4.17.4 Impacts and Mitigation Measures

Methodology

Potential impacts associated with the proposed project and mitigation measures were developed based on consultation with Kern County and review of the proposed project design. The discussion below lists specific impacts and measures that would be incorporated to mitigate and reduce potential impacts to the extent feasible.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state that a project would have a significant impact on utilities and service systems if it would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments;
- Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs;
- Comply with federal, State, and local statutes and regulations related to solid waste; and

As discussed in Appendix A (Notice of Preparation/Initial Study [NOP/IS]), the proposed project was determined to have no impact with regard to the following impact thresholds:

- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments; and
- Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs.

These issues are not discussed further in this EIR.

Project Impacts

Impact 4.17-1: Exceed Wastewater Treatment Requirements of the Applicable Regional Water Quality Control Board

The proposed project would generate a minimal volume of wastewater. During construction, wastewater would be contained within portable toilet facilities and disposed of at an approved disposal site. During operation, the proposed project would not generate substantial volumes of wastewater as there would only be a maximum of up to 32 full and part-time employees.
Furthermore, septic systems with leach lines would be installed for the O&M buildings. The systems would be installed in conformance with the standard conditions and permit requirements of the Kern County Environmental Health Services Department. Therefore, the proposed project would not exceed wastewater treatment requirements and impacts would be less than significant.

**Mitigation Measures**

The project would comply with the goals, policies, and implementation measures of the KCGP. No additional measures would be required.

**Level of Significance**

Impacts would be less than significant.

**Impact 4.17-2: Require or Result in the Construction of New Water or Wastewater Treatment Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects**

The proposed project would require construction of septic systems and leach lines. Wastewater generation during operation is not expected to be substantial as the proposed project would require up to 32 full and part-time employees. Water, including potable water for drinking purposes, for the O&M facility personnel and operations, as well as for construction (dust suppression and concrete mixing), would either be obtained from a well located within the project boundaries, or would be secured from a nearby water purveyor and trucked in. Since the proposed project would provide its own water source, it would not impact existing water supply systems. However, the proposed project would require construction of some or all of the facilities listed above. While all applicable local, State and federal requirements and Best Management Practices (BMPs) would be incorporated into construction of the proposed project, depending on its location, construction of the septic systems and leach fields could result in impacts to the environment (with respect to surface water, groundwater, and vegetation). Implementation of Mitigation Measure 4.17-1 would ensure that impacts are less than significant.

**Mitigation Measures**

**MM 4.17-1** The method of sewage disposal shall be as required and approved by the Kern County Environmental Health Services Department. Compliance with this requirement will necessitate that the project proponents obtain the necessary approvals for the design of the septic systems from the Kern County Engineering, Surveying, and Permit Services Department prior to issuance of building permits for the operations & maintenance buildings. The septic system disposal fields shall be located a minimum of 100 feet from a classified stream or 25 feet from a non-classified stream and shall not be located where it would impact State wetlands or special-status plant species.

**Level of Significance after Mitigation**

Impacts would be less than significant.
Impact 4.17-3: Require or Result in the Construction of New Stormwater Drainage Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects

Impervious surfaces that would result from construction of the proposed project would be limited to WTG footings and pads for maintenance buildings and substation equipment. Although the proposed project would create a small amount of additional impervious surface and may require a small amount of imported water for dust suppression during construction, these changes would not substantially increase the amount of stormwater runoff. The proposed project area is drained by natural stream channels and does not rely on constructed stormwater drainage systems. The pattern and concentration of runoff could be altered by proposed project activities, such as grading of access roads; however, the amount of runoff across the proposed project site would not be substantially altered. Implementation of the proposed project SWPPP (see Section 4.9, “Hydrology and Water Quality”) would be sufficient to manage stormwater runoff during construction.

WTG footings would cover very small areas and would be distributed over a large geographic region, resulting in some potential for stormwater runoff. Other areas of permanent disturbance would be treated with vegetation, gravel, caliche or other stabilizing treatment that would still be pervious.

Overall, although grading would occur at WTG locations, substation site(s), the O&M building sites, and along access roads, this ground disturbance would be spread over the proposed project’s 13,535 acres and would not substantially alter the overall topography of the area. As described under Section 3.7 (Construction – Site Preparation), the proposed project’s WTG pads would be constructed of compacted soil graded to draw stormwater runoff away from the foundations. Impervious surfaces that would result from construction of the proposed project would not substantially increase surface water runoff. Therefore, the proposed project would not require new stormwater drainage facilities to manage stormwater runoff during construction or operation, and this impact would be less than significant.

Mitigation Measures

The project would comply with the goals, policies, and implementation measures of the KCGP. No additional measures would be required.

Level of Significance

Impacts would be less than significant.

Impact 4.17-4: Have Sufficient Water Supplies Available to Serve the Project from Existing Entitlements and Resources, or Are New or Expanded Entitlements Needed

Water is required for construction and operation of the proposed project. No existing water source is currently serving the proposed project site. However, water, including potable water for drinking purposes, for the O&M facility personnel and operations would either be obtained from a well located within the project boundaries, or would be secured from a nearby water purveyor and trucked in. The project proponents would be required to obtain well permits from Kern County prior to construction of the wells and to provide additional information on volumes of water, rates of withdrawal, and other required data at that time. Also, water that is required for construction, such as for dust suppression and concrete mixing, would also be obtained from a well within the project area.
boundaries or would be trucked in from nearby municipalities, such as the community of Mojave or city of Tehachapi. With implementation of Mitigation Measure 4.17-2, the proposed project would provide its own water source and would not impact existing water supply systems.

**Mitigation Measures**

**MM 4.17-2** Prior to issuance of grading or building permits for the proposed project, the project proponents shall obtain permits for water wells or obtain other water appropriation rights for on-site potable water to the satisfaction of the Kern County Environmental Health Services Department.

**Level of Significance after Mitigation**

Impacts would be less than significant.

**Impact 4.17-5: Comply with Federal, State, and Local Statutes and Regulations Related to Solid Waste**

The proposed project would generate solid waste during construction and operations. Common construction waste may include metals, masonry, plastic pipe, rocks, dirt, cardboard, or green waste related to land development. The 1989 California Integrated Waste Management Act (AB 939) requires Kern County to attain specific waste diversion goals. In addition, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires expanded or new development projects to incorporate storage areas for recycling bins into the proposed project design. Reuse and recycling of construction debris would reduce operating expenses and save valuable landfill space. Because the proposed project would generate a minimal amount of waste, it would not be expected to significantly impact Kern County landfills. Nevertheless, to ensure compliance with policies to reduce waste sent to landfills, Mitigation Measures 4.17-3 and 4.17-4 are proposed as follows:

**Mitigation Measures**

**MM 4.17-3** The project proponents shall reduce construction waste transported to landfills by recycling solid waste construction materials to the extent feasible, such as taking materials to recycling and reuse locations listed in the brochure on recycling construction and demolition materials available on the Kern County Waste Management Department Web site.

**MM 4.17-4** The project proponents shall provide a fenced storage area for recyclable materials that is clearly identified for recycling. This area shall be maintained on the sites during construction and operations. Site plans showing the recycling storage areas shall be submitted to the Kern County Planning and Community Development Department and Kern County Waste Management Department prior to the issuance of any grading or building permits for the sites.

**Level of Significance after Mitigation**

Impacts would be less than significant.
Cumulative Setting Impacts and Mitigation Measures

Cumulative Setting

The geographic scope for cumulative impacts to utilities and service systems includes the six-mile radius that is described in the project description (Chapter 3) and other energy projects located within the Tehachapi Wind Resource Area (TWRA). This geographic scope of analysis is appropriate because various projects within the six-mile radius and within the TWRA could be constructed within the same timeframe as the proposed project. The landscape in the proposed project area has changed in recent years due to the development of other wind energy projects. Several wind energy projects have been built and applications for future projects are currently pending. Because the immediate vicinity of the proposed project is uninhabited, public service and utility systems have not been significantly affected.

Impact 4.17-6: Contribute to Cumulative Impacts on Utilities and Service Systems

Several applications for wind energy projects and residential developments have been submitted to Kern County, as described in Section 3.11. Public services and utility providers and facilities would be expected to expand in order to continue the provision of services to the existing population while also accommodating the future population growth expected from future residential developments.

Impacts of the proposed project would be cumulatively considerable if they would have the potential to combine with similar impacts of other past, present, or reasonably foreseeable projects. However, as discussed above, the proposed project would place few demands on water, stormwater drainage, and solid waste disposal.

The proposed project would not generate a substantial amount of stormwater runoff and would not drain into an existing stormwater drainage system. The other planned projects listed in Chapter 3, “Project Description,” would generate stormwater runoff but would be expected to comply with their respective SWPPP, NPDES permit conditions and to install systems to manage stormwater runoff so that impacts would be less than significant. Therefore, the proposed project would not have the potential to combine with impacts from past, present, or reasonably foreseeable projects to result in a cumulative impact to stormwater runoff.

The proposed project would not generate substantial volumes of wastewater as there would only be up to 32 full- and part-time employees during operation. Furthermore, the proposed project would install septic systems with leach lines. The other planned projects would be expected to operate with a similar number of employees and also require the installation of a septic system with leach line. Therefore, the proposed project would not have the potential to combine with impacts from past, present, or reasonably foreseeable projects to result in a cumulative impact to wastewater.

Water, including potable water for drinking purposes, for the O&M facility personnel and operations would either be obtained from a well located within the project boundaries, or would be secured from a nearby water purveyor and trucked in. Furthermore, the proposed project would implement MM 4.17-2 to obtain permits for water wells or obtain other water appropriation rights for on-site water prior to the issuance of grading or building permits to ensure impacts are less than significant. Other planned projects are expected to carry out the same options. Therefore, the proposed project would not have the potential to combine with impacts from past, present, or reasonably foreseeable projects to result in a cumulative impact to water supplies.
The proposed project would generate a minimal amount of waste and is not expected to significantly impact Kern County landfills. However, generation of waste from cumulative projects, including residential and commercial developments, and other wind projects could result in a cumulative impact. To ensure compliance with policies to reduce waste sent to landfills, the proposed project would comply with MMs 4.17-3 and 4.17-4 and impacts would be less than significant. Other planned projects are expected to comply with waste reduction policies as well. Therefore, the proposed project would not be expected to combine with impacts from past, present, or reasonably foreseeable projects to result in a cumulative impact to landfills.

In conclusion, the proposed project would be self-contained and would not have a significant impact on public utilities. Therefore, the proposed project would not contribute to cumulative impacts on utilities and service systems. The proposed project would result in a beneficial impact on utility services and offset future stress on energy service providers as energy demand grows in Kern County and southern California.

**Mitigation Measures**

Implement MMs 4.17-1 through 4.17-4.

**Level of Significance after Mitigation**

Cumulative impacts would be less than significant.