# Sand Hill Wind Repowering Project Repowering Project

# **Statement of Overriding Considerations**

Pursuant to the requirements of Public Resources Code Sections 21002, 21002.1, and 21081, and Section 15093 of the State CEQA Guidelines, the East County Board of Zoning Adjustments (EBZA) finds that approval of the Sand Hill Wind Repowering Project, whose potential environmental impacts have been evaluated in the *Environmental Checklist*, as a tiered project related to the Altamont Pass Wind Resource Area Repowering Program EIR (PEIR), and as indicated in the findings presented in Exhibit A, will result in the occurrence of significant effects that are not avoided or substantially lessened, as described in Exhibit A. These significant effects are listed below.

Impact AQ-2b: Violate any air quality standard or contribute substantially to an existing or projected air quality violation

Impact AQ-3b: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)

Impact BIO-11b: Avian mortality resulting from interaction with wind energy facilities

Impact BIO-14b: Turbine-related fatalities of special-status and other bats

Impact BIO-19b: Potential impact on the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites

Further, as required by CEQA Section 21081(b) and State CEQA Guidelines Section 15093, the EBZA finds that the unavoidable significant effects listed above are outweighed by specific overriding economic, legal, social, technological, or other benefits offered by the project. Specifically, the project will provide the benefits described below.

#### **Environmental Benefits**

California's Renewables Portfolio Standard (RPS) requires all electricity retailers in the state, including publicly owned utilities (POUs), investor-owned utilities, electricity service providers, and community choice aggregators, to adopt RPS goals of obtaining 20% of retail energy sales from renewable energy sources by the end of 2013, 25% by the end of 2016, and the 33% by the end of 2020. Originally established in 2002 under Senate Bill (SB) 1078 and amended in 2010 by SB 107,

the current RPS was codified at its current level by SB X1-2 in 2011. This RPS preempts the California Air Resources Board's (ARB's) previous 33% Renewable Electricity Standard.

Wind energy is a renewable energy source. The program will assist California in meeting the legislated RPS for the generation of renewable electric energy in the state both by maintaining renewable energy output and by enabling and accelerating the repowering of old-generation turbines, which are known to be hazardous to avian species.

Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, establishes a statewide goal of reducing greenhouse gas (GHG) emissions to 1990 levels by 2020. This statute requires CARB to develop a "Scoping Plan" that describes the specific programs that California will employ to meet this goal. The Scoping Plan was first considered by CARB in 2008 and its first update was adopted on May 22, 2014. The RPS program is an integral part of the suite of GHG emissions reduction programs that are relied upon by the Scoping Plan. Therefore, the project will assist California in maintaining its legislated Global Warming Solutions Act criteria that require reductions in carbon dioxide and other GHG emissions, which in turn represent benefits in the region. Approval of the project will aid the County in meeting energy needs in an efficient and environmentally sound manner, as provided in the County General Plan, which encourages utilization of renewable energy resources.

#### **Economic Benefits**

The project will provide new full-time jobs during construction of the project. The project will provide economic benefits to the County and its residents by increased spending in the community as a result of construction and development related work. In addition, the project is compatible with the existing agricultural use. It will promote the long-term economic viability of grazing in unincorporated Alameda County by providing financial support to property owners through a second income stream from ground leases within the Sand Hill Wind project area. The property owners can use the funding to enhance or continue agricultural operations. Project road maintenance will also enhance agricultural operations by improving access throughout the project properties.

# **Technological Benefits**

The project will provide technological benefits through the replacement of large numbers of existing wind energy collection systems with a smaller number of more technologically advanced systems. Although the new turbines are larger, the available evidence indicates that repowering with the improved technology could substantially reduce turbine-related avian fatalities (although fatalities remain a significant impact).

As discussed in Section 3. 11 of the PEIR, the fourth-generation turbines are upwind turbines, meaning each turbine faces into the wind, so the wind encounters the rotor blades before the tower and nacelle, making for quieter operations than the existing downwind turbines. Additionally, the modern turbines have relatively low rotational speeds and pitch control on the rotors, both of which reduce sound levels compared to the sound produced by the turbines that are now operation within the Sand Hill Wind Project area.

# **Safety Benefits**

Repowering would result in public safety benefits for several reasons: reductions in fire hazard, the underground placement of electrical lines, and improved turbine technology that reduces the risk of blade throw. Section 3.8 of the PEIR provides a discussion of fire risks, and indicates that the most common causes of wildland fire at windfarms are hardware and/or conductor failures of power collection lines, dropping of collection lines, turbine malfunction or mechanical failure, and avian electrocution incidents. Because of their age, design, and large number, the existing turbines present a greater risk of fire ignition than do the proposed new turbines. Repowering, by reducing the number of turbines and undergrounding the electrical collection system, would therefore reduce the likelihood of fire ignition associated with hardware failure, electrical line failure, and avian electrocutions. Installation of new turbines would also greatly reduce the potential and probability of blade throw or failure associated with existing wind turbines. Most fourth-generation turbines, such as those proposed for the program, are equipped with newer safety and engineering features to reduce the risk of blade failure and are designed for safe operation under normal conditions. The rotors of these turbines are provided with blade pitch controls that regulate the angle of the rotor blade into the wind, as well as redundant brake mechanisms that can control speed and shutdown or slowdown in response to excessive wind speed. The greatly reduced number of individual wind turbines would also reduce the probability of blade throw, which in any case is far lower for new generation than for old-generation turbines.

# **Benefits to the Knowledge Base**

Post-construction monitoring, which will be required once the new turbines are in operation, will provide data to quantify the actual change in the extent of avian fatalities from repowering and the extent of avian fatalities for projects in the program area. This will contribute to the body of knowledge about avian fatalities in the Altamont Pass region and will support future environmental analyses and mitigations.

### Summary

The County is obligated by Section 15093 of the State CEQA Guidelines to balance the competing interests of identified project benefits against the unavoidable environmental risks when determining whether to approve a project. The County finds that the project, with all the mitigation measures proposed, would best balance the advancement of wind technology, while also reducing the unavoidable impacts on protected or special-status avian wildlife species, including golden eagles and other raptors, to the lowest acceptable level.