Construction activities include excavation and grading of the proposed Jawbone Wind Energy Project property. Site preparation and construction of the proposed Jawbone Wind Energy Project would be in accordance with all federal, state, and county codes and requirements. Noise-generating construction activities would be limited to the construction hours noted above.

All stationary equipment and machines with the potential to generate a significant increase in noise or vibration levels would be located away from noise receptors to the extent practicable. The contractor shall conduct construction activities in such a manner that the maximum noise levels at the affected buildings would not exceed established noise levels. All applicable local, state, and federal requirements and best management practices (BMPs) would be incorporated into the construction activities for the proposed Jawbone Wind Energy Project.

Construction equipment would be turned off when not in use. The construction contractor would ensure that all construction and grading equipment is properly maintained. All vehicles and compressors would utilize exhaust mufflers and engine enclosure covers (as designed by the manufacturer) at all times.

**Site Preparation**

Site preparation activities would be the same as described above for the North Sky River Wind Energy Project.

**Start-up and Restoration**

Start-up and restoration activities would be the same as described above for the North Sky River Wind Energy Project.

**Regional Transmission System Reinforcement**

The transmission line reinforcement would involve a 230 kV transmission line tap from the existing Highwind substation to the adjacent Wilderness Transmission Line (Figure 3-7), requiring two new pole locations and 1,000 feet of new ROW.

New transmission line construction would consist of two components:

- Tower work, including creation of tower pads, footing construction and steel work.
- Wire installation, including all activities associated with the installation of conductors onto the transmission towers.

**3.8 Operation and Maintenance Activities**

Upon completion of all construction activities, up to 32 full- and part-time wind turbine technicians, operations personnel, administrative personnel, and managers would be employed to operate and maintain the proposed project. Not all staff would be working at the same time. The O&M staff would monitor WTG and system operation, perform routine maintenance, troubleshoot malfunctions, shut down and restart WTGs (when necessary), and provide security. They would be headquartered at the O&M facility and travel around the proposed project site as needed. Normal operations could involve deployment of up to three crews of two technicians around the site and two to three personnel in the office. Staff may not be present at the site 24 hours per day. However, operations would be continuously monitored through the SCADA system from a project proponent-
operated remote location. All O&M staff would be regularly trained to provide best practice health, safety, and environmental protection services.

After the initial startup period, the WTGs would be serviced at regular intervals. Annual overhaul maintenance service would also be performed. Most servicing would be performed onsite. The regular routine typically consists of inspecting and testing safety systems; inspecting wear and tear on components; lubricating the mechanical systems; performing electronic diagnostics on the control systems; and inspecting the overall structural components of the WTGs. Blade cleaning may also be performed and could be required if accumulation of debris on the lead edge reduced aerodynamic performance. The blades would be spray-washed with water, using a high pressure sprayer with extension nozzles, from a standard boom manlift.

During operation, hazardous and potentially hazardous chemicals (for example, oil, grease, and ethylene glycol) would be used to lubricate and cool the WTGs and ancillary facilities; a radiator would dissipate heat and would contain a water and ethylene mixture that would be tested annually. The gearbox would contain 70 gallons of oil that would not be routinely renewed. The WTGs would be equipped with leak-proof gaskets. Possible leakage or spillage during operations and/or maintenance of the WTGs would be confined within the towers. A supply of chemicals would be stored on site in the maintenance yard. Due to the remote location of the site, it is expected that two 500-gallon diesel storage tanks would be installed on site to serve O&M vehicles. To minimize the potential for harmful releases through spills or contaminated runoff, chemicals would be stored in tanks or drums located within secondary containment areas. Use of extremely hazardous materials is not anticipated. Storage and use of hazardous materials would be subject to a hazardous materials management plan approved by Kern County.

Routine O&M work would be performed by the O&M staff and would be conducted at the proposed project site. When specialized equipment or expertise is required (that is, cranes for major repairs, power line or substation repairs, etc.), the project proponents would subcontract with the appropriate contractors. Additionally, each WTG supplier would have personnel on the proposed project site as necessary to perform warranty maintenance and operations services during the warranty period on the WTGs. These personnel may work out of an offsite office building in one of the local communities.

Project access roads would be periodically graded and compacted to maintain the design, safety, and environmental requirements during the life of the proposed project. Maintenance on cut and-fill slopes, culverts, grade separations, and drainage areas would be performed as necessary to minimize erosion problems and maintain functional drainage structures. The project proponents would be responsible for cleaning up all construction debris and maintaining the appearance of all proposed project roads and rights-of-way (ROWs) in cooperation with applicable parties.

### 3.9 Decommissioning and Repowering

Several factors would determine the life expectancy of the proposed project, the most critical of which are land rights, demand for the electricity generated, and proper maintenance. The proposed project has a life expectancy of 30 years, based on landowner lease arrangements and permit approval timeframes. If there is continued demand for the electricity generated by the proposed project, outdated or worn facility components, especially the WTGs, would be replaced or upgraded in order to repower the proposed project and keep it operational.