

APPENDIX N
Cumulative Scenario

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Cumulative Scenario and Impacts

1 CUMULATIVE PROJECTS

The National Environmental Policy Act (NEPA) defines a cumulative impact as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (40 CFR 1508.7). A cumulative impact assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor, but collectively substantial, impacts taking place over a period of time.

The below table of reasonably foreseeable, approved and pending projects (“Cumulative Projects”) was developed through consultation with the Tribe and the Bureau of Indian Affairs (BIA) based on their knowledge of other projects in the area. Additionally, projects were identified through review of existing environmental documents for projects in the area as well as consultation with the County of San Diego for projects within their jurisdiction. Table 1 also identifies, where known, a project is expected to have Project-related impacts in a specific issue area studied in the Environmental Impact Statement (EIS).

Table 1
Cumulative – Reasonably Foreseeable, Approved, and Pending Projects

| Project | Type | Status | Distance from Project | Project-Related Impacts |
|---|------|----------------------------|-----------------------|--|
| Energia Sierra Juarez Wind Project I: Development of 400 MW of wind generation. Phase I (just north of the town of La Rumorosa in Mexico) is proposed to generate approximately 100 MW of energy with 45 to 52 turbines. Point of interconnection proposed with the ECO Substation (CAISO 2010) | PF-W | C | Approx. 15 miles | Aesthetics, Air Quality, Biological Resources, Cultural Resources, and Hazards and Hazardous Materials (Fire) |
| Tule Wind Farm: 12,239 acres of public lands, 186 MW, with 57 wind turbines; the project would deliver power through the project substation via a 138 kV transmission line to run south to an interconnection with the proposed SDG&E Rebuilt Boulevard Substation | PF-W | Phase 1 = C Phase 2 = A | Approx. 0.25 miles | Air Quality, Biological Resources, Cultural Resources, Public Services, and Hazards and Hazardous Materials (Fire) |
| Ocotillo Express LLC, CACA 051552: Development of 562 MW wind farm on 14,691 acres in two phases | PF-W | C | Approx. 10 miles | Aesthetics, Air Quality, Biological Resources, Cultural Resources, and Noise |
| Energia Sierra Juarez U.S. Transmission, MUP: 230 kV double circuit power lines leading to SDG&E ECO Substation near the Mexican border | PF | C | Approx. 13 mile | Aesthetics, Air Quality, Biological Resources, Cultural Resources, and Hazards and Hazardous Materials (Fire) |

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Table 1
Cumulative – Reasonably Foreseeable, Approved, and Pending Projects

| Project | Type | Status | Distance from Project | Project-Related Impacts |
|--|------|--------|-----------------------|---|
| ECO Substation: ECO Substation, Rebuilt Boulevard Substation, and 13.3-mile 138 kV line between Rebuilt Boulevard Substation and ECO Substation | PF | C | Approx. 13 mile | Aesthetics, Air Quality, Biological Resources, Cultural Resources, Hydrology/Water Quality, Noise, and Hazards and Hazardous Materials (Fire) |
| Rugged Solar: Major Use Permit Modification MUP-12-007W1, MUP-12-007TE; MUP for the construction and operation of a 74 MW solar energy system on an approximately 765-acre site | PF-S | UC | Approx. 5 miles | Aesthetics, Air Quality, Biological Resources, Cultural Resources, Hydrology/ Water Quality, Noise, Public Services, and Hazards and Hazardous Materials (Fire) |
| Golden Acorn Casino and Travel Center: SCH No. 2007071097: 33-acre expansion consisting of 150-room hotel, 900-space parking garage, surface parking, RV park, casino expansion, bowling alley, arcade, offices, retail, restaurants/food service, wind turbines, and water and wastewater improvements in three phases | F | C | Approx. 4 miles | Aesthetics, Air Quality, Biological Resources, Cultural Resources, Noise, Public Services, Utilities, and Hazards and Hazardous Materials (Fire) |
| Freedom Ranch: Major Use Permit; MUP 74-011W2; expand existing facilities from 50 beds to 125 in four phases (Alcohol/Drug Treatment and Recovery Facility) | R | A | Approx. 12 miles | Aesthetics, Air Quality, Biological Resources, Cultural Resources, Noise, Public Services, Utilities, and Hazards and Hazardous Materials (Fire) |
| Boulevard Fire Station: Project would replace existing fire station along Highway 94; the fire station would be 8,496 square feet including an apparatus bay, and would have a total footprint of disturbance of approximately 30,000 square feet of the 17.5-acre parcel; the site would include water tank facilities that would be filled infrequently as well as roadway improvements along its northern boundary and roadway access improvements to Manzanita Dulce (Fire Station) | PF | C | Approx. 4 miles | Aesthetics and Air Quality |
| Rough Acres Foundation Campground Facility; Major Use Permit; MUP-12-021; MUP for a campground/conference center (wellness center and campground facility) | O | UR | Approx. 2 miles | Aesthetics, Air Quality, Biological Resources, Cultural Resources, Noise, Public Services, Utilities, and Hazards and Hazardous Materials (Fire) |
| JCSD Capacity Increase: Project would involve creation of new well at existing monitoring well site (Park Well) to increase capacity of JCSD water supply | O | A | Approx. 11 miles | Hydrology Water Quality |

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Table 1
Cumulative – Reasonably Foreseeable, Approved, and Pending Projects

| Project | Type | Status | Distance from Project | Project-Related Impacts |
|---|------|--------|--------------------------|--|
| Jacumba Solar: Major Use Permit; MUP-14-041; MUP for the construction and operation of a 20 MW solar energy system on an approximately 304-acre site | PF-S | C | Approx. 13 miles | Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology & Soils, Hazards & Hazardous Materials, Hydrology & Water Quality, Land Use & Planning, Noise, Public Services, Transportation/Traffic, Utilities & Service Systems |
| Boulevard Solar: Major Use Permit Modification: MUP-12-010W1 MUP-12-010TE; MUP for the construction and operation of a 60 MW solar energy system on an approximately 420-acre site | PF-S | UR | Approx. 9 miles | TBD pending completion of environmental analysis |
| Boulevard Energy Storage: Minor Use Permit; ZAP-17-006; ZAP for the construction and operation of a 100 MW energy storage facility on a 2-acre footprint | PF | UR | Approx. 6 miles | TBD pending completion of environmental analysis |
| JVR Solar: Major Pre-Application; MPA-17-016; Proposed construction and operation of a 100 MW solar energy system on an approximately 571-acre site | PF-S | UR | Approx. 10 miles | TBD pending completion of environmental analysis |
| Cameron Solar: Major Use Permit; MUP-18-004; MUP for the construction and operation of a 1.7 MW solar energy system consisting of approximately 19 acres on a 164.7-acre parcel | PF-S | UR | Approx. 13 miles | TBD pending completion of environmental analysis |
| Torrey Wind: Construction and operation of a 126 MW wind energy generation facility consisting of 30 wind turbines on approximately 1,000 acres. Torrey Wind proposes construction on lands through which the proposed Project gen-tie line would extend and similarly needs the new substation and switchyard that would be constructed as part of this project | PF-W | UR | Adjacent to Project site | TBD pending completion of environmental analysis |
| Meteorological Testing Facilities: Administration Permit; PDS2018-AD-18-007; NOE filed for the construction and operation of meteorological testing facilities to collect wind and climate data to determine site viability for the Proposed Project, Torrey Wind | PF | UC | On Project site | TBD pending completion of environmental analysis |

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Table 1
Cumulative – Reasonably Foreseeable, Approved, and Pending Projects

| Project | Type | Status | Distance from Project | Project-Related Impacts |
|---|------|--------|-----------------------|-------------------------|
| Level 3 Communications LLC: Minor Use Permit; PDS2001-3400-99-031; For the construction and operation of a Fiberoptic In-Line Application Facility consisting of two equipment shelters measuring 414 square feet and 286 square feet, a second facility consisting of six new shelters comprising 2,520 square feet, a 255-square-foot generator shelter, the relocation of an existing 255-square-foot generator hut, and an 8-foot, 6-inch sound wall | PF | C | Approx. 3.25 miles | Negative Declaration |
| Site Master Inc.: Major Use Permit; MUP-14-005; MUP for the construction and operation of a 35-foot-tall faux elevated water tank with two mounted microwave dishes | PF | C | Approx. 3.25 miles | Notice of Exemption |
| Pacific Telephone: Major Use Permit; PDS2011-3300-76-061; MUP for the construction and operation of a 64-square-foot equipment shelter | PF | C | Approx. 4.25 miles | Special Use Permit |
| White Star Communications Site: Major Use Permit; PDS2011-3300-88-064; MUP for the construction and operation of a radio communications facility for SAFE (San Diego Authority for Freeway Emergency) consisting of a tower max height of 70 feet, a mounted microwave dish, and a 200-square-foot equipment shelter with an antenna max height 40 feet | PF | C | Approx. 4.75 miles | Negative Declaration |
| Pactel White Star: Major Use Permit; MUP PDS2003-3300-90-018; MUP for the construction and operation of a 100-foot lattice tower with 10-foot whip antenna on top and two buildings measuring 288 square feet and 567 square feet, a 270-square-foot building, eight panel antennas, a 6-foot dish antenna, a 159.5-square-foot emergency standby generator surrounded by a 7-foot, 6-inch CMU block wall with roof and acoustic panel, 15 panel antennas, and a 230-square-foot equipment shelter | PF | C | Approx. 4.75 miles | Negative Declaration |
| SD0716 Manzanita – FWLL Modification & T-MOBILE L700: Site Plan; PDS2016-STP-16-022, PDS2014-STP-14-009, PDS2016-STP-16-020; Site Plan for the construction and operation of 8 panel antennas, 4 new RRUs (total 5), 4 RF filters, 4 TMAs, 2 surge suppressors mounted to an existing 35-foot wooden pole, each with 2 new equipment cabinets (total 4) and 1 GPS antenna (total 2) | PF | C | Approx. 2.5 miles | Notice of Exemption |

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Table 1
Cumulative – Reasonably Foreseeable, Approved, and Pending Projects

| Project | Type | Status | Distance from Project | Project-Related Impacts |
|---|------|--------|-----------------------|--|
| VZW I-8 Boulevard: Site Plan; PDS2014-STP-14-011; Site Plan for the construction and operation of 12 antennas mounted to a new 35 foot faux water tank, an associated equipment shelter, and an emergency generator. | PF | A | Approx. 2.25 miles | Biological Resources, Hazards & Hazardous Materials |
| Kumeyaay Wind: 50 MW, 25 wind turbine project located on Campo tribal lands | PF-W | C | Approx. 1.3 miles | Air Quality, Biological Resources, Cultural Resources, Public Services, and Hazards and Hazardous Materials (Fire) |

MW = megawatt; ECO = East County; PF = Public Facilities and Utilities; W = Wind; C = Completed; kV = kilovolt; SDG&E = San Diego Gas & Electric Company; A = Approved; MUP = Major Use Permit; S = Solar; UC = under construction; SCH = State Clearinghouse; F = Federal; R = Residential; O = Other; UR = under review; JCSD = Jacumba Community Services District; ZAP = Zoning Administrator Permit; MPA = Major Pre-Application; gen-tie = generation transmission; NOE = Notice of Exemption; CMU = concrete masonry unit; T = Transmission; TM = Tentative Map; I = Interstate.

2 CUMULATIVE IMPACTS

This section discusses the cumulative impacts of the projects reflected in Table 1, considered along with the Project impacts discussed in the EIS. This analysis only considers projects identified as having project-related impacts in these resource areas.

2.1 Land Resources

All of Southern California lies within a seismically active region with an extremely diverse range of geologic and soil conditions that can vary substantially within short distances. Impacts from cumulative projects are also site-specific and would only have the potential to combine with impacts of the Project if they occurred in the same location. Thus, the cumulative context for potential impacts to people and structures related to geologic and seismic hazards is restricted to the Project Site and the Project Area immediately surrounding the Project Site. The temporal scope includes construction, operation, and maintenance phases of the Project.

The cumulative projects could potentially result in a cumulative impact associated with paleontological resources from extensive grading, excavation, or other ground-disturbing activities in areas where paleontological resources may exist. The Project site, however, is not located in an area of paleontological potential or sensitivity; therefore, cumulative effects to paleontological resources from the Project would not be cumulatively adverse.

The Project (under either build alternative) does not include major topographical changes to the Project site or nearby land. With the implementation of a regulatory framework controlling the design and construction of structures, and actions required to obtain a grading and/or development

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permit at the local level, adverse impacts to topography resulting from the combination of the Project and cumulative projects would not cumulatively adverse.

The cumulative projects and the Project (under either build alternative) would adhere to required erosion control requirements under the National Pollutant Discharge Elimination System (NPDES) (including a stormwater pollution prevention plan (SWPPP) for projects that disturb more than 1 acre). Adverse impacts resulting from ground disturbance and erosion during construction or decommissioning of the Project and cumulative projects would not be cumulatively adverse.

The Project (under either build alternative) would not have adverse effects on mineral resources. The Jacumba Solar project, located approximately 13 miles from the Project, does have potential impacts to geology and soils. The proposed Torrey Wind project located north and northeast of the Project also has potential impacts to geology and soils. However, impacts to these resources are limited to the project sites and any project impact would be site-specific; therefore, implementation of the Project combined with cumulative projects would not interfere with or preclude the development and activity of mineral extraction operations. The Project would not contribute to a cumulatively adverse impact on mineral resources (under either build alternative).

2.2 Water Resources

Project features (under either build alternative) would be placed to avoid creeks, streams, tributaries and jurisdictional waters on the Reservation and on the private lands within the footprint of the Boulder Brush Facilities. The construction of new access roads across drainage features, however, is unavoidable, and could potentially add pollution-containing sediment to surface water flows. Listed 303(d) impairments in water bodies located downstream from the Project site include selenium, pH, ammonia, total nitrogen, manganese, phosphorous, perchlorate, indicator bacteria, and water color. Although the Project does not include use or manufacturing of these potential pollutants, ground disturbance and erosion from construction and decommissioning activities could potentially add sediment containing these constituents to surface water flows when runoff from the site (along with runoff from the whole watershed) eventually discharges into these waters. Several cumulative projects also have potential water quality impacts as a result of those projects' construction, decommissioning, or operation.

As with the Project, however, these cumulative projects with potential water quality impacts would also be required to adhere to state and federal water quality requirements to reduce the potential for impairing surface water quality. SWPPPs are required by the NPDES for any project having ground disturbance of more than 1 acre in order to minimize construction-related aquatic contamination through the use of BMPs to limit erosion, runoff, and discharge of potential pollutants. Adherence to these and other requirements of the Clean Water Act and additional applicable regulations would reduce potential cumulative impacts to water quality resources

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resulting from the cumulative projects and the Project. Therefore, the Project would not contribute to an adverse cumulative impact.

2.3 Air Quality

The Project, and several of the Cumulative Projects, are located within the San Diego Air Basin. The San Diego Air Basin is listed as nonattainment for the state and federal ambient air quality standards. Even if the Project would not exceed thresholds and is determined to have less-than-adverse air quality impacts, it may still have a cumulatively considerable impact on air quality if the emissions from the Project, in combination with the emissions from cumulative projects, are in excess of established thresholds. Therefore, the Project and cumulative projects would have a cumulatively considerable impact if cumulative emissions would exceed standards for oxides of nitrogen (NO_x), carbon monoxide (CO), coarse particulate matter (PM₁₀), and/or fine particulate matter (PM_{2.5}).

Should other projects occur in the vicinity of the Project (Project Area and surrounding communities), adverse effects related to VOC, NO_x, CO, SO_x, PM₁₀, and/or PM_{2.5} emissions could be further intensified due to active operations at multiple sites with potential earth-moving activities associated with site preparation and grading (resulting in increased PM₁₀ and PM_{2.5} emissions), and exhaust emissions from construction equipment, worker vehicles, and truck trips (resulting in increased NO_x, PM₁₀, and PM_{2.5} emissions) associated with material deliveries and on-site hauling activities. Cumulative construction emissions were found to be potentially adverse when considering the Project in combination with cumulative projects. With implementation of Project design features (under either build alternative), the Project's contribution to cumulative construction emissions would not be cumulatively adverse.

With the implementation of Project design features and adherence to federal laws and regulation, which the Project and each of the cumulative projects must adhere to, impacts to air quality from the increased NO_x, CO, PM₁₀, and PM_{2.5} emissions of the Project and cumulative projects would not be cumulatively adverse according to federal standards.

Cumulative impacts associated with ozone (O₃) precursors and cumulative emissions from maintenance and operation of the Project and Cumulative Projects would be accounted for in the Regional Air Quality Strategy and would not exceed national ambient air quality standards. Cumulative emissions from maintenance and operation of the Project and cumulative projects would thus not result in cumulatively adverse impacts on air quality.

2.4 Greenhouse Gas Emissions and Climate Change

Due to the global nature of the assessment of greenhouse gas (GHG) emissions and the effects of global climate change, Project-related impacts are analyzed in the EIS from a cumulative impact

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context. The Project and several of the cumulative projects have the potential to decrease the region's GHG emissions by providing renewable energy sources that could replace electricity generated by fossil-fuel-fired power plants. The Project could result in a net reduction in GHG emissions of 399,690 metric tons of carbon dioxide equivalent (MT CO_{2e}) per year and 11,990,700 million MT CO_{2e} over the 38-year Project lifetime. Although there are no specific requirements under NEPA for evaluating cumulative GHG emissions, there is no cumulatively adverse effect anticipated from the Project and cumulative projects.

2.5 Biological Resources

The geographic extent for the analysis of cumulative impacts associated with biological resources includes the vicinity of all reasonably foreseeable cumulative projects and ecological boundaries based on ecoregions (see Figure 16 of Appendix H to the EIS). An ecological review and analysis of eastern San Diego County and western Imperial County was performed.

The cumulative analysis conducted for biological resources is based on the list of relevant projects listed as cumulative projects in Table 1. Several of those projects would potentially affect biological resources within the vicinity of the Project.

The total estimated area of disturbance to similar native vegetation communities as the Project for reasonably foreseeable cumulative projects in the biological cumulative analysis study area was determined to be approximately 2,893 acres.

In order for a cumulative impact to special-status plant species to occur, the cumulative projects would have to result in the loss of the same special-status plant species or their habitat as the Project (under either build alternative) such that those species become more limited in their distribution, population size, or available suitable habitat within the cumulative analysis area. With the implementation of mitigation measures recommended in Section 4.5, Biological Resources, of the EIS, impacts to sensitive and special-status vegetation species from the combination of the Project and reasonably foreseeable future actions would not be adverse.

Given the nature, location, and timing of the reasonably foreseeable future projects, the potential for cumulatively adverse indirect construction-related impacts to special-status wildlife species is low. Reasonably foreseeable projects within the biological cumulative analysis study area involve a variety of project types. Cumulative projects within a few miles of the Project are generally not anticipated to be constructed simultaneously (see previous discussion), thus reducing the impacts to wildlife species.

However, construction of some listed cumulative projects in close proximity to the Project (e.g. Torrey Wind Project) may overlap, in which case noise, human presence, and erosion and altered hydrology could cause wildlife behavior modifications and avoidance of the area during

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construction activities. These disruptions could result in changes in habitat usage and potentially affect species fitness and productivity. The potential mortality resulting from increased vehicle use in the area and construction area hazards (e.g., trenches) across the Project site and listed Cumulative Project sites could lead to decreased population numbers and reduced productivity. The Project and relevant cumulative projects are located in a rural area and adjacent properties provide undeveloped areas for golden eagle (*Aquila chrysaetos*) to forage and available habitat for Quino checkerspot butterfly (*Euphydryas editha quino*) host plants. Permanent indirect impacts to wildlife habitat from increased wildfire risk could result in a cumulatively adverse impacts.

However, with implementation of the mitigation measures recommended for the Project (under either build alternative), along with the minimization and mitigation measures for the cumulative projects, these impacts would not be cumulatively adverse. Additionally, there is suitable habitat available for wildlife species, including federally protected species, on portions of the Project site and throughout the biological cumulative analysis study area.

2.6 Cultural Resources

The importance of cultural resources derives from qualities that convey peoples or places of significance, unique material remains, or research value, that collectively inform on cultural heritage. Therefore, the cumulative loss of information that convey significance is the issue that must be analyzed.

In adherence to mitigation measure MM-CUL-3, defined in Appendix P of the EIS, known cultural resource sites that are less than adverse, preserve information through recordation and test excavations. Significant sites that are placed in open space easements avoid impacts to cultural resources and preserve the data. Significant sites that are not placed within open space easements preserve the information through recordation, test excavations, and data recovery programs that would be presented in reports and filed with the County and South Coastal Information Center. The artifact collections from any potentially significant site would also be curated at a facility within the County or with an affiliated Tribal curation facility based on where the artifact was collected. Alternatively, the collections may be repatriated to a Tribe of appropriate affiliation.

The geographic extent of the cumulative study area for cultural resources includes southeastern San Diego County and southwestern Imperial County, and was selected because these areas include the relatively undeveloped portions of the ancestral Kumeyaay territory, and those rural areas outside of the historically developed urban population centers in San Diego and southwestern Imperial County.

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Cumulative Projects within this geographic extent are capable of collectively contributing, along with the Project's area of potential effects, to impacts on prehistoric resources associated with ancestral Kumeyaay lifestyles.

Prehistoric site types identified in the cumulative project area include several small features and sites pertaining to prehistoric sites. Dated prehistoric sites predominantly fall into the Late Prehistoric Period. Impacts to significant sites on the cumulative projects list were, or are proposed to be, mitigated through a combination of avoidance, where project components were realigned or open space was created in order to avoid impacts to sites; data recovery, where the information potential of the sites was collected through excavation and recordation; curation of collected artifacts; and monitoring of ground-disturbing construction activities to prevent adverse impacts to previously unidentified sites and sites that have not been evaluated.

The Project's impacts on cultural resources would be reduced to a level that is less than adverse through the evaluation of known and newly discovered sites that cannot be avoided, and recommended mitigation measures defined in Appendix P of the EIS that include the placement of significant sites within an avoidance area (open space), curation of all artifacts obtained during the testing and data recovery programs, and grading monitoring that includes avoidance or data recovery at new discoveries. As outlined previously, the cultural resources located within the cumulative project sites would be mitigated through similar measures.

The Project (under either build alternative) has been designed to avoid and minimize damage, alteration, or destruction to all resources in the area of potential effects in order to avoid potential adverse effects to historic properties (see Appendix I, Cultural Resources Report). The Project would not contribute to potential direct or indirect cumulative impacts to cultural resources. Impacts on cultural resources from the Project combined with cumulative projects would not be cumulatively adverse.

2.7 Socioeconomic Conditions

Implementation of the Project (under either build alternative) and cumulative projects would not directly cause an increase in residential population or a substantial increase in workforce population. Workers would only be required during construction and decommissioning activities. Due to the temporary nature of construction and decommissioning, workers are not anticipated to temporarily relocate their families to the area; therefore, there would not be a significant change to local demographics or economic status. The Project and cumulative projects would not result in cumulatively adverse impacts on socioeconomic conditions.

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2.8 Resource Use Patterns

The Project, along with certain cumulative projects, would have impacts on agricultural resources. Only small portions of the impact area under the Project (under either build alternative) and other projects' footprints are located on or near Prime Farmland or Farmland of Statewide Importance. Most of the agricultural activities within the areas of the cumulative projects include cattle grazing, which is only temporarily affected by alternative energy projects. Other projects that would permanently remove any agricultural lands are much smaller in development footprint size and their impacts would be cumulatively minimal. Due to the relatively small portions of farmland that would be lost, the Project and cumulative projects would have minimal cumulative impacts on agricultural resources. Limited cattle grazing and agriculture currently exists on the Reservation. The amount of cattle grazing lost and the impact on cattle grazing resulting from the Project would be minimal and temporary, as cattle would still be able to graze near wind turbines. After decommissioning of alternative energy projects, the sites are returned to pre-development states and cattle grazing can continue.

As stated above under Section 2.1 Land Resources, the Project, in combination with cumulative projects, would not have an adverse cumulative impact on mining activities on the Reservation or on off-Reservation lands in the vicinity of the Project.

The Project and several of the cumulative projects include similar components and would not remove significant recreational areas. Impacts from these projects on recreational opportunities would be temporary. The Golden Acorn Casino and Travel Center project, however, would include components such as an RV Park, arcade, and bowling alley, creating recreational options as part of that project. The Rough Acres Foundation Campground Facility project also includes additional recreational components. Land used for recreation activities would not be adversely impacted by the proposed Project. Electrical Collection and Communication System (ECCS) lines along Manzanita Road, which is located in the vicinity of On-Reservation recreational uses, would be placed underground. During construction, a 40-foot-wide area would be required to install the ECCS cables, which may cause temporary disturbance to the entrance to an off-road motorcycle area. However, these impacts would be short term in nature and the motocross track would not be permanently impacted. Cumulative impacts on resource use patterns from the Project and cumulative projects would not be cumulatively adverse.

2.9 Traffic and Transportation

The Campo Wind Facility is located in a predominantly rural area of unincorporated San Diego County; numerous local roads and unnamed dirt roads are spread throughout the area. The Project (under either build alternative) would participate in the Transportation Impact Fee program by

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paying into the program based on the projected use and new trips to local and regional roads associated with the portions of the Project within private lands (the Boulder Brush Facilities; further detail regarding proposed Project components and phasing are provided in Appendix B, Project Description Details).

Prior to obtaining approval of the lease from the BIA for the Project, the Project developer shall use a trained and qualified traffic flagger for the duration of Project construction at the Project driveways at the end of the day shift (PM peak hour) to stagger outbound Project traffic, to minimize delays at the impacted intersections of Crestwood Road/Interstate (I) 8 westbound ramps and Old Highway 80/Church Road (BIA Route 10)–Golden Acorn Casino Driveway. Cumulative impacts on these intersections, and possibly other intersections associated with the projects listed in Table 1, would be temporary and not adverse.

The Jacumba Solar project, and possibly other projects listed in Table 1 (pending completion of environmental analysis), could have a cumulative temporary impact on transportation and traffic during construction. However, due to the nature of the projects, operational impacts are likely to be minimal and would not be considered an adverse cumulative permanent impact.

By implementing to recommended mitigation measures detailed in Appendix P of the EIS, the cumulative impacts to traffic and transportation from the Project combined with cumulative projects would not be collectively adverse.

2.10 Noise

The northeastern edge of the Project and the southern edge of the proposed Torrey Wind project each share a boundary with private lands within the County of San Diego. Several verified and unverified noise-sensitive receptors within this area may be exposed to potential cumulative noise effects due to concurrent construction and/or operation of these two wind turbine generator projects. Other energy generation and transmission projects in the vicinity of Boulevard would include the Rugged Solar Project, which has a boundary as close as a half-mile to these same unincorporated County noise-sensitive receptors. Other cumulative projects, such as Boulevard Energy Storage, as well as present and future development projects in the vicinities of Jacumba Hot Springs to the southeast and Freedom Ranch to the west, are too distant to be expected to have meaningful cumulatively considerable effect on these studied County noise-sensitive receptors in proximity to the Project site.

Project-related construction noise (under either build alternative) would cause significant airborne noise impacts at the closest noise-sensitive land uses to the Boulder Brush Facilities access road. With the implementation of recommended mitigation of construction noise as discussed in Section

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4.10, Noise, of the EIS and the implementation of BMPs, construction-related noise impacts from the proposed Project combined with applicable cumulative projects would not be adverse.

Effects related to noise (On- and Off-Reservation) would result from the Project build alternatives (1 and 2) where more than one turbine is located in proximity to the 0.25-mile setback from a residence. Adverse operational noise impacts from the Project combined with nearby applicable cumulative projects, which would be similar in type and generation of noise, would be collectively adverse.

2.11 Visual Resources

For purposes of this analysis, the cumulative study area is defined as the viewshed of I-8 from SR-79 (Pine Valley) to the Imperial County line. Due to the proximity of I-8 and Old Highway 80 along this corridor, projects that would be visible from I-8 would also be visible from the highway. Cumulative projects considered in this analysis are those in the study area that would produce similar visual effects as the Project.

The Project would not substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from I-8, Old Highway 80, Airport Mesa, ridgelines in the Jacumba Mountains, or the mesa landform within the Table Mountain Area of Critical Environmental Concern. As a result, cumulative impacts from the Project and relevant cumulative projects on scenic vistas would not be adverse.

The Project, in combination with relevant cumulative projects, would contribute to an ongoing change in the visual character of the I-8 viewshed and change in scenic views available from recreational lands in the Jacumba area. Therefore, implementation and development of the Project and cumulative projects considered in this analysis would result in a cumulatively adverse impact on the existing visual character and quality of the I-8 viewshed.

The Project wind turbines would be painted a standard off-white matted color to minimize glint and glare potential. With the exception of SR-94, roads in the vicinity of the Project tend not to be directly aligned or perpendicular to wind turbine locations. Wind turbines are proposed on a ridge to the west of SR-94 and would be aligned toward the roadway near Live Oak Spring Road. However, the presence of existing oak trees (*Quercus* spp.) in the area would generally block potential blade glint from the view of motorists. As such, effects from glare would not result in a cumulatively adverse impact.

2.12 Public Health and Safety

The cumulative study area for hazards and hazardous materials is the immediate vicinity of each of the cumulative projects, as well as the Project Site. Public health and safety analyzes effects

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of hazardous materials, and safety concerns associated with construction activities, operational activities and failures, as well as decommissioning of alternative energy projects.

The Project (under either build alternative) includes adverse effects to public health and safety from possible hazardous materials releases during construction, exposure to mobilized contaminants existing in groundwater or soil during construction, to workers from exposure to contaminated or hazardous materials during construction, to exposure of people or structures to safety hazards, from fire risk during construction/operation/or decommissioning, as well as risk related to rotor blades breaking or collapse of wind turbines.

At least 10 of the cumulative projects (not including those pending environmental analysis) anticipate an impact related to hazards; most of these are related to fire risk.

Hazardous materials associated with construction, operation, and decommissioning of alternative energy projects are usually limited to the immediate vicinity of each project. Hazardous materials impacts from cumulative projects are unlikely to be impacted by any hazardous materials from the Project or cumulative projects. Due to anticipated compliance with all applicable laws and regulations, impacts related to hazardous materials contamination from the Project combined with cumulative projects would not be adverse.

The Project and cumulative projects would be in compliance with applicable Federal Aviation Administration rules and regulations and would not result in adverse impacts associated with airport hazards.

Increased activity and ignition sources on the Project site have the potential to increase wildfire hazards during the Project's and cumulative projects' construction, operation, and decommissioning activities. With the enforcement of Applicant defined fire standards, Public Health and Safety, of the EIS, cumulative impacts on public health and safety as a result of wildfire risks would not be adverse.

3 REFERENCES CITED

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