3.0 Environmental Setting, Impacts, and Mitigation

3.1 Introduction

This introductory section serves as a roadmap for the reader, identifying the scope of the environmental analysis, format and content of the resource-specific analyses, and key methodological approaches to the impact analyses.

3.1.1 Scope of the Environmental Analysis

The primary Project components that are addressed in this Environmental Impact Report (EIR) are:

- **Lompoc Wind Energy Facility (LWEF)**. This is the wind turbine generator (WTG) component of the Project, located on 2,950 acres of privately owned lands; primary elements include 65 ~~0 to 80~~ 1.5 MW wind turbines, new access roads and road improvements, a communication system, meteorological towers, an Operations and Maintenance (O&M) facility, onsite electrical collection and distribution lines, and an onsite electrical substation (Project Substation).
- **Lompoc Wind Energy Power Line (power line).** This is a new ~~7.85~~ 8.7-mile 115-kV power line that would carry the electricity generated by the Project and interconnect with the Pacific Gas and Electric Company (PG&E) electric grid. This line would be constructed and operated by PG&E.
- Resource-specific impact analyses are included in the following sections:

    3.2 Aesthetics/Visual
    3.3 Agricultural Resources
    3.4 Air Quality
    3.5 Biological Resources
    3.6 Cultural Resources
    3.7 Energy/Electric Utilities
    3.8 Fire Protection and Emergency Services
    3.9 Geology/Soils
    3.10 Land Use
    3.11 Noise
    3.12 Paleontological Resources
    3.13 Risk of Accidents/Hazardous Materials/Safety
    3.14 Transportation/Circulation
    3.15 Water Resources
    3.16 Other Issue Areas

3.1.2 Format and Content of the Environmental Analysis

Each resource section includes a description of the following.

Existing Conditions. In most cases, the description of existing conditions focuses on the immediate vicinity of the Project sites. For some resources, such as air quality and transportation, regional information is more appropriate.

Regulatory Framework. This includes a description of federal, state, and/or local regulations that are applicable to the assessment of Project impacts.

Impact Assessment Methodology. This includes the procedures followed to determine the type and magnitude of impacts that would occur.

Thresholds of Significance. Resource-specific thresholds are used to evaluate the significance of environmental impacts. They are based on the County of Santa Barbara Environmental Thresholds and Guidelines Manual (County, 2006), augmented where appropriate with those identified in the Initial Study Checklist included in Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and modified as needed to address potential Project impacts.

Project Impacts. Both direct and indirect impacts that would occur prior to the application of Applicant-proposed and County mitigation measures are identified. Direct impacts are those that are caused by and immediately related to the Project. Indirect impacts are not immediately related to the Project, but are reasonably foreseeable changes in the environment caused by the direct impacts (CEQA Guidelines Section 15358). Project impacts are categorized using County of Santa Barbara classifications, as follows:

- *Class I* – Significant adverse impacts that cannot be feasibly mitigated or avoided. If the Project is approved, decision-makers are required to adopt a statement of overriding considerations, pursuant to CEQA Section 15093, explaining why project benefits outweigh the unavoidable, adverse environmental effects.
- *Class II* – Significant adverse impacts that can be feasibly mitigated or avoided. If the Project is approved, decision-makers are required to make findings pursuant to CEQA Section 15091, that impacts have been mitigated to the maximum extent feasible by implementing the recommended mitigations.
- *Class III* – Adverse impacts that are less than significant. These impacts do not require that CEQA findings be made.
- *Class IV* – Beneficial impacts.

~~**Applicant-proposed**~~ **Mitigation Measures**. Applicant-proposed mitigation measures are listed in Section 2.8.4 ~~were consolidated where appropriate and reformatted to be consistent with the intent of the County's Standard Conditions and Mitigation Measures (Santa Barbara County, 2002)~~. These measures were ~~applied to~~ considered in the assessment of Project impacts to determine whether they would be mitigated ~~to the maximum extent feasible under CEQA~~ and in the development of additional mitigation measures.

~~**Additional Mitigation Measures.**~~ Other mitigation measures were identified as needed to reduce or avoid potentially significant environmental effects where no Applicant-proposed

mitigation measures have been identified or where it was determined that additional measures would be required to mitigate impacts to the maximum extent feasible in accordance with Santa Barbara County policy. Likewise, mitigation measures also have been identified for adverse, but less than significant impacts where impacts could be feasibly further reduced.

Residual Impacts. This section identifies the impacts that would remain after the application of either Applicant-proposed mitigation measures or other mitigation measures identified by the County to mitigate Project impacts.

3.1.3 Key Methodological Approaches

The following general methodological approaches were used in the resource-specific impact assessments:

1. ~~A detailed~~ The preliminary WTG layout for the LWEF area is presented in Figure 2-2. ~~has not been developed~~. The final WTG model selection, final design engineering, geotechnical studies, and environmental considerations, will be considered in determining the exact locations of the WTGs. The Applicant has identified WTG corridors that would allow for the placement of ~~60 to 80~~ 65 1.5 MW WTGs, while taking into consideration environmental, engineering, and meteorological factors. The analysis of environmental impacts assumes that the entire area within each corridor would be subject to disturbance during construction because the WTGs could be located anywhere within the designated corridors. Also, the WTGs, roadways, and onsite electrical collection lines are assumed to be located in areas where the greatest resource-specific impacts would occur. In general, specific layouts were developed for the visual and noise analyses to ensure that the greatest potential impacts were assessed.[1] Thus, the analysis assumes a "worst-case scenario" for the potential environmental impacts.

2. ~~An exact~~ The preliminary power line alignment is presented in Figure 2-4. ~~has not been developed~~. Due to expected Project refinements related to final design engineering and siting, as well as environmental considerations, the Applicant has identified a 200-foot-wide corridor (100 feet on either side of centerline) to accommodate the new power line. Detailed environmental resource surveys were conducted within this 200-foot corridor. The width of this corridor was selected with the understanding that it would allow flexibility in siting. Because the location of individual poles is not known, the impact analysis assumes that they would be located in areas where the greatest resource-specific impacts would occur (that is, "worst-case scenario"). Data for a 2,000-foot corridor (extending 1,000 feet on either side of centerline) also were collected through the review of aerial photography, existing reports, and databases to identify the general environmental resources between the 200-foot-wide corridor and the edge of the 2,000-foot-wide corridor.

3. The Applicant has proposed construction to occur in as many as two ~~three~~ phases. The first phase would include 82.5 megawatts (MW) of electrical generation capacity to satisfy an existing power purchase agreement with PG&E. This would require the installation of 55 WTGs. The installation of the additional 10 WTGs could either occur as

[1] The layout used in several visual simulations (KOPs 8, 11, 12, and 13) assume WTG placement as shown on Figure 2-2. This layout is realistic, but not necessarily worst case.

part of Phase I or in up to two subsequent phases. Phase I is proposed for construction in Spring 2009 ~~from 2007 to 2008~~ and would take approximately 6 to 10 months to complete. Commercial operation of Phase I is estimated to commence in the fourth quarter of 2008. Construction of Phase II and III would commence after the completion of Phase I, but no later than 7 years after the approvals for Phase I. Phase~~s~~ II and III would each have a 6-month construction schedule. In Sections 3.4 Air Quality and 3.14 Traffic/Circulation, the analyses evaluated the worst-case scenario of constructing all 97.5 ~~120~~ MW (up to 65 ~~80~~ WTGs) of the Project as part of Phase I.

4. The Project would not be constructed on lands under the jurisdiction of the California Coastal Commission (CCC) (that is, the Coastal Zone). However, some of the Project properties along the southeastern edge of the Project are bisected by the Coastal Zone boundary, and thus are partially within the Coastal Zone and partially within the County's Inland Zone. The environmental analyses included in this EIR encompass the full extent of the Project properties, including the areas within the Coastal Zone. Inclusion of these areas allows for potential future expansion of the Project farther south on the bisected properties, without having to conduct additional environmental review. The Applicant has indicated interest in possibly petitioning the CCC to adjust the Coastal Zone boundary by up to 200 yards southward on the affected parcels. (Such an adjustment is potentially allowable under the California Coastal Act in situations where the Coastal Zone boundary bisects parcels.) The County is not aware of any plans to expand the WTG corridors into this area, and any future Project expansion would be subject to all normal environmental review and permit requirements.