If the proposed project is decommissioned, all facilities which make up the proposed project would be dismantled and removed in accordance with all applicable County, State and federal laws; however, underground distribution cables, foundations and structures would remain in place. WTG foundations would be dismantled two feet below grade and underground cable risers would be cut off three feet below grade before being abandoned in place. Infrastructure facilities, including the proposed O&M facilities, switchyards, substations and overhead transmission lines would also be removed.

If the project proponent decides to re-power the project, the project proponent would have to apply for all required permits.

### 3.10 Related Projects

The project proponents have not filed any applications for additional wind projects in the general vicinity of the project. However, it is likely that additional similar projects will be developed within the TWRA and these future additional facilities are considered as part of the cumulative impacts discussion in this EIR. Discretionary action and permits from Kern County would likely be required, in addition to CUPs for temporary batch plants.

Southern California Edison (SCE) is currently constructing the TRTP, which is scheduled for overall completion of all segments in 2013. The TRTP would involve new and upgraded transmission infrastructure along 173 miles of new and existing ROWs in southern Kern County, portions of Los Angeles County, including the Angeles National Forest (ANF), and the southwestern portion of San Bernardino County, California. SCE’s stated objectives for the proposed project are to provide the electrical facilities necessary to integrate levels of new wind generation in excess of 700 MW and up to 4,500 MW in the TWRA (SCE, 2007). The TRTP would consist of Segments 4 through 11 (Segments 4 and 10 traverse the proposed project site), and related facilities. Segments 2 and 3 are discussed in Section 3.11.1, below. Projects involving upgrades to electrical transmission lines owned and operated by public utilities are within the exclusive jurisdiction of the California Public Utilities Commission. As required by CEQA, this EIR analyzes potential environmental impacts of the future transmission lines in the discussion of cumulative projects.

### 3.11 Cumulative Projects

CEQA requires that an EIR evaluate a project’s cumulative impacts. Cumulative impacts are the project’s impacts combined with the impacts of other related past, present and reasonably foreseeable future projects. As set forth in the State CEQA Guidelines, the discussion of cumulative impacts must reflect the severity of the impacts, as well as the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone. As stated in CEQA, Title 14, Section 21083(b), “a project may have a significant effect on the environment if the possible effects of a project are individually limited but cumulatively considerable.”

According to the State CEQA Guidelines:

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable and which compound or increase other environmental impacts.
(a) The individual effects may be changes resulting from a single project or a number of separate projects.

(b) The cumulative impact from several projects is the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonable foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (California Code of Regulations [CCR], Title 14, Division 6, Chapter 3, §15355).

In addition, as stated in CEQA Guidelines, it should be noted that:

The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project’s incremental effects are cumulatively considerable (CCR, Title 14, Division 6, Chapter 3, Section 15064[I][5]).

Cumulative impact discussions for each environmental topic area are provided at the end of each technical analysis contained within Chapter 4, under “Impacts and Mitigation Measures.” As previously stated, and as set forth in the State CEQA Guidelines, related projects consist of “closely related past, present, and reasonable foreseeable probable future projects that would likely result in similar impacts and are located in the same geographic area” (CCR, Title 14, Division 6, Chapter 3, Section 15355).

**Other Energy Projects**

The Tehachapi Wind Resource Area (TWRA) is located within eastern Kern County and is the State’s largest wind energy resource area and currently responsible for over 40% of California’s wind energy generation. The TWRA currently consists of 3,822 WTGs that produce 907 MW of power. Wind plants in this area produce more power than any other wind development in the United States. Most of the TWRA’s existing turbines were installed between 1981 and 1986. Between 1986 and 1989, about another 100 MW worth of turbines were developed. Between 1990 and 2000 very few additional WTGs were installed. During the late 1990s, wind power plant owners started repowering their existing turbines by removing the older turbines and replacing them with newer models.

The most relevant projects to the cumulative analysis for the proposed project are other wind energy projects. Several new wind energy developments are currently proposed in Kern County and are listed below in Table 3-9 and shown in Figure 3-8. This EIR generally considers cumulative impacts of projects within six miles; however the nature of impacts under certain issue areas requires consideration of projects outside this range. Additional wind energy projects are being planned, but applications have not yet been submitted to permitting agencies. One reason that there are many wind energy developments in various stages of development in Kern County (in addition to the demand for renewable energy and favorable regional conditions) is that new transmission line upgrades are being proposed, as discussed in Section 3.10. In planning for additional future wind projects, the CAISO is forecasting a need for up to 4,500 MW of power.
## Future Applications
### Alta-Oak Creek Mojave Project and Additional Facilities

The Alta-Oak Creek Mojave Project, and subsequent addendum, would generate up to 1,071 MW of electricity from up to 386 WTGs on an 13,730-acre site in unincorporated Kern County. The project would generate wind energy to be transferred to SCEs 220-kV transmission system and sold to California investor-owned utilities, municipalities, or other purchasers in furtherance of the goals of the California RPS. The original EIR was approved by the Board of Supervisors on December 15, 2009 and construction began in early 2010 and is expected to end in late 2011.

At this time, the Alta project proponent is in the early planning stages for construction of additional wind energy facilities that would be located within the TWRA and would generate 700-900 MW of electricity. Applications have been filed for these additional wind projects and are described below.

### Pending Applications
#### Alta East Wind Project

The Alta East Wind Project would generate up to 300 MW of electricity from up to 120 WTGs on an 3,660-acre site in unincorporated Kern County. The proposed project includes a 12-mile long, a 8-mile long, or an 8 ½-mile long 230-kV generation-tie transmission line, security fencing, access and service roads, an O&M facility, and up to four construction staging areas. An EIR for this proposed project is expected to begin in early 2011.

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### Table 3-9 Proposed Wind Projects Identified by Kern County Planning and Community Development Department

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Project Location</th>
<th>Case Type</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alta East Wind Project</td>
<td>North and south sides of SR 58; three miles northwest of community of Mojave</td>
<td>Zone change to allow WTGs</td>
<td>3,660</td>
</tr>
<tr>
<td>Pahnamid Wind Energy Project</td>
<td>One mile south of the intersection of Highline Road and Tucker Road</td>
<td>Zone change to allow WTGs</td>
<td>2,760</td>
</tr>
<tr>
<td>Catalina Renewable Energy Project</td>
<td>Two miles west of the intersection of Backus Road and Tehachapi Willow Springs Road</td>
<td>Zone change to allow WTGs</td>
<td>7,400</td>
</tr>
<tr>
<td>Avalon Wind Energy Project</td>
<td>Two miles west of the intersection of Backus Road and Tehachapi Willow Springs Road</td>
<td>Zone change to allow WTGs</td>
<td>6,658</td>
</tr>
<tr>
<td>Morgan Hills Energy Project</td>
<td>Half mile south of Oak Creek Road and two miles west of Tehachapi-Willow Springs Road</td>
<td>Zone change to allow WTGs</td>
<td>3,773</td>
</tr>
<tr>
<td>Rising Tree Wind Energy Project</td>
<td>One quarter mile north of Oak Creek Road and five miles east of Tehachapi-Willow Springs Road</td>
<td>Zone change to allow WTGs</td>
<td>2,746</td>
</tr>
</tbody>
</table>
3.0 Project Description

North Sky River Wind Energy Project and Jawbone Wind Energy Project
Draft Environmental Impact Report
May 2011
Pahnamid Wind Energy Project

The Pahnamid Wind Energy Project would generate 240 MW of electricity from up to 80 WTGs on 2,760 acres in unincorporated Kern County. The facility includes a substation, above and below-ground transmission lines, dirt access roads, and concrete batch plants. The project proposes a 230-kV generation-tie transmission line to connect to SCE’s Windhub Substation. An EIR for this proposed project is expected to begin in early 2011.

Catalina Renewable Energy Project

The Catalina Renewable Energy Project would generate 250 MW of electricity from up to 120 WTGs and up to 150 MW of solar energy from photovoltaic solar arrays co-located on 5,723 acres of a 7,400-acre area in unincorporated Kern County. The facilities would consist of wind turbines, solar arrays, substations, an O&M facility, above and below-ground transmission lines, dirt access roads, and concrete batch plants. The project proposes a 230-kV generation-tie transmission line to connect to SCE’s Whirlwind Substation. An EIR for this proposed project is expected to begin in early 2011.

Avalon Wind Energy Project

The Avalon Wind Energy Project would generate 255 MW of electricity from up to 170 WTGs on 6,658 acres in unincorporated Kern County. The facility includes a substation, above and below-ground transmission lines, dirt access roads, and concrete batch plants. The project proposes a 230-kV generation-tie transmission line to connect to SCE’s Whirlwind Substation. An EIR for this proposed project is expected to begin in early 2011.

Morgan Hills Energy Project

The Morgan Hills Energy Project would generate 230 MW of electricity from up to 230 WTGs on 700 acres of a 3,773-acre area in unincorporated Kern County. The facility includes wind turbine generators with foundation pads, crane pads, permanent access roads, switch yard and substation, temporary construction lay-down yards, parking areas, an O&M building, one temporary concrete batch plant, transmission lines, and an underground power collection system. An EIR for this proposed project is expected to begin in early 2011.

Rising Tree Wind Energy Project

The Rising Tree Wind Energy Project would generate 234 MW of electricity from up to 78 WTGs on 2,746 acres in unincorporated Kern County. The facility includes wind turbine generators with foundation pads, crane pads, permanent access roads, switch yard and substation, temporary construction lay-down yards, parking areas, a 10,000 square foot O&M building, one temporary concrete batch plant, transmission lines, and an underground power collection system. An EIR for this proposed project is expected to begin in early 2011.

Existing and Recently Approved Projects

Pine Tree Wind Development Project

The Pine Tree Wind Development Project is an approved project that would result in construction of a wind energy development with a generating capacity of 120 MW. The project would be located in Kern County six miles west of SR-14, 12 miles north of the community of Mojave, and 15 miles
northeast of the City of Tehachapi. Primary access to the project property is from SR-14 via Jawbone Canyon Road. A Final EIR was completed for this project in April 2005 and the facility is currently in operation. The Pine Tree Wind Development Project site is located immediately south of the proposed project site. Access to the proposed project site is off SR 14 via Jawbone Canyon Road, which also serves as access to the Pine Tree Wind Development Project.

**Pine Canyon Wind Project**

The Pine Canyon Wind Project is expected to be constructed on 12,000 acres of land adjacent to the Pine Tree Wind Development Project and is proposed to produce 150 MW of wind energy. To date no CEQA documentation is publicly available for the Pine Canyon Wind Project.

**PdV Wind Energy Project (recently referred to as Manzana Wind Project)**

The PdV Wind Project is an approved project located at the southern end of the TWRA, just north of the proposed Whirlwind Substation. The project is situated on 5,820 acres of land and entails up to 300 WTGs to produce up to 300 MW of wind energy. The project would also include a substation to increase the voltage generated by the turbines to meet the electrical system’s 220-kV or 500-kV voltage. The Final EIR for this project was completed in February 2008 and was certified by the Board of Supervisors on July 29, 2008. Construction of this project began in December 2010.

**PdV Infill Project**

The PdV Infill Project is an approved project and is considered an infill project that is adjacent to, and surrounded by, the PdV Wind Project. The infill project is situated on 2,422 acres of land and entails the relocation of turbines to private lands adjacent to the approved PdV Wind Project to achieve more efficient development of the 300 MW wind farm and maximize wind output and efficiency. The infill expanded the approved PdV Wind Project boundary and reconfigured the location of the WTGs, but did not include any increase in the number of WTGs or the size of the wind farm in terms of its MW capacity. The Final EIR for the PdV Wind Project was amended for this project and was approved by the Board of Supervisors on March 2, 2010. Construction of this project is expected to be completed in 2012.

**Pacific Wind Energy Project**

The Pacific Wind Energy Project is an approved project located at the southern end of the TWRA, immediately south of the PdV Wind Project. The project is situated on 8,300 acres of land and entails up to 151 WTGs to produce up to 151 MW of wind energy. The project would also include a substation to increase the voltage generated by the turbines to meet the electrical system’s 220-kV voltage. The Final EIR for this project was completed in August 2010 and was certified by the Kern County Board of Supervisors on October 26, 2010. Construction of this project is scheduled to begin in late 2011.

**Sky River Wind Energy Facility**

NextEra owns and operates the existing 77-MW Sky River wind energy facility, located immediately south of the southwest portion of the proposed project site. The wind farm began commercial operation in 1991 and operates with 342 225-kW Vestas V27 WTGs.
Antelope Transmission Project Segments 1-3

Construction of SCE’s Antelope Transmission Project is currently underway, and would occur in three sequential segments: Segment 1, Antelope-Pardee 500-kV Transmission Line; Segment 2, Antelope-Vincent 500-kV Transmission Line; and Segment 3, Antelope-Tehachapi Transmission Line.

Segment 1 of the Antelope Transmission Project involves the construction of a new 25.6-mile 500-kV transmission line between SCE’s existing Antelope and Pardee Substations, located in the City of Lancaster and the City of Santa Clarita, respectively. This project includes modifications to Antelope and Pardee Substations and the expansion of Antelope Substation. Segment 1 is a 500-kV single-circuit transmission line within an existing SCE 66-kV transmission line ROW for 22.8 miles and establishes a new 500-kV ROW for three miles. The line would initially be energized at 220-kV to serve the existing transmission needs determined by SCE and, as energy demand increases, it would be upgraded to 500-kV. Implementation of Segment 1 would facilitate and accommodate the construction of Segment 2 and Segment 3. Segment 1 was completed in winter 2009.

Segment 2 (Antelope-Vincent 500-kV T/L) consists of a new 17.8-mile 500-kV transmission line connecting SCE’s existing Antelope Substation with the Vincent Substation, located near Acton, California. This line would be constructed to deliver electricity from new wind farms to communities in southern California. Similarly to Segment 1, this segment would initially be energized at 220-kV. Segment 2 was completed in 2010.

Segment 3 (Antelope-Tehachapi T/L) consists of two phases. The first phase includes construction of a new 26.1-mile, 500-kV transmission line connecting SCE’s existing Antelope Substation to a proposed substation (Substation 1) in the Mojave Area. This transmission line would initially be energized at 220-kV. The second phase would consist of a new 9.4-mile, 220-kV transmission line from the proposed Substation 1 to a proposed substation in the Monolith Area (Substation 2). The transmission line and proposed Substation 2 would be constructed to transmit electricity from the wind farms to communities in southern California. The first portion of Segment 3 has been completed. Construction of the second portion of Segment 3 has not begun and no schedule for completion has been developed yet.

Tehachapi Renewable Transmission Project Segments 4-11

The TRTP, as proposed by SCE, would involve the construction, operation, and maintenance of new and upgraded transmission infrastructure along 173 miles of new and existing ROW in southern Kern County, portions of Los Angeles County, including the ANF and U.S. Army Corps of Engineers lands, and southwestern San Bernardino County, California. The description of major components for the TRTP begins with Segment 4. Segments 4 through 8, as well as Segments 10 and 11 of the TRTP are transmission facilities, while Segment 9 addresses the addition and upgrade of substation facilities. The proposed transmission lines would be constructed primarily within existing ROWs. The major components would consist of the following:

- Building a new single-circuit 500-kV Transmission Line (T/L) traveling 17 miles over new ROW between the Windhub Substation and the proposed new Whirlwind Substation (Segment 10);
- Two new single-circuit 220-kV T/Ls traveling four miles along new ROW from a private Substation to the proposed new Whirlwind Substation (Segment 4 - 220-kV);
• A new single-circuit 500-kV T/L, traveling 16 miles along new ROW from the proposed new Whirlwind Substation to the existing Antelope Substation (Segment 4 - 500-kV);
• Rebuilding 18 miles of the existing Antelope-Vincent 220-kV T/L and the existing Antelope-Mesa 220-kV T/L to 500-kV standards along existing ROW between the existing Antelope and Vincent Substations (Segment 5);
• Rebuilding 19 miles of existing 220-kV T/L to 500-kV standards between the existing Vincent and Gould Substations. Also adding a new 220-kV circuit on the vacant side of the existing double-circuit structures of the Eagle Rock-Mesa 220-kV T/L, between the existing Gould and Mesa Substations (Segment 11);
• Rebuilding of 32 miles of existing 220-kV T/L to 500-kV standards from the existing Vincent Substation to the southern boundary of the ANF, including 27 miles of the existing Antelope-Mesa 220-kV T/L and five miles of the existing Rio Hondo-Vincent 220-kV No. 2 T/L (Segment 6);
• Rebuilding 16 miles of the existing Antelope-Mesa 220-kV T/L to 500-kV standards from the southern boundary of the ANF to the existing Mesa Substation. This segment would replace the existing Antelope-Mesa 220-kV T/L (Segment 7);
• Rebuilding 33 miles of existing Chino-Mesa 220-kV T/L to 500-kV standards from a point two miles east of the existing Mesa Substation (the “San Gabriel Junction”) to the existing Mira Loma Substation. Also rebuilding seven miles of the existing Chino-Mira Loma No. 1 line from single-circuit to double-circuit 220-kV structures (Segment 8);
• Building the new Whirlwind Substation, a 500/220-kV substation located near the intersection of 170th Street and Holiday Avenue in Kern County near the TWRA (Segment 9);
• Upgrading the existing Antelope, Vincent, Mesa, Gould, and Mira Loma Substations to accommodate new T/L construction and system compensation elements (Segment 9); and
• Installation of associated telecommunications infrastructure.
• The Final EIR for the TRTP was approved on December 17, 2009. Construction of the project began in Fall of 2010 and is expected to end in 2015.

Other Cumulative Projects

Table 3-10 lists nearby residential, commercial, natural resource and solar energy projects. The Kern County Planning and Community Development Department reviewed all known projects within a six-mile radius of the project site. There are no new known residential projects located, within a 6 mile radius of the project site.

<table>
<thead>
<tr>
<th>Kern County Case ID</th>
<th>Zone Map</th>
<th>Project Name</th>
<th>Project Location</th>
<th>Case Type</th>
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<tr>
<td>8310</td>
<td>149</td>
<td>Jefferson</td>
<td>Portion of Section 36 in PM 7178</td>
<td>ZCC to from E (5) CL to A</td>
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<tr>
<td>8311</td>
<td>149</td>
<td>Jefferson</td>
<td>Portion of Section 36 in PM 7178</td>
<td>Variance to Reduce Parcel Size</td>
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<td>13222</td>
<td>150</td>
<td>LA Department of Power and Water</td>
<td>Section 13 and 14</td>
<td>CUP for 10 MW Solar Facility in an A zone.</td>
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<tr>
<td>13433</td>
<td>149</td>
<td>Mesonika Pleuch</td>
<td>Black Oak Drive, Sand Canyon</td>
<td>Vacate Public Access easements</td>
</tr>
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</table>