3.21 Mandatory Findings of Significance

3.21.1 Summary of Impacts

Table 3.21-1presents a summary of the significant impacts for each element of the Environmental Checklist as provided in Appendix G of the CEQA Guidelines for Mandatory Findings of Significance.

Table 3.21-1 Summary of Proposed Project Impacts for Mandatory Findings of Significance

Would the Proposed Project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Impact Discussion

a) Would the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Fish and Wildlife Species Habitat

The Proposed Project would involve rebuilding existing subtransmission lines, replacing/modifying individual existing poles, and reuse of individual existing subtransmission structures along portions of existing subtransmission lines within existing SCE easements.

The Proposed Project area contains suitable habitat for common and special status wildlife species. Construction activities would result in temporary and permanent impacts on habitat for wildlife at pole work areas where vegetation would be cleared. While the loss of habitat around each pole would be small, the impact could be significant for very rare species that already have limited habitat. MM Biology-2 requires restoration of areas of temporary impacts, MM Biology-6 requires compensatory mitigation for blunt-nosed leopard lizard habitat, and MM Biology-13 requires compensatory mitigation for San Joaquin kit fox habitat. The impact on wildlife habitat would be less than significant with mitigation.

Fish and Wildlife Populations

The proposed pole replacements would occur in upland areas. Proposed culvert replacements would occur within ephemeral or intermittent streams but not within perennial streams. Work within fish habitat would be performed only when the stream is dry. The Proposed Project would thus have no effect on fish populations. Grading, excavation, and equipment access during construction of the Proposed Project could cause mortality or injury of individual wildlife if wildlife were to occur in work areas at the time of construction. Project construction would occur over a period of 18 months. Project construction activities would occur in pole work areas, existing and proposed access routes, and staging areas. The existing access routes and staging areas are currently disturbed or developed and do not contain suitable habitat for wildlife. Construction activities at each pole work area would last for only a few days. While it is unlikely for wildlife to occur within the work area at the time of construction, the impact on very rare species populations could be significant. MMs Biology-1 through Biology-15 define procedures to protect special status wildlife in addition to SCE APMs and blunt-nosed leopard lizard avoidance and minimization. The impact on wildlife population levels, including special-status wildlife, would be less than significant.

Plant and Animal Communities

Impacts on plant and animal communities are discussed in Section 3.4: Biological Resources. Construction impacts would be isolated to the individual work areas and would not eliminate an entire plant or animal community due to the small area of disturbance at each pole. The

potential impacts on individual plants or animals would not eliminate or threaten to eliminate an entire plant or animal population or community. The impact would be less than significant.

Rare or Endangered Plants and Animal Numbers and Range

Range of Rare and Endangered Species

The Proposed Project is located within the range of rare and endangered species as discussed in Section 3.4: Biological Resources. The Proposed Project would have impacts on habitat for rare and endangered species at each work area/pole location in species habitat; however, the Proposed Project would not create a barrier to species movement. and the small area of impact at each proposed replacement pole would not restrict the range of any rare or endangered plant or animal species. The impact on the range of rare or endangered species would be less than significant.

Rare and Endangered Plants

The Proposed Project has the potential to reduce the number of rare and endangered plant species through direct removal of rare and endangered plants during grading and construction and through indirect impacts such as invasive weed introduction (refer to the discussion of direct and indirect impacts on special status plants in Section 3.4: Biological Resources). Direct and indirect impacts on special status plants could reduce the number of rare and endangered plants in the project study area, which would be a significant impact. MM Biology-1 requires specific criteria for pre-construction surveys during blooming season, avoidance measures, and a Salvage and Replanting Plan for special status plants that cannot be avoided. MM Biology-2 requires that, during restoration, performance standards and timeframes are met that would allow populations of these species to remain viable in disturbed areas.

MM Biology-1 and MM Biology-2 would reduce the potential for the Proposed Project to substantially reduce the number of any rare or endangered plant species. The impact would be less than significant with mitigation.

Rare or Endangered Wildlife

The Proposed Project has the potential to impact rare or endangered wildlife. Construction activities could injure or kill rare or endangered wildlife individuals, resulting in a reduction in the number of rare or endangered wildlife species occurring in the project study area. Construction activities would also result in noise and light impacts, which could affect wildlife breeding behavior or cause nest abandonment and, therefore, cause a reduction in rare or endangered species numbers, which would be a significant impact. APM BIO HERP-5, APM BIO MAM-2, MM Biology-3, MM Biology-4, MM Biology-5, MM Biology-6, MM Biology-7, MM biology-8, MM Biology-9, MM Biology-10, MM Biology-11, MM Biology-12, MM Biology-13, MM Biology-14, and MM Biology-15 would reduce potential impacts on Tehachapi slender salamander, Kern Canyon slender salamander, San Joaquin kit fox, Tipton kangaroo rat, Crotch's bumblebee, blunt-nosed leopard lizard, American badger, special status and protected avian species, and special status and protected bat species, respectively, to less-than-significant levels. Potential impacts on rare and endangered wildlife species would be less than significant with mitigation.

California History or Prehistory
The CRHR is used to catalog important examples of California history and prehistory. No CRHR eligible resources are known to occur in the Proposed Project area. as discussed in Section 3.5: Cultural Resources. Pole removal and installation, grading of access roads, vegetation removal, and other ground-disturbing activities have the potential to substantially damage or destroy previously undiscovered CRHR-eligible resources. Destruction or substantial damage of CRHR-eligible resources could eliminate an important example of California history or prehistory, which would be a significant impact. Cultural resource training, monitoring, evaluation, avoidance of eligible cultural resources, and data recovery, as necessary, would reduce the impact of construction activities on these resources (MM Cultural-1, APM CUL-2, APM CUL-3, APM CUL-4 and APM CUL-5). The Proposed Project would not eliminate important examples of the major periods of California history or prehistory with implementation of mitigation.

Required APMs and MMs: APM BIO HERP-5, APM BIO MAM-2, MM Biology-3, MM Biology-4, MM Biology-5, MM Biology-6, MM Biology-7, MM biology-8, MM Biology-9, MM Biology-10, MM Biology-11, MM Biology-12, MM Biology-13, MM Biology-14, and MM Biology-15,MM Cultural-1, APM CUL-2, APM CUL-3, APM CUL-4 and APM CUL-5

b) Would the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Introduction
The CEQA Guidelines (section 15130) require a discussion of the cumulative impacts of a project. Cumulative impact analysis accounts for the combined impacts associated with two or more projects in a given area. The following cumulative analysis evaluates the potential cumulative impacts from the Proposed Project in combination with other past, present, and probable future projects in the area. Based on the cumulative impacts analysis provided below, the Proposed Project would not result in a significant cumulative environmental impact.

Approach to Cumulative Impact Analysis
CEQA Guidelines Section 15130(b) presents two approaches for analyzing cumulative impacts, using either:

- A list of past, present, and probable future projects producing related or cumulative impacts, including those projects outside the control of the agency; or
- A summary of projections contained in an adopted local, regional, or statewide plan, or related planning document that describes or evaluates conditions contributing to the cumulative effect.

A hybrid approach is used in this IS/MND, where a list of probable future projects is considered in combination with the baseline conditions, agency projections, and adopted planning

documents. The cumulative analysis considers, but does not exclusively rely on, planning documents to establish the cumulative scenario for the analysis.

Area of Analysis

The analysis of potential cumulative impacts is generally limited to projects occurring within an approximately 2-mile-wide corridor centered on the approximately 65-mile-long Project alignment (i.e., 1 mile on each side of the Project alignment). Additional projects outside of this radius were also considered if they were determined to be relevant to the geographic scope of an environmental resource topic (e.g., air quality, greenhouse gases). The analysis area represents the physical extent of the limits in which indirect impacts of the Proposed Project may occur. For these reasons, the approximately 1-mile buffer is an appropriate distance to determine the potential for other probable future projects to be cumulatively considerable.

Data Collection

Projects were identified through review of websites, by contacting the surrounding local and state agencies (Caltrans, Kern County, Los Angeles County, City of Bakersfield, and City of Arvin), reviewing the Governor's Office of Planning & Research's CEQAnet database of the State Clearinghouse (SCH), reviewing the LPNF and SNF NEPA project websites, and by contacting private developers to inquire whether any projects were recently constructed, are being constructed, or are currently planned near the Proposed Project or its alternatives.

Cumulative Projects List

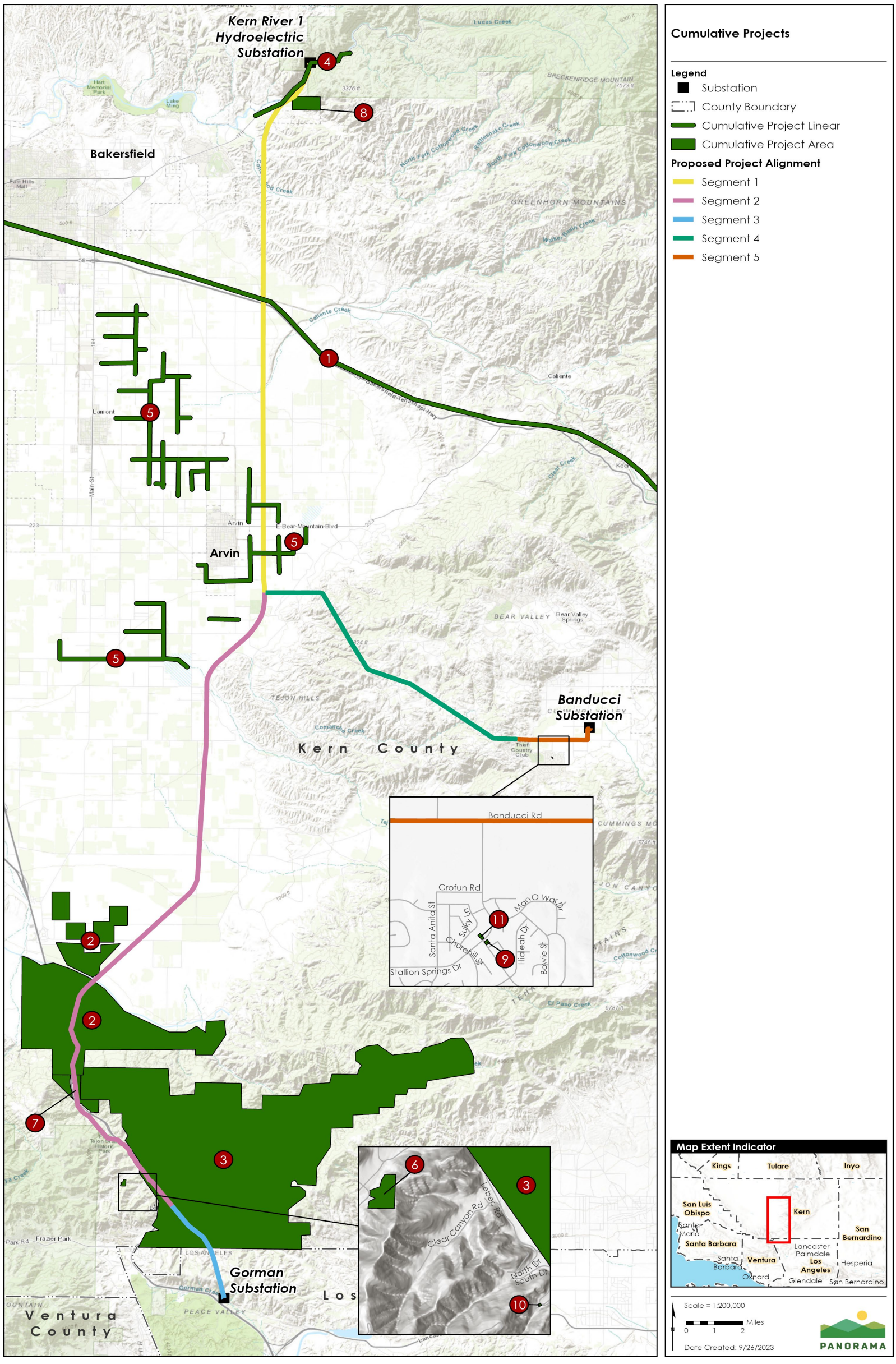
Table 3.21-2 includes a list of present (i.e., under construction) and probable future projects considered in this cumulative analysis. The table lists the project name, project type, a description of the project, its location and status. The locations of cumulative projects in relation to the Proposed Project are shown on Figure 3.21-1. Each project in Table 3.21-2 has an assigned number that is keyed to Figure 3.21-1.

Table 3.21-2 Cumulative Projects List

No.	Project name (project type)	Project components	Location	Status
1	High-speed rail	Construct high-speed rail infrastructures between Bakersfield and Palmdale.	Segment 1	In permitting
2	Grapevine at Tejon Ranch	Master planned development	Segment 2 (Lebec)	Approved
3	Mountain Village at Tejon Ranch	Master planned development	Segment 2 and 3 (Lebec)	Approved

No.	Project name (project type)	Project components	Location	Status
4	Kern Canyon culvert rehabilitation	Repair, replace, and clean culverts. Two new culverts and one overside drain will be built, 355 roadside signs will be replaced, and various Intelligent Transportation Systems will be installed at 11 locations.	Segment 1	In design
5	Expansion of District distribution system pipelines into groundwater service area lands	Construction of up to 44 miles of pipelines, manholes and turnouts	Segment 1	Approved
6	Cell tower	Construction of a cell tower in Lebec stealthed as a grain silo	Segment 3	Active
7	6-foot' monopole tower	Conditional Use Permit for the construction of a 60' Monopole Tower	Segment 3	Active
8	Mining sand and gravel	Conditional Use Permit to allow mining of sand and gravel in A zone and OS-S (Open Space - Slopes Exceeding 30%) (Previous mine CUP 6, Map 105)	Segment 1	In suspense
9	New automotive repair facility	Precise Development to permit a 1,500 square foot automotive repair shop	Segment 5: 18210 Bold Venture Drive, Stallion Springs area	Active
10	Residential bldg. minimum distance separation	Zoning Variance to allow a reduction in building separation setback	Segment 3: 601 Canyon Drive in the Lebec area.	Active
11	Child day care facility	Precise Development to allow a change of use to child day care operation previously utilized as a restaurant in a C-2 PD zone and 6.2/2.7 general plan designation on .37 acres.	Segment 5	Active

Figure 3.21-1 Cumulative Project Locations



Cumulative Impacts

Introduction

The cumulative impact analysis for the Proposed Project is provided for each of the environmental resource topics analyzed in this IS/MND.

Resources not considered further because they would have no cumulative impacts include the following:

- Energy: The Proposed Project would replace existing electrical power lines and would not increase the use of energy. The energy utilized during the Proposed Project's construction would require a short-term consumption of a limited amount of fossil fuel resources.
- Land use and planning: The Proposed Project would have no impact pertaining to the physical division of an established community nor would it conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, the Proposed Project would not cause or contribute to any cumulative impact related to Land Use and Planning.
- Mineral resources: The Proposed Project area is not located in a mineral resource area or within a locally important mineral resource recovery site delineated on any local land use plans. Therefore, the Proposed Project would not cause or contribute to any cumulative impact related to mineral resources.
- Public services: The Proposed Project would have no impact associated with the provision of or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools, parks, or other public facilities. Therefore, the Project would not cause or contribute to any cumulative impact related to these considerations.
- Population and housing: The Proposed Project would not result in an increase in population and, therefore, would not necessitate the construction of new housing. The Proposed Project would continue to serve the existing service area and would not service additional areas or provide additional energy.

Aesthetics

Geographic Extent

The geographic extent for the analysis of cumulative impacts to aesthetic resources includes both local and regional viewsheds. The local viewshed includes projects, activities, and landscapes visible within the same field of view as the Proposed Project. Regional cumulative effects occur when viewers perceive that the general visual quality or landscape character of a regional area is diminished by the proliferation of visible similar structures or construction effects even if the changes are not within the same field of view as existing or known future structures or facilities. The result is a perceived "industrialization" or "urbanization" of the existing landscape character. Cumulative aesthetic impacts would occur within 1 mile or less of the Proposed Project alignment. Beyond 1 mile, structures become less distinct or not visible if

they blend in sufficiently with background forms, colors, and textures. Also, beyond 1 mile it is likely that sightlines would become impaired or blocked by intervening terrain and vegetation.

Impacts Avoided by the Proposed Project
The Proposed Project would have no impact on scenic vistas and would not contribute to a cumulative impact on scenic vistas.

Potential Cumulative Impacts
As described in Section 3.1: Aesthetics, many of the impacts pertaining to aesthetics would occur during construction as the presence of equipment and materials would present temporary visual intrusions during construction. The Proposed Project's pole replacement would affect the visual landscape. The Proposed Project includes design features that would minimize temporary impacts pertaining to construction lighting and reduce (potentially permanent) impacts associated with glare. Following construction, the new structures would be located within an existing utility corridor, in most cases within 5 to 10 feet of existing structures, and of comparable size and form to existing structures.

Soil disturbance, construction staging, and the presence of equipment and materials would presumably occur with most of the projects listed in Table 3.21-2, although many would not be visible from the Proposed Project alignment. The master-planned development in proximity to the Proposed Project would introduce new residential development or commercial development. The impacts of residential and commercial development on the viewshed could be significant; however, the Proposed Project would not contribute to that cumulative impact as the Proposed Project would replace an existing subtransmission line and would not result in substantial changes to the viewshed in combination with the master-planned development. The Proposed Project and high-speed rail project would overlap in one location. Because the Proposed Project would replace an existing subtransmission line, a significant cumulative visual impact would not occur from the Proposed Project and high-speed rail project. Cumulative visual impacts would be less than significant.

Agriculture and Forestry Resources
Geographic Extent
The geographic extent for the analysis of cumulative impacts associated with agriculture includes all of Kern County. This geographic extent accounts for regional cumulative impacts to agriculture, which is appropriate because agricultural production is a regional resource.

Impacts Avoided by the Proposed Project
The Proposed Project would not conflict with zoning for, or cause rezoning of, forest land, timberland, or timberland zoned as Timberland Production. The Proposed Project would not contribute to cumulative impacts on these resources.

Potential Cumulative Impacts
A few projects identified in Table 3.21-2 would result in a substantial loss of or impact on agricultural land, including the high-speed rail project, Grapevine at Tejon Ranch, and Mountain Village at Tejon Ranch, and other projects, including energy projects in Kern County,

would also result in conversion of agricultural land to other uses. The cumulative impact on agricultural land is potentially significant. The Proposed Project would replace an existing subtransmission line. The existing subtransmission structures would be removed so that the areas of impacted farmland would be offset with the areas of removed structures that would be available for farmland use. Therefore, the Proposed Project may result in minor and temporary impacts on farmland but would not permanently convert any land to non-farmland uses and would not contribute considerably to cumulative impacts on farmland.

Air Quality

Geographic Extent

Air quality is a regional resource and is neither defined nor limited by jurisdictional boundaries, political boundaries, or project boundaries. The cumulative study area for air quality primarily encompasses activities within the same air basins as the Proposed Project, specifically the San Joaquin Valley Air Basin (SJVAB), Mojave Desert Air Basin (MDAB), and South Coast Air Basin (SCAB), which are under the jurisdictions of the San Joaquin Valley Air Pollution Control District (SJVAPCD), Eastern Kern Air Pollution Control District (EKAPCD), and South Coast Air Quality Management District (SCAQMD), respectively.

The Proposed Project would not conflict with or obstruct implementation of the applicable air quality plan or result in other emissions such as those leading to odors. Therefore, the Project would not cause or contribute to any cumulative impact in this respect.

Potential Cumulative Impacts

Regional Air Quality.

Regional air quality is affected by all activities that occur within an air basin. The SJVAB is classified as nonattainment for state and national standards for ozone, PM_{10} and $PM_{2.5}$. The MDAB is classified as nonattainment for state and national standards for ozone and PM_{10}. The SCAB is classified as nonattainment for state and national standards for ozone, and $PM_{2.5}$, and state standards for PM_{10}, and national standards for lead. The Proposed Project area is within either an unclassified or attainment area for all other State and federally regulated air pollutants. See Table 3.3-3 for the current attainment status of the study area. The cumulative impact from past, present, and probable future projects on existing air quality violations in the SJVAB, MDAB, and SCAB and criteria pollutants for which they are in nonattainment, would be significant.

Cumulative impacts on regional air quality are addressed by the air districts thresholds of significance for criteria pollutant emissions in the respective air basins because SJVAB, MDAB, and SCAB considered all past, present, and probable future projects when they set the thresholds of significance. The construction thresholds represent the levels at which a project's individual combustion emissions of criteria air pollutants and precursors would result in a cumulatively considerable contribution to the existing nonattainment designations. None of the air districts in the Proposed Project area sets numerical thresholds for fugitive dust. If a project's emissions exceed the numerical thresholds in their respective air basins, or if the project

generates uncontrolled fugitive dust, the project would considerably contribute to the cumulatively significant air quality impact in the applicable air basin.

Emissions generated during construction activities of the Proposed Project would not exceed the SJVAPCD, EKAPCD, or SCAQMD significance thresholds for criteria air pollutants with controlled emission (refer to Section 3.3: Air Quality, Impact b). Uncontrolled PM_{10} and fugitive dust emissions could result in a significant impact. The Proposed Project's contribution to a significant cumulative impact to an existing air quality violation and nonattainment of particulate matter could be considerable. APM AIR-1 and CPUC Draft Environmental Measure for Dust Control During Construction require SCE to implement measures to reduce fugitive dust and diesel emissions. With implementation of APM AIR-1 the Proposed Project would not generate excessive emissions of fugitive dust and would comply with SJVAPCD, EKAPCD, and SCAQMD fugitive dust restrictions. The Proposed Project would thus not contribute considerably to a significant cumulative air quality impact.

*Local Air Quality***.** Carbon monoxide hotspots, fugitive dust emissions, or diesel emissions have the potential to result in localized impacts due to the toxic air contaminants (TACs) capable of causing short-term and long-term adverse human health effects. Diesel and jet fuel exhaust would be emitted from heavy equipment and helicopters operating at the Proposed Project work areas and the Proposed Project ground disturbing activities would generate fugitive dust. Health effects from TACs are typically framed in terms of incremental cancer risk.

Construction vehicles and equipment used during construction of the cumulative projects would generate localized diesel and fugitive dust emissions at the various staging areas that are near sensitive receptors (Table 3.3-10). Adjacent cumulative projects could affect the same sensitive receptors as the Proposed Project (sensitive receptors within 1,000 feet of cumulative project and Proposed Project construction areas) if the construction occurs at the same time. Construction of the cumulative projects, particularly large master planned communities, has the potential to subject sensitive receptors to elevated TAC emissions for a prolonged period if any sensitive receptors are adjacent to the projects. The only Proposed Project activities that would last more than 2 months would be staging activities. None of the Proposed Project staging yards are in proximity to the master planned development. In addition, there are very few receptors within 1,000 feet of the Proposed Project as illustrated in Section 3.3: Air Quality. Because the Proposed Project would not involve activities lasting more than 2 months within 1,000 feet of any cumulative project, the cumulative impact on sensitive receptors from air toxics would be less than significant.

Biological Resources

Geographic Extent

The geographic extent for the biological resources cumulative analysis includes vegetation and wildlife communities and special status species habitats within 1 mile of the Proposed Project alignment. This geographic extent is appropriate because it accounts for the cumulative degradation or loss of a particular vegetation community or special status species population from cumulative projects that have impacted, or would impact, vegetation communities of

concern or special status species and that could result in cumulative habitat degradation or fragmentation.

Impacts Avoided by the Proposed Project
The Proposed Project would not impact special status fish or the movement of migratory fish or wildlife species or conflict with any local policies or ordinances protecting biological resources or with any habitat conservation plan or natural community conservation plan. The Proposed Project would not contribute to cumulative impacts on these resources.

Potential Cumulative Impacts
Many of the cumulative projects listed in Table 3.17 2 are located in developed areas that do not provide suitable habitat for and would not impact special-status plants, amphibians, reptiles, or mammals. The high-speed rail project (#1), Grapevine at Tejon Ranch (#2), Mountain Village at Tejon Ranch (#3), and the cell tower (#6) are the only cumulative projects located within 1 mile of the Proposed Project area that could impact natural habitats that may support special status species. The cumulative impacts of these projects and the Proposed Project are described below.

Special Status Species: The high-speed rail project, Grapevine at Tejon Ranch, Mountain Village at Tejon Ranch, and the cell tower could impact the same special status plant and wildlife species as the Proposed Project. The high-speed rail project EIRs/EISs for the Fresno to Bakersfield section (California High-Speed Rail Authority 2014b) and for the Bakersfield to Palmdale Section (California High-Speed Rail Authority 2021a) include mitigation measures to reduce impacts on special status plants and wildlife. The Grapevine at Tejon Ranch and Mountain Village at Tejon Ranch projects are subject to the Tejon Ranch Habitat Conservation Plan (HCP), which includes conservation actions and measures to reduce impacts on special status plants and wildlife. The HCP is designed to address impacts at a regional scale to avoid significant cumulative impacts occurring from the Tejon Ranch Development. The cell tower project is an isolated project that would not create a cumulative impact with the Proposed Project. Because the larger cumulative projects include mitigation measures to offset their individual impacts and provide for habitat compensation to address cumulative habitat impacts on special status species and because the Proposed Project includes mitigation measures to avoid a significant loss of habitat, the cumulative impact of the Proposed Project and cumulative projects would be less than significant with implementation of the project-specific mitigation included in Section 3.4: Biological Resources.

Cultural Resources
Geographic Extent
The geographic extent for the cultural resources cumulative analysis includes the Proposed Project region. This geographic scope is appropriate because cultural resources are usually associated with both a particular tribe or historic settlement and a particular time period. The Proposed Project is not located in a historic or archaeological district.

Potential Cumulative Impacts
The loss of several resources from a particular tribe or representing one particular time period could result in significant impacts to the information that those resources possess. If any of the cumulative projects could each impact resources with similar information about a particular tribe or timeframe, a cumulatively significant impact could occur.

The Proposed Project would avoid impacts on any significant historic or archaeological resources and has some potential to impact previously undiscovered cultural resources, which could contribute to a significant cumulative impact on cultural resources. MM Cultural-1, APM CUL-2, APM CUL-3, APM CUL-4 and APM CUL-5 require procedures to conduct cultural resource surveys prior to construction in areas not previously surveyed, to train workers, to monitor qualifying ground disturbance, and to avoid eligible cultural resources as well as procedures to follow upon discovery of human remains and perform data recovery, as necessary. With this mitigation, any previously undiscovered resources would either be avoided or their information potential ascertained, and the Proposed Project's contribution to any cumulative impacts would be less than considerable.

Geology, Soils and Paleontological Resources
Geographic Extent
The geographic extent for the analysis of cumulative impacts associated with geology, soils, and paleontological resources includes projects within 0.5 mile of the Proposed Project site because nearby projects could contribute to slope instability or geologic hazards.

The geographic extent for cumulative paleontological impacts includes the extent of geologic units with high paleontological sensitivity: Tejon Formation, Tecuya Formation, Olcese Formation, Bena Gravel, Santa Margarita Formation, Chanac Formation, and Kern River Gravel. This geographic extent is appropriate because these contiguous geologic formations could contain similar paleontological resources that would contain the same research potential as resources found within the Proposed Project study area.

Impacts Avoided by the Proposed Project
The Proposed Project would not be located on expansive soils or require the use of septic tanks or alternative wastewater disposal systems. The Proposed Project would not contribute to cumulative impacts on these resources. The Proposed Project would avoid impacts on unique geologic features because none exist in the Proposed Project area. The Proposed Project would, therefore, not contribute to a cumulative impact to unique geologic formations.

Potential Cumulative Impacts
Active faults are located in the region. The risk of seismic hazards to the public would be localized and would not combine cumulatively. The risks from seismicity are existing risks, and none of the cumulative projects substantially increase seismic risks over baseline conditions.

All of the considered cumulative projects would occur in flat, previously graded and disturbed areas. In addition, all cumulative projects that exceed 1 acre would be required to obtain coverage under the California Stormwater General Permit and prepare a SWPPP. None of the

projects would result in substantial soil erosion or loss that could be cumulatively significant due to compliance with the California Stormwater General Permit requirements. Due to the flat terrain, destabilization of soils or geologic units is unlikely. The cumulative impacts would be less than significant.

Segments 1, 2, 3, and 5 are located within geologic units with moderate to very high paleontological sensitivity. Many of the cumulative projects listed in Table 3.21-2 are located in areas adjacent the Proposed Project site and may have high or very high paleontological sensitivity. Ground-disturbing activities for the Proposed Project and cumulative projects could result in cumulative significant impacts on paleontological resources. SCE has proposed APMs PAL-1, PAL-2, and PAL-3 to reduce impacts on paleontological resources. APM PAL-1 would require SCE to develop a Paleontological Resource Mitigation and Monitoring Plan (PRMMP) to guide all paleontological management activities during Project construction. The PRMMP would include a Paleontological Resource Monitoring and Reporting Plan, Unanticipated Discovery Protocol, and Data Analysis and Reporting and requires monitoring in areas with moderate to high paleontological sensitivity. APM PAL-2 requires Paleontology Resources Awareness Training that would require all construction personnel to be trained regarding the recognition of possible buried paleontological resources (i.e., fossils) and protection of all paleontological resources during construction. APM PAL-3 would require paleontological monitoring to be conducted by a qualified paleontologist familiar with the types of resources that could occur within the Proposed Project area. Implementation of these APMs would reduce the Project's contribution to a cumulative impact on paleontological resources to less than significant.

Greenhouse Gas Emissions

Geographic Extent

GHGs are global pollutants and have long atmospheric lifetimes of 1 year to several thousand years, which permits dispersal of GHGs around the globe. In contrast to air quality, which generally is a regional or local concern, human-caused emissions of GHGs have been linked to climate change on a global scale. The geographic extent for the GHG emissions cumulative analysis is therefore considered global.

Potential Cumulative Impacts

GHG emissions and climate change are inherently cumulative impacts. Past, present, and probable future projects worldwide contribute or would contribute to the cumulative conditions for GHG emissions. The cumulative impact of GHG emissions and climate change is significant.

Cumulative impacts from GHG emissions are addressed by SCAQMD, which is the most conservative GHG threshold of all three air districts in which the Proposed Project is located. SCAQMD thresholds of significance of 10,000 $MTCO_2e$ per year represent the levels at which a project's individual emissions of criteria air pollutants and precursors would result in a cumulatively considerable contribution to GHGs. SCAQMD considered the cumulative nature of greenhouse gases when setting thresholds for GHG.

The use of heavy equipment, construction-related vehicles, and helicopters during construction of the Proposed Project would generate GHG emissions. The Proposed Project would generate approximately 4,542 $MTCO_2e$ over the 3-year construction period. The Proposed Project's GHG emissions from operation and maintenance would primarily result from vehicle travel to and from the Proposed Project area to conduct routine inspections and maintenance. Since the operation and maintenance activities and associated emissions would be far less than that of the construction activities and emissions, the annual CO_2e emissions from operation and maintenance activities would be well below the threshold of 10,000 $MTCO_2e$ per year. GHG emissions generated by construction and operation of the Proposed Project would not exceed the SCAQMD GHG emissions threshold. The Proposed Project's contribution to GHG emissions would be less than cumulatively considerable.

Hazards and Hazardous Materials

Geographic Extent

The geographic extent for the analysis of cumulative impacts associated with hazards and hazardous materials is the area within approximately 0.25 mile of the Proposed Project alignment. This geographic extent is appropriate given the small volume of hazardous materials that would be used for construction of the Proposed Project and the potential hazardous material to be transported during upset or accident conditions.

Potential Cumulative Impacts

The high-speed rail (#1), Grapevine at Tejon Ranch (#2), Mountain Village at Tejon Ranch (#3), Kern Canyon culvert rehabilitation (#4), Expansion of District Distribution System Pipelines into Groundwater Service Area Lands (#5), 60-foot monopole tower (#7), and mining sand and gravel (#8) projects are the cumulative projects listed within 0.25 mile of the Proposed Project.

Routine transport, use, and disposal of hazardous materials and accidental hazardous materials releases: Construction and operation of the Proposed Project and cumulative projects would use equipment and vehicles that could leak hazardous materials including gasoline and diesel fuel, engine oil, coolant, lubricants, solvents and grease. Hazardous materials, particularly fuel, may be transported to and from

Project sites, which would increase the risk of accident and release. The hazard to the public from fuel leaks from the cumulative projects would be highly localized due to the small amount of hazardous materials that typical construction activities would use and would not overlap or compound. SCE would implement APM-HAZ 1, which requires implementation of an HMMP/HMBP for storage, use, and transport of hazardous materials to ensure that all hazardous materials and wastes would be handled and disposed of according to applicable rules and regulations. Additionally, APM HAZ-1 requires BMPs to prevent accidental spills. Because SCE would implement APM HAZ-1, the cumulative impact from routine use of hazardous materials would be less than significant.

Hazardous materials sites: A review of hazardous material investigation and cleanup site databases provided information regarding the hazardous material sites located in the Proposed

Project study area (Table 3.9-1). The cumulative projects would not disturb a hazardous materials site within 0.25 mile of the Proposed Project. No cumulative impact from accidental releases of hazardous materials from a known hazardous site would occur.

Air traffic hazard: Construction of the cumulative projects would not increase air traffic in the region. Although the Proposed Project would temporarily increase air traffic during helicopter operations, none of the other cumulative projects involve air traffic or the construction of tall structures. No cumulative impact would occur.

Wildland fire: The cumulative projects are located in various Fire Hazard Severity zones, including CPUC Extreme and Elevated Fire Threat Areas. The cumulative projects in high fire risk areas do not involve activities that would create a cumulative fire hazard when considered in combination with the Proposed Project. No cumulative impact from cumulative project activities in a high fire risk area would occur.

Hydrology and Water Quality

Geographic Extent

The geographic extent for this cumulative analysis is defined as the watersheds where the Proposed Project site is located, the majority being located within the Middle Kern–Upper Tehachapi–Grapevine watershed. This watershed represents both the hydrologic and administrative units for water quality control and protection of beneficial uses for water resources in the Proposed Project area.

Impacts Avoided by the Proposed Project

The Proposed Project would not construct houses or structures within a 100-year flood hazard area. The Proposed Project would not contribute to cumulative impacts from flooding on housing or structures.

Potential Cumulative Impacts

All projects listed in Table 3.21-2 contribute or would contribute to the cumulative conditions for hydrology and water quality within the cumulative analysis study area.

Water Quality Standards, Waste Discharge Requirements, Erosion, and Polluted Runoff.

The Proposed Project would involve ground-disturbing activities that could increase erosion and siltation. Ground-disturbing activities required to construct cumulative projects could result in soil erosion and sediment deposition into local streams. In addition, construction and operation of the Proposed Project and cumulative projects would require the use of hazardous materials such as diesel fuel and gasoline. Spilled materials and sedimentation from earth-moving activities could potentially be transported to waterways and adversely impact water quality in the watersheds. All of the cumulative projects and the proposed project would be required to obtain a Construction Stormwater General Permit and prepare an HMBP. Due to compliance with State laws for protection of water quality, the cumulative impact from spills of hazardous materials or sedimentation would be less than significant.

Groundwater: The master-planned development cumulative projects could result in a cumulative increase in impervious surfaces and use of groundwater, which could result in a cumulative significant impact on groundwater supplies. The Proposed Project would have a negligible increase in impervious areas and would not contribute considerably to any cumulative impact on groundwater recharge.

Construction of the Proposed Project would require water for dust control and compaction. The Proposed Project would not require long-term water use and would not contribute to long-term impacts on groundwater resources. The Proposed Project would not contribute considerably to a significant cumulative impact on groundwater supplies.

Drainage Pattern alterations. The Proposed Project would not alter drainage patterns of the area and thus would not contribute to cumulative impacts on drainage patterns.

Noise

Geographic Extent

The geographic extent for the analysis of cumulative impacts associated with noise is limited to areas within 0.5 mile of the Proposed Project site. This geographic extent is appropriate because noise levels attenuate rapidly with distance, and the noise generated by activities greater than 0.5 mile from the Proposed Project would not have the potential to combine with the noise generated by Proposed Project construction. Cumulative projects located within 0.5 mile of the Proposed Project include the high-speed rail (#1), Grapevine at Tejon Ranch (#2), Mountain Village at Tejon Ranch (#3), Kern Canyon culvert rehabilitation (#4), Expansion of District Distribution System Pipelines into Groundwater Service Area Lands (#5), 60-foot monopole tower (#7), mining sand and gravel (#8), and residential building minimum distance separation (#10) projects. The Proposed Project would contribute to a cumulative noise impact along with these projects only if their construction schedules coincide or overlap.

Impacts Avoided by the Proposed Project

The Proposed Project would not generate noise that would be located within an airport land use plan or within 2 miles of a private airstrip. The Proposed Project would not contribute to cumulative impacts from conflict with noise standards or proximity to an airport.

Ambient noise: Construction activities and equipment use associated with construction of the cumulative projects have the potential to generate substantial noise. The noise from construction of the cumulative projects could temporarily increase ambient noise levels. At this time, the construction schedules for the nearby cumulative projects are not known. However, with the distance of the projects in relation to the Proposed Project site and the short-term noise increases from the Proposed Project, noise generated from these projects would not combine to cause a cumulative impact because of the distances between the project sites. The projects would not result in significant impacts at the same noise-sensitive receptors. The cumulative impact on noise-sensitive receptors from temporary or periodic noise increases would be less than significant.

Groundborne vibration**:** Construction of the cumulative projects would require the use of heavy equipment that would generate groundborne vibrations. Vibration impacts associated with construction activities would primarily affect receptors located closest to staging areas, TSP, and LWS pole installation sites and those located near conductor removal/replacement locations that would include the use of an excavator, heavy trucks, boom/crane truck, auger truck, and water trucks. Vibration levels attenuate rapidly with distance. While the high-speed rail project could generate vibration during operation, the Proposed Project would not be a source of vibration during operation. Due to the distance between the Proposed Project and cumulative project construction activities, the cumulative vibration impact from construction would be less than significant.

Recreation

Geographic Extent

The geographic extent for the analysis of cumulative impacts associated with recreation includes areas within 1 mile of the Proposed Project alignment. A geographic distance of 1 mile is appropriate because neighbors are expected to use recreational facilities in proximity to their community. A 1-mile area surrounding the Proposed Project alignment includes the parks that are most likely to be used by the same community that uses the parks affected by the Proposed Project.

Impacts Avoided by the Proposed Project

The Proposed Project would not require the construction or expansion of recreational facilities or contribute to population growth that could cause the deterioration of recreational facilities. The Proposed Project would not contribute to a cumulative impact from the construction or expansion of recreational facilities or from population growth.

Potential Cumulative Impacts

There are no developed recreational facilities or trails in the vicinity of the Proposed Project alignment, except for the Fort Tejon State Historic Park. During conductor removal and installation activities within the Fort Tejon State Park parking lot, access to the Fort Tejon State Historic Park's parking lot and pedestrian traffic through the area would be restricted for public safety. There are no other projects in the vicinity that would result in closure of Fort Tejon State Historic Park and, therefore, the Proposed Project would not result in cumulative impacts from closure of the parking area. No cumulative impact on recreation would occur.

Transportation and Traffic

Geographic Extent

The geographic extent for the transportation and traffic cumulative analysis includes the local and regional roadways and highways that would be crossed by the Proposed Project or utilized for transportation of Proposed Project materials. The extent of the analysis specifically includes all projects within 1 mile of the Proposed Project alignment because these projects are expected to use the same roads for access. In general, the Proposed Project's transportation and traffic impacts (such as increased traffic volume and lane closures) would diminish with increased distance from the Project area.

Potential Cumulative Impacts
The Proposed Project and cumulative projects listed in Table 3.21-2 that involve construction vehicle trips or add permanent vehicle traffic to roadways would contribute to the cumulative scenario for traffic. At this time, the construction schedules for the cumulative projects are not known.

Conflict with traffic standards: Construction worker vehicles and haul trucks used during construction of the cumulative projects would use local roadways to access work sites. Most of the cumulative projects are located in Kern County, and many would use the same local roadways as the Proposed Project for access. However, at this time, the construction schedule for the cumulative projects is not known. In addition, the Proposed Project would generate temporary vehicle trips during construction. Construction crews would be transported to and from construction work areas in construction vehicles or helicopters. Temporary workers needed for construction are expected to reside in Kern County and Los Angeles communities adjacent the Proposed Project alignment, including the city of Bakersfield and the city of Arvin. Workers are not expected to commute for long distances to reach the Proposed Project site because they would be residing in areas along the Proposed Project alignment. Taken together with the other projects, the cumulative impact on local roadways would be less than significant.

Air traffic patterns: The cumulative projects would not generate air traffic that could affect air traffic patterns. No cumulative impact on air traffic would occur.

Traffic hazards: Construction of the cumulative projects would increase truck traffic to and from work sites and could require temporary lane closures. The cumulative projects may use the same local roadways as the Proposed Project. The cumulative project construction could overlap with the Proposed Project and create a significant impact from increased traffic hazards. SCE would implement APM TRA-1, which requires implementation of traffic control measures consistent with the CAMUTCD and CATTCH, where necessary. With implementation of APM TRA-1, the Proposed Project's contribution to cumulative traffic hazards would be less than significant.

Emergency access: Lane and road closures may be required during construction of the cumulative projects. Closures have the potential to restrict or slow down emergency vehicles and responders. Construction of the cumulative projects may result in lane and road closures on the same local roadways as the Proposed Project, depending on the construction schedule. While the Proposed Project and cumulative projects could affect the same roads, the Proposed Project duration of lane or road closures would be limited to a few minutes or hours at any location during stringing, and the cumulative impact on emergency access on local roadways would be less than significant.

Alternative transit: Bicycle lanes, bus stops, and bus routes have the potential to be affected by lane and road closures required during construction of the cumulative projects or during stringing of overhead power lines for the Proposed Project. Each cumulative project may have limited impact on some bicycle lanes, bus stops, and bus routes. Most of these impacts would be

localized (i.e., development projects) and/or of limited duration due to the nature of the construction projects (i.e., linear projects). It is not likely that all closures would happen at the same time or affect the same facility. Even when all closures are considered together, disruption to the overall system would be minimal and not cumulatively significant.

Utilities and Service Systems

Geographic Extent

The geographic extent for the analysis of cumulative impacts associated with utilities and public services is the service area of the cities and counties near the Proposed Project, including Kern County, Los Angeles County and the cities of Arvin and Bakersfield.

Impacts Avoided by the Proposed Project

Construction of the Proposed Project would not exceed wastewater treatment requirements; require or result in the construction of new or expanded water or wastewater facilities; require or result in the construction of new or expanded storm water drainage facilities; or conflict with federal, State, or local statutes and regulations related to solid waste. The Proposed Project would not contribute to cumulative impacts on these resources.

Potential Cumulative Impacts

Wastewater treatment capacity: The Proposed Project would generate minimal wastewater during construction from portable restrooms and, possibly, from dewatering. Although construction of the cumulative projects would result in generation of additional wastewater, the Proposed Project's contribution would be minimal and would not result in exceeding the wastewater treatment capacity of the wastewater treatment systems. The cumulative impact would be less than significant.

Water supplies and facilities: Construction of the cumulative projects would require varying quantities of water for dust control and/or compaction. The majority of the cumulative projects that could be constructed simultaneously are small and would require little water.

The Proposed Project would require an estimated 350 acre-feet of water during the 2-year construction period. SCE would use recycled or reclaimed water to the extent feasible, if available. Should sufficient quantities of recycled or reclaimed not be available to supply the entire Project, SCE would purchase water from commercial purveyors to supplement the recycled or reclaimed water available. The Proposed Project's short-term demand for water would be minimal compared to overall water demand for Kern County, and SCE would primarily use recycled water for the construction water. Additionally, the comparatively small quantity of water required during construction of the Proposed Project would not significantly impact existing water supplies. The cumulative impact on water supplies and facilities would be less than significant.

Landfills: The regional landfills that serve the cumulative projects and Proposed Project have approximately 94 million cubic yards of capacity. The Proposed Project would generate approximately 2,021 tons of solid waste. Approximately 35 percent of waste generated by Proposed Project construction would consist of recyclable content and would be hauled to a

recycling facility for disposal. The cumulative projects would not result in waste generation in excess of the available landfill capacity. The cumulative impact on landfill capacity would be less than significant.

Wildfire

As analyzed in Section 3.20: Wildfire, depending on the pathway of migration, the geographic scope for cumulative effects relating to wildfires would include areas with very high fire hazard severity or state responsibility areas in the same region as the Proposed Project. Portions of the high-speed rail (#1), Grapevine at Tejon Ranch (#2), and Mountain Village at Tejon Ranch (#3) project sites are located in the very high fire severity zone. The high-speed rail project EIRs/EISs for the Fresno to Bakersfield section and for the Bakersfield to Palmdale section include mitigation measures to reduce impacts from potential fire hazards. The Grapevine at Tejon Ranch and Mountain Village at Tejon Ranch projects are also subject to their EIRs, which include mitigation for wildfire hazards, as well. SCE would implement APM HAZ-3, which would require SCE to develop and implement a project-specific Fire Prevention and Emergency Response Plan, which would include specific fire prevention protocols and emergency procedures to reduce wildfire risk during construction of the Proposed Project. Additionally, SCE would implement standard fire prevention protocols during construction activities and would comply with applicable laws and regulations. Because the cumulative projects include mitigation measures to offset their individual impacts, and because the Proposed Project includes APMs, the cumulative impact of the Proposed Project and cumulative projects would be less than significant with implementation of the project specific mitigation and APMs.

Once operational, the Proposed Project would not introduce a new source of wildfire risk associated with operation and maintenance activities. These features would aid in reducing wildfire risk and facilitating emergency suppression of fires. Given Proposed Project components such as access roads, vegetation clearance provisions, emergency suppression equipment, and regulatory requirements and the fact that the Proposed Project would replace existing aging infrastructure and wood poles, the addition of the incremental impact of the Project on wildfire would not be cumulatively considerable.

c) Would the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The following sections of this IS/MND discuss various types of impacts that could have potentially adverse effects on human beings:

- Dust and air pollutants emitted during Proposed Project construction activities (refer to Section 3.3: Air Quality)
- Potential increase in GHG emissions during Proposed Project construction activities (refer to Section 3.8: Greenhouse Gas Emissions)
- Potential release of gasoline, diesel fuel, oil, and lubricants associated with construction equipment and other vehicles (refer to Section 3.9: Hazards and Hazardous Materials)
- Noise generated by Proposed Project construction (refer to Section 3.13: Noise)

- Potential traffic hazards (refer to Section 3.17: Transportation and Traffic)
- Potential for wildland fires during Proposed Project construction activities (refer to Section 3.20: Wildfires)

The potential impacts on human beings are all temporary impacts that could occur during Proposed Project construction activities. Each type of impact with the potential to cause substantial adverse effects on human beings has been evaluated. The potential health impact from air pollutants generated during construction would be less than significant with implementation of APM Air-1. The hazard to the public from increased risk of wildland fires and the release of hazardous materials would be less than significant with implementation of APM HAZ-1 and APM HAZ-2. The effect from temporary noise increases on sensitive receptors would be less than significant with implementation of APM NOI-1, MM Noise-1, MM Noise-2 and MM Noise-3. Traffic hazards from lane, road, and pedestrian route closures would be less than significant with implementation of APM TRA-2 and APM TRA-3. The hazard to motorists from damaged roadways would be less than significant with the implementation of MM Traffic-2.

The Proposed Project would have a beneficial effect on human beings in the Proposed Project area by increasing electrical service capacity and reliability. Potential direct and indirect adverse effects on human beings would not be substantial with mitigation. The potential impact on human beings would thus be less than significant with mitigation.

Required APMs and MMs: APM Air-1, APM HAZ-1, APM HAZ-2, APM NOI-1, MM Noise -1, MM Noise-2, MM Noise-3, APM TRA-2, APM TRA-3 and MM Traffic-2, and MM Traffic-3 (refer to Section 3.3, Air Quality, 3.9: Hazards and Hazardous Materials, Section 3.13: Noise, and Section 3.17: Transportation and Traffic)

3.21.2 References

California High-Speed Rail Authority. 2014b. Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Fresno to Bakersfield Section of the California High-Speed Rail (HSR) Project. https://hsr.ca.gov/programs/environmental-planning/project-section-environmental-documents-tier-2/fresno-to-bakersfield-final-environmental-impact-report-environmental-impact-statement-eir-eis/.

———. 2021a. Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Bakersfield to Palmdale Section of the California High-Speed Rail (HSR) Project. Bakersfield to Palmdale. https://hsr.ca.gov/programs/environmental-planning/project-section-environmental-documents-tier-2/bakersfield-to-palmdale-draft-environmental-impact-report-environmental-impact-statement/.