaminated soil. H-7a: Develop Hazardous Substance Control and Emergency Response Plan for project operations.	Class II	Section E.5.10
	Impact PS-1: transmission line operation causes radio and television interference	PS-1a: Limit the conductor surface electric gradient. PS-1b: Document and resolve electronic interference complaints.	Class II	Section E.5.10

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	Impact PS-2: transmission line operation causes induced currents and shock hazards in joint use corridors	PS-2a: Implement grounding measures.	Class II	Section E.5.10
New Renewable Generation <ul style="list-style-type: none"> • Biomass/biogas projects in San Diego and Fallbrook 	Impact P-1: Soil or groundwater contamination results due to improper handling and/or storage of hazardous materials during construction activities	P-1a and P-1b: See New Conventional Generation, Impact P-1.	Class II	Section E.5.10
	Impact P-2: Residual pesticides and/or herbicides could be encountered during grading or excavation in agricultural areas	P-2a: Test for residual pesticides/herbicides. P-2b, P-2c, and P-2d: See New Conventional Generation, Impact P-3.	Class II for Fallbrook facility only	Section E.5.10
	Impact P-3: Previously unknown soil and or groundwater contamination could be encountered during excavation or grading	P-3a and P-3b: See New Conventional Generation, Impact P-3.	Class II	Section E.5.10
	Impact P-5: Soil or groundwater contamination could result from accidental spill or release of hazardous materials during operation and maintenance	P-1a and P-1b: See New Conventional Generation, Impact P-1. P-1c, P-1d, and P-1e: See New Renewable Generation, Solar Thermal, Impact P-1.	Class II	Section E.5.10
	Impact P-8: Landfill gasses could accumulate in excavations resulting in explosions or exposure of workers to toxic gasses	P-8a: Verify Presence of Landfill Gases. P-8b: Implement Personnel Safety and Monitoring Measures.	Class II for Miramar only	Section E.5.10
	Impact PS-1: transmission line operation causes radio and television interference	PS-1a and PS-1b: See New Renewable Generation, Solar Thermal, Impact PS-1	Class II for Fallbrook facility only	Section E.5.10
	Impact PS-2: transmission line operation causes induced currents and shock hazards in joint use corridors	PS-2a: Implement grounding measures.	Class II for Fallbrook facility only	Section E.5.10
LEAPS Transmission	Impact P-1: Soil or groundwater contamination results due to improper handling and/or storage of hazardous materials during construction activities	P-1a, P-1b, P-1c, P-1d, P-1e, P-1f, and P-1g: See New Renewable Generation, Solar Thermal, Impact P-1. USFS-7: Hazardous Substances Plan	Class II	Section E.7.1.10
	Impact P-2: Residual pesticides and/or herbicides could be encountered during grading or excavation in agricultural areas	P-2b, P-2c, and P-2d: See New Conventional Generation, Impact P-3.	Class II	Section E.7.1.10
	Impact P-4: Areas used by the military may contain unexploded ordnance (UXO) and could explode and injure workers during construction	P-4a and P-4b: See New Conventional Generation, Impact P-4.	Class II	Section E.7.1.10

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	Impact P-5: Soil or groundwater contamination could result from accidental spill or release of hazardous materials during operation and maintenance	P-1c, P-1e, and P-1g: See New Renewable Generation, Solar Thermal, Impact P-1 USFS-7: Hazardous Substances Plan	Class II	Section E.7.1.10
	Impact P-6: Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites	P-6a and P-6b: See New Conventional Generation, Impact P-6.	Class II	Section E.7.1.10
	Impact P-7: Use and storage of hazardous materials at power plant sites would create public health and safety hazards	P-1g and P-7a: See New Conventional Generation, Impact P-7. P-7b: Investigate contaminated sites. [HS-APM-5]	Class II	Section E.7.1.10
AIR QUALITY				
Increased Solar Photovoltaic & DG Deployment	No Class I or II impacts; see Section E.5.11 for discussion of Class III impacts.			
New Conventional Generation <ul style="list-style-type: none"> • One new combined cycle power plant • Four new peaker power plants 	Impact AQ-1: Construction would generate dust and exhaust emissions of criteria pollutants and toxic air contaminants	AQ-1a: Suppress dust at all work or staging areas and on public roads. AQ-1b: Use low-emission construction equipment. AQ-1d: Implement Dust Reduction Measures. [AQ-APM-2] AQ-1e: Prevent Transport of Mud and Dust. [AQ-APM-3] AQ-1f: Encourage Carpooling. [AQ-APM-4] AQ-1g: Minimize Vehicle Idling. [AQ-APM-5] AQ-1h: Obtain NOx and particulate matter emission offsets.	Class I	Section E.6.11
	Impact AQ-3: Power generated during transmission line operation would cause emissions from power plants	AQ-3a: Offset emission increases of PM10 and ozone precursors.	Class I	Section E.6.11
	Impact AQ-4: Project activities would cause a net increase of greenhouse gas emissions	AQ-4a: Offset construction-phase greenhouse gas emissions with carbon credits. AQ-4b: Offset operation-phase greenhouse gas emissions with carbon credits. AQ-4c: Avoid sulfur hexafluoride emissions. AQ-4d: Offset greenhouse gas emissions from power generation with carbon credits.	Class I	Section E.6.11

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
New Renewable Generation • Wind generation in the Crestwood area	Impact AQ-1: Construction would generate dust and exhaust emissions of criteria pollutants and toxic air contaminants	AQ-1a, AQ-1b, AQ-1d, AQ-1e, AQ-1f, AQ-1g, and AQ-1h. See New Conventional Generation, Impact AQ-1.	Class I	Section E.5.11
New Renewable Generation • Solar thermal generation in the Borrego Springs area	Impact AQ-1: Construction would generate dust and exhaust emissions of criteria pollutants and toxic air contaminants	AQ-1a, AQ-1b, AQ-1d, AQ-1e, AQ-1f, AQ-1g, and AQ-1h. See New Conventional Generation, Impact AQ-1.	Class I	Section E.5.11
New Renewable Generation • Biomass/biogas projects in San Diego and Fallbrook	Impact AQ-1: Construction would generate dust and exhaust emissions of criteria pollutants and toxic air contaminants	AQ-1a, AQ-1b, AQ-1d, AQ-1e, AQ-1f, AQ-1g, and AQ-1h. See New Conventional Generation, Impact AQ-1.	Class I	Section E.5.11
	Impact AQ-3: Power generated during transmission line operation would cause emissions from power plants	AQ-3a: See New Conventional Generation, Impact AQ-3.	Class I	Section E.5.11
LEAPS Transmission	Impact AQ-1: Construction would generate dust and exhaust emissions of criteria pollutants and toxic air contaminants	AQ-1a, AQ-1b, AQ-1d, AQ-1e, AQ-1f, AQ-1g, and AQ-1h. See New Conventional Generation, Impact AQ-1.	Class I	Section E.7.1.11
	Impact AQ-4: Project activities would cause a net increase of greenhouse gas emissions	AQ-4a: Offset construction-phase greenhouse gas emissions with carbon credits. AQ-4b: Offset operation-phase greenhouse gas emissions with carbon credits. AQ-4c: Avoid sulfur hexafluoride emissions.	Class I	Section E.7.1.11
WATER RESOURCES				
Increased Solar Photovoltaic & DG Deployment	No Class I or II impacts identified; see Section E.5.12 for discussion of Class III impacts			
New Conventional Generation • One new combined cycle power plant • Four new peaker power plants	Impact H-1: Construction activity could degrade water quality due to erosion and sedimentation	H-1a: Prepare Substation Grading and Drainage Plan. H-1c: Minimize construction and maintenance disturbance to riparian areas [WQ-APM-1]. H-1d: Avoid watercourses to the maximum extent possible. H-1e: Identify and mark sensitive areas for avoidance. H-1f: Develop and implement construction Best Management Practices.	Class II	Section E.6.12

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
		<p>H-1g: Stream crossings at low flow periods. (SDCPP & peakers only)</p> <p>H-1h: Compliance with NPDES regulations. [WQ-APM-14] (SDCPP & peakers only)</p> <p>H-1i: Construction routes to avoid and minimize disturbance to stream channels. [WQ-APM-15] (SDCPP & peakers only)</p>		
	<p>Impact H-2: Construction activity could degrade water quality through spills of potentially harmful materials</p>	<p>H-2a: Groundwater testing and treatment before disposal. [WQ-APM-8]</p> <p>H-2b: No storage of fuels and hazardous materials near sensitive water resources. [WQ-APM-9]</p> <p>H-2c: Proper disposal and clean-up of hazardous materials. [WQ-APM-13]</p> <p>P-1a: Implement Environmental Monitoring Program. (SBRP only)</p> <p>P-1b: Maintain emergency spill supplies and equipment. (SBRP only)</p> <p>H-1c, H-1d, H-1e, H-1f, H-1g, H-1h, and H-1i: See New Conventional Generation, Impact H-1. (SDCPP & peakers only)</p>	Class II	Section E.6.12
	<p>Impact H-3: Excavation could degrade groundwater quality in areas of shallow groundwater</p>	<p>H-2a: Groundwater testing and treatment before disposal [WQ-APM-8].</p> <p>H-3a: Detect and avoid groundwater with project excavations [WQ-APM-11].</p> <p>H-1c: Minimize construction and maintenance disturbance to riparian areas. [WQ-APM-1] (SDCPP & peakers only)</p>	Class II	Section E.6.12
	<p>Impact H-4: Groundwater dewatering for project construction could deplete local water supplies</p>	<p>H-4a: Avoid using source water and provide alternative sources where avoidance is not possible [WQ-APM-6].</p>	Class II for SBRP & peakers only	Section E.6.12
	<p>Impact H-6: transmission towers or other above-ground project features located in a floodplain or watercourse could result in flooding, flood diversions, or erosion</p>	<p>H-1i: Construction routes to avoid and minimize disturbance to stream channels.</p> <p>H-1c: Minimize construction and maintenance disturbance to riparian areas. (SDCPP only)</p> <p>H-6a: Scour protection to include avoidance of bank erosion and effects to adjacent property. (SDCPP)</p>	Class II for SBRP & SDCPP only	Section E.6.12

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	Impact H-7: Accidental releases of contaminants from project facilities could degrade water quality	H-7a: Develop Hazardous Substance Control and Emergency Response Plan for project operation. H-2b and H-2c: See New Conventional Generation, Impact H-2. (SBRP only)	Class II	Section E.6.12
	Impact H-9: Power plant operation could substantially deplete local water supplies	None proposed.	Class I for SDCPP only	Section E.6.12
New Renewable Generation • Wind generation in the Crestwood area	Impact H-1: Construction activity could degrade water quality due to erosion and sedimentation	H-1a, H-1e, H-1f, and H-1g: See New Conventional Generation, Impact H-1.	Class II	Section E.5.12
	Impact H-3: Excavation could degrade ground-water quality in areas of shallow groundwater	H-1c, H-1d, and H-1h: See New Conventional Generation, Impact H-1. H-2b, and H-2c: See New Conventional Generation, Impact H-2.	Class II for transmission line	Section E.5.12
	Impact H-4: Groundwater dewatering for project construction could deplete local water supplies	H-4a: Avoid using source water and provide alternative sources where avoidance is not possible. [WQ-APM-6]	Class II for transmission line	Section E.5.12
	Impact H-6: transmission towers or other above-ground project features located in a floodplain or watercourse could result in flooding, flood diversions, or erosion	H-1i: Construction routes to avoid and minimize disturbance to stream channels. [WQ-APM-15] H-6a: Scour protection to include bank erosion and effects to adjacent property. H-8a: Bury power line below 100-year scour depth.	Class II	Section E.5.12
	Impact H-7: Accidental releases of contaminants from project facilities could degrade water quality	H-7a: Develop Hazardous Substance Control and Emergency Response Plan for project operation.	Class II	Section E.5.12
	Impact H-8: Underground portions of the power line could be exposed during flow events causing damage to the line or to adjacent property	H-6a: Scour protection to include avoidance of bank erosion and effects to adjacent property. H-8a: Bury power line below 100-year scour depth.	Class II	Section E.5.12
New Renewable Generation • Solar thermal generation in the Borrego Springs area	Impact H-1: Construction activity could degrade water quality due to erosion and sedimentation	H-1a, H-1c, H-1d, H-1e, H-1f, H-1g, H-1h, and H-1i: See New Conventional Generation, Impact H-1.	Class II	Section E.5.12
	Impact H-2: Construction activity could degrade water quality through spills of potentially harmful materials	H-1c, H-1d, H-1e, H-1f, H-1g, H-1h, and H-1i: See New Conventional Generation, Impact H-1. H-2a, H-2b, H-2c, P-1a, and P-1b: See New Conventional Generation, Impact H-2. P-1c: Personnel trained in proper use and safety procedures for the chemicals used. [HS-APM-1]	Class II	Section E.5.12

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
		<p>P-1d: Personnel trained in refueling of vehicles. [HS-APM-2]</p> <p>P-1e: Preparation of environmental safety plans including spill prevention and response plan. [HS-APM-3]</p> <p>P-1f: Applicant's and/or General Contractor environmental/health and safety personnel. [HS-APM-8]</p> <p>P-1g: Proper storage and disposal of generated waste. [HS-APM-10]</p>		
	Impact H-3: Excavation could degrade groundwater quality in areas of shallow groundwater	H-1c, H-2a, and H-3a: See New Conventional Generation, Impact H-3.	Class II	Section E.5.12
	Impact H-4: Groundwater dewatering for project construction could deplete local water supplies	H-4a: Avoid using source water and provide alternative sources where avoidance is not possible. [WQ-APM-6]	Class II	Section E.5.12
	Impact H-6: transmission towers or other above-ground project features located in a floodplain or watercourse could result in flooding, flood diversions, or erosion	H-6a: Scour protection to include bank erosion and effects to adjacent property.	Class I	Section E.5.12
	Impact H-7: Accidental releases of contaminants from project facilities could degrade water quality	<p>H-7a: Develop Hazardous Substance Control and Emergency Response Plan for project operation.</p> <p>P-5a: Include HTF in spill response plans and remediate contaminated soil.</p>	Class II	Section E.5.12
	Impact H-8: Underground portions of the power line could be exposed during flow events causing damage to the line or to adjacent property	H-8a: Bury power line below 100-year scour depth.	Class II for Option 1 transmission line only	Section E.5.12
	Impact H-9: Power plant operation would substantially deplete local water supplies	H-9a: Offset water for operation of Solar Thermal plant.	Class II	Section E.5.12
New Renewable Generation	Impact H-1: Construction activity could degrade water quality due to erosion and sedimentation	H-1c, H-1d, H-1e, H-1f, and H-1h: See New Conventional Generation, Impact H-1.	Class II for Fallbrook facility	Section E.5.12
<ul style="list-style-type: none"> • Biomass/biogas projects in San Diego and Fallbrook 	Impact H-2: Construction activity could degrade water quality through spills of potentially harmful materials	H-1h: Compliance with NPDES regulations. [WQ-APM-14]	Class II	Section E.5.12

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
		H-2a, H-2b, and H-2c: See New Conventional Generation, Impact H-2.		
	Impact H-3: Excavation could degrade ground-water quality in areas of shallow groundwater	H-2a and H-3a: See New Conventional Generation, Impact H-3.	Class II	Section E.5.12
	Impact H-5: Creation of new impervious areas could cause increased runoff resulting in flooding or increased erosion downstream	H-5a: Install substation runoff control.	Class II for the Fallbrook Facility	Section E.5.12
	Impact H-6: transmission towers or other above-ground project features located in a floodplain or watercourse could result in flooding, flood diversions, or erosion	H-1d: Avoid watercourses to the maximum extent possible. H-6a: Scour protection to include bank erosion and effects to adjacent property.	Class II	Section E.5.12
	Impact H-7: Accidental releases of contaminants from project facilities could degrade water quality	H-2c: Proper disposal and clean-up of hazardous materials. [WQ-APM-13] H-7a: Develop Hazardous Substance Control and Emergency Response Plan for project operation.	Class II	Section E.5.12
LEAPS Transmission	Impact H-1: Construction activity could degrade water quality due to erosion and sedimentation	FERC-1: Erosion Control Plan. FERC-3: Surface Water Resources Management Plan. USFS-35: Surface Water Resources Management Plan. H-1c, H-1d, H-1e, H-1f, H-1g, H-1h, and H-1i: See New Conventional Generation, Impact H-1. H-4a: See New Conventional Generation, Impact H-4. H-7a: Develop Hazardous Substance Control and Emergency Response Plan for project operation.	Class II	Section E.7.1.12
	Impact H-2: Construction activity could degrade water quality through spills of potentially harmful materials	FERC-1, FERC-3 and H-7a: See LEAPS Transmission, Impact H-1.	Class II	Section E.7.1.12
	Impact H-3: Excavation could degrade ground-water quality in areas of shallow groundwater	USFS-36: Groundwater Management Plan. H-3b: See New Conventional Generation, Impact H-3.	Class II	Section E.7.1.12
	Impact H-6: transmission towers or other above-ground project features located in a floodplain or watercourse could result in flooding, flood diversions, or erosion	H-6a: Scour protection to include bank erosion and effects to adjacent property.	Class II	Section E.7.1.12

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
GEOLOGY, MINERAL RESOURCES, AND SOILS				
Increased Solar Photovoltaic & DG Deployment	No impacts identified; see Section E.5.13 for complete discussion.			
New Conventional Generation <ul style="list-style-type: none"> • One new combined cycle power plant • Four new peaker power plants 	Impact G-1: Erosion would be triggered or accelerated due to construction activities	G-1a: Limit modification of access roads. [GEO-APM-1] G-1b: Implement erosion control procedures. [GEO-APM-2]	Class II	Section E.6.13
	Impact G-3: Project would expose people or structures to potential substantial adverse effects as a result of problematic soils	G-3a: Conduct geotechnical studies for soils to assess characteristics and aid in appropriate foundation design. G-3b: Avoid structure placement in high shrink/swell areas. [GEO-APM-3]	Class II	Section E.6.13
	Impact G-4: Project would expose people or structures to potential substantial adverse effects as a result of seismically induced groundshaking and/or ground failure.	G-4b: Conduct geotechnical investigations for liquefaction. G-6a: Conduct geotechnical surveys for landslides and protect against slope instability.	Class II	Section E.6.13
	Impact G-6: Project would expose people or structures to potential substantial adverse effects as a result of slope instability created during excavation and/or grading	G-6a: Conduct geotechnical surveys for landslides and protect against slope instability.	Class II for SDCPP and Miramar and Margarita peakers only	Section E.6.13
	Impact G-7: Project would expose people or structures to potential substantial adverse effects as a result of landslides, earthflows, debris flows and/or rockfall	G-5a: Minimize project structures within active fault zones. G-6a: Conduct geotechnical surveys for landslides and protect against slope instability.	Class II for SDCPP, and Miramar and Margarita peakers only	Section E.6.13
New Renewable Generation <ul style="list-style-type: none"> • Wind generation in the Crestwood area 	Impact G-1: Erosion would be triggered or accelerated due to construction activities	G-1a and G-1b: See New Conventional Generation, Impact G-1. G-1d: Restore surfaces for erosion control and revegetation. [GEO-APM-6]	Class II	Section E.5.13
	Impact G-3: Project would expose people or structures to potential substantial adverse effects as a result of problematic soils	G-3a and G-3b: See New Conventional Generation, Impact G-2.	Class II	Section E.5.13

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	Impact G-4: Project would expose people or structures to potential substantial adverse effects as a result of seismically induced groundshaking and/or ground failure	G-4b and G-6a: See New Conventional Generation, Impact G-4. G-4a: Reduce effects of groundshaking G-5a: Minimize project structures within active fault zones	Class II	Section E.5.13
	Impact G-6: Project would expose people or structures to potential substantial adverse effects as a result of slope instability created during excavation and/or grading	G-6a: See New Conventional Generation, Impact G-6. G-3b: Avoid structure placement in high shrink/swell areas. [GEO-APM-3] G-6b: Place structures in stable areas. [GEO-APM-4]	Class II	Section E.5.13
	Impact G-7: Project would expose people or structures to potential substantial adverse effects as a result of landslides, earthflows, debris flows, and/or rockfall	G-3b: Avoid structure placement in high shrink/swell areas. [GEO-APM-3] G-6a: Conduct geotechnical surveys for landslides and protect against slope instability.	Class II	Section E.5.13
New Renewable Generation • Solar thermal generation in the Borrego Springs area	Impact G-1: Erosion would be triggered or accelerated due to construction activities	G-1a, G-1b, and G-1d: See New Renewable Generation, Wind component, Impact G-1. G-1c: Avoid new disturbance, erosion, degradation. [GEO-APM-5].	Class II	Section E.5.13
	Impact G-2: Unique geologic features would be damaged due to construction activities	G-2a: Protect desert pavement.	Class II	Section E.5.13
	Impact G-3: Project would expose people or structures to potential substantial adverse effects as a result of problematic soils	G-3a and G-3b: See New Conventional Generation, Impact G-3.	Class II	Section E.5.13
	Impact G-4: Project would expose people or structures to potential substantial adverse effects as a result of seismically induced groundshaking and/or ground failure	G-4a, G-4b, and G-6a: See New Renewable Generation, Wind component, Impact G-4.	Class II	Section E.5.13
	Impact G-5: Project would expose people or structures to potential substantial adverse effects as a result of surface fault rupture at crossings of active faults	G-5a: Minimize project structures within active fault zones.	Class II	Section E.5.13
	Impact G-6: Project would expose people or structures to potential substantial adverse effects as a result of slope instability created during excavation and/or grading	G-6a and G-6b: See New Renewable Generation, Wind component, Impact G-6. G-6c: Avoid or remove unstable slope elements. [GEO-APM 8]	Class II for transmission line options	Section E.5.13

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	Impact G-7: Project would expose people or structures to potential substantial adverse effects as a result of landslides, earthflows, debris flows, and/or rockfall	G-6a: See New Renewable Generation, Wind component, Impact G-7. G-6b: Place structures in stable areas. [GEO-APM-4] G-6c: Avoid or remove unstable slope elements. [GEO-APM 8]	Class II for Option 2 transmission line only	Section E.5.13
New Renewable Generation • Biomass/biogas projects in San Diego and Fallbrook	Impact G-1: Erosion would be triggered or accelerated due to construction activities	G-1a, G-1b, G-1c, and G-1d: See New Renewable Generation, Solar Thermal component, Impact G-1.	Class II	Section E.5.13
	Impact G-3: Project would expose people or structures to potential substantial adverse effects as a result of problematic soils	G-3a: See New Conventional Generation, Impact G-3.	Class II	Section E.5.13
	Impact G-4: Project would expose people or structures to potential substantial adverse effects as a result of seismically induced groundshaking and/or ground failure	G-4a and G-4b: See New Renewable Generation, Wind component, Impact G-4.	Class II	Section E.5.13
	Impact G-6: Project would expose people or structures to potential substantial adverse effects as a result of slope instability created during excavation and/or grading	G-6a, G-6b, and G-6c: See New Renewable Generation, Solar Thermal component, Impact G-6.	Class II for Fallbrook Facility only	Section E.5.13
	Impact G-7: Project would expose people or structures to potential substantial adverse effects as a result of landslides, earthflows, debris flows, and/or rockfall	G-4a: Reduce effects of groundshaking G-6a and G-6b: See New Renewable Generation, Solar Thermal component, Impact G-7.	Class II for Fallbrook Facility only	Section E.5.13
LEAPS Transmission	Impact G-1: Erosion would be triggered or accelerated due to construction activities	FERC- 1: Erosion Control Plan H-1f: Develop and implement construction Best Management Practices G-1e: Minimize road construction	Class II	Section E.7.1.13
	Impact G-3: Project would expose people or structures to potential substantial adverse effects as a result of problematic soils	G-3a: Conduct geotechnical studies for soils to assess characteristics and aid in appropriate foundation design	Class II	Section E.7.1.13
	Impact G-4: Project would expose people or structures to potential substantial adverse effects as a result of seismically induced groundshaking and/or ground failure	G-4a: Reduce effects of groundshaking. G-4b: Conduct geotechnical investigations for liquefaction G-6a: Conduct geotechnical surveys for landslides and protect against slope instability G-6b: Place structures in stable areas. [GEO-APM-4] G-6c: Avoid or remove unstable slope elements. [GEO-APM 8]	Class II	Section E.7.1.13

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	Impact G-5: Project would expose people or structures to potential substantial adverse effects as a result of surface fault rupture at crossings of active faults	G-5a: Minimize project structures within active fault zones G-6b: Place structures in stable areas	Class II	Section E.7.1.13
	Impact G-6: Project would expose people or structures to potential substantial adverse effects as a result of slope instability created during excavation and/or grading	G-6a: Conduct geotechnical surveys for landslides and protect against slope instability	Class II	Section E.7.1.13
	Impact G-7: Project would expose people or structures to potential substantial adverse effects as a result of landslides, earthflows, debris flows, and/or rockfall	G-6a: Conduct geotechnical surveys for landslides and protect against slope instability	Class II	Section E.7.1.13
SOCIOECONOMICS, PUBLIC SERVICES, AND UTILITIES				
Increased Solar Photovoltaic & DG Deployment	No adverse impacts identified; see Section E.5.14 for complete discussion.			
New Conventional Generation <ul style="list-style-type: none"> • One new combined cycle power plant • Four new peaker power plants 	Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident	S-2a: Notification of utility service interruption. S-2b: Protection of underground utilities.	Class II	Section E.6.14
	Impact S-3: Project construction and operation would increase the need for public services and facilities	S-3a: Recycle construction waste.	Class II for solid waste for SBRP Class I for water and sewer for SDCPP operations	Section E.6.14
New Renewable Generation <ul style="list-style-type: none"> • Wind generation in the Crestwood area 	Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident	S-2a: Notification of utility service interruption. S-2b: Protection of underground utilities. S-2c: Coordinate with utility providers. [PSU-APM-1], [PSU-APM-2]	Class II	Section E.5.14
New Renewable Generation <ul style="list-style-type: none"> • Solar thermal generation in the Borrego Springs area 	Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	WR-1a: Coordinate construction schedule and activities with the authorized officer for the recreation area. WR-1b: Provide temporary detours for trail users. WR-1c: Coordinate with local agencies to identify alternative recreation areas.	Class I for revenues; Class IV for economic benefits	Section E.5.14
	Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident	S-2a, S-2b, and S-2c: See New Renewable Generation, Wind, Impact S-2.	Class II	Section E.5.14

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
	Impact S-3: Project construction and operation would increase the need for public services and facilities	H-9a: Offset water for operation of Solar Thermal plant.	Class II for operation	Section E.5.14
New Renewable Generation • Biomass/biogas projects in San Diego and Fallbrook	Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	None proposed.	Class IV	Section E.5.14
	Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident	S-2a, S-2b, and S-2c: See New Renewable Generation, Wind, Impact S-2.	Class II for Miramar facilities	Section E.5.14
LEAPS Transmission	Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	USFS-37: Scenery Conservation Plan. WR-1a, WR-1b and WR-1c: See New Renewable Generation, Solar Thermal, Impact S-1.	Class I for displaced businesses. Class II for businesses not directly affected. Class IV for economic benefits	Section E.7.1.14
	Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident	S-2a and S-2b: See New Renewable Generation, Wind, Impact S-2.	Class II	Section E.7.1.14
FIRE AND FUELS MANAGEMENT				
Increased Solar Photovoltaic & DG Deployment	No impacts would occur; see Section E.5.15 for complete discussion.			
New Conventional Generation • One new combined cycle power plant • Four new peaker power plants	Impact F-1: Construction and/or maintenance activities would significantly increase the probability of a wildfire	F-1a: Develop and implement a Construction Fire Prevention Plan. F-1c: Ensure coordination for emergency fire suppression. F-1d: Remove hazards from the work area.	Class II for SDCPP and peakers only	Section E.6.15
	Impact F-2: Operation and maintenance activities would increase the probability of a wildfire	F-1c: Ensure coordination for emergency fire suppression.	Class II for SDCPP and peakers only	Section E.6.15

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
New Renewable Generation • Wind generation in the Crestwood area	Impact F-1: Construction and/or maintenance activities would significantly increase the probability of a wildfire	F-1a, F-1c, and F-1d: See New Conventional Generation, Impact F-1. F-1b: Finalize and implement SDG&E 2006 Draft Fire Plan for Electric Standard Practice. F-1e: Contribute to defensible space grants fund.	Class II	Section E.5.15
	Impact F-2: Presence of the overhead transmission line would increase the probability of a wildfire	F-1e: See Impact F-1. F-2a: Establish and maintain adequate line clearances.	Class I	Section E.5.15
	Impact F-3: Presence of the overhead transmission line would reduce the effectiveness of firefighting	F-3a: Construct and maintain fuelbreaks. F-3b: Prepare and implement a Multi-agency Fire Prevention MOU.	Class I	Section E.5.15
	Impact F-4: Project activities would introduce non-native plants, which would contribute to an increased ignition potential and rate of fire spread	B-3a: Prepare and implement a Weed Control Plan.	Class II	Section E.5.15
New Renewable Generation • Solar thermal generation in the Borrego Springs area	Impact F-1: Construction and/or maintenance activities would significantly increase the probability of a wildfire	F-1a, F-1b, F-1c, F-1d, and F-1e: See New Renewable Generation, Wind component, Impact F-1.	Class II	Section E.5.15
	Impact F-2: Presence of the overhead transmission line would increase the probability of a wildfire	F-1e and F-2a: See New Renewable Generation, Wind component, Impact F-2.	Class II for Option 2 transmission Line only	Section E.5.15
	Impact F-3: Presence of the overhead transmission line would reduce the effectiveness of firefighting	F-3a and F-3b: See New Renewable Generation, Wind component, Impact F-2.	Class I for Option 2 transmission Line only	Section E.5.15
	Impact F-4: Project activities would introduce non-native plants, which would contribute to an increased ignition potential and rate of fire spread	B-3a: See New Renewable Generation, Wind component, Impact F-4.	Class II	Section E.5.15

No Project Alternative Component	Impact(s) (Note: Class I and II impacts only. See referenced sections for Class III impact discussions.)	Mitigation Measure(s) (Note: Appendix 12 contains the complete mitigation measure language.)	Impact Classification	Full Impact Discussion Provided in
New Renewable Generation • Biomass/biogas projects in San Diego and Fallbrook	Impact F-4: Project activities would introduce non-native plants, which would contribute to an increased ignition potential and rate of fire spread	B-3a: See New Renewable Generation, Wind component, Impact F-4.	Class II for Fallbrook facility only	Section E.5.15
LEAPS Transmission	Impact F-1: Construction and/or maintenance activities would significantly increase the probability of a wildfire	F-1a, F-1b, F-1c, F-1d, and F-1e: See New Renewable Generation, Wind component, Impact F-1.	Class I	Section E.7.1.15
	Impact F-2: Presence of the overhead transmission line would increase the probability of a wildfire	F-1e and F-2a: See New Renewable Generation, Wind component, Impact F-2.	Class I	Section E.7.1.15
	Impact F-3: Presence of the overhead transmission line would reduce the effectiveness of firefighting	F-3a and F-3b: See New Renewable Generation, Wind component, Impact F-2.	Class I	Section E.7.1.15
	Impact F-4: Project activities would introduce non-native plants, which would contribute to an increased ignition potential and rate of fire spread	B-3a: See New Renewable Generation, Wind component, Impact F-4.	Class II	Section E.7.1.15

E.8.16 References

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