2.10 Significant Irreversible Environmental Changes Resultant from Project Implementation

The California Environmental Quality Act (CEQA) Guidelines require that an environmental impact report (EIR) address any significant irreversible environmental changes that would be involved in a project should it be implemented (Sections 15126(c) and 15126.2(c)). CEQA Guidelines Section 15126.2(c) indicates that "uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter likely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified."

2.10.1 Irreversible Environmental Changes

The project proposes an amendment to the existing Zoning Ordinance governing wind turbine development of small and large turbines and MET facilities. Approval would facilitate the development of wind turbines in an effort to help meet the current and future federal and state goals for renewable energy production. The Zoning Ordinance amendment consists of clarifications, deletions, and revisions to provide an updated set of definitions, procedures, and standards for review and permitting of wind turbines and MET facilities. The proposed project includes allowing a temporary MET facility that complies with the height designator of the zone without a discretionary permit. The proposed project also includes allowing small wind turbines that meet the definition and specifications of the Zoning Ordinance to be developed without a discretionary permit, meaning that so long as they meet the requirements of the Zoning Ordinance, no land use permits would be required. Large wind turbines, as defined by the Zoning Ordinance, would continue to be subject to Major Use Permit procedures and requirements, and would require separate project-specific environmental review. Amendments to the Zoning Ordinance related to large wind turbines are proposed to bring development parameters up to date with technological changes that affect design standards of wind turbines. Irreversible long-term environmental changes associated with the proposed project would include those potential significant impacts described in Chapters 2.1 through 2.9 of this EIR.

Thus, implementation of the proposed project would involve the following irreversible environmental changes:

- Adoption of the ordinance may allow increased wind turbine operations that could require a permanent commitment of natural resources resulting from the direct consumption of fossil fuels, construction materials, and energy required for the production of materials, as well as

the manufacture of new equipment that largely cannot be recycled at the end of the project's useful lifetime.

- Temporary and permanent commitment of energy and water resources could occur as a result of the construction, long-term operation, and maintenance of new operations, which may be considered a permanent investment.
- Cultural and paleontological resources are non-renewable. Impacts to these resources would constitute an irreversible and irretrievable commitment of resources.
- Where turbines are constructed and operational, there would be a potential for destruction of sensitive biological resources, including special-status species.
- Adoption of the ordinance would potentially permanently change the visual landscape and character of the site and surrounding area. Changes to visual settings would vary, depending on the quality and character of existing views, viewing conditions, and distances to the proposed project facilities. Overall, many views would be transformed from predominantly natural or mixed natural and community settings to landscapes with strong industrial characters. Decommissioning and deconstructing project components would restore the visual character of the area to a degree, but would not restore the visual landscape to existing conditions prior to project construction.
- Adoption of the ordinance may allow turbines to be built on lands that are currently isolated due to inaccessible or difficult terrain and could allow for new access roads to the turbines. This increase in access to these lands would be irreversible.

2.10.2 Potential Environmental Damage from Accidents

Implementation of the proposed project would not involve any uniquely hazardous uses, and its operation would not be expected to cause environmental accidents that would affect other areas.

The use and storage of hazardous materials is discussed in Chapter 2.6 (Hazards and Hazardous Materials) and is not anticipated to be a significant impact, except for potential fire danger. While fire risks can be minimized through use of fuel reduction and siting, it cannot be assured that fire hazards could be completely avoided upon implementation of wind turbine development and operation.

2.10.3 Irreversible Commitment of Resources

As described in Chapter 1 (Project Description, Location, And Environmental Setting), the objectives of the proposed project include encouraging the development of wind turbines in the County of San Diego (County). Implementation of the Zoning Ordinance Amendment to allow new uses would facilitate this growth, which would likely include an incremental increase in the

use of small and large wind turbines. This growth would entail the commitment of nonrenewable resources, such as natural gas, petroleum products, asphalt, steel, copper, and other metals, as well as sand and gravel. The commitment of these resources would be irreversible as the processes that created them occurred over a very long period of time.

In addition to the primary impacts, long-term impacts would also result from an increase in vehicular traffic and the associated air pollutant and noise emissions. This commitment of resources would be a long-term obligation because, practically speaking, it is difficult to return the land to its original condition once it has been developed.

In summary, while the proposed project is expected to incrementally increase the use of both renewable and non-renewable resources, the demand for these resources is expected to increase regardless of whether the proposed project is approved. If not consumed as a result of this project, these resources would likely be committed to other projects in the region. However, this loss would be offset by the delivery of renewable energy to the energy grid, thereby assisting the state and federal governments in achieving their renewable energy goals. Therefore, there would be no permanent loss of the overall productivity of the environment from the proposed project. Compliance with all applicable building codes, as well as County policies and the mitigation measures identified in this EIR, would ensure that all natural resources are conserved to the maximum extent possible.

The proposed project is not expected to result in environmental accidents that would cause irreversible damage. Compliance with required plans, such as a stormwater pollution prevention plan, erosion and grading plan, and hazardous materials management plan, would minimize the potential for accidents resulting in environmental damage. Some birds and bats could be killed through collisions with the wind turbines and power lines; however, populations of individual species would not be eliminated, and the impacts to populations would not be irreversible.

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