

3.0 Introduction

In accordance with Section 15161 of the California Environmental Quality Act (CEQA) Guidelines, this Environmental Impact Report (EIR) examines the environmental impacts of the proposed Sand Hill Wind Project (proposed project). As described in Chapter 2, *Project Description*, the project would consist of two or more phases, referred to as the Initial Repower and the Full Repower.

The Initial Repower, the project for which Sand Hill Wind (the Applicant) has filed a conditional use permit (CUP) application, would consist of the complete decommissioning of 70–80 existing wind turbines in the project area, and their replacement with 40 new shrouded turbines with a total nameplate capacity of 4 megawatts (MW). This phase would result in construction of temporary laydown areas; widening of internal access roads; and installation of associated facilities including new pads, transformers, and connections to the existing power collection system. The Initial Repower would support an ongoing 3-year Avian Validation Study comparing the effects of the old and new turbines on avian species. The CUP would permit the operation and maintenance, and require the eventual decommissioning, of the shrouded turbines and their associated facilities.

The Full Repower, a future phase of the Sand Hill Wind Project for which no CUP application has yet been filed, includes, with the exception of the Avian Validation Study, the same actions as the Initial Repower, but on a larger scale, based on decommissioning of an estimated 330 existing turbines and their replacement with up to 300 additional shrouded turbines. Definition of the Full Repower project-level details will depend on the outcome of the Avian Validation Study to be completed during the Initial Repower phase. The Full Repower would occur within the same project area but include an additional 68 acres of existing facilities on a separate parcel. The combined 34 MW of capacity that is proposed in the two phases would represent a 33 percent increase in output over the nameplate capacity of the existing turbines, which is estimated to be 25.5 MW. The Full Repower would take place after completion of the Initial Repower and would be subject to a separate CUP and additional, project-level CEQA evaluation.

This chapter evaluates the potential impacts of both phases of the Sand Hill Wind Project. As discussed in Chapter 1, *Introduction*, the Initial Repower is evaluated at a project level, and the Full Repower is evaluated at a program level.

3.0.1 Resources Dismissed from Further Consideration

Due to the types of activities associated with the proposed Sand Hill Wind Project, the County determined, through preparation of the March 6, 2013, initial study (IS) (Appendix A), that some topics do not require in-depth technical analysis. Based on the findings of the IS, the following resources were dismissed from further evaluation in the EIR.

- Land Use
- Mineral Resources

- Population and Housing
- Public Services
- Recreation

3.0.2 Resources Considered in Detail in This EIR

Section 15126 of the State CEQA Guidelines indicates that an EIR's environmental analysis must identify and describe the short- and long-term direct and indirect physical impacts associated with all phases of a proposed project and identify feasible, enforceable mitigation measures to minimize any significant adverse impacts. Based on the project description and the County's understanding of the environmental issues associated with the project, this chapter provides environmental analyses of the physical impacts that could occur as a result of implementation of the Initial and Full Repower phases. There is a separate section for each resource analyzed, as listed below. Each section provides a description of the regulatory and environmental setting, significance criteria and methodology used in the impact analysis, and the potential impacts and required mitigation measures. In accordance with CEQA and the State CEQA Guidelines, the resource analyses in this chapter consider physical changes to the environment, including direct and indirect effects, that would likely result from decommissioning of existing wind facilities and repowering of the project area with new shrouded turbines. An evaluation of cumulative effects is provided in Chapter 5, *Other CEQA Considerations*.

Based on the findings of the IS, the following resource topics are analyzed in detail in Sections 3.1 through 3.12 of this chapter.

- 3.1, *Aesthetics*
- 3.2, *Agricultural and Forestry Resources*
- 3.3, *Air Quality*
- 3.4, *Biological Resources*
- 3.5, *Cultural Resources*
- 3.6, *Geology, Soils, and Paleontological Resources*
- 3.7, *Greenhouse Gases*
- 3.8, *Hazards and Hazardous Materials*
- 3.9, *Hydrology and Water Quality*
- 3.10, *Noise*
- 3.11, *Transportation/Traffic*
- 3.12, *Utilities and Service Systems*

Each section of Chapter 3 uses the following basic format.

- *Regulatory Setting* describes applicable federal, state, and local plans, policies, and regulations related to the resource topic.
- *Environmental Setting* defines the project-specific context for the resource topic.
- *Methods for Analysis* outlines the approach used to evaluate resource-specific impacts of the proposed Sand Hill Wind Project Initial Repower and Full Repower.
- *Determination of Significance* describes the thresholds used to distinguish the level of significance of each potential impact.

- *Impacts and Mitigation Measures* provides a detailed comparison of the proposed Initial Repower to each criteria or condition used for the determination of significance, a conclusion of significance for each, and, if applicable, includes feasible mitigation measures necessary to reduce or eliminate significant impacts. This section also contains a broader discussion of the potential resource-specific effects of the proposed Full Repower and, where applicable, feasible mitigation measures to reduce significant Full Repower impacts.
- *References Cited* lists all the published references and personal communications cited within each resource topic discussion.