4.17 Utilities

4.17.1 Introduction

This section of the Environmental Impact Report (EIR) addresses the project’s potential impacts on certain utilities and services—water, electricity, natural gas, solid waste and wastewater, and stormwater. This section also provides the environmental and regulatory settings and discusses mitigation measures to reduce impacts where applicable.

4.17.2 Environmental Setting

The proposed project site is primarily undeveloped rural open space with limited existing utility services available to the site. As such, there is no existing water supply system, wastewater treatment or sewer system, stormwater drainage facilities, or gas and electric lines that serve the site.

Water

Water systems are not established in the vicinity of the project site due to the rural nature of the surrounding area.

*Construction Water Usage and Source:* It is anticipated that approximately 80 million gallons of water will be required for construction related activities, with a peak monthly water use rate of approximately 12 million gallons (See Table 3-6 in Section 3). On-site construction water requirements are detailed as follows:

During construction of the project, water would be obtained from a water well located within the project boundaries or would be trucked from an off-site source, or from a combination of both options as described below:

- Water Well: The first option is an existing well located northwest of the project site (Figure 3-2). Use of the well would include the installation of the following elements:
  - Temporary open water storage reservoir (300 feet x 400 feet) constructed on water supply parcel for use during construction;
  - Permanent open water storage reservoir (100 feet by 100 feet) constructed on water supply parcel for use after construction, to be kept dry when not in use;
  - Main water production well located at northeast corner of water supply parcel;
  - 2 monitoring wells located on water supply parcel;
  - Back-up production well located at southeast corner of water supply parcel;
  - Two underground water pipelines; and
  - Post-construction low-profile partially submerged concrete tank.

An underground water pipeline would connect the main well to the temporary water storage reservoir during the project’s construction period. A second underground water pipeline would connect the back-up well to the temporary water storage reservoir. After the construction of the project, the temporary water reservoir will be decommissioned and replaced with a low-profile partially submerged tank constructed from on-site concrete produced by the project’s batch plant. The tank would be completely closed so that no open
Water would be present and there is no potential to attract birds and wildlife or be a safety hazard during the post-construction operations period of the proposed project. A smaller 100 feet x 100 feet water storage reservoir would be also constructed, but kept dry. On occasions when the project proponents, U.S. Forest Service, and/or the Kern County Fire Department need to fight local wildfires, the reservoir could be quickly filled from the wells or storage tank for fire protection uses at the Jawbone Wind Energy and North Sky River Wind Energy projects, as well as in Jawbone Canyon, Piute Mountains, Kelso Valley, Walker Basin and the surrounding areas.

- Trucked Water: The second option is the use of water that could be acquired and trucked to the site from the Cal Portland Mojave Plan located at 9350 Oak Creek Road or from the Los Angeles Aqueduct in Jawbone Canyon Road.

**Operational Water Source:** During project operations, water for the O&M facility personnel and operations would either be obtained from the domestic water well located within the northwest portion of the site (Figure 3-2), or would be secured from a nearby water purveyor and trucked in as bulk water for potable and non-potable uses. Depending on water quality, bottled water may also be delivered to the O&M facility for potable use. The amount of daily water needed during operation would be minimal (e.g., approximately 2,500 gallons per day or less) and would be primarily limited to sanitary uses. A water system to support the project would be installed on O&M facility grounds. Most likely, two 5,000-gallon water storage tanks would be installed: one 5,000 gallon tank for O&M facility operations and one for fire water.

The project proponents would be required to obtain well permits from Kern County prior to construction of wells and would provide additional information on volumes of water, rates of withdrawal, and other required data at that time.

**Electricity**

There is currently no electrical service to the project site. However, the project would not require a connection to Southern California Edison’s State electric distribution system because electricity generated by the proposed project itself would be sufficient to provide power to the O&M buildings and other facilities, as needed, during operation of the proposed project.

Primary electrical service would be provided to both the O&M facility and to the collector substation by separate 34.5kV connections to the substation bus. Service to the substation would come from a station service transformer connected to the 34.5kV bus., and service to the O&M facility would come via underground cables from a separate 34.5kV station service transformer. Primary electrical service for the North Sky River switchyard would come from CCVTs (Coupling Capacitor Voltage Transformer) connected to the 230kV bus in the switchyard.

Back-up power to operate the collector substation would be provided by backflow on the transmission line if the project is not operating. In addition, the substation would be equipped with a back-up generator to supply substation and turbine needs during emergency periods and during start-up and/or maintenance. It is anticipated that the substation generator would be a 150-kW generator powered by liquid propane (LP) fuel. Liquid propane fuel storage for the generator at the substation would be approximately 1,000 gallons. The substation back-up generator would comply with all applicable State of California and Environmental Protection Agency (EPA) emissions standards for this type of unit and application. The back-up generator and fuel supply would be located within secondary containment, as necessary, to meet all California and EPA requirements.
for spill prevention and control. Secondary containment design requirements, as well as Spill Prevention, Control and Countermeasures (SPCCs), would be provided in the project’s SPCC Plan.

Back-up power would be provided to the O&M facility by a connection to the collection substation via a 34.5kV station service transformer. In addition, the O&M facility would be equipped with a generator to provide back-up power service during emergency periods and during start-up and/or maintenance. It is anticipated that the generator would be a 150-kW generator powered by liquid propane (LP) fuel. Liquid propane fuel storage for the generator at the O&M facility would be approximately 1,000 gallons. The O&M facility back-up generator would comply with all applicable State of California and EPA emissions standards and all design requirements for spill prevention and control, as described above for the substation.

Back-up power would be provided to the Sky River Switchyard Substation by a connection to the local electrical distribution system. In addition, the switchyard would be equipped with a generator to provide back-up power service during emergency periods and during start-up and/or maintenance. It is anticipated that the generator would be a 150-kW generator powered by liquid propane (LP) fuel. Liquid propane fuel storage for the generator at the switchyard would be approximately 1,000 gallons. The switchyard back-up generator would comply with all applicable State of California and EPA emissions standards and all design requirements for spill prevention and control, as described above for the substation.

Natural Gas

Pacific Gas and Electric Company is the natural gas provider in Kern County; however, there is no known natural gas service to the proposed project site. Natural gas would not be required during construction or operation of the proposed project. The proposed project would use propane to provide heating or other support of the O&M buildings where the operations staff would work. This may require an on-site 250- to 500-gallon propane tank. A service truck would be expected to fill the tank four times per year. Therefore, the proposed project would not place any demand on existing natural gas systems.

Solid Waste and Wastewater

The proposed project site is in an undeveloped, rural area with no established sewage system. During construction, portable waste facilities would be provided for use by proposed project personnel, and all waste would be disposed of by an approved contractor at an approved disposal site. The Mojave-Rosamond Landfill at 400 Silver Queen Road is the closest waste disposal site, and is located five miles south of Mojave and one mile east of Highway 14.

The proposed project would require the development of septic systems and leach lines at the O&M buildings to support operations staff. The septic systems and leach lines would be located away from surface waters in the proposed project site to prevent any sewage runoff into these features. The wastewater systems for the proposed project would comply with the requirements of the County of Kern Department of Environmental Health Services as well as the Uniform Building Code.

Stormwater Drainage

Impervious surfaces that would result from construction of the proposed project would be limited to wind turbine generator (WTG) footings and pads for maintenance building and substation
equipment. Footings would cover very small areas and would be distributed over a large geographic region, resulting in some potential for increased stormwater runoff. Other areas of permanent disturbance would be covered with gravel, vegetation, or other stabilizing treatment, which would still allow for water absorption and would lessen stormwater runoff. Given the limited amount of land area that would be converted to impervious surface, runoff during operation of the proposed project is expected to be limited, and a stormwater drainage system is not proposed for the proposed project.

As discussed in more detail in Section 4.9, “Hydrology and Water Quality,” and Section 4.6, “Geology and Soils,” stormwater runoff has the potential to cause impacts on water quality, cause erosion, and result in loss of soils. Because the proposed project would disturb more than one acre of land, it would be subject to the U.S. Environmental Protection Agency’s National Pollutant Discharge Elimination System (NPDES) Construction General Storm Water Permit, as implemented by the Lahontan Regional Water Quality Control Board and the Kern County Engineering, Surveying, and Permit Services Department. The proposed project would comply with NPDES requirements and develop and implement a Stormwater Pollution Prevention Plan (SWPPP), as required by Section 19.64.140(k) of the Kern County Wind Energy (WE) Combining District and the Clean Water Act, which would be submitted to the Kern County Engineering, Surveying, and Permit Services Department for review and approval.

### 4.17.3 Regulatory Setting

*State*

**California Energy Commission (CEC)**

The CEC regulates the provision of natural gas and electricity within the State. The CEC is the State’s primary energy policy and planning agency. Created in 1974, the CEC has five major responsibilities: forecasting future energy needs and keeping historical energy data, licensing thermal power plants 50 megawatts (MW) or larger, promoting energy efficiency through appliance and building standards, developing energy technologies and supporting renewable energy, and planning for and directing the State response to energy emergencies.

**California Integrated Waste Management Board (CIWMB)**

The CIWMB is the State agency designated to oversee, manage, and track California’s 76 million tons of waste generated each year. It is one of the six agencies under the umbrella of the California Environmental Protection Agency State. The CIWMB develops laws and regulations to control and manage waste, for which enforcement authority is typically delegated to the local government. The board works jointly with local government to implement regulations and fund programs.

The Integrated Waste Management Act of 1989 (Public Resources Code (PRC) 40050 et seq. or Assembly Bill (AB 939, codified in PRC 40000), administered by the CIWMB, requires all local and county governments to adopt a Source Reduction and Recycling Element to identify means of reducing the amount of solid waste sent to landfills. This law set reduction targets at 25 percent by the year 1995 and 50 percent by the year 2000. To assist local jurisdictions in achieving these targets, the California Solid Waste Reuse and Recycling Access Act of 1991 requires all new developments to include adequate, accessible, and convenient areas for collecting and loading recyclable and green waste materials.