# ATTACHMENT E

Hearing Date: December 16, 2008

Attachment E

# Planning Commission Staff Report dated September 17, 2008 with Attachments

# SANTA BARBARA COUNTY PLANNING COMMISSION Staff Report for Lompoc Wind Energy Project

Hearing Date: September 30, 2008 Deputy Director: Doug Anthony (568-2046)

Staff Report Date: September 17, 2008 Division: Energy

Case No.: 06CUP-00000-00009 Energy Specialist: Kevin Drude (568-2519)

Variance No.: 08VAR-00000-00003 Planner: John Day (568-2045)

**Environmental Document:** 

SBC# 06EIR-00000-00004; SCH# 2006071008

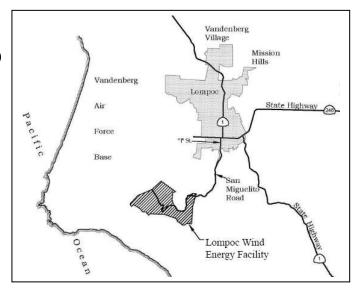
## Owner/Applicant:

Pacific Renewable Energy Generation, LLC (Subsidiary of Acciona Wind Energy USA LLC) 420 Stevens Avenue, Suite 240 Solana Beach, CA 92075 Attn: K. Harley McDonald, Project Manager

(858) 793-5104

### Representative

John V. Stahl Gaviota Energy Group, Inc. P.O. Box 930 Los Olivos, CA 93441



Application Complete: June 1, 2006

Processing Deadline: 180 days from certification of EIR

# 1.0 REQUEST

Estimated Time: 5-6 hours

Hearing on the request of Pacific Renewable Energy Generation LLC to consider the Lompoc Wind Energy Project, as follows:

- Approval of a Conditional Use Permit (06CUP-00000-00009, application filed February 21, 2006) allowing construction and operation of a wind energy generation facility on property zoned AG-II-100, in compliance with Section 35.82.060 of the County Land Use and Development Code;
- Approval of a Variance (08VAR-00000-00003, application filed April 1, 2006) from setback regulations, in compliance with Section 35.82.200 of the County Land Use and Development Code, to allow placing wind turbines one turbine blade length from certain property lines instead of the overall system height;

 Certification of the Environmental Impact Report (06EIR-00000-00004; SCH# 2006071008) pursuant to the State Guidelines for Implementation of the California Environmental Quality Act.

As a result of this project, significant effects on the environment are anticipated in the following categories: Aesthetic/Visual Resources, Air Quality, Biological Resources, Cultural Resources, Fire Hazards and Emergency Services, Geology/Soils, Land Use, Noise, Paleontological Resources, Risk/Safety, Traffic/Circulation, and Water Resources. Proposed mitigation measures would reduce the environmental effects to less than significant, except for residual effects on Visual and Biological Resources, which would remain significant and unavoidable.

The proposed Final EIR (FEIR) and all documents referenced therein may be reviewed at the Planning and Development Department, Energy Division, 123 E. Anapamu St., Santa Barbara. The EIR is also available for review at the following public libraries: Lompoc (501 E. North Ave.), Santa Maria (420 S. Broadway), Vandenberg Village (3755 Constellation Rd.), Goleta Branch Library (500 N. Fairview Ave.), Santa Barbara (40 E. Anapamu St.), and UCSB Library. In addition the final EIR may be viewed at the Energy Division website: <a href="http://www.countyofsb.org/energy/projects/LompWindEnergy.asp">http://www.countyofsb.org/energy/projects/LompWindEnergy.asp</a>.

The permit application involves 10 parcels adjacent to San Miguelito road near its southern terminus, from 3525 to 5555 San Miguelito Road, APN #s 083-080-004, 083-090-001, 083-090-002, 083-090-003, 083-100-004, 083-100-008, 083-250-011, 083-250-019, 083-090-004, 083-100-007. Lompoc area. Third Supervisorial District.

The proposed power line associated with the project (but outside the County's permitting jurisdiction) would run on or adjacent to 65 parcels along San Miguelito Road from 5500 to 1259 San Miguelito Road, from there to Highway 1 near the Lompoc City limit, and in the City of Lompoc along Highway 1 and 12th Street between Highway 246 and Laurel Avenue. The APN #s of the parcels along the proposed route are as follows: 083-010-051 to 054; 083-030-005, 006, 010 to 013, 027, 031, 035, 039, 044, 052, 057; 083-040-001 to 005; 083-050-001 to 019; 083-060-013 to 017; 083-080-003, 005; 083-090-004; 083-100-004, 007, 008; 083-110-002, 003, 007, 008, 012; 085-360-007; 085-421-036; 085-433-022; 099-141-022, 029; 099-520-006, 015, 016. Third and Fourth Supervisorial Dist.

# 2.0 RECOMMENDATION AND PROCEDURES

Follow the procedures outlined below and conditionally approve the Lompoc Wind Energy Project, Case No.06CUP-00000-00009 based upon the project's consistency with the Comprehensive Plan and based on the ability to make the required findings.

Your Commission's motion should include the following:

- 1. Adopt the required findings for the project specified in Attachment A of this staff report and as modified by the Planning Commission, including CEQA findings.
- 2. Certify the Environmental Impact Report (06EIR-00000-00004; SCH# 2006071008), including the modification to Mitigation Measure Bio-16.d provided in Appendix F of this staff report and the errata sheet dated September 30, 2008, and adopt the

- mitigation monitoring program contained in the conditions of approval, and any modifications approved by the Planning Commission.
- 3. Approve Conditional Use Permit No. 06CUP-00000-00009 and Variance No. 08VAR-00000-00003 for this project, consisting of 65 wind turbines, access roads and facilities as proposed, subject to the project description and conditions included in Attachment B and as modified by the Planning Commission.

Refer back to staff if the County Planning Commission takes other than the recommended action for appropriate findings and conditions.

## 3.0 JURISDICTION

This project, comprising 65 wind turbines, onsite collector power lines, electrical substation, operations and maintenance building, and other ancillary facilities, is being considered by the County Planning Commission based on Section 35.80.20 of County Land Use and Development Code (LUDC). This section states that the Planning Commission shall have decision making authority for a Conditional Use Permit (CUP). It also states that when two or more applications are submitted for the same project (here, CUP and Variance applications) all applications shall be under the decision making authority of the review body with the highest jurisdiction, which in this case is the Planning Commission.

The County does not have permit jurisdiction over the proposed 115 kV power line, although it is an essential adjunct to the project and is analyzed in the EIR. The power line would be built by PG&E and would be under the sole jurisdiction of the California Public Utilities Commission (CPUC), pursuant to California Public Utilities Code Sections 701, 761, 762, 768, and other sections. It would be subject to CPUC General Order 131-D, which prescribes rules relating to planning and construction of power lines by electric public utilities, and other CPUC rules and decisions.

## 4.0 ISSUE SUMMARY

#### 4.1 Power Line:

As stated above, the PG&E power line is evaluated in the EIR, but construction and operation would be under CPUC authority. Consequently, the County cannot impose permit conditions or enforce environmental compliance. Furthermore, assuming that PG&E constructed the Power Line Route Alternative #1<sup>1</sup> as expected, the power line would be exempt from CPUC permitting. PG&E would only need to issue a Notice of Construction (NOC).<sup>2</sup> The exemption from CPUC permitting applies to power lines that have undergone CEQA review as part of a larger project and for which the final EIR finds no significant, unavoidable impacts from construction and operation of the power line (CPUC General Order 131-D, Sec. III.B.1.f). If CPUC does not issue

<sup>&</sup>lt;sup>1</sup> This is the route specified in the Environmentally Superior Alternative and is preferred by the Applicant and recommended by Staff. It has no significant, unavoidable impacts. If PG&E were to choose another route, they would be required to obtain a CPUC permit, and CPUC would conduct additional environmental review.

<sup>&</sup>lt;sup>2</sup> NOCs require public noticing and are appealable to the CPUC.

a permit for a project, it cannot implement a mitigation monitoring and compliance program. Thus, because of the regulatory framework, neither the County nor CPUC has a direct way to ensure mitigation monitoring, as required by CEQA.

These issues were raised in CPUC and PG&E comments on the draft EIR and discussed in subsequent meetings with County staff. The solution, as implemented in the final EIR, is to incorporate the mitigation measures applicable to the power line in the EIR Project Description as "Avoidance and Protection Measures." Because the EIR would serve as CPUC's CEQA document for the power line, and because CPUC has sole jurisdiction over the power line, CPUC would be obligated to ensure that PG&E adhered to the project description (including the Avoidance and Protection Measures). If in constructing the power line, PG&E were to deviate from the Project Description, then the CPUC would take any necessary action to remedy the situation. PG&E agrees to provide the County with access to the site during power line preconstruction and construction to verify that the project is constructed in accordance with the Project Description (Sec. 2.8.5). If the County monitor observed construction to be out of compliance, and if PG&E were unresponsive to the County's concerns, then the County would request intervention by CPUC.

#### 4.2 Project Siting:

The most basic "fact of life" about the proposed project is that it must be sited where the wind resource is adequate. The project is comparable to a mining project, insofar as the location of the resource dictates siting. The proposed project site is located in one of several areas of the County where the wind resource is sufficient for a commercial-scale wind farm, and where wind energy projects are permittable by County ordinance, and where environmental impacts would be relatively limited. The micro-siting of the wind turbine generators (WTGs) within the project site is dictated first and foremost by the pattern of prevailing winds. The wind is strongest above the ridges, hence the WTGs must be located on the ridges. Shifting the WTGs off the ridge tops reduces their power generating potential and also places them on steeper slopes, which makes construction difficult and increases grading-related environmental impacts. Some impacts due to the ridge-top siting are unavoidable, including increased visual impacts and possibly greater risks to some bird species.

The project description delineates "corridors" in which the WTGs would be located. The corridor concept allows flexibility in micro-siting of the WTGs up until the time of final plan approval. The Applicant recently submitted a specific layout for 65 WTGs, which is the maximum number proposed in the final project description. The layout is based on ongoing wind studies, feasibility of construction, and collaboration with Vandenberg Air Force Base (VAFB) to ensure the WTGs do not interfere with VAFB telemetry, microwave, and radar operations. Although the WTGs are shown in definite locations on the project layout, the locations remain tentative pending preconstruction studies (geotechnical, archeological, biological, etc.). Adjustments to the layout of roads and WTGs may be made to avoid sensitive resources or areas of problematic substrate. However, the WTGs could not be located outside the specified corridors without further environmental review, County approval, and concurrence from VAFB.

#### 4.3 Environmental Impacts:

The proposed project may result in significant, unavoidable (Class I) impacts to birds and bats, due primarily to fatalities due to collisions with WTGs. The project would result in Class I impacts to visual resources, due to intrusion of turbines into views from Jalama Beach County Park, Miguelito County Park, and public viewing areas in the immediate vicinity of the wind farm. A statement of overriding considerations for these impacts must be adopted if the project is approved. The project would also result in a number of significant but mitigable (Class II) impacts (e.g., Gaviota tar plant, El Segundo blue butterfly, wetlands, and noise) and various adverse but not significant (Class III) impacts. It would also have an important beneficial impact (Class IV), in providing up to 285 million kilowatt-hours of renewable energy annually. Environmental impacts and recommended mitigation measures to minimize impacts are listed in the Impact Summary Table in the Executive Summary section of the EIR and are attached to this staff report as Attachment C. They are discussed in Section 6.1 of this staff report. Selected impacts are summarized below.

## 4.3.1 Significant Adverse Impacts

#### Impacts to Birds and Bats

Birds and bats, including protected species, can be killed in collisions with WTGs (blades and towers), meteorological towers, and power lines, and fatalities are anticipated to result from this project. However, the numbers and species affected cannot be predicted accurately. Potential impacts resulting from WTG collisions are classified as significant and unmitigable (Class I). Options for reducing impacts by WTG siting are limited. Feasible options for mitigating impacts are also limited. A possible mitigation measure requiring shut-down or curtailment of WTG(s) in the case of extreme and unexpected fatalities of protected or sensitive species was not included in the proposed Final EIR, as released on September 5, 2008. Such a mitigation measure has been drafted and is proposed as a modification to the Final EIR and included in the recommended permit conditions (Bio-16.d). These issues are discussed in Section 6.1.1.1.

#### Aesthetic/Visual Impacts:

The proposed WTGs would cause significant, unavoidable visual impacts to views from the immediate project area, as the nearly 400-foot high structures would dominate the landscape, viewed at close range. Based on site topography, the WTGs would be hidden from most vantages within a several-mile radius by intervening ridges. However, the WTGs would be visible and cause significant, unavoidable impacts from the vicinity of Miguelito County Park (with limited visibility from within the park) and Jalama Beach County Park, which are located 1+ and 4.5 miles from the project site, respectively. The WTGs would be visible in distant views from numerous locations, including La Purisima Mission, but would not dominate the views. Many comments on the draft EIR expressed concern about visual impacts of the WTGs in the immediate project area and from distant views.

#### 4.3.2 Beneficial Impacts

#### Renewable Energy:

If all 65 WTGs are constructed, the project would generate an estimated 285 million kilowatt hours (kWh) of electricity annually, equivalent to the electrical usage of 40,000 to 50,000

households. This is a beneficial impact in supporting state and federal goals of increasing renewable energy generation. Insofar as the project would avert construction of new fossil fuel-burning power plants, it would have direct environmental and economic benefits by reducing petroleum usage and greenhouse gas emissions. The Community Environmental Council (SBCEC) strongly endorses development of wind resources as part of its Renewable Energy Blueprint.<sup>3</sup> Many of the comments received on the project, even those critical of the draft EIR, have remarked on the pressing need for clean, renewable energy sources.

#### Agriculture:

The project is compatible with agricultural use (grazing) and would not impair productivity of the project properties. The Project could have a beneficial impact to agricultural resources, in providing financial support to property owners, who could use the funding to enhance the viability of their agricultural operations. The project operator would maintain access roads, which would allow property owners greater access to their lands and enhance agricultural operations. Road improvements and maintenance would also increase accessibility for firefighters.

### 4.4 Proposed Project v. Environmentally Superior Alternative

The proposed Final EIR concludes that Project Alternative 2, a downsized project, is the Environmentally Superior Alternative (ESA) for the Lompoc Wind Energy Project. Staff recommends that the Planning Commission approve the full, proposed project, including 65 WTGs (97.5 MW generating capacity) instead of the ESA, for the following reasons.

The ESA would limit project capacity to 82.5 MW; WTGs would be prohibited in areas visible from Jalama Beach and Miguelito County Park; and the project would be built in a single phase. Alternative 2 would eliminate Class I visual impacts, except in the immediate project vicinity and along San Miguelito Road. It would also reduce Class I impacts to biology (birds and bats) to some degree and reduce certain other Class II and Class III impacts, including short-term construction impacts. (See EIR Sections 5.3.1.2 and 5.4) However, the ESA would fail to confer the full measure of benefits promised by the proposed project, including renewable, fossil-free energy production, air quality improvement, agricultural use viability, and property taxes. In addition, it is uncertain whether Alternative 2 would be commercially viable, because the WTG sites on the southern project ridges that would be precluded are in areas of highest wind resource potential.

As discussed in the CEQA findings (Attachment A) the benefits of the full, proposed project far outweigh the adverse environmental impacts associated with it. The reduction in adverse environmental impacts associated with the reduced project does not justify the loss in public benefits.

<sup>&</sup>lt;sup>3</sup> Community Environmental Council, *A New Energy Direction: A Blueprint for Santa Barbara County*, Nov. 2007, http://www.communityenvironmentalcouncil.org/EnergyBlueprint/CompleteBlueprint.pdf

<sup>&</sup>lt;sup>4</sup> The ESA also includes Power Line Alternative 1, which is outside County jurisdiction and is not considered here.

# 5.0 PROJECT INFORMATION

# **5.1** Site Information

Table 1. Site Information		
Comprehensive Plan Designation	AC (Agriculture Commercial)	
Ordinance, Zone	AG-II-100	
Site Size	2,950 acres (total of 10 parcels)	
Present Use & Development	Mainly grazing; 45 acres of dryland farming	
Surrounding Uses/Zone(s)	North: AC / AG-II-100; City of Lompoc (Frick Springs)	
	South: Vandenberg AFB	
	East: AC / AG-II-100	
	West: Vandenberg AFB	
Access	San Miguelito Road	
Other Site Information	The western and southern project boundaries abut VAFB	
	property. The adjacent VAFB property is undeveloped land,	
	similar in character to the project area, except for Sudden	
	Peak Tracking Station which is near the southeastern project	
	boundary. The southern project boundary coincides with the	
	coastal zone boundary along most of its length, but the	
	project area does not extend into the coastal zone. Frick	
	Springs, adjacent to the northeast quadrant of the project	
	area, is a water supply facility for City of Lompoc located on a 14.7-acre City-owned parcel.	
Public Services	Water Supply: None. Minor water needs to be supplied by	
	onsite well, to be constructed.	
	Sewage: None. Onsite leach line system to be constructed as part of the project.	
	<u>Fire</u> : County Fire Department Station #51 (Vandenberg Village); mutual aid agreements with City of Lompoc and VAFB fire departments.	

## 5.2 Setting

The proposed project site is approximately 5 miles southwest of the City of Lompoc. It is located on the wind-swept coastal ridges adjacent to VAFB, near the western end of the Santa Ynez Mountains. The southern project perimeter is 2 miles northeast of Pacific ocean at the closest point, and the ocean is visible from locations along the ridges.

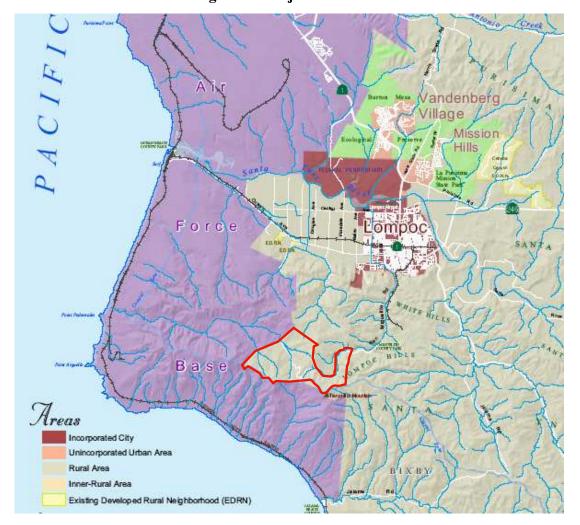


Figure 1. Project Location

The project area is entirely in the inland area, but abuts the Coastal Zone along the southern perimeter. It is bounded on the south and west by VAFB property and on the north and east by privately owned agricultural property. The project area comprises 10 parcels on 2,950 acres of private, agricultural property. Average parcel size is approximately 300 acres. The land is rural in character and used principally for grazing. All parcels are zoned AG-II and all are under Agricultural Preserve contracts.

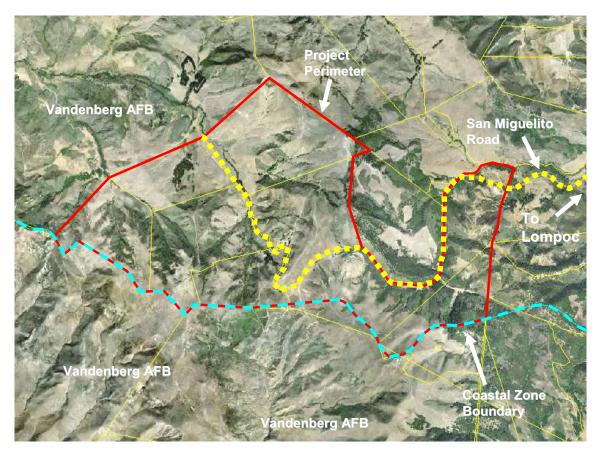


Figure 2. Project Area

There are 9 residences (and several barns and out-buildings) located on the project properties. The landowners, or "project participants," have signed lease agreements with the Applicant to allow construction of the project on their land. Five other residences are located on the adjacent private properties, within one half mile of the project perimeter. These residences are unaffiliated with the project, or "non-participating." The adjacent VAFB property is undeveloped, except for the Sudden Peak Tracking Station, which is located immediately adjacent to the southeastern project perimeter.

The only site access is via San Miguelito Road, which winds through the project area and deadends at the VAFB line at the eastern side of the project area. With no through traffic, the project area remains fairly remote, with limited public use for sightseeing, cycling, bird watching, etc. There is also some traffic to Sudden Peak Tracking Station via a road that leads up the mountain from Sudden Road; it is not open to the public.

The project area is semi-arid, with annual rainfall up to 20 inches at the higher elevations. Strong, prevailing winds blow out of the northwest most of the year, though southerly winds occur under certain conditions. Inland intrusion of the marine layer causes frequent heavy fog, especially during summer months. The upper reaches of Honda and San Miguelito creeks are within the project area.

Site topography ranges from rolling to seep and rugged, as shown in Figure 3. From top to bottom, the photos show: a) the view from the Sudden Peak road looking west toward Tranquillon Mountain; b) intersection of San Miguelito Road and Sudden Road (proposed location of the Operations and Maintenance Building) in summertime; c) a view toward the north, with Lompoc Valley in the distance.

The main vegetation types include native and non-native grasslands and coastal scrub. Areas of evergreen forest and woodland and eucalyptus groves are present in areas of the site not proposed for WTGs. Seeps, springs, and intermittent streams are present, and support riparian and wetland vegetation of limited extent.

In addition to grazing and limited dry farming, the area has historically been used for rock quarrying, particularly in the northeastern-most parcel, which shows obvious land modifications. The area was also used by Native Americans as a quarry, and numerous archeological sites have been identified.

Figure 3. Project Area Photos







## 5.3 Statistics

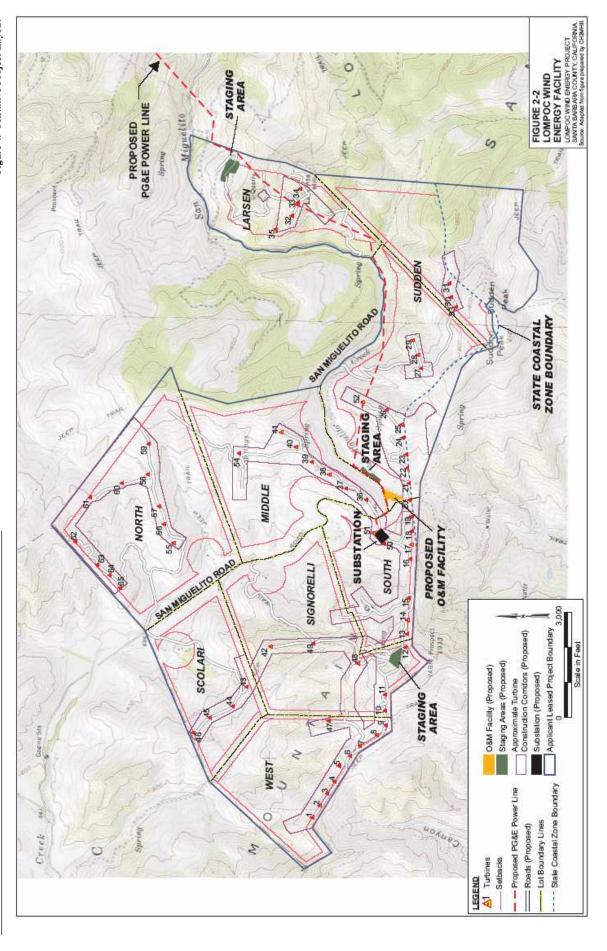
Table 2. Main Project Components			
Item	Proposed	Ordinance Standard	
Wind Turbine Generators (WTGs)	up to 65 WTGs (1.5 MW ea.)		
Maximum Dimensions:	max total height – 397 ft. max blade length – 135 ft. max tower height – 262 ft. tower dia. – 15 ft. (base) – 7 ft. (top) perm. disturb. area. 4.5 acres	35.57 Wind Energy Systems 35.62.040 Ridgeline & Hillside Development Guidelines (See discussion in Sec 6.5)	
Est. Max. Electrical Generation	285 million kWh	n/a	
Operations & Maintenance (O&M) facility	Floor area – 5,000 sq. ft. Site – 2 acres	n/a	
Project Substation	Site – 2 acres	n/a	
Roads (onsite gravel access roads)	Improved, existing – 8.3 mi. New – 5.5 mi.	n/a	
Meteorological Towers (up to 262 ft. high, unguyed)	up to 10 (possibly as few as 1)	n/a	
Water Tanks	2 (5,000 gal. each)	n/a	
Operational Staffing	10	n/a	
Grading (combined cut & fill)	490,000 c.y.	n/a	
PG&E 115 kV Power Line	8.7 miles	(not in County jurisdiction)	

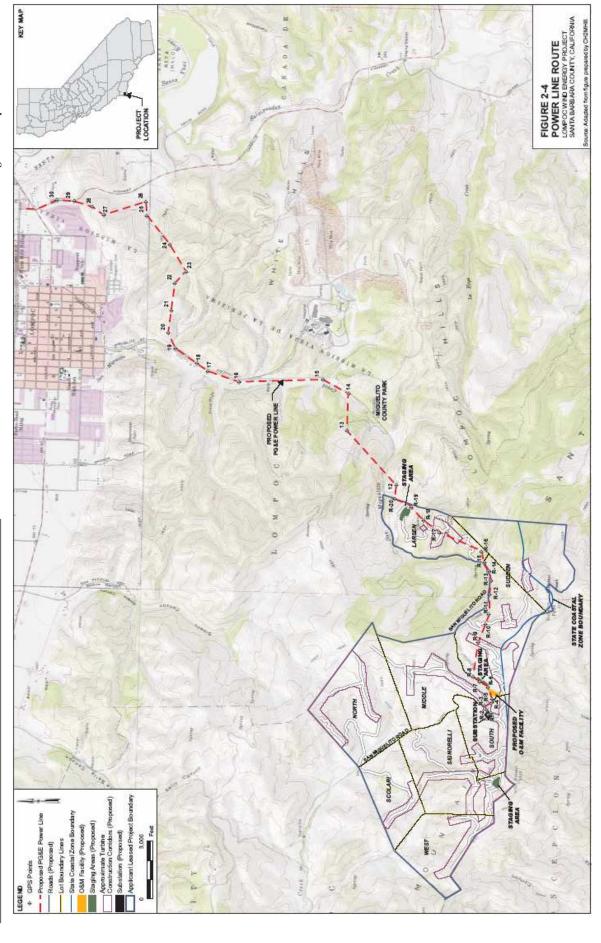
# 5.4 Project Description

The proposed project is a wind farm consisting of 65 wind turbine generators (WTGs) plus the infrastructure and support facilities necessary for operation. The proposed project layout and 115 kilovolt PG&E power line route are shown in Figures 4-5. (These figures are from the Final EIR.) The following is a brief description of the project. Additional details are provided in the Final EIR.

## **5.4.1** Project Components

**Wind Turbine Generators.** Sixty-five wind turbine generators (WTGs) are proposed, which are shown as red triangles in Figure 4. These locations are still tentative, with final siting to be determined through geotechnical studies and detailed biological and cultural resource evaluation of the sites. WTG construction corridors are outlined with purple lines. If WTG locations need to be adjusted, they could be relocated only within the designated corridors.





The WTGs would be of the three-bladed, horizontal axis design, which is the type installed in most modern, commercial wind farms (Figure 6). The WTGs would generate up to 1.5 MW each. Their overall height would be up to 397 feet from foundation to blade tip. Blades would be 126 to 135 feet long and constructed of laminated fiberglass. A rotor hub, to which the blades would be bolted, would be covered by a composite nose-cone structure. The generator housing ("nacelle") would include the drive train, gearbox, generator, and electrical and hydraulic components. A transformer to raise the output voltage to 34.5 kV would be located either outside the base of each tower or inside the tower or nacelle.

The towers would be epoxy-coated steel tubes, tapering from 15 feet diameter at the base to 7 feet at the nacelle. Access to the nacelle is from within the tower. Several types of foundation types could be selected depending on substrate characteristics; no guy wires would be used. The exposed concrete pad would be approximately the same diameter as the tower base and extend less than 1 foot above grade.

The WTGs would be equipped with obstruction lighting subject to an FAA lighting plan. Lighting would most likely consist of synchronized red flashing beacons on WTGs at the end of rows, or at intermediate WTGs so that the spacing between lighted WTGs would not exceed ½ mile. The WTGs would include safety features, including a fail-safe rotor braking system. Each WTG also would be equipped with vibration, temperature, and fire detection systems in the nacelle and tower, and the operational parameters would be transmitted to the central computer through a. Supervisory Control and Data Acquisition (SCADA) system. The SCADA system, would be monitored from the O&M control room or remote locations.

Figure 6. Acciona AW-1500



Access Roads. Many dirt roads are present throughout the Project area and are used for agricultural operations. To provide access during construction and operations, 8.3 miles of the existing roads would be improved and widened from their existing widths of 10 to 14 feet, to 16 to 24 feet. Some road sections would be widened to 40 feet to provide access for the large cranes required for WTG installation. In addition, 5.5 miles of new roads would be constructed. Most of the new roads would be built to access the North Corridor (Figure 4). All access roads would be gravel surfaced, except where steep grades necessitated paving. The roads would be restored to a width of 24 feet or less and the disturbed areas revegetated upon completion of WTG installation. The access road serving the Scolari and North corridors would cross Hondo Creek, requiring construction of a bridge to minimize impacts to the stream. The bridge would be 16 to 24 feet wide and 60 to 80 feet long, depending on final design work. Culverts would be installed at the crossings of several intermittent streams.

Operations and Maintenance Facility (O&M). The O&M facility would occupy approximately 2 acres at the intersection of San Miguelito Road and Sudden Road (Figure 4). It is proposed to be centrally located in the project area to minimize the average travel time of crews to WTGs and other facilities and response time in case of a malfunction or emergency. The O&M facility would house fire fighting water and suppression equipment. By centrally locating fire fighting water and suppression equipment, fire response time would be minimized.

#### The O&M facility would consist of:

- Main building a pre-engineered metal building, 50x100 feet, including offices, spare parts storage room, restroom, and shop area;
- Outdoor storage for large parts (e.g., spare blades), staff parking, turnaround area for large vehicles;
- Outdoor lighting, gated access with partial or full perimeter fencing, and appropriate landscaping;
- Two 5,000 gallon water tanks (one exclusively for fire water, the other for facility needs or fire water).
- Water supply for O&M from an on-site spring or well. (Use would be less than 500 gallons per day.) Additional water for fire water tank may be trucked in.
- Leach line system nearby for disposal of effluent from the office drains.

**Project Substation.** The project substation is required to transform the electricity from 34.5 kV transmitted from the WTGs to 115 kV suitable for the PG&E system. The proposed substation would be located approximately one quarter mile west of the O&M building. (The Draft EIR showed it adjacent to the O&M building, but the location was changed due to seasonal wetlands at the original site.) Locating the substation in a central location near the O&M building is important for security, operational convenience, and to minimize the total length of and power loss from the electrical collector lines.

The substation would be approximately 2 acres in size, within a fenced enclosure, and would consist of four components: a low-voltage switchgear rack, two step-up transformers (34.5 kV to 115 kV), 115-kV switch rack, and control building. The substation would be constructed and owned by the Applicant, up to the 115 kV take-off structure that would be the point of connection of the PG&E power line.

## **Electrical Collection Lines and Communication System.**

Each array of WTGs would be interconnected via 34.5-kV electrically insulated cables. The collection lines would transmit the generated power to the project substation. The lines would run underground and would follow roads where feasible. Aboveground lines would be used where undergrounding would create serious impacts (e.g., erosion), for example in crossing steep canyons or streams. Communication lines for the SCADA system would be buried in the same trenches used for the electrical collector lines and would be routed to the control room in the O&M facility.

## **Meteorological Tower(s).**

The project description proposes up to 10 meteorological towers on the site.<sup>5</sup> The towers would be free-standing lattice structures, up to 262 feet in height. No guy wires would be used. The tower(s) would be placed within the WTG corridors if feasible. Any existing temporary, guyed meteorological towers would be removed before start of operations.

#### 5.4.2 Setbacks.

The WTGs would be set back from property lines, occupied structures and public roads, as shown in Figure 4 (red lines). Setback distances are as follows:

- Occupied Structures: Two times the height of the WTG tower away from any occupied structure (LUCD 35.57.050.G).
- <u>Property Lines (per ordinance)</u>: One and one-half times the total WTG system height away from property lines of private properties not part of the project (LUCD 35.57.050.G).
- <u>Property Lines (per Variance Application)</u>: One WTG blade length away from property lines of project participants and from the VAFB property lines (see Setback Variance, Sec. 6.3.2).
- <u>Public Roads</u>: Equal to the total WTG system height away from public roads (Mitigation measure Risk-5).
- <u>Coastal Zone</u>: No setback is required along the Coastal Zone boundary, which bisects project properties in the southeastern sector of the project. However, the location of WTGs and construction activities would be located far enough away to ensure that no disturbance would occur in the Coastal Zone.

#### 5.4.3 Construction.

The Project Description proposes construction in up to 3 phases. The first phase would include 82.5 MW of electrical generation capacity (55- 1.5 MW WTGs) to fulfill the existing power purchase agreement with PG&E. The first phase would also include construction of the major project infrastructure (O&M facility, project substation, etc.). The remaining 15 MW of capacity (10 WTGs) could be constructed at the same time or in one or two subsequent phases, which would begin no later than 7 years after approval of the Conditional Use Permit. The Applicant proposes to start construction of the first phase in Spring 2009. Construction would take 6-10 months, with a target of late 2009 for first delivery of power.

Construction of roads, WTG foundations, and other facilities would require grading of 490,000 cubic yards (combined cut & fill). Temporary disturbance would involve approximately 196 acres. Permanent disturbance will be approximately 40 acres (mainly roads), following regrading of roads and revegetation of disturbed areas. One or two portable concrete batch plants would be set up on site, and reclaimed water would be hauled in for dust control. The WTGs and other project components would be delivered to the site in sections. Despite the very large loads, road

<sup>&</sup>lt;sup>5</sup> However, the Applicant indicates that as few as one permanent, unguyed, 100-foot high tower may be installed.

widening is not expected to be necessary on San Miguelito Road or other public roads. Please refer to the final EIR for further information on construction and post-construction site restoration.

### 5.4.4 Operation.

During the operational phase of the project, a staff of approximately 10 would be employed onsite. Staff would monitor WTG and system operation, perform routine maintenance, troubleshoot malfunctions, shut down and restart WTGs when necessary, and provide security. They would be headquartered at the O&M facility and travel around the site as needed. Normal operations could involve deployment of up to three crews of two technicians around the site and two to three personnel in the office. Staff might not be present at the site 24 hours per day. However, operations would be continuously monitored through the SCADA system from remote locations.

Equipment, supplies, and spare parts would be stored inside the O&M facility, with the exception of Project vehicles and WTG blades, which would be stored outside the building within the secured yard. The substation would also be fenced and the gate kept locked. Access roads would be periodically graded and compacted to maintain the design, safety, and environmental requirements during the life of the Project. Maintenance on cut-and-fill slopes, culverts, grade separations, and drainage areas would be performed as necessary to minimize erosion problems and maintain functional drainage structures.

#### 5.4.5 Project Life and Decommissioning.

The anticipated life of the Project is 30 years. At the end of its useful life, several options are available, including "repowering" (i.e., replacement of WTGs) or decommissioning. The decision to repower or decommission would depend on energy economics at the time, technological options, the landowners' willingness to renew the leases with the Project owner, and other factors.

Future repowering or decommissioning of the project would require a discretionary permit from the County and would be subject to environmental review. Decommissioning would require that the applicant prepare a decommissioning plan as outlined in Section 2.7 of the EIR. The Applicant would be required to provide a financial assurance acceptable to the County to ensure timely and proper decommissioning (Conditions *Decom-1* and *Decom-2*).

#### 5.4.6 PG&E Power Line.

As discussed in Sections 3.0 and 4.0, approval of the PG&E 115 kV power line is not under County permit jurisdiction and is not included in the recommended Conditional Use Permit. However, the power line is described and analyzed in the EIR, which is within the County's authority to certify. It is also an essential and integral part of the overall wind farm project.

The proposed power line would be approximately 8.7 miles long, running generally northeast from the project substation to a tie-in point in the existing 115 kV PG&E power line (which

serves the Celite mining facilities) at the southeast corner of the City of Lompoc. The power line would consist of up to 184 poles, up to 75 feet high, spaced at 250-350 feet. Most poles would be single, wooden poles, but a few might be double wooden or single steel poles, depending on final engineering. The final tie-in pole at the Lompoc end of the line would be equipped with a switching structure. Existing low voltage distribution lines along the route (e.g., along San Miguelito Road) would be under-hung on the same new poles where feasible to avoid additional poles. A segment of the existing 115 kV power line along Highway 1 and San Julian Street inside Lompoc would be reconductored to carry the additional power. Reconductoring would involve installing heavier conductors and possibly larger poles, but pole locations would not change.

Two changes have been made to the southern part of the power line since the draft EIR was circulated. First, the power line was extended approximately one quarter mile to the new substation location. (See Sec, 5.4.1 Substation, above.) Second, it was rerouted across the Larsen parcel (a project participant) and off the Bedford parcel (a non-participant). The revised route would eliminate a long span across San Miguelito Road and reduce project impacts to the neighboring private property.

After exiting the northeast corner of the Larsen parcel, the power line would cross private agricultural land behind (and out of view of) Miguelito County Park, returning to San Miguelito Road northeast of the park. It would proceed north up the road, head east across agriculturally zoned land, and then north into Lompoc. Figure 5 shows the northern segment of the power line (after angle point 27) as the alignment was originally proposed.

The Applicant subsequently proposed a new route for this segment. The route avoids significant visual impacts of the power line on the ridgeline adjacent to Highway 1, near the Lompoc City limit. This alternative, described as Power Line Route Alternative 1 in the EIR (Sec. 5.3.2), is the Applicant's preferred route and is included in the Environmentally Superior Alternative in the EIR (Sec. 5.4.3). The alternative route would cross over the hill at the entrance to Lompoc and tie into the Celite line on the north side of the hill. From there, the line would follow the existing route of the Celite line, which would be reconductored to carry the combined power.

YNEZ Existing 115kV Celite Line Proposed PG&E Power Line Route

Figure 7. Power Line Alternative

The power line would be constructed using standard PG&E procedures and conform to applicable CPUC rules, including General Order 95 State of California Rules for Overhead Electric Line Construction. Power line construction would also be required to comply with Avoidance and Protection Measures, as outlined in Sec. 2.8.5 of the EIR.

#### 6.0 PROJECT ANALYSIS

## **6.1** Environmental Review

### **6.1.1** Impacts and Mitigation Measures

Environmental impacts of the Lompoc Wind Energy Project are discussed in the EIR. The EIR Executive Summary section and Tables ES-1 through ES-5 provide summaries of the Class I, II, III, IV and cumulative impacts that would be expected to result from the project. A complete evaluation of the potential environmental impacts and mitigation measures is provided in the issue area discussions in Section 3 and the cumulative impact discussion in Section 4 of the EIR. Project alternatives are discussed in Section 5.

The 115 kV power line that PG&E would construct for the project would not be subject to the mitigation measures summarized in this section, due to the jurisdictional issue discussed above (Sections 3.0 and 4.0). However, in constructing and operating the power line, PG&E would be required to comply with the Avoidance and Protection Measures described in EIR Section 2.8.5.

## 6.1.1.1 Significant and Unavoidable Impacts (Class I)

Operation of the proposed wind farm would result in significant and unavoidable environmental impacts to biological and visual resources. The anticipated impacts and the mitigation measures developed to minimize them are summarized in Table 3 and the paragraphs that follow. Please refer to Table ES-1 in the EIR Executive Summary and the issue area discussions in the EIR for additional details regarding potential impacts and mitigation measures. Also refer to Section 2.8.5 regarding applicable Avoidance and Protection Measures for the power line.

**Table 3: Class I Impacts** (from EIR Table ES-1)

Issue Area	Impacts (EIR number)	Primary Mitigation Measures
Aesthetic/ Visual Resources	VIS-1: Visual impact of WTGs on public views near the project site.  VIS-2: Visual impacts of WTGs to viewsheds at Jalama Beach and Miguelito County Parks.	<ul> <li>VIS-1: Materials storage locations.</li> <li>VIS-2: Location of construction activities.</li> <li>VIS-3: Contribution to County Parks fund.</li> <li>VIS-4: Landscaping and Lighting Plan.</li> <li>LU-1: FAA obstruction lighting plan.</li> </ul>
	VIS-4: Visual impacts of 115 kV power line along Highway 1 near Lompoc city limit.	NOTE: The impacts would be less than significant if Power Line Alternative I is constructed. PG&E Avoidance and Protection Measure PL-5 would apply.
Biological Resources	BIO-10: Special status and non-sensitive birds and bats—risk of fatal collisions with wind turbines (WTGs) during the project life.	BIO-15: Design and siting of WTGs.  BIO-16: Bird/bat monitoring and adaptive management plan.

**AESTHETIC/VISUAL RESOURCES – WTGs** (Impacts VIS-1 and VIS-2). The only visual impacts from the project that the EIR classifies as significant and unavoidable would be those caused by the WTGs themselves. Standing nearly 400 feet high, with blades up to 135 feet long, the WTGs would cause major visual impacts from public viewing places. The impacts would decrease with distance and vary according to the scenic quality and viewer sensitivity at different viewing locations. The rotating blades would cause flicker and draw viewer attention. The mandatory FAA obstruction lighting would be visible at night and would add to the existing lighting at VAFB facilities on the coastal ridges.

These impacts would be moderated to some extent by fog, haze and overcast that are often present in the area. From some areas (e.g., Miguelito Park and Lompoc) the WTGs would usually be seen in side view, as they would be oriented to face into the prevailing northwest winds. The towers and blades would be coated with an off-white, matte finish intended to minimize visibility over a wide range of lighting conditions. Although visual screening of the WTGs would be generally impossible because of their size, they would be hidden from view in much of the surrounding region by intervening ridges or by existing mature trees or structures near the viewing locations.

The WTGs would be visually dominant in immediate project surroundings along San Miguelito Road, which receives some public recreational use (Impact VIS-1). Several WTGs would be highly visible from San Miguelito Road approaching Miguelito County Park, 1-1½ miles from the nearest proposed WTGs. Views of WTGs from within the park would mostly be blocked by the mature tree canopy, but at least one WTG would be highly visible from certain vantage points in the park (Impact VIS-2). Most views of the WTGs from distances of less than 5 miles away would be largely blocked by intervening hills. However, WTGs on ridges in the southwestern part of the project area would be visible from Jalama Beach County Park, 4.5 miles away. At this distance the WTGs would not dominate the views from the park; however, the visual impacts would be significant, given the scenic quality and aesthetic expectations of park visitors (Impact VIS-2). Visual impacts of the WTGs from more distant views, including Highway 1 (5 miles east of the project) and La Purisima Mission State Park (7 miles north of the project) would be adverse, but less than significant.

Mitigation Measures. Mitigation measures VIS-1, VIS-2, and VIS-4 would reduce visual impacts from construction activities and enhance appearance of accessory structures during operation. Recommended measures include storage of construction materials away from public roads, confining construction activities to WTG construction corridors, staging areas, project substation and O&M building locations. A Landscape and Lighting Plan would be required to reduce visual impacts of the project during its operational life. None of these measures would reduce the significant visual impacts of the WTGs. Measure LU-1 would ensure that the WTG obstruction lighting would not cause impacts beyond those that are unavoidable due to FAA requirements. Measure VIS-3 would provide compensatory mitigation of \$100,000 to the County for use by the County Parks Department to preserve and enhance the natural beauty of Jalama Beach County Park and Miguelito County Park.

**AESTHETIC/VISUAL RESOURCES – PG&E POWER LINE** (Impact VIS-4). The 115 kV power line to connect the project substation to the PG&E grid would approach Highway 1, a designated scenic highway, near the southern city limit of Lompoc. In the original project proposal, the power line would run along the ridgeline visible above Highway 1 and descend to cross the highway just inside the city limit. The placement of a new series of poles silhouetting against the skyline as seen from the scenic highway corridor would cause significant and unavoidable visual impacts. If PG&E elected to build the power line on this route, significant visual impacts would result, which would trigger a CPUC permitting process and further CEQA review, with CPUC as the lead agency.

The Applicant has proposed an alternate power line route, described as Power Line Alternative 1 in the EIR, that would reduce visual impacts of the power line to less than significant. PG&E has evaluated the alternative route and found it feasible, and it can reasonably be assumed that this route would be chosen by PG&E for construction. (See section 6.1.1.6, below.)

BIOLOGICAL RESOURCES – BIRD AND BAT COLLISIONS WITH WTGs (Impact BIO-10). Bird and bat fatalities resulting from collisions with WTGs has been a major issue at many wind farms. Avian collisions with guy wires and power lines have also been of concern (Impact Bio-11). Many factors contribute to the risk of collisions, the most important of which are bird and bat densities at the project site and species-specific behaviors that can put them in harm's way. Other risk factors include habitat type and availability of nesting and foraging opportunities on the site, prey base, topography in relation to wind patterns, and design and layout of WTGs.

Bird densities are described in the EIR and supporting documents as low-to-medium or typical for the project habitat, which is 87% coastal scrub and grassland. In the avian studies conducted for this project (May 2002 - May 2008), 108 avian species have been observed on the site, including 18 special status species. Nine of the special status species have behaviors that could take them into the WTG rotor-swept zone of 130-400 feet above ground. Examples of such behaviors are soaring (raptors) or breeding display flights (California horned lark). Three California fully protected species have been observed at the project site: peregrine falcon, whitetailed kite, and golden eagle. Golden eagle is the only fully protected species that has been regularly observed, and there are probably eagle nests in the general vicinity, though not on the project site. Most of the sensitive avian species occur in low numbers and have been observed only infrequently at the site. Non-sensitive raptor species including red-tailed hawk and American kestrel are potentially subject to collisions. Turkey vultures, the most abundant raptors at the site, have been reported to avoid WTGs and may have low vulnerability. Many of the more abundant, non-sensitive passerine species (e.g., wren-tit) could collide with WTGs, but are at lower risk than raptors, because their normal flight patterns are below the 130 foot lower limit of the rotor-swept zone.

<sup>&</sup>lt;sup>6</sup> Special status species refers to Federally or State listed, threatened or endangered species, as well as non-listed sensitive species categories, such as California fully protected species and species of special concern. Refer to Section 3.5.4 of the EIR.

Migratory birds are present on the site, as they are throughout the County, particularly during the spring and fall migration peaks. Concerns were raised in comments on the draft EIR that flocks of nocturnal migratory birds might set down in the project area, or that they could be forced down into the WTG rotor-swept zone due to fog or adverse weather conditions, resulting in potentially catastrophic mortality. These scenarios are unlikely, based on independent, professional analysis of two years of radar data for the region (see EIR, Sec. 3.5.1.6 and 3.5.3.3). Most of the migration follows a route 20-40 miles farther inland than the project site and at high altitude. Relatively little migration takes place during adverse weather.

The abundance of bats on the project site has been much less studied than that of birds. The project site is known to support 10 species of bats, including 4 sensitive species. Bat roosts have not been found on site, although foraging activity could take place there. Cliffs, caves and rocky substrate suitable as roosting habitat for several species are available nearby on VAFB, and 233 acres of wooded habitat suitable as roosting habitat for arboreal roosting species is present on the project site. Acoustical studies in Spring 2008 detected only one of the sensitive species (pallid bat) on the project site. Ongoing bat studies being conducted by the Applicant report bat activity to be extremely low.

Current scientific knowledge does not allow accurate estimation of bird or bat mortality at new wind farms, with the possible exception of the few areas where modern wind farms are already operating in similar habitat and terrain and have been well studied. Therefore, the studies that have been done to date for the Lompoc Wind Energy project cannot give quantitative predictions of how many birds and bats of each species may die in collisions with WTGs. However, the studies do provide enough information to conclude that the project will result in increased mortality of birds and bats, including sensitive species. Red-tailed hawks and other non-sensitive raptors are likely to be killed. The EIR (Mitigation Measure BIO-16) estimates that 6-7 fatalities of non-sensitive raptors could occur per year, assuming a full project build-out (65 WTGs). Based on experiences at other wind farm projects, the mortality rate for all birds combined would be many times higher than that of raptors. The Applicant has estimated that 1.85 non-raptors would be killed per year at each WTG, or approximately 120 birds per year total for the project, based on average mortality rates at wind farms in California and nationwide. However, lacking mortality data from the project site or comparable sites, such mortality estimates are uncertain. For many species, the increased mortality would not necessarily constitute a significant impact under CEQA. However, the overall impact to birds and bats for the project must be considered significant, particularly because there is reasonable likelihood that small numbers of fully protected birds or sensitive bird or bat species would be killed.

**Mitigation Measures.** Mitigation measure Bio-15a concerns siting. The project must be built on or near ridge-tops to maximize the wind resource, even though this may increase the collision risk for raptors riding updrafts. However, there are other opportunities for siting to reduce bird and bat impacts. The Applicant-proposed layout avoids siting WTGs in forested areas, thereby reducing the risk to nesting birds and arboreal roosting bats. Mitigation Measure Bio-15a would require WTGs to be located at least 500 feet from identified critical biological resources and 250

feet from unnamed intermittent tributaries containing riparian scrub habitat, which attract birds and bats.

Mitigation measure Bio-15b (in conjunction with the project description) stipulates project design that would reduce avian impacts. Design elements would include large, monopole-style WTGs with slow-rotating blades, underground electrical lines where feasible, avian protection measures for aboveground lines, and unguyed meteorological towers.

Mitigation Measure Bio-16 outlines a *Monitoring and Adaptive Management Plan* to mitigate operational impacts to birds and bats. The adaptive plan is designed to evaluate and respond to bird and bat fatalities. A responsive, adaptive mitigation strategy is needed, due to the uncertainty of operational impacts to bird and bat species, lack of reliable or detailed predictions, and in consideration of the limited options available to mitigate possible fatalities in advance. The plan provides a flexible set of mitigation approaches that the County would require if bird or bat fatalities exceeded expected rates, as stipulated in well-defined thresholds.<sup>7</sup>

The plan consists of the following four components:

- <u>Before-after/Control-impact (BACI) Study</u>. An avian monitoring study to compare preand post-construction bird use on the site;
- <u>Bird/Bat Mortality Study</u>. A study to estimate bird and bat mortality rates during wind farm operations and to identify WTGs causing unanticipated high mortality;
- Reduce Prey Base Near Turbines. Program to reduce the densities of burrowing mammals in the Project area, in order to reduce attraction of raptors to the Project area;
- Adaptive Management Program (AMP). Additional mitigation measures to be required if specific thresholds of bird or bat mortality are reached. Structured as 2-level thresholds that would trigger more intensive mortality monitoring (Level 1) and project modifications or compensatory mitigation (Level 2). Level 2 measures include a toolbox of options for mitigating impacts.

The AMP options contained in the proposed final EIR do not include WTG shutdowns or restriction of operation. However, the shutdowns have been added as a permit condition (Appendix B, Bio-16.d) and as a recommended modification to the final EIR (Appendix F). Shutdown options could be invoked in the case of unexpectedly large kills of sensitive bird or bat species if such an event could be foreseen. WTG shutdowns could also be required by CDFG or USFWS based on their enforcement power under the California Fish and Game Code, Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, or other applicable law.

<sup>&</sup>lt;sup>7</sup> The *Monitoring and Adaptive Management Plan* would be implemented by the County, unless CDFG determines that it falls within their jurisdiction under a streambed alteration agreement (Fish & Game Code §1602) or Gaviota tarplant take permit (Fish & Game Code §2081). CDFG staff have suggested this possibility, but have not yet made a determination or communicated it to the County.

#### Background and Discussion of Bird/Bat Issues.

The extent of bird and bat fatalities varies greatly among wind farms depending on the environmental setting and project design. Reported fatalities at some wind farms have been minimal, while hundreds of birds are killed annually at others. Impacts at wind farms in Solano County and the Altamont Pass Wind Resource Area (Altamont) in Alameda County have raised alarm among regulators and the environmental community due to the large numbers of raptors killed, including red-tail hawks and golden eagles. Surveys of the Lompoc Wind Energy Project site indicate bird usage at the site is moderate on the scale of other wind project sites, which suggests that mortality rates would likely be toward the lower end of the spectrum and not a repeat of the Altamont experience. However, golden eagles or other protected species are likely to be killed over the years in collisions with WTGs.

Viewed in the broader context of all human-caused fatalities to birds and bats, wind farms cause only a minute fraction of the total anthropogenic bird deaths (estimated at <0.03% per year) caused by buildings, vehicles, high-tension lines, communications towers, house cats, toxic chemicals, oil spills, etc. Nevertheless, the biological consequences of wind farm fatalities for specific resident or migratory bird populations could be significant for some projects, particularly in the case of slow-reproducing or endangered species.

Comments on the draft EIR for this project that were submitted by the California Department of Fish and Game (CDFG), Audubon Society (Audubon), and Environmental Defense Center (EDC) described the biological baseline, analysis, and proposed mitigation measures as inadequate, particularly regarding birds and bats. In response, additional biological studies were conducted, including a radar study of nocturnal migratory birds. The biology section of the final EIR has been revised to strengthen the biological baseline and fill informational gaps. In addition, the mitigation plan addressing potential impacts to birds and bats has been expanded and made more specific.

The California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development (Guidelines) were adopted by the California Energy Commission and endorsed by CDFG in September 2007. The Guidelines are explicitly voluntary for developers and local jurisdictions to use at their discretion and are not a CEQA requirement. However, they have set public expectations for a new standard of environmental review for wind farm impacts to birds and bats. The bird and bat studies recommended by the Guidelines cannot be completed within the CEQA time limit of one year, unless a wind developer commences detailed biological studies long before applying for a permit. Furthermore, the Guidelines must be regarded as a "work in process," because the science for predicting wind farm impacts to birds and bats is in its early development. The Guidelines do not yet offer generally applicable procedures for assessing risks to birds and bats or scientifically tested methods for micro-siting WTGs to minimize impacts.

<sup>&</sup>lt;sup>8</sup> National Research Council, Environmental Impacts of Wind-Energy Projects, 2007, p. 71.

#### Two Difficult Issues.

In developing measures to mitigate bird and bat fatalities, staff considered two mitigation measures proposed by CDFG and the environmental groups. Offsite conservation easements were rejected for the reasons discussed below. Requirements for WTG shutdown were initially also rejected and do not appear in the proposed final EIR. However, a shutdown and curtailment measure has since been developed and is recommended by staff, as discussed below.

1. Offsite Conservation Easements. Offsite conservation easements or habitat enhancement plans are favored by CDFG and recommended in the CEC Guidelines to mitigate avian impacts. Easements must be distant from the proposed site to avoid attracting birds to the project area. Such measures have been required in several recent wind energy project EIRs to mitigate two types of impacts. Conservation land acquisitions or easements were required in Solano County to mitigate loss of avian "aerial habitat." In Shasta County such measures were required to mitigate anticipated fatalities of two California fully protected species, bald eagle and sandhill crane.

Reasons for not requiring easements for loss of aerial habitat: 1) The aerial habitat loss from WTG operation would be adverse but less than significant, affecting only about 6% of the project area (EIR Section 3.5.7.3, Impact BIO-12). 2) Comparable aerial habitat is abundant in the project vicinity and throughout the County. Loss of aerial habitat is not the same kind of issue as loss of native grasslands or wetlands. 3) Although easements could have long-term generalized biological benefits, there is no clear or specific link between distant conservation lands and project habitat loss. 4) Conservation easements would not be reasonable or feasible mitigation. Acquisition cost of meaningfully large acreages of lands at risk of development would not be not commensurate with the minor scale of habitat loss impacts.

Reasons for not requiring easements for potential fatalities of protected birds: 1) There is little if any nexus between bird or bat fatalities at the site and distant conservation lands or easements. This is particularly true because the protected species that might be killed do not have known nests on the project site. 2) There is no natural or agreed-upon way to establish the acreage or characteristics of conservation lands that would compensate the take of a protected species. Hence, the mitigation measure would be arbitrary. 3) Conservation easements might not be economically feasible, depending on an arbitrary determination of habitat replacement area.

2. Requirement for WTG shutdowns. CDFG and the environmental groups have strongly recommended including a mitigation measure requiring shutdown of WTGs if the project causes unexpectedly high bird or bat mortality rates or incidents. Shutdowns could be temporary or permanent and could focus on specific WTGs or groups of WTGs. Shutdowns could also be imposed during specific hours or seasons associated with higher bird presence and risk of fatalities.

<sup>9</sup> This issue is complicated by the legal status of the affected birds. Take of California fully protected species is illegal under California Fish and Game code, subject to criminal penalties. Take of golden eagles or migratory birds, which include almost all species found in the County, is subject to criminal penalties under federal law.

In response to these concerns, a mitigation measure has been developed that provides for shutdowns or operational restrictions and could potentially reduce bird or bat fatalities. Operational restrictions means restricted operating hours during periods determined to cause high risk to birds and bats. The measure would apply in cases where high fatality events could be predicted in advance and would be limited to feasible shutdowns or restricted operations. The measure was not included in the proposed Final EIR, but is provided as Appendix F of this staff report and may be incorporated into the Final EIR by the Planning Commission. It is included in the recommended permit conditions, as part of the Adaptive Management Plan (Appendix B, Bio-16.d).

As discussed in the EIR, the proposed project would result in the risk of significant, unavoidable (Class I) impacts to birds and bats. Approval of the project requires a statement of overriding consideration that the project benefits outweigh the adverse environmental impacts, including possible fatalities to birds and bats. If the project is approved, some unknown number of birds and bats will die. In the case of protected species, the USFWS and CDFG have jurisdiction and may prosecute cases of illegal take.

WTG shutdown requirements have been a difficult issue for staff and the project Applicant to grapple with, in two regards. First, extreme bird and bat mortality events are not anticipated, or would be a rare occurrence, based on the studies conducted for the EIR. In most cases, fatalities of sensitive birds and bats are not expected to be predictable. However, they could be predicted in certain cases if a pattern of deaths were observed at a particular WTG. Hence, it may be possible to prevent fatalities in some cases by WTG shutdowns or restrictions on operating hours.

Second, CEQA requires mitigation of significant impacts to the maximum extent feasible. Requirements for open-ended shut-downs would not be economically feasible. No project proponent could commit \$150 million to a project, where unrestricted shutdowns could be imposed. Yet, some level of shutdowns or curtailments could undoubtedly be tolerated without crippling project economics or precluding project financing. The proposed mitigation measure represents a middle ground that addresses both maximum mitigation and feasibility. The measure would be triggered if shutdowns or limited operational hours for one or several WTGs would likely prevent excessive fatalities. It would also allow the proponent a due-process path to contest a shutdown, if it were imposed, on two grounds: economic feasibility and technical grounds. Economic infeasibility might be demonstrated if the shutdown(s) threatened economic viability of the project. Technical grounds might be demonstrated if, for example, the analysis of the bird/bat mortality study data were faulty, or if the ordered shutdowns would not significantly reduce fatalities to sensitive species.

## 6.1.1.2 Significant and Mitigable Impacts (Class II)

The EIR identifies 27 Class II impacts that would result from the Lompoc Wind Energy Project. Most of these impacts are construction-related; a few are operational, such as potential noise from WTG operation (NOI-2) and risk of tower collapse (RISK-1). These significant impacts would be mitigated to less than significant levels with implementation of specific mitigation measures, many of which were proposed by the project Applicant. (See EIR Section 2.8.4., *Applicant-Proposed Mitigation Measures*.) Impacts from construction and operation of the 115 kV power line would be less than significant, as PG&E would be required to adhere to the *Avoidance and Protection Measures* stipulated in the EIR (Section 2.8.5). Class II impacts and associated mitigation measures are summarized in Table 4 below. Additional details regarding potential impacts and mitigation measures are provided in the issue area discussions in the EIR (Sec. 3.2-3.16) and Table ES-3 of the EIR Executive Summary. The measures are also formatted as a Mitigation Monitoring Plan in Appendix D of the EIR.

One Class II impact deserves special note. The proposed Operations and Maintenance Building would impact a small (0.18 acre) wetland area. The wetland was identified as such and delineated following heavy rains earlier this year. County staff and the Applicant have discussed alternative locations for the O&M facility. However, alternative locations were found to be infeasible. The reasons are documented in a letter from Applicant dated July 1, 2008, and were independently verified by staff in consultation with the EIR consultant. The reasons center around the need for a site central to the project area and near the project substation, which will enhance safety (fire response and other emergency), site security, minimize travel around the project site during routine operations, and minimize trenching and ground disturbance. Required mitigation of the wetland loss would result in protection and enhancement of degraded wetlands on the site and a net increase in wetland resources within the watershed.

**Table 4: Class II Impacts** (from EIR Table ES-2)

Issue Area	Impacts (EIR number)	Primary Mitigation Measures
Air Quality	AQ-2: Dust and particulate emissions during construction.	AQ-2: Dust control plan.

BIO-1: Construction-related impacts to
vegetation and wildlife habitat.

BIO-2: Tree trimming and removal.

**BIO-3**: Wetland impacts.

BIO-5: Gaviota tarplant disturbance/ loss.

BIO-6: Special status plant disturbance/ loss.

BIO-8: Impacts to nesting birds.

 $\underline{\text{BIO-9}}$ : Impacts to special-status wildlife Species.

<u>BIO-11</u>: Bird and bat collisions with power lines and meteorological towers.

BIO-14: Indirect impacts to vegetation.

## BIO-1: Worker education and awareness pgm.

BIO-2: Minimize ground disturbance.

BIO-3: Site restoration / revegetation plan.

BIO-4: Tree Protection and Replacement Plan.

BIO-5: Pre-construction plant surveys.

BIO-6: Gaviota tarplant mitigation plan.

BIO-7: Kellogg's and mesa horkelia protection / restoration.

BIO-8: Native perennial bunchgrass protection / restoration.

BIO-9: Protection of creeks, springs, and wetlands.

BIO-10: Riparian habitat restoration plan.

BIO-11a: Pre-construction wildlife surveys.

BIO-11b: Wildlife habitat fencing.

BIO-11c: Biological monitoring.

BIO-11d: Monitoring report.

BIO-12: Protection for nesting birds and roosting bats:

BIO-12a. Avoid ground disturbance during nesting season.

BIO-12b. Buffer zones to protect nests / roosts

BIO-13: Protection for El Segundo blue butterfly.

BIO-14: Protections for sensitive wildlife species:

BIO-14a: California horned lizard.

BIO-14b: Silvery legless lizard.

BIO-14c: San Diego desert woodrat.

BIO-14d: American badger.

BIO-14e: Sensitive avian species.

Bio-15: Reduction of bird and bat collisions with WTGs, power lines, and met towers.

Bio-15a. WTG siting.

Bio-15b. WTG and project-element design.

Bio-16: Bird and Bat Monitoring and Adaptive Management Plan:

16.a. Before-After/ Control-Impact Study.

16.b. Bird/Bat Mortality Study.

16.c. Reduce Prey Base Near Turbines.

16.d. Adaptive Management Plan.

Other applicable measures include: GEO-2, WAT-1, and WAT-2.

#### Biological Resources

Cultural Resources	CULT-1: Disturbance to known archeological sites.  CULT-2: Disturbance to unidentified archeological sites.  CULT-3: Unauthorized artifact collection.	CULT-1: Additional archeological site investigations.  CULT-2: Procedure for archeological isolates.  CULT-3: Unanticipated discoveries.  CULT-4: Archeological and Native American monitors.  CULT-5: Pre-construction workshop.  CULT-6: Avoidance of cultural resources.  CULT-7: Final plan notification.  CULT-8: Temporary fencing.
Fire Hazards and Emergency Services	FPES-1: Increase risk of fire (construction).  FPES-2: Increase risk of fire (operations).  FPES-3: Fire services demand / response.  FPES-5: Interference with controlled burns.	FPES-1: Fire protection plan. FPES-2: No smoking or open fires. FPES-3: Gravel around project substation. FPES-4: Access roads to remain passable during construction. FPES-5: Demonstrate fire water supply.
Geology and Soils	GEO-3: Possible landslides.	GEO-2: Grading and drainage plan.
Land Use	LU-5: Quality of life / noise from WTG operations.	See Noise, below.
Noise	NOI-1: Project construction noise. NOI-2: WTG operational noise.	NOI-1: WTG maintenance.  NOI-2: Construction hours.  NOI-3: Telephone number for complaints.  NOI-4: Noise complaint resolution plan.  NOI-5: Maintain construction equipment.  NOI-6: Resident notification for loud construction activities.  NOI-7: Pre-construction noise analysis.  NOI-8: Noise monitoring and control plan.  NOI-9: Maintenance hours.
Paleonto- logical Resources	PALEO-1: Damage to paleontological resources.  PALEO-2: Unauthorized collection of fossils.	PALEO-1: Pre-construction workshop.  PALEO-2: Monitoring program.  PALEO-3: Procedures - fossil discovery.
Risk of Accidents, Hazardous Materials, Safety	Risk 1: WTG tower failure or blade throw.	Risk 5: Setback of WTGs from Public roads.

Traffic and Circulation	TC-2: Roadway safety. TC-5: Damage to roadways.	TC-1: Traffic management plan.  TC-2: Traffic mitigation fees.  TC-3: Roadway repairs.  TC-4: Oversize load study and mitigation.
Water Resources	WAT-5: Riparian vegetation impacts.	WAT-1: Erosion control plan.  WAT-2: Minimize watercourse encroachment in road widening.  Other applicable measures include: Bio-1, Bio-2, Bio-2, Bio-9, Bio-10, Geo-2, Risk-1, Risk-2, Risk-3, And Risk-4.

## 6.1.1.3 Adverse but Less Than Significant Impacts (Class III)

An additional 40 adverse but less than significant impacts from the Lompoc Wind Energy Project are identified and discussed in the EIR. They are summarized in Table ES-3 of the EIR Executive Summary. In some cases, mitigation measures are recommended to reduce or mitigate potential adverse impacts to the maximum extent feasible, even though these impacts did not trigger County CEQA significance thresholds.

## 6.1.1.4 Beneficial Impacts (Class IV)

Two beneficial impacts of the project are discussed in the EIR. First, the project would generate up to 285 kilowatt hours of electricity per year. This would support both the California and U.S. Department of Energy goals of increasing use of alternative energy sources for electricity generation. Second, it would enhance viability of continuing agricultural use of the project properties and support maintenance of local agricultural facilities by providing financial support to project property owners. The wind farm would not significantly interfere with agricultural operations. Although an economic analysis was not conducted and economic benefits to the County are not analyzed in the EIR, the project would increase property tax revenues to the County. Assuming the total project cost is \$150-\$200 million, the initial taxes would be \$1.5-\$2 million per year. The tax basis would be subject to change due to many factors, and the total tax revenue during the project life is not known.

#### 6.1.1.5 Cumulative Impacts

The EIR assessed the incremental impact of the Lompoc Wind Energy Project and other reasonably foreseeable projects that could be developed in the future for each issue area. Section 4.0 of the EIR describes the potential industrial, commercial, residential and other development projects anticipated in the area. Included are offshore oil and gas projects and residential and commercial projects in the unincorporated Lompoc areas and the City of Lompoc. No other wind energy projects are currently proposed in the County. However, Clipper Wind has installed meteorological towers for wind studies on properties north of the project site, and the project Applicant is considering conducting wind studies in the Casmalia Hills area. These studies could

lead to additional wind energy projects in the years to come. The significant cumulative impacts identified in Section 4.0 of the EIR and summarized in Table 5 below. Cumulatively significant, Class I impacts would occur to Biological and Visual Resources. Potential Class II impacts are identified in 7 issue areas. The Class II impacts would be reduced to less than significant with mitigation measures recommended in the EIR issue area discussions (Sec. 3.2-3.16). Section 4.0 also describes 8 cumulative impacts that would be Class III, less than significant.

**Table 5: Significant Cumulative Impacts** 

Issue Area	Source of Impact	Impact Class
	C-VIS-2: Visual Character/Quality.	I
	C-VIS-3: Degradation of Coastal Scenic Resources.	I
Aesthetic/ Visual Resources	Cumulatively significant impact on scenic qualities of the Lompoc Valley, project vicinity, Miguelito and Jalama County Parks. (Views of power line from SR-1 would be cumulatively significant unless Power Line Alternative 1 is adopted.)	
	C-AQ-2: PM-10 Emissions.	II
Air Quality	Project would exacerbate County nonattainment of state air quality standards for particulates. Mitigable to less than significant (Sec. 3.4.3.4).	
	C-BIO-1: Wildlife and Vegetation.	
	Biological impacts to sensitive species and habitats described in	П
<b>Biological Resources</b>	project impacts would be cumulatively significant but mitigable (Sec 3.5.7.5 and other sections). Bird and bat fatalities from	I
	operation of WTGs would be cumulatively significant and unmitigable.	
	C-CULT-1: Archeological Sites.	П
Cultural Resources	Cumulative impacts to known and unknown archeological sites.  Mitigable to less than significant (Sec. 3.6.8.3).	
	C-FPES-1: Fire Protection Services.	П
Fire Protection and Emergency Services	The project would potentially place additional load on fire response services, cumulative with other large projects. Mitigable to less than significant (Sec. 3.8.3.4).	
	C-PALEO-1: Loss of Paleontological Resources.	П
Paleontological Resources	Cumulative impact from potential loss of paleontological resources in the Lompoc Valley. Mitigable to less than significant (Sec. 3.12.3.4).	
Risk of Accidents,	C-RISK-1: Risk of Accidents, Hazardous Materials, and Safety.	П
Hazardous Materials, Safety	Cumulative impacts due to wildfire risk, EMF exposure, etc. Mitigable to less than significant (Sec. 3.13.3.4).	

**Table 5: Significant Cumulative Impacts** 

Issue Area	Source of Impact	Impact Class
Traffic and Circulation	C-TC-2: Safety and Road Damage.  Impacts from oversized trucks during construction. Mitigable to less than significant (Sec. 3.14.3.5).	п

#### 6.1.1.6 Project Alternatives

Project alternatives are described in Section 5 of the EIR. Alternatives included different project locations, project configurations and power line routes. In addition to the project as proposed, two alternative project configurations and one alternative power line route were carried forward for detailed analysis. They are as follows:

**Project Alternative 1:** Limit WTGs on South/West Corridors. (EIR Section 5.3.1.1) This alternative would prohibit construction of the approximately 13 WTGs visible from Jalama and Miguelito County Parks. Project size and electrical generating capacity would potentially be reduced, depending on the Applicant's ability to reconfigure the WTG layout in the allowed corridors. It could reduce many of the identified environmental impacts, including impacts to birds and bats. It could also reduce the beneficial impacts of the project. It is unclear whether the project would be financially viable if WTGs on the southern ridge were disallowed. The Applicant has stated that these locations are the "bread-and-butter" wind resource for the project. However, lacking any financial analysis to the contrary, it was assumed in the EIR that this alternative would be feasible.

#### **Project Alternative 2:** Phase I Only. (EIR Section 5.3.1.2)

This alternative is similar to Project Alternative 1, except it would limit project build-out to 82.5 MW (55 WTGs) to be built in a single construction phase. The alternative would reduce both adverse and beneficial project impacts. It would also reduce construction-related impacts by limiting construction to a single phase. This alternative was developed when the project proposal included up to 120 MW of electrical generating capacity. At that time, Project Alternative 2 represented a decrease in project capacity from 120 to 82.5 MW. The final proposed project is for 65 WTGs, or 97.5 MW. Thus, Alternative 2 now represents a decrease in project capacity from 97.5 to 82.5 MW. The financial feasibility issues are similar to those of Project Alternative 1.

**Power Line Route Alternative 1.** Re-routing to Minimize Visual Impacts. (EIR Section 5.3.2) This alternative for the 115 kV power line route was proposed by the Applicant to reduce visual impacts from Highway 1 (a designated scenic highway), approaching Lompoc city limit from the south. The route is described in Section 5.4.6 of this staff report. Assuming PG&E selects this route for construction and adheres to the required Avoidance and Protection Measures, no significant impacts would result from the power line.

As explained in Sections 3 and 4 of this staff report, the power line route is not within the permitting jurisdiction of the County and is not included in the CUP. However, if PG&E were to

choose any other route, they would need to undergo further environmental review with CPUC as lead CEQA agency.

## **Environmentally Superior Alternative.** (EIR Section 5.4)

The EIR concludes that the environmentally superior project alternative (apart from the "no-project alternative") is Project Alternative 2, coupled with Power Line Route Alternative 1. The rationale is that the significant and adverse environmental impacts would be minimized by limiting construction to a single phase, disallowing WTGs visible from the County parks, and curtailing overall project scale to 82.5 MW. The environmentally superior alternative does not account for or weigh beneficial environmental impacts against adverse impacts.

# **6.2** Comprehensive Plan Consistency

REQUIREMENT	DISCUSSION
Agricultural Element	
Goal I. Santa Barbara County shall assure and enhance the continuation of agriculture as a major viable production industry in Santa Barbara County. Agriculture shall be encouraged. Where conditions allow, (taking into account environmental impacts) expansion and intensification shall be supported.	Consistent. The Project would provide financial support to property owners, who could use that funding to enhance the viability of their agricultural operations. The Project also would maintain roads in agricultural areas, which would allow property owners greater access to their land which could also enhance agricultural operations.
Policy I.A. The integrity of agricultural operations shall not be violated by recreational or other non-compatible uses.	Consistent. The County Agricultural Preserve Advisory Committee reviewed the Project on June 2, 2006, and determined that it is a compatible use under the existing Agricultural Preserve contracts. Moreover, the Project would not violate the integrity of agricultural operations, because existing grazing and dryland farming activities would be able to continue. Further, LUDC Section 35.57 permits wind projects on agricultural properties, subject to approval of a Conditional Use Permit.
<b>Policy I.D.</b> The use of the Williamson Act (Agricultural Preserve Program) shall be strongly encouraged and supported	<b>Consistent</b> . See discussion under Policy I.A. of the Agricultural Element above.
Policy I.F. The quality and availability of water, air, and soil resources shall be protected through provisions, including but not limited to the stability of Urban/Rural Boundary Lines, maintenance of buffer areas around agricultural areas, and the promotion of conservation practices.	Consistent. The Project would include mitigation measures such as segregating excess topsoil stockpiled onsite from other soils to facilitate future land restoration and protection of stockpiled soils, as well as measures to minimize water quality and air quality impacts. Agricultural activities would be able to continue under the Project.
Goal II. Agricultural lands shall be protected from adverse urban influence.	<b>Consistent</b> . See discussion under Policies I.A. and I.F. of the Agricultural Element above.
<b>Policy II.D.</b> Conversion of highly productive agricultural lands whether urban or rural, shall be discouraged. The County shall support	Consistent. Most of the land that would be affected by the Project is used for cattle grazing, but depending on the placement of

programs which encourage the retention of highly productive agricultural lands.	individual poles for the power line, some Farmland of Local Importance could be affected. However, the potential permanent loss of less than 1 acre of Farmland of Local Importance would not significantly impair agricultural productivity. The Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a nonagricultural use.
Goal III. Where it is necessary for agricultural lands to be converted to other uses, this use shall not interfere with remaining agricultural operations.	Consistent. See discussion under Policy II.D. of the Agricultural Element. In addition, grazing would be able to continue during and after construction, and the permanent loss of grazing land would not significantly impair agricultural productivity or operations.
Circulation Element	
B. Roadway Standards. The Policy capacities provided in this Element shall be used as guidelines for evaluating consistency with this section of this Element. A project's consistency with this section shall be determined as follows:  A project that would contribute Average Daily Traffic (ADT) to a roadway where the Estimated Future Volume does not exceed the policy capacity would be considered consistent with this section of this Element.	Consistent. Service levels of area roadways potentially affected by Project traffic would experience minimal changes from existing conditions, although there would be a temporary increase during the construction phase. Project-related traffic volumes fall below County significance thresholds during both construction and operational phases.
Conservation Element	
Ecological Systems Conclusions and Recommendations. In making the following recommendations, we have been guided by the conviction that it is imperative to preserve for the future as much biological diversity, that is, as many different species and communities, as possible	Consistent. The Project would not result in the elimination of any species or communities. It would result in significant impacts to vegetation and wildlife, but mitigation measures have been identified that would reduce impacts to these biological resources to the maximum extent feasible. Impacts to avian and bat species resulting from collisions with WTGs are expected to be significant and unavoidable, but the implementation of mitigation measures identified in EIR Section 3.5.7.5 would reduce these impacts to

the maximum extent feasible; although

Agricultural Resources Conclusions and Recommendations. Agricultural preservation in the County has been extremely successful to date in placing lands adjacent to urban areas, as well as more remote lands, under Williamson Act agreements. The County and the cities should adopt the following policies to protect and enhance their agricultural resources:

The County and cities should take all measures necessary to protect agricultural lands from urban impacts, e.g. trespassing and theft.

Archaeological Sites Conclusions and Recommendations. For specific project areas, the following steps should be taken:

- A systematic ground survey of the project area and alternative areas should be carried out by the archaeologist selected. Preliminary testing of sites within the designated construction areas may be included.
- A report should be submitted by the archaeologist to the planners and developers concerned with the project and to responsible government agencies. This report should include details on surface and sub-surface finds, evaluation of the area and the sites it may contain, and suggestions for further actions concerning archaeological resources.

individual birds and bats may be killed, the overall populations of the affected species would not be eliminated. Moreover, the Project would ensure that the LWEF site would remain in open space, which would support the goal of preserving biological diversity.

Consistent. The Project would help preserve the land in productive agriculture and open space. Because the area is accessible to the public only via San Miguelito Road, and VAFB provides a buffer zone on the south and west sides, urban-related impacts at the site would be minimal. Presence of project personnel at the O&M building and around the project site on a daily basis would enhance security in the area.

Consistent. Cultural Resources Surveys were prepared as part of the Environmental Impact Report (EIR) and are described in EIR Section 3.6, Cultural Resources. The Project would also include mitigation measures, such as avoiding known resources when feasible; noting areas of known cultural resources as "unbuildable" on final plans; installing temporary fencing around known resources to protect them from construction impacts; conducting a Phase 1 Archaeological Survey in areas of construction impacts (and Phase 2 and 3 testing as required); conducting contractor/ construction personnel pre-construction briefings; and having County-approved archaeologist and Native American monitors present during ground disturbances in all areas containing archaeological materials to mitigate impacts to less than significant levels.

# Oak Tree Protection Supplement of the Conservation Element

The Oak Tree Protection Goal. Santa Barbara County shall promote the conservation and regeneration of oak woodlands in the County over the long term, and, where feasible, shall work to increase the native oak population and extent of woodland acreage. The highest priority for conservation, protection, and regeneration shall be for valley oak trees, valley oak woodlands, and valley oak savanna.

Oak Tree Protection Policy 1. Native oak trees, native oak woodlands, and native oak savannas shall be protected to the maximum extent feasible in the County's rural and/or agricultural lands. Regeneration of oak trees shall be encouraged. Because of the limited range and increasing scarcity of valley oak trees, valley oak woodlands, and valley oak savanna, special priority shall be given to their protection and regeneration.

Consistent. The layout of turbine corridors and access roads was designed to avoid wooded areas. Additionally, the Project includes mitigation measures to protect native trees, including oak trees, as well as replacement of damaged trees at established ratios.

# **Energy Element**

Goal 4: Water Use and Solid Waste. Increase the efficiency of water and resource use to reduce energy consumption associated with various phases of using resources (pumping, distribution, treatment, heating, etc.)

**Policy 4.1: Construction.** Encourage recycling and reuse of construction waste to reduce energy consumption associated with extracting and manufacturing virgin materials.

Goal 5: Alternative Energy. Encourage the use of alternative energy for environmental and economic benefits, and encourage opportunities for businesses that develop or market alternative energy technologies.

Consistent. Where possible, the power line would follow the existing distribution lines consolidating facilities, thus avoiding energy use to fabricate and install new production facilities and reducing the amount of construction waste generated. In addition, rocks excavated during construction would be crushed and reused onsite as backfill or roadway material where appropriate.

Reclaimed water also would be used for dust control during construction.

**Consistent**. The County LUDC provides a permit path for wind energy projects that establishes permit procedures and development standards for such projects. The Project is a wind energy project, which is considered an alternative energy source for producing electricity from a renewable source.

Policy 5.1: Environmental Analysis. In the consideration of alternative energy, the County shall consider the full life-cycle environmental effects and embedded energy requirements to provide such alternative energy. The County shall encourage the use of those alternatives determined to present sufficient environmental benefits.

**Consistent**. Although a full life-cycle analysis has not been done for this specific project, studies for other wind energy projects show that wind projects have a high net energy payback and low greenhouse gas emissions compared to other energy sources.

### Land Use Element

Fundamental Goals: Agriculture. In the rural areas, cultivated agriculture shall be preserved and, where conditions allow, expansion and intensification should be supported. Lands with both prime and non-prime soils shall be reserved for agricultural uses.

area used primarily for cattle grazing, with a limited amount of dryland farming adjacent to San Miguelito Road between the Scolari and North properties. The Project would not interfere significantly with either grazing or cultivated agriculture. See discussion under the Policies and Goals of the Agricultural Element.

**Consistent**. The Project is located in a rural

### Land Use Development Policies:

Policy 4. Prior to issuance of a development permit, the County shall make the finding, based on information provided by environmental documents, staff analysis, and the applicant, that adequate public or private services and resources (i.e., water, sewer, roads, etc.) are available to serve the proposed development. The applicant shall assume full responsibility for costs incurred in service extensions or improvements that are required as a result of the proposed project. Lack of available public or private services or resources shall be grounds for denial of the project or reduction in the density otherwise indicated in the land use plan

**Consistent**. Adequate services and resources would be available. Adequate water supplies, including reclaimed water and City of Lompoc water, are available from existing sources to meet construction needs. Water for the O&M facility operations and for the fire water tank would be obtained from a new shallow well on the property, from an existing spring on the property, or would be trucked in. Less than 500 gallons per day would be needed for the facility, and adequate supplies are available from existing sources to serve the Project. In compliance with Mitigation Measure FPES-5 (Section 3.8.3.4), the Applicant must demonstrate prior to land use clearance that the onsite water supply is adequate for O&M facility needs, while maintaining 5,000 gallons of stored water for fire fighting purposes.

Effluent from the O&M drains would be disposed of through a leach line system to be installed on the west side of the O&M facility and would not require treatment by the regional wastewater treatment plant.

Where appropriate, excavated soil and rock

during construction would be reused onsite and would not be transported to a landfill, and only minor amounts of solid waste would be generated by the O&M facility. Landfill capacity would not be exceeded, and all construction and operations waste materials would be disposed of in accordance with applicable regulatory requirements.

Storm drainage facilities would not be required other than those included as part of the Project and would serve no other projects.

Roads would be constructed as part of the Project to provide access to the Project site, but to no other locations.

The Applicant would be responsible for providing electricity to the LWEF. Power lines are already present in the Project area, and adequate power is available.

### Hillside and Watershed Protection Policies:

**Policy 1.** Plans for development shall minimize cut and fill operations. Plans requiring excessive cutting and filling may be denied if it is determined that the development could be carried out with less alteration of the natural terrain.

Consistent. Due to the site topography and Project design, some WTGs and roads would require locations on steep slopes. The Project would include cut and fill operations only as required to construct Project components. Mitigation measures in Sections 3.2 Aesthetics/Visual and 3.9 Geology would minimize impacts from cut and fill to less than significant levels. Upon completion of construction, access roads would be regarded to a width of 24 feet or less, and disturbed areas would be revegetated.

Policy 2. All developments shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not suited to development because of known soil, geologic, flood, erosion, or other hazards shall remain in open space.

Consistent. The Project would include measures to minimize geologic impacts as discussed in EIR Section 3.9, Geology and Soils. See discussion under Policy 1 and Policy 3, Hillside and Watershed Protection Policies, as well as the discussion of the Oak Tree Protection Supplement of the Conservation Element.

Policy 3. For necessary grading operations on hillsides, the smallest practical area of land shall be exposed at any one time during development, and the length of exposure shall be kept to the shortest practicable amount of time. The clearing of land should be avoided during the winter rainy season and all measures for removing sediments and stabilizing slopes should be in place before the beginning of the rainy season.

Consistent. The Project would include mitigation measures limiting grading to the dry season, to the extent practicable; and if grading needed to be done outside of the dry season, the Applicant would coordinate grading work with the County and follow all applicable guidelines, including implementing erosion control measures to control runoff and erosion in the event that revegetation was not completed prior to the rainy season. The Project would also include mitigation measures to minimize the size of the disturbed area associated with grading and construction and would require the stockpiling of all excavated soils and protecting them from wind and water erosion. See discussion under Policy 5, Hillside and Watershed Protection Policies.

Policy 4. Sediment basins (including debris basins, desilting basins, or silt traps) shall be installed on the project site in conjunction with the initial grading operations and maintained through the development process to remove sediment from runoff waters. All sediment shall be retained on site unless removed to an appropriate dumping location.

**Consistent**. The Project would include the implementation of mitigation measures to minimize runoff and erosion including implementing Best Management Practices (BMPs); submitting a final Grading and Drainage Plan; using diversion structures and spot grading to reduce siltation into adjacent streams/drainages during grading and construction activities; and ensuring that wetland areas within 50 feet of ground disturbance would be protected from siltation by imposition of silt fence, straw bales (composed of certified weed-free straw), or other barriers placed prior to ground disturbance. Moreover, Project construction would be done in accordance with a Stormwater Pollution Prevention Plan (SWPPP).

Policy 5. Temporary vegetation, seeding, mulching, or other suitable stabilization method shall be used to protect soils subject to erosion that have been disturbed during grading or development. All cut and fill slopes shall be stabilized as rapidly as possible with planting of native grasses and shrubs, appropriate non-native plants, or with

Consistent. The Project would include mitigation measures to minimize impacts to soils including stabilizing any disturbed area that would not be covered with base or paving within 14 days after completion of disturbing activities by use of soil coating mulch, dust palliatives, compaction, reseeding, or other approved methods; reseeding all temporarily

accepted landscaping practices.

disturbed areas with an appropriate mix of native plant species as soon as possible after construction is completed to accelerate the revegetation of these areas; and reseeding all exposed graded surfaces with native ground cover to minimize erosion within 60 days of the completion of grading.

Policy 7. Degradation of the water quality of groundwater basins, nearby streams, or wetlands shall not result from development of the site. Pollutants, such as chemicals, fuels, lubricants, raw sewage, and other harmful waste, shall not be discharged into or alongside coastal streams or wetlands either during or after construction.

**Consistent**. See discussion under Policies 3, 4, and 5, Hillside and Watershed Protection Policies. In addition, the Project would include mitigation measures to protect creeks, seeps, springs, wetlands, and other sensitive areas from fuel spills, hazardous materials, runoff from concrete, and trash and litter.

### Streams and Creeks Policies:

**Policy 1.** All permitted construction and grading within stream corridors shall be carried out in such a manner as to minimize impacts from increased runoff, sedimentation, biochemical degradation, or thermal pollution.

Consistent. A Project access road would cross Hondo Creek at one point, requiring construction of a bridge to minimize impacts to the stream. Headwalls are proposed to be built outside of the streambed so there would be no grading within the stream. The area of construction disturbance would be outside of the riparian area of the creek. Crossings of minor drainage channels would be accomplished with culverts. V-ditches and culverts would be installed, where necessary, to handle excess drainage water. All required permits and agreements would be obtained.

# Historical and Archeological Sites Policies:

**Policy 2.** When developments are proposed for parcels where archaeological or other cultural sites are located, project design shall be required which avoids impacts to such cultural sites if possible.

Policy 3. When sufficient planning flexibility does not permit avoiding construction on archaeological or other types of cultural sites, adequate mitigation shall be required.

Mitigation shall be designed in accord with guidelines of the State Office of Historic Preservation and the State of California Native

Consistent. The Project includes mitigation measures to protect and avoid cultural resources. The Native American Heritage Commission has also been consulted. See discussion under the Archaeological Sites Conclusions and Recommendations of the Conservation Element above.

American Heritage Commission.		
<b>Policy 5.</b> Native Americans shall be consulted when development proposals are submitted which impact significant archaeological or cultural sites.		
Other Open Lands Policies:  Policy 1. Preservation of open lands shall be encouraged under the Williamson Act.	<b>Consistent.</b> See discussion under Policy 1.A of the Agricultural Element above.	
<b>Policy 2.</b> Utilization of open lands shall be consistent with protection and long term productivity of County watersheds.	<b>Consistent.</b> See discussion of the Hillside and Watershed Protection Policies 2, 3, 4, 5 and 7 above.	
Visual Resources Policies:  Policy 1. All commercial, industrial, and planned developments shall be required to submit a landscaping plan to the County for approval.	Consistent. The Project includes a site restoration and revegetation plan and a landscape and lighting plan. Areas of temporary disturbance would be restored to agricultural grazing land at the end of construction. The WTG sites would be reseeded with native grasses to allow the current use of the property to continue to the maximum extent practicable, and the shoulder areas of access roads (new and improved) would also be reseeded. The 2-acre fenced area of the Project Substation would be covered with crushed rock; no landscaping is planned because of interior location of this area at the Project site. The O&M facility access area would be landscaped with vegetation suitable for the region and climate.	
Policy 2. In areas designated as rural on the land use plan maps, the height, scale, and design of structures shall be compatible with the character of the surrounding natural environment, except where technical requirements dictate otherwise. Structures shall be subordinate in appearance to natural landforms; shall be designed to follow the natural contours of the landscape; and shall be sited so as not to intrude into the skyline as seen from public viewing places.	Consistent. The WTGs and power poles associated with the Project would be visible from public viewing places as discussed in EIR Section 3.2 and would result in significant impacts to views from Jalama Beach, San Miguelito Road, Miguelito County Park, and SR-1. Adoption of Power Line Alternative 1, as proposed by the Applicant and analyzed in Section 5.3.2, would reduce visual impacts from the power line portion of the project to less than significant. It would be infeasible to reduce the visual impacts from the WTGs to less than significant levels. However, the	

	Project would be consistent with this policy because the height, scale, and design of the WTGs and power poles are dictated by technical requirements, and impacts would be mitigated to the maximum extent feasible.	
Land Use Element Area/Community Goals Applicable to the Lompoc Area:  Land Use. The natural backdrop of the area should be preserved through strict controls on hillside development. Hillside grading over 30 percent on residential and commercial land should be severely restricted.	Consistent. The Project was sited strategically to minimize its visibility from the surrounding area; however, there would be unavoidable visual impacts from Jalama Beach County Park, San Miguelito Road, within Miguelito County Park, and SR-1. These visual impacts would be mitigated to the extent feasible. Impacts to views from SR-1 would be less than significant with Power Line Alternative 1. The Project also would support continued use of the property for agriculture and reduce pressure for residential expansion into the area. See also Visual Resources Policy 2 discussion, above.	
The unique character of the area should be protected and enhanced with particular emphasis on protection of agricultural lands, grazing lands, and natural amenities.	Consistent. See discussion under the policies and goals of the Agricultural Element.	
Commercial and industrial development that complements and expands the existing agricultural industry of the area should be encouraged.	Consistent. See discussion under Goal I of the Agricultural Element.	
Prime agricultural lands should be preserved for agricultural use only. Preservation of lesser grades of presently producing or potential agricultural land should be actively encouraged.	Consistent. See discussion under the policies and goals of the Agricultural Element.	
Encouragement should be given to the preservation of significant archeological resources and sites reflecting the County's Indian, Mexican, Spanish, and Early California cultural historical heritage now in both public and private ownerships.	Consistent. See discussion under the Historical and Archeological Sites Policies of the Land Use Element.	
Changes in natural or re-established topography, vegetation, biological communities should be minimized in an attempt to avoid the destruction of natural habitats.	Consistent. Due to the nature of the Project and technical feasibility issues, some Project components would be located in steep areas. The Project would not include more access roads than necessary, and they would be	

regraded down to narrower widths following construction. Project design and required mitigation measures (grading and erosion control plan, SWPPP, revegetation, and others) would minimize impacts to land, streams, and biology. The Project would result in significant impacts to vegetation and wildlife, but mitigation measures have been identified that would reduce impacts to these biological resources to the maximum extent feasible. For example, impacts to avian and bat species resulting from collisions with WTGs are expected to be significant and unavoidable, but the implementation of mitigation measures identified in EIR Section 3.5.7.5 would reduce these impacts to the maximum extent feasible; although individual birds and bats may be killed, the overall populations of the affected species would not be eliminated. The Project also would support continued use of the property for agriculture and could reduce pressure for residential expansion into the area.

Development, construction, and roads cut in steep areas should be limited to ensure safety and protection of the terrain, as well as environmental and scenic values. Consistent. See discussion immediately preceding (Changes in natural...). Further, scenic values would be protected to a great extent by the Project siting at the end of a dead-end country road; the site would be surrounded on two sides by undeveloped portions of VAFB and views from the surrounding area would be screened by intervening topography; however, there would be unavoidable visual impacts from Jalama Beach, San Miguelito Road, within Miguelito County Park, and SR-1. These visual impacts would be mitigated to the extent feasible. Impacts to views from SR-1 would be less than significant with Power Line Alternative 1.

**Circulation.** Improvements to or alterations of existing roadways must minimize environmental and visual impact...

**Consistent**. The Project would include new access roads and the widening of existing roads on private property at the LWEF site; however, the road improvements would be consistent with other agricultural roads in the Project area. All grading would be subject to a final,

approved grading and erosion control plan to minimize erosion and ensure adequate slope stabilization. Disturbed areas would be revegetated following the roadwork. Surveys indicate that transport of large loads to the project site would require tree trimming, but tree removal, grading, or major vegetation damage should not occur. This would be confirmed with further studies prior to land use clearance. Any necessary tree trimming or removal, grading, or vegetation disturbance would be subject to the final grading and erosion control plan, SWPPP, revegetation plan, and tree replacement requirements, as well as mitigation measures included in EIR Section 3.5.7. Environment. The County should plan for and **Consistent**. See discussion under the Goals encourage the maximum conservation of and Policies of the Energy Element. energy. **Pollution** of streams, sloughs, drainage **Consistent**. See discussion under the Hillside channels, underground water basins, estuaries, and Watershed Protection Policies and Streams the ocean, and areas adjacent to such waters and Creeks Policies of the Land Use Element should be minimized. above. Air Quality Supplement to the Land Use Element Good air quality should be maintained as one Consistent. The Project would include of our greatest assets. mitigation measures to minimize air quality impacts during construction. During operations, the Project would benefit air

portfolio.

# Noise Element Conclusions and Recommendations

In the planning of land use, 65 decibels (dB)  $L_{dn}$  should be regarded as the maximum exterior noise exposure compatible with noise-sensitive uses unless noise mitigation features are included in project designs.

Consistent. As discussed in Section 3.11, noise impacts to participating residences could potentially exceed 65 dB L<sub>dn</sub>. However, WTG layout and implementation of mitigation measures would reduce these impacts to less than this threshold level. A more stringent noise threshold of 50 dBA<sub>(CNEL)</sub> would be required at residences not participating in the project. This threshold is consistent with typical noise levels in rural, agricultural areas.

quality by increasing the amount of power generated by renewable sources in the PG&E

# Open Space Element

The Open Space Element identifies four factors for designating land in open space and includes: Open Space for Public Health and Safety (e.g., fire hazard areas, steep slopes); Open Space for Managed Production of Resources (such as grazing lands, agricultural lands and mineral resources); Open Space for Outdoor Recreation; and Open Space for the Preservation of Natural Resources (e.g. scenic areas, rare and endangered plant and wildlife communities). Project areas include all of these designations. The purpose of the Open Space Design Concept (discussed in the Element) is to delineate lands that have the potential for open space preservation to serve one or more of the purposes prescribed in the State Planning Law (i.e., the four factors identified above). In areas with slopes 20 to 30 percent or greater, limited or no development is recommended (this includes Project areas).

Consistent. Due to the nature of the Project and technical feasibility issues, some Project components would be located in an open space area and on steep slopes. The Project would include measures to ensure adequate slope stabilization and would increase fire protection and other environmental protection measures. In addition, mitigation measures are included to minimize visual, fire, and other environmental impacts. The Project would have minimal impacts on mineral or recreational resources. See also the discussion under the Agricultural Element goals and policies as well as the Conservation and Land Use Element discussions above.

# Scenic Highways Element

**Goal A.** To enhance and preserve the valuable scenic resources located along roadways within the County.

**Consistent**. County policies and ordinances do not preclude the installation of power lines in a scenic highway corridor. The Scenic Highways Element refers to a state requirement that utility lines be placed underground in scenic highway corridors, but this applies only to electric and communications distribution lines, not to high voltage power lines. Construction and operation of the power line visible from public roadways (San Miguelito Road, except SR-1) would not result in significant impacts. The power line would be routed below ridgelines to the maximum extent feasible so that it would not be visible against the skyline until it was near the top of a hill just before the Lompoc city limit. The power line would be constructed using long spans where feasible to reduce the number of poles needed, although technical constraints may limit where poles are placed. The Applicantpreferred alternative route evaluated in Section

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	5 was developed in order to reduce visual impacts along the ridgeline. Some visual impacts would occur, but they would be minimized to the extent feasible.
Goal C. To help maintain the economic contribution of tourism to the County.	Consistent. The Project would not negatively affect tourism in the County. See discussion of visual impacts to visitors at Jalama Beach County Park, under Scenic Highway Element Goal A.
Seismic Safety and Safety Element	
Section V of the Seismic Safety and Safety Element includes Land Use Planning Objectives that are designed to provide for appropriate planning in areas with identified varying degrees of geologic, soil and seismic problems in order to minimize or avoid associated hazards resulting from development. Section V of the Element also includes a discussion of the importance of the Grading and Building Codes and the importance of obtaining a detailed geologic	Consistent. The Project would include mitigation measures to minimize geologic impacts and would comply with all grading and Building Code requirements. The facilities would be designed and built to Uniform Building Code Seismic Zone 4 standards.  The Project would also include measures to minimize fire risk, including onsite storage of water for fire fighting, improving site access,
and soil investigation for sites under consideration for development.  With regard to fire hazards, Section VI of the Seismic Safety and Safety Element provides Control Measures designed to reduce fire hazards within the County and identifies that	requiring vegetation clearances, and complying with all Fire Department requirements such as the submittal of a fire control plan.

short of prohibiting all land development in areas of extreme fire hazard, the most reasonable solution is to require that all development proposals be accompanied by a plan showing the measures that will be taken to meet County regulations to minimize fire hazard and should address access to the site, water supply, buffer strips and firebreaks around structures, and a contingency plan covering human activities during periods of critical fire weather.

# Environmental Resource Management Element (ERME)

The ERME identifies environmental factors in areas mapped with slopes 30 percent and greater. Although steep slopes

**Consistent**. Due to the nature of the Project and technical feasibility issues, some Project components would be located in steep areas.

are not always hazardous in themselves, landslides, erosion and other geologic hazards are prevalent in these areas. Even if landslide and slope stability problems are solved by engineering design, other problems can ensue, resulting in damage to a project site itself, as well as to sites at lower elevations. In addition, scarring of the terrain due to grading is discussed. The ERME states that development on lands with "Slopes 20 to 30 Percent" should also be minimized because they are often subject to geologic problems, comprise portions of watersheds, or form the scenic backdrop of urban communities.

However, the Project would include mitigation measures to minimize geologic impacts and would comply with all grading and Building Code requirements. The Project would also include measures to ensure adequate slope stabilization.

# 6.3 Zoning: Land Use and Development Code Compliance

# 6.3.1 Compliance with Land Use and Development Code Requirements

# Santa Barbara County Land Use & Development Code

# Chapter 35.30.090 Height Measurement, Exceptions and Limitations

Describes height limits and exceptions to those limits. The section indicates that certain structures that are not used for human activity may be up to 50 feet in height. The section includes exemptions for specific structures and equipment and states that in the inland area, WTGs allowed in compliance with Chapter 35.57 may exceed applicable height limits where compliance would render operations technically infeasible.

**Consistent.** Wind turbines in the inland area of the County allowed under Section 35.57 may exceed height limits if compliance is technically infeasible (Sec. 35.30.090.E.3.d). Refer also to the discussion under Chapter 35.57 below.

# Chapter 35.57 Wind Energy Systems

# 35.57.050 Development Standards.

Wind turbine generators and wind energy conversion systems are subject to the following development standards.

### A. Setbacks

Wind turbines shall comply with all setback requirements of the applicable zone.

**Consistent.** The Project complies with setback requirements for the AG-II-100 zone district; for example, structures would be set back at least 50 feet from the centerline and 20 feet from the right-of-way of any street (Sec. 35.21.050).

See also *G. Horizontal Access Wind Turbine Setbacks*, below.

### B. Access Control

Towers shall be constructed to provide one of the following means of access control or other appropriate method of access:

Tower-climbing apparatus located no closer than 12 feet from the ground

A locked anti-climb device installed on the tower

A locked, protective fence at least 6 feet in height that encloses the tower

**Consistent.** Towers would be accessed for service via a door at the base of each tower. It is expected that the door would remain locked at all times. Due to the remote nature of this Project and the limited number of people present in the area, a locked door would be considered to meet these requirements.

### C. Tower Structures

Wind energy system tower structures shall be designed and constructed to be in compliance with pertinent provisions of the Uniform Building Code and National Electric Code.

**Consistent.** The tower structures would be designed and constructed in compliance with the pertinent provisions of these codes.

### D. Overspeed Controls

Wind energy systems shall be equipped with manual and automatic overspeed controls. The conformance of rotor and overspeed control design and fabrication with good engineering practices shall be certified by the manufacturer.

**Consistent.** The wind energy systems would be equipped with the appropriate speed controls, certified by the manufacturer to comply with good engineering practices.

### E. Height

To prevent harmful wind turbulence from existing structures, the minimum height of the lowest part of any horizontal axis wind turbine blade shall be at least 30 feet above the highest structure or tree within a 250 foot radius. Modification of this standard may be allowed when the applicant demonstrates that a lower height will not jeopardize the safety of the wind turbine structure.

**Consistent.** All WTGs would be located away from structures or trees.

# F. Guy Wires

Anchor points for any guy wires for a system tower shall be located within the property that the system is located on and not on or across any aboveground electric transmission or distribution lines. The point of attachment for the guy wires shall be enclosed by a fence 6 feet high or sheathed in bright orange or yellow covering from 3 to 8 feet above the

**Consistent.** Guy wires are not proposed for WTGs or permanent meteorological towers. Guy wires for meteorological towers would be prohibited by a condition of approval. (Two temporary, guyed meteorological towers would be present on site during preconstruction and construction phases, but removed prior to startup of operations.)

### ground.

# G. Horizontal Access Wind Turbine Setbacks Horizontal axis wind turbines shall be placed at a distance of at least two times the total tower height from any occupied structure. Additionally, the base of the tower shall be setback from all property lines a minimum distance equal to the height of the system, including the wind turbine, provided that it also complies with any applicable fire setback requirements in compliance with Public Resources Code Section 4290.

Consistent. The Project complies with setback requirements for all portions of the WTG area adjacent to private property. The Applicant has requested variances to reduce these setbacks to one WTG blade length along the VAFB property line and between Project-participant properties. If the variance is approved pursuant to LUDC Section 35.82.200, the decision to approve would ensure consistency with the LUDC. Additionally, for public safety, WTGs would be set back from public roads by a distance equal to the total WTG height, including blades (CUP Condition L-5).

# I. Electromagnetic Interference

The system shall be operated such that no electromagnetic interference is caused. If it is demonstrated that a system is causing harmful interference, the system operator shall promptly mitigate the harmful interference or cease operations of the system.

Consistent. Proximity to VAFB communication facilities was addressed during Project development in consultation with VAFB. No electromagnetic interference is identified with Project design.

# J. Color and Nonreflective Surfaces

The system's tower and blades shall be painted a nonreflective, unobtrusive color that blends the system and its components into the surrounding landscape to the greatest extent possible and incorporate nonreflective surfaces to minimize any visual disruption. **Consistent.** With the implementation of visual resource mitigation measures, the Project will conform to these requirements.

# K. Visual Impact

The system shall be designed and located in such a manner to minimize adverse visual impacts from public viewing areas (e.g., public parks, roads, trails). To the greatest extent feasible, the wind energy system:

- Shall not project above the top of ridgelines.
- If visible from public viewing areas, shall use natural landforms and existing vegetation for screening.
- Shall not cause a significantly adverse visual impact to a scenic vista from a County or state designated scenic corridor.

Consistent. The WTGs in the westernmost array would result in significant impacts to viewers at Jalama Beach County Park. In addition, 3 to 4 of the northernmost WTGs would be visible when traveling southbound on San Miguelito Road approaching Miguelito County Park, and one WTG would be visible from within the Park. Many WTGs would be visible from San Miguelito and Sudden Roads in the immediate vicinity of the project. Implementation of mitigation measure VIS-5 would partially mitigate the impact by providing funds for the enhancement of Jalama Beach County Park and Miguelito County

– Shall be screened to the maximum extent
feasible by natural vegetation or other means
to minimize potentially significant adverse
visual impacts on neighboring residential
areas.

Park. The wind resource distribution along the ridges renders mitigating the impact to less than significant infeasible, although reduced project alternatives have been included in Section 5 of the EIR to address this impact.

# L. Exterior Lighting

Exterior lighting on any structure associated with the system shall not be allowed except that which is specifically required by the FAA.

**Consistent.** This standard applies to WTG lighting, which would be installed in conformance with FAA requirements. A landscape and lighting plan would be required for other project facilities.

# M. Underground Electrical Wires

Onsite electrical wires associated with the system shall be installed underground except for "tie-ins" to a public utility company and public utility company transmission poles, towers and lines. This standard may be modified by the review authority if the project terrain is determined to be unsuitable due to reasons of excessive grading, biological impacts or similar factors.

**Consistent.** The Project proposes to underground all lines, except in those cases where placing the lines aboveground would minimize environmental impacts.

# N. Signage

At least one sign shall be posted on the tower at a height of 5 feet warning of electrical shock or high voltage and harm from revolving machinery. No brand names, logo or advertising shall be placed or painted on the tower, rotor, generator or tail vane where it would be visible from the ground, except that a system or tower's manufacturer's logo may be displayed on a system generator housing in an unobtrusive manner.

**Consistent.** With the implementation of mitigation measures to reduce risks and addressing signage, the Project would conform to these requirements.

### O. Access Roads

Construction of onsite access roadways shall be minimized. Temporary access roads utilized for initial installation shall be regraded and revegetated to the pre-existing natural condition after completion of installation. **Consistent.** The road installation for the Project complies with this requirement. Access roads would be regraded to reduced width following construction.

# Chapter 35.62.040 Ridgeline and Hillside Development Guidelines

This section is intended to provide "visual

**Consistent.** Due to the nature of the Project and technical feasibility issues, some Project components would be located in steep areas. The Project was sited strategically to minimize

protection of the County's ridgelines and hillsides by requiring that the Board of Architectural Review evaluate each proposed structure within [certain] areas... in terms of the [development] guidelines" and "encourage architectural designs and landscaping that conforms to the natural topography on hillsides and ridgelines." The guidelines apply to each structure proposed where there is a 16-foot drop in elevation within 100 feet in any direction from the proposed building footprint. The Board of Architectural Review may exempt a new structure or an alteration to an existing structure from Review provided that in their review of the structure they find that one or more of the following situations applies to the proposed development:

b. In certain circumstances, allowing greater flexibility in the guidelines will better serve the interests of good design, without negatively affecting neighborhood compatibility or the surrounding viewshed.

its visibility from the surrounding area. Scenic values would be protected to a great extent by the Project siting at the end of a dead-end country road; the site would be surrounded on two sides by undeveloped portions of VAFB and views from the surrounding area would be screened by intervening topography; howeverthe WTGs would cause unavoidable visual impacts from Jalama Beach, San Miguelito Road, and Miguelito County Park. The Project also would support continued use of the property for agriculture and could reduce pressure for residential expansion into the area. The Project includes a site restoration and landscaping plan, which would minimize the visual impacts from Project construction; native and drought-resistant plants that are compatible with the climate would be used. Placement of WTGs would be avoided on steeper slopes, where feasible, to minimize grading. The Project would not include more access roads than necessary, and they would be regraded down to narrower widths following construction.

# 6.3.2 Other Requested Modifications

**Variance for Property Line Setbacks.** The Applicant has submitted an application for a Variance to allow reduced setback of wind turbine generators (WTGs) from property lines between properties that are participants in the project and also along the VAFB line.

County Land Use and Development Code (Sec. 35.57.050.G) requires WTGs to be set back from property lines a distance equal to the full WTG system height, including blades. For the proposed project, the setback would be up to 397 feet. The Variance application, as amended April 17, 2008, requests that the setback distance be reduced to one WTG blade length (126 to 135 feet) from adjacent properties that are project participants and along the Vandenberg property line. The WTG blades would not overhang the property lines. The Variance would not apply along property lines of adjacent properties on the north and east sides of the project that are not project participants.

The reason for the Variance request is that in some cases the property lines follow ridge lines, and it is necessary to site the WTGs close to the ridgeline in order to best exploit the wind resource. Shifting WTGs almost 400 feet away from the ridgelines to comply with the development standard would fail to capture the maximum wind energy and would place the WTGs on steeper slopes, creating engineering difficulties, unnecessary environmental impacts, and increased costs. Thus, the Variance plays an important role for the project in enabling advantageous ridgeline siting of WTGs, which will increase power generation, reduce costs, and minimize adverse impacts.

Approval of the Variance would not affect private properties that are not project participants and would not result in safety hazards or adverse environmental impacts. It also would not affect VAFB uses, because the VAFB property along the project perimeter is undeveloped, open-space land. Furthermore, the Applicant has been working with VAFB personnel to assure that the project is acceptable to them and does not interfere with base operations.

# 6.4 Subdivision/Development Review Committee

The project was presented to the Subdivision/Development Review Committee on March 2, 2006. In a letter dated March 8, 2006, the Fire Department outlined conditions for hazardous and/or flammable materials/wastes and a possible requirement for a Hazardous Materials Business Plan. Environmental Health Services commented on the need for water and septic system permits. Flood control noted requirements for an approved plan for any road or bridge crossing within 50 feet of stream banks. The Air Pollution Control District noted that permits will be required for internal combustion engines and pointed out possible requirement for use of low-sulfur diesel fuel in construction equipment. Public Works/ Roads commented on requirements for peak hour trip fees, haul permits, encroachment permits, and a Traffic Control Plan. P&D Building and Safety discussed requirements for a Grading and Drainage Plan, Erosion Control Plan, and building and electrical permits. These requirements have been integrated in the EIR as appropriate and will be required of the permittee as part of the project approval.

# 6.5 Design Review

The project is subject to review by the Board of Architectural Review (BAR) pursuant to the County's Land Use and Development Code Sec. 35.62.040 *Ridgeline and Hillside Development Guidelines*. The BAR has discretion to interpret and apply the guidelines or to exempt projects under some conditions.

The Applicant presented the project before the Central Board of Architectural Review (CBAR) in a conceptual review hearing on August 3, 2007. CBAR indicated that they have review authority over the entire project (except the PG&E power line) and not just those components of the project that trigger the ridgeline guidelines. Width and location of access roads was noted as a particular concern due to potential visual impacts from public viewing areas. CBAR requested a site visit, with story poles erected if feasible. A site visit was held on September 11, 2007, attended by CBAR members, officials from the California Department of Parks and Recreation and La Purisima Mission, and members of the public. The site visit included a tour of key observation points, which was cut short due to overcast conditions and low visibility. A second CBAR hearing was conducted on October 5, 2007. State Parks Regional Superintendent Rich Rojas spoke about concern for visual impacts from La Purisima Mission, and Mr. and Mrs. Bedford (owners of property adjacent to the project site) expressed concern about visual and noise impacts. Board members stated that CBAR review was limited to public viewing areas, that anticipated impacts on La Purisima Mission viewshed are minor, but noted some concern about the appearance of roads, towers, and project facilities, and about setting a precedent that could lead to a "Palm Springs effect." CBAR asked for the project to be brought back for further conceptual review following project approval by the Planning Commission.

# 6.6 Agricultural Preserve Advisory Committee

The project was presented by before the Agricultural Preserve Advisory Committee on June 2, 2006, and was found (in a vote of 6-0) to be consistent with the County's Uniform Rules. All 10 parcels of the project are zoned AG-II-100, used primarily for grazing, and are covered under agricultural preserve contracts. The Commissioners discussed the compatibility of wind energy projects with grazing use and determined that the project would not impair the long-term agricultural use of the project site.

# 6.7 Development Impact Mitigation Fees

A series of ordinances and resolutions adopted by the County Board of Supervisors require the payment various development impact mitigation fees. This project is subject to the fees as shown in the following table. The amounts shown are estimates only. The actual amounts will be calculated in accordance with the fee resolutions in effect when the fees are paid.

The developer of a project that is required to pay development impact mitigation fees may appeal to the Board of Supervisors for a reduction, adjustment or waiver of any of those fees based on

the absence of a reasonable relationship between the impacts of the proposed project and the fee category for which fees have been assessed. The appeal must be in writing and must state the factual basis on which the particular fee or fees should be reduced, adjusted or waived. The appeal must be submitted to the director(s) of the relevant departments within 15 calendar days following the determination of the fee amount(s). For a discretionary project, the date of determination of fee amounts is the date on which the decision-maker adopts the conditions of approval and approves the project.

Estimated Countywide Development Impact Mitigation Fees					
Fee Program	Base Fee (per unit or 1,000 sf)	<b>Estimated Fee</b>	Fee due at		
Transportation	8 P.H. Trips x \$493.00	\$3,944.00	LUP		
Fire (\$0.10/sf.)	5,875 s.f x \$0.10	\$587.50	Final Inspection		

# 7.0 APPEALS PROCEDURE

The action of the Planning Commission may be appealed to the Board of Supervisors within 10 calendar days of said action. The appeal fee to the Board of Supervisors is \$443.

# **ATTACHMENTS**

- A. Recommended Findings for Approval
- B. Recommended Conditions of Approval
- C. EIR Summary Table
- D. Assessor Parcel Maps
- E. Preliminary Site Plan
- F. Proposed Modification to Final EIR
- G. Additional Public Comments

# **ATTACHMENT A:**

# **FINDINGS FOR APPROVAL**

# **ATTACHMENT B:**

# **CONDITIONS OF APPROVAL**

# **ATTACHMENT C:**

# **EIR SUMMARY IMPACT TABLE**

# **ATTACHMENT D:**

# **ASSESSOR PARCEL MAPS**

# ATTACHMENT E.

# PRELIMINARY SITE PLAN

# **ATTACHMENT F.**

# PROPOSED MODIFICATION TO FINAL EIR

# **ATTACHMENT G.**

Staff Report

Attachment G

# **ADDITIONAL PUBLIC COMMENTS**

Comments received after the close of the Comment Period for the Draft EIR

(September 4, 2007) up to the present (September 17, 2008)

and not included in the Final EIR

# ATTACHMENT A: RECOMMENDED FINDINGS FOR APPROVAL

- **1.0 CEQA FINDINGS** (Pursuant to PRC §21081 and the CEQA Guidelines §§15090 and 15091)
- 1.1 CONSIDERATION OF THE EIR: The Planning Commission has considered the Environmental Impact Report (06EIR-00000-00004; SCH #2006071008) together with comments received and considered during the public review process. The Environmental Impact Report reflects the independent judgment of the Planning Commission, has been completed in compliance with CEQA, and is adequate for the Lompoc Wind Energy Project.
- **1.2 FULL DISCLOSURE:** The Planning Commission finds and certifies that the Final EIR constitutes a complete, accurate, adequate and good faith effort at full disclosure under CEQA. The Planning Commission further finds and certifies the Final EIR has been completed in compliance with CEQA.
- 1.3 LOCATION OF RECORD OF PROCEEDINGS: The documents and other materials that constitute the record of proceedings upon which this decision is based are in the custody of the Secretary to the Planning Commission, County Planning and Development Department located at 123 E. Anapamu Street, Santa Barbara, CA 93101.
- 1.4 UNAVOIDABLE IMPACTS ARE MITIGATED TO MAXIMUM EXTENT FEASIBLE: The Final EIR for the Lompoc Wind Energy Project identifies 3 significant environmental impacts that would result from the full Project proposed for Planning Commission approval, which cannot be fully mitigated and are therefore considered unavoidable. The impact areas are biological resources and aesthetic/visual resources.

To the extent the impacts remain significant and unavoidable, such impacts are acceptable when weighed against the overriding social, economic, legal, technical, and other considerations set forth in the Statement of Overriding Considerations included herein. Each of these "Class I" impacts identified by the Final EIR are discussed below, along with the appropriate findings as per CEQA Section 15091:

Additionally, there is one significant, unavoidable impact that would result from the proposed PG&E power line, which is not under County jurisdiction for approval; this impact would be rendered less than significant by adoption of an alternative power line route identified and recommended in the EIR (Section 5.3.2, *Power Line Alternative 1*). If PG&E selected any route other than this Alternative, additional CEQA environmental review and permitting might be required, with California Public Utilities Commission as lead CEQA agency.

### **Aesthetic/Visual Significant Impacts** (EIR Section 3.2.5.6):

Impact VIS-1. Wind turbine generators (WTGs) will be visible from public viewing areas on San Miguelito Road near the project site, causing significant, unavoidable visual impacts. Short term visual impacts due to construction will be reduced by mitigation measures that restrict location of construction activities and materials storage. Visual impacts of the built project will be reduced by other mitigation measures, including requirements of a Landscape and Lighting Plan, WTG matte finish and neutral color, and limiting WTG lighting to that required by FAA. These mitigation measures are required as conditions of approval for the project. However, due to the large scale of the WTGs (up to 397 feet tall), there is no feasible way to screen them from view, and there are no known measures that would further reduce the visual impacts.

Impact VIS-2. Wind turbine generators (WTGs) will be located mainly on and near ridgelines, which is technically necessary to exploit the wind resource effectively. Due to their size and ridgeline siting, WTGs will be visible from long distances and cause significant impacts to views from San Miguelito County Park and Jalama Beach County Park (at distances of 1+ miles and 4.5 miles from the project site, respectively). Conditions of approval concerning WTG lighting and WTG finish and color will minimize visual impacts. However, due to the large scale of the WTGs, there is no feasible way to screen them from view, and there are no known measures that would further the visual impacts.

### **Biological Resources Significant Impacts** (EIR Section 3.5.7.3):

<u>Bio-10</u>. Collisions with WTGs during operation of the Lompoc Wind Energy Project will result in fatalities of an unknown number of birds and bats, which may include endangered, protected, or other special status species. The impacts are potentially significant and are unavoidable. The numbers of fatalities of different species cannot be predicted accurately and depend on many complex factors that are not well understood by present-day science. Options for reducing potential impacts are limited. A primary consideration is to avoid locating wind energy projects in areas of heavy bird or bat usage. Baseline studies in the EIR indicate that the Lompoc Wind Energy Project site has relatively low bird and bat usage compared to existing, high-mortality wind farm sites, and on that basis the project is not expected to kill exceptionally large numbers of birds or bats. WTGs would be located mainly on and near ridgelines, which is a technically necessary to exploit the wind resource efficiently. Ridgeline siting may increase risk to some raptor species. The project layout avoids placing WTGs in wooded areas that could attract birds or bats and thereby increase collision risk.

Mitigation measures have been developed to reduce potential for bird or bat collisions with WTGs and other project structures. These measures include: 1) buffer zones between WTGs and areas likely to attract birds and bats (e.g., raptor nests, riparian zones); 2) project design features (e.g., unguyed meteorological towers, underground power lines); and 3) a Monitoring and Adaptive Management Plan. This mitigation plan is designed to collect information on bird/bat activity in the project area, monitor bird/bat fatalities during project operations, and respond with specific measures if mortality exceeds stipulated thresholds. These adaptive management measures include habitat modifications to reduce bird/bat attraction to the site, project design modifications, conservation research on affected species, and contributions to programs to enhance recovery of affected species or better understand bird/bat interactions with wind farms. It is technically infeasible, in advance of construction, to predict where or when fatalities will occur with enough precision to prevent the impacts. However, the adaptive management plan provides reactive options that may reduce future mortality, including possible limited curtailment of operations to prevent extreme impacts, in cases where they can be predicted.

Additional mitigation measures were considered in an effort to identify additional, feasible options to prevent bird/bat fatalities or compensate in advance for potential fatalities. Measures considered include more open-ended WTG shutdown requirements and offsite conservation easements. Such options were dismissed for three reasons: 1) Shutdowns would not be effective in preventing fatalities, unless fatalities occur in a pattern that allows prediction of which specific WTG(s) will cause excessive fatalities at certain times and/or under certain conditions in the future. Shutting WTGs down in response to fatality events has little or no value as prevention unless such a pattern is demonstrated. 2) WTG shutdowns may be inconsistent with the stated project objectives, in particular: "To develop an economically viable wind energy project that will support commercially available financing." While limited shutdowns could in some cases be a justified and feasible preventative measure, requirements for shutdowns that are discretionary or open-ended have potential to destroy project economic viability or preclude project financing,

and thus are infeasible. 3) Offsite conservation easements or habitat enhancements must be located sufficiently far away from the wind farm that they do not attract birds to the vicinity. The nexus between bird/bat fatalities at the project site and distant, offsite habitat conservation easements or enhancement measures is very weak, particularly given the abundance of similar habitat throughout the project vicinity and region.

These points considered, the mitigation measures, detailed in EIR Section 3.5.7.5 as amended on September 30, 2008, will provide maximum feasible mitigation for the significant impacts to birds and bats resulting from collisions with WTGs. No other feasible measures are known that would further mitigate these impacts.

In addition to the significant, unavoidable impacts described above, the Final EIR for the Lompoc Wind Energy Project identified 27 significant but mitigable (Class II) impacts in the following subject areas: Air Quality, Biological Resources, Cultural Resources, Fire Hazards and Emergency Services, Geology/Soils, Land Use, Noise, Paleontological Resources, Risk/Safety, Traffic/Circulation, and Water Resources. These Class II impacts are identified in Table 4 and discussed in Section 6.1.1.2 of the September 30, 2008, Planning Commission staff report. The mitigation measures recommended in the Final EIR and adopted as conditions of approval for this project will reduce all of these potentially significant impacts to less than significant levels.

### 1.6 MITIGATION WITHIN THE JURISDICTION OF ANOTHER PUBLIC AGENCY:

The 115 kV power line for the project will be constructed by PG&E. Although it is described in the Final EIR, it is not part of the project being approved by the Planning Commission, being under the sole jurisdiction of the California Public Utilities Commission (CPUC). The power line, as described in the Final EIR Project Description (including specified Avoidance and Protection Measures) and the route specified in and with the Power Line Alternative 1, will not result in significant environmental impacts. If PG&E were to deviate from the project description or route, potentially causing significant impacts that were not identified in the EIR, the matter would be within the responsibility and jurisdiction of CPUC to resolve.

California Department of Fish and Game (CDFG) is expected to require an incidental take permit pursuant to California Fish & Game Code (F&G Code) Sec. 2081 for impacts to Gaviota tar plant and also a streambed alteration agreement pursuant to Sec. 1602. CDFG staff have indicated that, based on either Sec. 2081 or 1602, they may decide to assume jurisdictional authority over the mitigation program for impacts to birds and bats resulting from WTG collisions. CDFG does not have explicit permitting authority applicable to bird and bat impacts and cannot issue "incidental take permits" for California fully protected species. However, unintentional take of such species carries criminal penalties under F&G Code, which CDFG is responsible to enforce. If CDFG, as a Responsible Agency, takes over implementation of the applicable mitigation measure (Bio-Wildlife-16), the County would not be involved in oversight or monitoring.

1.7 NO FEASIBLE ALTERNATIVE IDENTIFIED: The Final EIR for the Lompoc Wind Energy Project evaluated four alternative project locations, two reduced project alternatives, and the "no project" alternative as methods of reducing or eliminating potentially significant environmental impacts. These alternatives are infeasible for the reasons stated below.

Alternative routes for the 115 kV power line that is necessary for the project to operate were also considered in the EIR. One of these routes (Power Line Alternative 1) was found feasible and is recommended to minimize environmental impacts. As the power line is not part of the project subject to County approval, it is not discussed further here.

<u>Alternative Sites</u>. The selection of alternative sites evaluated in the EIR was based on a recent study that compares potential wind energy project sites in Santa Barbara County (Community Environmental Council, *A New Energy Direction: A Blueprint for Santa Barbara County*, November 2007). The sites considered are:

- Zaca Lake Region, consisting of over 25 miles of ridge crest approximately 10 miles northeast of Los Olivos and Santa Ynez near Zaca Lake;
- The Channel Islands of Santa Cruz, San Miguel, and Santa Rosa;
- Offshore areas near Vandenberg Air Force Base;
- The Hollister Ranch Region, consisting of the hill crests north of the Hollister Ranch.

The alternative sites were found infeasible based on site suitability issues, inadequate infrastructure, lack of consistency with the County General Plan and regulations, and ability to gain site control and economic viability. The alternative sites would not avoid or substantially reduce environmental impacts, and could increase impacts, particularly in the areas of aesthetic/visual resources, biological resources, archeological and paleontological resources, and land use/planning. In addition, the alternative would fail to achieve some of the project objectives due to the delays and uncertainties associated with developing a wind project at these sites, all of which would present significant regulatory or environmental hurdles.

### Reduced Project. Two reduced project alternatives were considered in the Final EIR:

- Project Alternative 1 would prohibit placing WTGs in locations visible from Jalama Beach and Miguelito County Parks. WTGs would be highly constrained or prohibited along the western part of the southernmost ridge and the northeastern area of the project site. This alternative would substantially reduce the Class I visual impacts, but visual impacts (Impact VIS-1) would remain significant. It would potentially also reduce the Class I impacts to birds and bats and several Class II impacts, depending on the final project layout.
- Project Alternative 2 would include the restrictions of Project Alternative 1, but would further limit the project to a single construction phase. It would also limit total power generating capacity to 82.5 megawatts, the amount of the proponent's power purchase agreement with PG&E. This alternative would reduce Class I impacts to birds and bats and several Class II operational impacts to a greater degree than Alternative I. It would also reduce construction-related impacts by limiting construction to a single phase. Project Alternative 2 is identified as the Environmentally Superior Alternative (EIR Section 5.4.4), because significant operational and construction impacts would be less than the proposed project or Project Alternative 1.

The Planning Commission finds Project Alternatives 1 and 2 infeasible and rejects them in favor of the proposed project, for the following reasons. These alternatives would prohibit WTGs in areas of prime wind resources and limit the generation capacity of the project in the most productive areas. The project proponent states that the restriction of WTGs along the southern ridges would make these project alternatives economically infeasible. Although the County has not been provided with the proponent's proprietary wind study data or financial analysis, County staff have independently verified that the southern ridge has much greater wind resource potential than the rest of the project site. Wind resource maps obtained from the California Energy Commission show that the wind power potential along the southern ridge ranges from Class 3 to 6, on a scale of 1 to 7, whereas the rest of the project site is in the range of Class 1-4. The only large acreages in buildable areas with Class 5-6 wind potential are located on the western part of the southern ridge. The wind resource maps strongly support the proponent's contention that the alternatives are economically infeasible.

Furthermore, limiting the project to less than its commercial power generation potential would not fully realize the public and private project objectives or benefits, including development of alternative energy sources, sustained viability of agricultural uses, and additional tax revenues.

No Project. This alternative would result in no environmental impacts, but would fail to meet any of the proponent's project objectives, as outlined in Section 1.3 of the Final EIR. Furthermore it would fail to provide any of the identified project benefits or satisfy any of its public objectives, including development of alternative energy sources, sustained viability of agricultural uses, and additional tax revenues. Therefore, the "no project" alternative is rejected.

- 1.8 STATEMENT OF OVERRIDING CONSIDERATIONS: The Final EIR for the Lompoc Wind Energy Project identifies project impacts to Aesthetic/Visual Resources and Biological Resources as significant environmental impacts which are considered unavoidable. The Planning Commission therefore makes the following Statement of Overriding Considerations which warrant approval of the project notwithstanding that all identified significant impacts are not fully mitigated. Pursuant to CEQA Sections 15043, 15092 and 15093, any remaining significant effects on the environment are acceptable due to these overriding considerations:
  - 1. The project will generate up to 285 million kilowatt hours of clean, renewable wind power annually, which will help meet regional energy needs in an efficient, sustainable, and environmentally sound manner. (See Class IV Impact *EEU-1*, EIR Section 3.7.3.3.) This will support the United States Department of Energy goal of increasing the overall use of wind power to generate electricity and assist California in meeting its legislated Renewable Energy Portfolio standards for the generation of renewable energy in the state. The Energy Element of the Santa Barbara County Comprehensive Plan recognizes the environmental and economic benefits of alternative energy generation and encourages development of alternative energy technologies in the County. (See EIR Sections 3.7.2.1 to 3.7.2.3.)
  - 2. The project will offset the need for additional electricity generated from fossil fuels and thereby assist the California in meeting its air quality goals and reducing greenhouse gas emissions. (EIR Section 4.5.3.1.)
  - 3. The project is compatible with the existing agricultural use. It will promote the long-term economic viability of agricultural uses in the Santa Barbara County by providing financial support to property owners, who can use the funding to enhance agricultural operations. Project road maintenance will also enhance agricultural operations by improving access throughout the project properties. (See Class IV Impact *AG-1*, EIR Section 3.3.3.3.)
  - 4. The project will provide Santa Barbara County, school districts, and special districts, including the Lompoc Hospital with additional tax revenues. (See Staff Report for Planning Commission hearing September 30, 2008, Section 6.1.1.4).
- 1.9 ENVIRONMENTAL REPORTING AND MONITORING PROGRAM: Public Resources Code Section 21081.6. requires the County to adopt a reporting or monitoring program for the changes to the project which it has adopted or made a condition of approval in order to mitigate or avoid significant effects on the environment. The approved project description and conditions of approval, with their corresponding permit monitoring requirements, are hereby adopted as the monitoring program for this project. The monitoring program is designed to ensure compliance during project implementation.

These conditions also require that an Environmental Quality and Assurance Program (EQAP) be prepared to ensure compliance during project implementation with those measures included in the

project description and with those conditions imposed on the project in order to mitigate or avoid significant effects on the environment.

### 2.0 ADMINISTRATIVE FINDINGS

### 2.1 CONDITIONAL USE PERMIT FINDINGS

Pursuant to Subsection 35.82.060.E.1 of the Santa Barbara County Land Use and Development Code, a Conditional Use Permit application shall be approved or conditionally approved only if the review authority first makes all of the following findings, as applicable:

a. The site for the proposed project is adequate in terms of location, physical characteristics, shape, and size to accommodate the type of use and level of development proposed.

The project properties encompass 2,950 acres, which will accommodate the proposed 65 wind turbine generators (WTGs) without aversely affecting its primary use for commercial agriculture. The site is well-suited for a wind farm, due to high wind resource potential on over the ridges and its relatively remote, rural location, which minimizes compatibility issues and visual, noise, and safety impacts.

b. Environmental impacts. Within the Inland area significant environmental impacts will be mitigated to the maximum extent feasible.

As discussed in Section 6.1 of the Staff Report for the Planning Commission hearing September 30, 2008, and the CEQA findings above, the significant environmental impacts will be mitigated to the maximum extent feasible. Significant, unavoidable impacts to Aesthetic/Visual and Biological Resources cannot be mitigated to a less than significant level and are addressed in CEQA Finding 1.8, above.

c. Streets and highways are adequate and properly designed.

Road construction is limited to gravel access roads on the project properties. The final project layout and grading plans are subject to County approval. Any damage to public roads during construction will be restored following construction, pursuant to conditions of approval (Traf-1 to Traf-3). No more than 10 employees will be present on the project site during normal operations, and the additional traffic generated on San Miguelito Road will not affect the level of service (rated A).

d. There will be adequate public services, including fire protection, police protection, sewage disposal, and water supply to serve the proposed project.

Fire, police, and emergency services are discussed in Section 3.8 of the EIR. The project is not expected to significantly increase demand for services. The project proponent will submit a fire protection plan prior to issuance of a Land Use Permit, which among other things will address the need for "dedicated repeaters" to summon fire or emergency services in case of phone system outages. The project will have low water needs, estimated at up to 500 gallons per day, which will be supplied by a low-producing, onsite well or spring. Project water use will not affect any mapped groundwater basin. Water to fill the fire water tank may be trucked in to the site if necessary. Sewage disposal will be by means of a leach line system near the Operations and Maintenance building, which will be installed pursuant to County Code.

e. The project will not be detrimental to the comfort, convenience, general welfare, health, and safety of the neighborhood and will be compatible with the surrounding area.

The project is situated in a relatively remote, rural location, surrounded by agriculturally zoned properties and undeveloped Vandenberg land. It is not located in a conventional neighborhood. Most of the properties that are in the immediate project vicinity and will be within view of the WTGs or exposed to the project during ongoing operations are project participants, which will minimize visual compatibility issues. The project will be compatible with the surrounding agricultural uses, and will not be detrimental comfort, convenience, general welfare, health, or safety of the neighborhood. Potential noise and safety impacts will be mitigated to less than significant by conditions of approval.

f. The proposed project will comply with all applicable requirements of this Development Code and the Comprehensive Plan, including any applicable community or area plan.

As discussed in detail in Section 6.2 of the Staff Report for the Planning Commission hearing September 30, 2008, the project, as conditioned and with adoption of the requested Variance, is consistent with the Comprehensive Plan. As discussed in Section 6.3 of the Staff Report, it also complies with the County's Land Use and Development Code, in particular Chapter 35.57 Wind Energy Systems.

g. In designated rural areas the use will be compatible with and subordinate to the rural and scenic character of the area.

The County's Comprehensive Plan Visual Resources Policy 2 states: "In areas designated as rural on the land use plan maps, the height, scale, and design of structures shall be compatible with the character of the surrounding natural environment, except where technical requirements dictate otherwise. Structures shall be subordinate in appearance to natural landforms; shall be designed to follow the natural contours of the landscape; and shall be sited so as not to intrude into the skyline as seen from public viewing places." Commercial wind farms are a permitted use in rural agriculturally zoned area, and are exempted from restrictions on height and ridgeline placement of WTGs based on technical feasibility (County Land Use and Development Code Sec. 35.30.090.E.3.d; 35.57.050.K). The height, scale, and design of the WTGs and power poles are dictated by technical requirements, and impacts would be mitigated to the maximum extent feasible. Therefore, the project is consistent with policy and compatible with the rural character, to the maximum extent feasible in consideration of technical requirements. (See also Section 6.2 of the Staff Report for the Planning Commission hearing September 30, 2008.)

### 2.2 VARIANCE FINDINGS

Pursuant to Subsection 35.82.200.E of the Santa Barbara County Land Use and Development Code, a Variance application shall be approved or conditionally approved only if the review authority first makes all of the following findings:

a. Due to special circumstances applicable to the subject property, including location, shape, size, surroundings, or topography, the strict application of this Development Code deprives the subject property of privileges enjoyed by other property in the vicinity and under identical zone classification.

County Land Use and Development Code (Sec. 35.57.050.G) requires wind turbine generators (WTGs) to be set back from property lines a distance equal to the full system height, including blades (up to 397 feet). The variance application requests that the setback be reduced to the WTG blade length (up to 135 feet) from adjacent properties that

are project participants and along the Vandenberg property line. The WTG blades would in no case overhang the property lines. The variance would not apply along property lines of adjacent properties that are not project participants, on the north and east project perimeter. The reason for the variance request is that in some cases the property lines follow ridge line, and it is necessary to site the WTGs close to the ridgeline in order to best exploit the wind resource. Shifting WTGs up to 397 feet away from the ridgeline to comply with Code would fail to capture the maximum wind energy and place the WTGs on steeper slopes, creating engineering difficulties, unnecessary environmental impacts, and increased costs. Thus, the location of the property lines in relation to ridgelines deprives some project properties of the use of prime WTG sites. The variance would remedy this situation to the extent feasible.

b. The granting of the Variance shall not constitute a grant of special privileges inconsistent with the limitations upon other property in the vicinity and zone in which the property is situated.

As this is the first large-scale wind farm in the County and the first variance request of its kind, the WTG setback restrictions have not previously been addressed for other projects or properties. It is anticipated that similar variances would be granted for future projects under the same circumstances.

c. The granting of the Variance will not be in conflict with the purpose and intent of this Development Code or the Comprehensive Plan.

The variance would not conflict with any Code requirement, would not create any safety concerns, and would support Comprehensive Plan Energy Element Goal 5, which encourages development of alternative energy sources.

### SANTA BARBARA COUNTY CONDITIONAL USE PERMIT

County Land Use & Development Code Section 35-1 of Chapter 35 of the County Code

### CASE NO. 06CUP-00000-00009

### I. A Conditional Use Permit is Hereby Granted:

TO: Pacific Renewable Energy Generation, LLC, a subsidiary of Acciona Wind Energy, USA LLC

APN #s: 083-080-004, 083-090-001, 083-090-002, 083-090-003, 083-100-004,

083-100-008, 083-250-011, 083-250-019, 083-090-004, and 083-100-007.

PROJECT ADDRESS: 3525, 4700, 4705, 5500, and 5555 San Miguelito Road and

5 adjacent parcels without street addresses

ZONE DISTRICT: AG-II-100

AREA/SUPERVISORIAL Lompoc / Third

DISTRICT:

FOR: Lompoc Wind Energy Project

### II. This permit is subject to compliance with the following conditions:

1. This Conditional Use Permit is based upon and limited to compliance with the project description and conditions of approval set forth below. Any deviations from the project description, exhibits or conditions must be reviewed and approved by the Planning Commission for conformity with this approval. Deviations may require modification to the permit and/or further environmental review. Deviations without the above described approval will constitute a violation of permit approval.

# The project description is as follows:

The project is a commercial wind farm consisting of wind turbine generators (WTGs) plus the infrastructure and support facilities necessary for operation. The following is a brief summary of the project description. The complete project description in contained in the final EIR for this project dated August 2008, which is incorporated by reference.

The WTGs will be sited along ridges entirely within the County's Inland Zone. The property comprises 10 privately owned parcels. The project owner/operator is constructing the project under lease agreements with the landowners. Project access is via

San Miguelito Road. Project development may be in up to 3 phases, with the final phase beginning no later than 7 years following issuance of this CUP. Construction of the first phase will require 6-10 months; subsequent phase(s) would be shorter. Construction will require grading of 490,000 c.y., temporary ground disturbance of 196 acres, and permanent disturbance of 40 acres. A maximum of 10 people would be employed onsite during the operational phase. The anticipated project life is 30 years. At the end of its useful life, several options are available, including "repowering" (i.e., replacement of WTGs) or decommissioning. Additional permitting will be required at that time.

The project includes the following components:

- Wind Turbine Generators (WTGs). Up to 65 WTGs, to be located in specified construction corridors. The WTGs shall not exceed 397 feet in overall height, including tower (up to 262 feet) and blades (up to 135 feet).
- **Access Roads.** Approximately 5.5 miles of new, gravel access roads and widening/improvement of 5.5 miles of existing roads. Bridge spanning Honda Creek.
- Operations and Maintenance Facility (O&M). A 5,000 square foot building located on approximately 2 acres at the intersection of San Miguelito Road and Sudden Road. Includes office, maintenance facility, parts storage, and two 5,000 gallon water tanks, one reserved exclusively for fire water. Water supply from an onsite well and/or trucked in; sewage disposal by leach line system.
- **Project Substation.** Substation to transform the generated electricity from 34.5 kV to 115 kV; connects to a new 115 kV PG&E power line. (The PG&E power line is not part of the project permitted under this CUP.)
- **Electrical Collection Lines and Communication System.** 34.5-kV collection lines and communication cables running underground, or in some cases aboveground where undergrounding is infeasible.
- **Meteorological Tower(s).** Up to 10, unguyed lattice towers up to 262 feet in height. Two temporary, guyed towers that will be removed before start of operations.

The grading, development, use, and maintenance of the property, the size, shape, arrangement, and location of structures, parking areas and landscape areas, and the protection and preservation of resources shall conform to the project description above and the hearing exhibits and conditions of approval below. The property and any portions thereof shall be sold, leased or financed in compliance with this project description and the approved hearing exhibits and conditions of approval hereto. All plans (such as Landscape and Tree Protection Plans) must be submitted for review and approval and shall be implemented as approved by the County.

Within 18 months after granting this permit, construction and/or the use shall commence. (18 months is measured from expiration of a 10 day appeal period, or the date after the matter is heard and approved on appeal to the Board of Supervisors.)

- 2. Developer shall defend, indemnify and hold harmless the County or its agents, officers and employees from any claim, action or proceeding against the County or its agents, officers or employees, to attack, set aside, void, or annul, in whole or in part, the County's approval of the Conditional Use Permit. In the event that the County fails promptly to notify the applicant of any such claim, action or proceeding, or that the County fails to cooperate fully in the defense of said claim, this condition shall thereafter be of no further force or effect.
- 3. In the event that any condition imposing a fee, exaction, dedication or other mitigation measure is challenged by the project sponsors in an action filed in a court of law or threatened to be filed therein which action is brought within the time period provided for by law, this approval shall be suspended pending dismissal of such action, the expiration of the limitation period applicable to such action, or final resolution of such action. If any condition is invalidated by a court of law, the entire project shall be reviewed by the County and substitute conditions may be imposed.
- 4. A Substantial Conformity Determination (SCD) shall be required following approval of final project plans for each project development phase, including the final layout of wind turbine generators and other project components and mitigation plans, prior to issuance of a Land Use Permit (LUP) for that development phase. A separate SCD and follow-up LUP may be issued for temporary meteorological towers prior to submittal of final plans for the entire, first development phase.
- 5. This Conditional Use Permit is not valid until the SCD and LUP for the development and/or use has been obtained. Failure to obtain said SCD and LUP shall render this Conditional Use Permit null and void. Prior to the issuance of the SCD and LUP, all of the conditions listed in this Conditional Use Permit that are required to be satisfied prior to issuance of the LUP must be satisfied. Upon issuance of the LUP, the Conditional Use Permit shall be valid. The effective date of this Permit shall be the date of expiration of the appeal period, or if appealed, the date of action by the Board of Supervisors.
- 6. If the Planning Commission determines at a Noticed Public Hearing that the permittee is not in compliance with any permit condition(s), pursuant to the provisions of Subsection 35.84.060.B of the County Land Use & Development Code, the Commission is empowered, in addition to revoking the permit pursuant to said section, to amend, alter, delete, or add conditions to this permit.

- 7. Any use authorized by this CUP shall immediately cease upon expiration or revocation of this CUP. Any LUP issued pursuant to this CUP shall expire upon expiration or revocation of the CUP. CUP renewals must be applied for prior to expiration of the CUP.
- 8. The Applicant's acceptance of this permit and/or commencement of construction and/or operations under this permit shall be deemed to be acceptance by the permittee of all conditions of this permit.
- 9. Within 24 months after the effective date of this permit, construction and/or the use shall commence. Construction or use cannot commence until an LUP has been issued.
- 10. If the applicant requests a time extension for this permit/project, the permit/project may be revised to include updated language to standard conditions and/or mitigation measures and additional conditions and/or mitigation measures which reflect changed circumstances or additional identified project impacts. Mitigation fees shall be those in effect at the time of issuance of the LUP.

# III. Additional Required Conditions from EIR Mitigation Measures:

#### **AESTHETICS/VISUAL RESOURCES**

Materials Storage. All construction materials and excavated materials shall be stored away from San Miguelito Road to reduce impacts on mountain views. Materials storage shall be confined to within the Wind Turbine Generator (WTG) corridors, staging areas, and Project substation and Operations and Maintenance (O&M) facility areas. Plan Requirement: P&D will confirm that a notation regarding materials storage is denoted on building plans. Timing: P&D will review and approve the plan notation prior to approval of the Land Use Permit for each phase of Project construction.

<u>MONITORING</u>: P&D staff will conduct inspections as needed during construction activities along San Miguelito Road to confirm and enforce compliance. (*Mitigation Measure Vis-1*)

Aest -2 Location of Construction Activities. Construction activities shall be confined to within the WTG corridors, staging areas, and the Project Substation and O&M facility areas. Plan Requirement: P&D staff will confirm that a notation regarding construction activities and materials storage is denoted on building plans. Timing: P&D staff will review and approve the plan notation prior to approval of the Land Use Permit for the first phase of Project construction and

prior to approval of the Land Use Permit for construction of subsequent project phases.

<u>MONITORING</u>: P&D staff will conduct inspections as needed during construction activities to confirm and enforce compliance (*Mitigation Measure Vis-2*)

Aest -3 Contribution to County Parks Fund. The Project owner/operator shall make a one-time \$100,000 payment to the County Parks Department. The County Parks Department shall use these funds exclusively to preserve and enhance the natural beauty of Miguelito County Park and Jalama Beach County Park. Plan Requirement and Timing: The Project owner/operator shall provide the payment to County Parks Department prior to approval of the Land Use Permit for the first phase of construction.

**MONITORING:** P&D staff will confirm receipt of payment prior to approval of the Land Use Permit for the first phase of construction. (*Mitigation Measure Vis-3*)

Landscape and Lighting Plan. The Project owner/operator shall submit a Landscaping and Lighting Plan to P&D for review and approval. All exterior facility night lighting shall be included in the Plan, with the exception of FAA-required obstruction lighting on WTGs (see Condition *Lu-1*). Lighting shall be of low glare design and shall be hooded to direct light downward. Measures to minimize the attraction of birds to facility lighting shall be developed and presented in the Plan. Plan Requirement and Timing: The Landscape and Lighting Plan shall be reviewed and approved by P&D prior to approval of the Land Use Permit for the first phase of construction and subsequent phases of construction.

**MONITORING:** P&D staff shall conduct inspections as needed during construction and operations to confirm and enforce compliance. (Mitigation Measure Vis-4)

Aest -5 Construction Debris. The Project owner/operator shall ensure that all excess construction debris is cleared from the site. Plan Requirement and Timing: This requirement shall be noted on final construction plans. Debris clearance shall be completed prior to initial operation of each phase.

**MONITORING:** P&D shall site inspect after construction and prior to initial operations. (Standard Condition Aest-9)

# **AIR QUALITY**

- **AQ-1 Construction Equipment Emission Reduction Plan.** A Construction Equipment Emission Reduction Plan shall be prepared by the Project owner/operator and shall contain the following elements. These measures are based on the construction impact mitigation measures for equipment exhaust summarized in the SBCAPCD guide (SBCAPCD, 2007).
  - a. *Catalytic Converters* Ensure that catalytic converters are installed on all gasoline-powered equipment, if feasible. Install diesel catalytic converters, diesel oxidation catalysts, and diesel particulate filters as certified and/or verified by EPA or California on diesel equipment, if available.
  - b. *High Pressure Fuel Injectors* Use high-pressure fuel injectors on Caterpillar engine types 3306 and 3406 DITA to reduce NO<sub>x</sub> emissions.
  - c. *Engine Maintenance* Maintain engines and emission systems in proper operating condition.
  - d. *Engine Model Year* Utilize heavy-duty diesel-powered construction equipment manufactured after 1996, whenever feasible.
  - e. *Engine Size* The engine size of construction equipment will be the minimum practical size.
  - f. **Number of Equipment** The number of construction equipment operating simultaneously will be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
  - g. *Engine Timing* Construction equipment operating onsite will be equipped with two to four degree engine timing retard or pre-combustion chamber engines.
  - h. *Equipment Replacement* Diesel-powered equipment will be replaced by electric equipment whenever feasible.
  - i. *Truck Idle Time* Idling of heavy-duty diesel trucks during loading and unloading will be limited to 5 minutes; auxiliary power units will be used whenever possible.
  - j. *Worker Trips* Construction worker trips will be minimized by requiring carpooling and by providing for lunch onsite.

**Plan Requirements**: P&D staff shall confirm that these requirements are shown on the grading and building plans. **Timing**: P&D staff shall ensure measures are included in the Construction Equipment Emission Reduction Plan and noted on building plans prior to approval of the Land Use Permit for each phase of

construction. The requirements shall be enforced throughout all construction periods.

**MONITORING**: County staff shall perform periodic site inspections of construction contractor maintenance activities. (Mitigation Measure AQ-1)

- **AQ-2 Dust Control Plan.** A Dust Control Plan shall be prepared by the Project owner/operator that contains the following directives:
  - a. *Water Application* Apply water sprays to all disturbed, active construction areas a minimum of two times per day, except when soil water content would exceed the level recommended by the soils engineer for compaction, or when weather conditions warrant a reduction in water application. Use adequate dust control to keep fugitive dust from being transmitted outside of the construction right-of-way. Perform increased dust control watering when wind speeds exceed 15 miles per hour, or as directed by the EQAP OEC. The amount of additional watering will depend upon soil moisture content.
  - b. **Soil Stabilization** Stabilize any disturbed area that would not be covered with base or paving within 14 days after completion of disturbing activities by use of soil coating mulch, dust palliatives, compaction, reseeding, or other approved methods. Soil stockpiled for more than 2 days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting soil shall be covered while in transit.
  - c. *Construction Monitoring* The contractor or builder shall designate a person or persons to monitor the Dust Control Program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties will include holiday and weekend periods when work may not be in progress.
  - d. *Limit Traffic Speed* Reduce traffic speeds on all unpaved roads to 15 miles per hour or less.

**Plan Requirements:** All requirements shall be shown on grading and building plans prior to approval of the Land Use Permit for the first phase of construction and prior to approval of the Land Use Permits for subsequent Project phases. **Timing:** The requirements of the Dust Control Plan shall be enforced throughout all construction periods.

<u>MONITORING</u>: P&D staff will ensure measures are included in the Dust Control Plan and shall perform periodic site inspections to ensure compliance. SBCAPCD shall respond to nuisance complaints. (*Mitigation Measure AQ-2*)

## **BIOLOGICAL RESOURCES**

# **Bio-1** Worker Education and Awareness Plan. The Project owner/operator shall fund a County-approved biologist to develop and implement a worker education and awareness program (WEAP) specific to the Project. The program shall be presented to contractors, project personnel, and others for which it is applicable

habitats and species and shall include, but not be limited to, the following:

a. The natural history, including sensitive species and habitats, shall be described as

due to their activities around the project site during project construction or operational phases. The program shall include information focused on sensitive

- well as the current status, reasons for decline, and protection measures relevant to the species and habitats.

  b. Contact points shall be provided for WEAP attendees to report sightings of
- b. Contact points shall be provided for WEAP attendees to report sightings of sensitive biological resources such as Gaviota tarplant, active bird nests, badger dens, and roosting bats and raptors in the vicinity of Project facilities.
- c. Attendees shall be provided with photographs of sensitive biological resources including sensitive wildlife and plant species, den and burrow entrances, and nest structures. Qualified biologists, familiar with El Segundo blue butterfly (ESBB) and Gaviota tarplant, will provide a brief educational program for all personnel prior to initiation of any construction activities within the project site. The program will include identification of ESBB, its host plant, coast buckwheat, and Gaviota tarplant; the general provisions and protections afforded to ESBB and Gaviota tarplant by the Endangered Species Act; and measures to be implemented during the Project to avoid and minimize adverse effects to ESBB and Gaviota tarplant.
- d. Attendees shall be informed verbally and in writing of the various Project tasks that require biological surveys and monitoring for resource protection.
- e. Attendees shall be provided with a photograph or description of the markers for active bird nests, trees, salvaged topsoil piles and windrows, or other mitigation areas, so that they shall know these are not to be disturbed without a biological monitor present.
- f. Attendees shall be provided with photographs of invasive weeds and instructed to report to the biologist any new populations observed near Project facilities.
- g. Attendees shall be informed not to litter. All trash and litter shall be picked up and removed from the construction sites at the end of each day.
- h. Attendees shall be informed to obey a speed limit of 15 miles per hour while traveling on the Project site to avoid collisions with wildlife and to avoid driving over or otherwise disturbing areas outside the designated construction areas.

Plan Requirements: The Project owner/operator shall submit the WEAP to P&D for review and approval 30 days prior to implementation. All contractors, project personnel, and others for which the program is applicable due to their activities around the project site during project construction or operational phases shall attend the WEAP prior to entering the Project site unescorted. The Project owner/operator shall provide copies of the training attendance sheets to P&D staff as a record of compliance with this measure on a monthly basis. Trained crew members shall receive a sticker for their hardhat from the County EQAP OEC demonstrating WEAP training. Timing: The WEAP shall be reviewed and approved by the County prior to approval of the first Land Use Permit. Implementation of WEAP training shall occur prior to the start of construction and as new crew members are added to the project.

<u>MONITORING</u>: P&D staff shall ensure compliance with the WEAP throughout all phases of construction and operation by review of attendance sheets and hardhats, inspection of the site, and interviewing workers, as appropriate. (*Mitigation Measure Bio-1*)

**Bio-2 Ground Disturbance.** The Project owner/operator shall minimize the amount of disturbance to the extent feasible including in areas devoted to WTGs; power line poles; temporary and permanent access roads; stockpiles; staging, parking and lay down areas; areas where spoil shall be used to control erosion; and areas for associated facilities. Construction activities shall avoid sensitive areas, such as riparian zones, forests, etc., where feasible. Construction shall avoid all wetlands regulated by Santa Barbara County, California Department of Fish and Game, and the U.S. Army Corps of Engineers to the extent feasible (see Condition *Bio-9*).

Where feasible, parking, lay down, storage areas, and other sites of surface disturbance shall be located in previously disturbed areas or in annual grassland (except in Gaviota tarplant habitat) and will be mowed rather than graded to keep root structures in place and thereby facilitating future revegetation. Permanent access roads shall follow routes used for construction access to reduce the amount of new road construction. Vehicles and equipment access shall follow marked routes and indiscriminate cross-country vehicle travel shall not be allowed.

**Plan Requirements:** Limits of ground disturbance, grading, access, and areas for installation of facilities shall be clearly shown on Project building plans. **Timing:** Building plans shall be submitted by the Project owner/operator and reviewed

and approved by P&D staff prior to approval of the Land Use Permit for each construction phase.

**MONITORING:** P&D staff will review Project building plans and inspect the Project site as needed during construction. P&D staff shall ensure the approved Project plans are consistent with the Site Restoration and Revegetation Plan (See Condition *Bio-3*). P&D staff shall monitor construction and revegetation activities to verify compliance and ensure requirements are fully implemented. (*Mitigation Measure Bio-2*)

- **Bio-3 Site Restoration and Revegetation Plan.** The Project owner/operator shall retain a County-approved botanist to prepare and implement a Site Restoration and Revegetation Plan. The Plan shall include the following requirements and other provisions as appropriate:
  - a. Top soil, and the seed bank it contains, shall be conserved on areas where soil is excavated such as WTG sites, access roads, and transmission pole locations. Salvage shall be accomplished by:
    - 1. Woody material shall be removed from the soil surface and piled in an area that will be out of the way during construction.
    - 2. The upper 6 to 8 inches of soil shall be scraped from the disturbance footprint and piled into a windrow in an area that will not be disturbed during construction.
    - 3. Topsoil stockpiles shall be clearly marked for avoidance.
    - 4. Windrows shall be immediately protected from wind erosion by covering them or hydromulching them to protect the pile from wind erosion. Wind erosion protection shall be renewed as needed.
    - 5. Salvaged topsoil shall be re-spread on areas that will be revegetated following construction. Salvaged topsoil rather than subsoil shall be used for this purpose unless the location is very weedy.
  - b. At final grade, the last few inches shall not be compacted to more than 75 percent to facilitate penetration by plant roots. Salvaged topsoil shall be spread over the finish grade. The grade shall not be completely smoothed. Small ridges shall be provided for seedling wind protection and to collect moisture from rain and fog. Hydroseed with soil stabilization seed mixture shall be applied between September 30 and mid-November. (Other methods of applying native seed (e.g., drill seeding, broadcast seeding followed by incorporation) may be implemented at other times, however it is preferable to apply the seed to coincide with the onset

of the fall-winter rainy season.) The hydroseed mix shall contain a mulch and binder to retard wind erosion by providing a crust over the soil surface. Native plant seeds shall be added to the hydroseed mixture or hand-broadcasted onto the site just prior to hydroseeding. Care shall be taken to avoid premature germination of native species caused by prolonged immersion in the hydroseeder. On slopes, the Project owner/operator shall augment the erosion control seed mixture with seed of native coastal scrub species native to the site and collected from the Project region. Appropriate seed mixtures for use on grassland and coastal scrub areas shall be developed in consultation with and approved by CDFG and County staff using seed of native species originating from the area between the Santa Ynez River and Hollister Ranch, and inland as far as California State Highway 1. Recommendations from the U.S. Department of Agriculture Natural Resources Conservation Service for reseeding of agricultural grazing areas shall be sought and incorporated as approved by the above agencies. The use of non-native species considered detrimental to agricultural grazing shall be avoided.

- c. For localized areas dominated by weedy species not palatable to livestock, the Plan shall consider a "grow-kill" approach that includes cycles of irrigation followed, after a suitable delay, by physical or chemical weed control methods to reduce the seedbank of weedy species by germinating them and killing the resulting seedlings prior to final seeding of the treated area.
- d. Where Central Coast scrub or Central Coast scrub/grassland mosaic has been removed by construction, revegetation will include coast buckwheat in the seed mix.
- e. The restoration areas shall be monitored for a minimum of three (3) years by a qualified botanist. Weed control shall be started within three (3) months of planting, or earlier if weeds have begun to flower. Weeding shall proceed as frequently as necessary to prevent weeds from spreading off the Project site into the adjacent area and to prevent seed set. An effort shall be made to cut weeds before they develop seeds to minimize the spread of invasive weeds. Cut mustard shall be hauled off the site and disposed of where the toxins in the stems will not affect other plants. Any new weed species not present in the Project area prior to construction shall be eradicated. At the end of the three-year monitoring period, the qualified biologist shall prepare a monitoring report detailing the success of the restoration efforts and shall provide recommendations, if needed. This monitoring report shall be submitted to the County for review and approval.
- f. Performance criteria for restoration shall be identified in the Site Restoration and Revegetation Plan to determine whether site restoration is proceeding as planned and for performance security release.

g. The Project owner/operator shall provide a performance security acceptable to P&D and equal to the cost/value of implementing and maintaining the specific measures identified in the Site Restoration and Revegetation Plan.

Plan Requirements: The Project owner/operator shall prepare the Site Restoration and Revegetation Plan and submit it to P&D staff for review and approval prior to approval of the Land Use Permit for the first construction phase. The detailed grading plan showing the limits of the grading shall be reviewed and approved by P&D staff prior to approval of the Land Use Permit for the first construction phase. The Project owner/operator shall post the site restoration performance security prior to approval of the Land Use Permit for the first construction phase and shall maintain the security until it is released by the County. Timing: The Plan shall be approved by the County prior to approval of the Land Use Permit for the first and all subsequent construction phases. The Plan shall be implemented during and after construction of the first and all subsequent Project phases. The Monitoring Report shall be submitted to the County at the end of the three-year monitoring period.

<u>MONITORING</u>: P&D staff shall review and approve the Project building plans and the Site Restoration and Revegetation Plan, and the final monitoring report for compliance with this measure. P&D staff shall monitor construction and revegetation activities to ensure the Plan is fully implemented. (Mitigation Measure Bio-3)

- Bio-4 Tree Protection and Replacement Plan. The Project owner/operator shall retain a County-approved botanist or arborist to design and implement a Tree Protection and Replacement Plan in order to protect existing native trees and minimize adverse effects of grading and construction. No ground disturbance, including grading for buildings, access ways, easements, and subsurface grading, shall occur within the critical root zone of any native tree unless specifically authorized by the approved Tree Protection and Replacement Plan. The Tree Protection and Replacement Plan shall include the following measures:
  - a. The Plan shall show the location, diameter at breast height (DBH), and critical root zone of all native and specimen trees that are potentially subject to disturbance due to Project construction and operational activities, including transport of large loads on San Miguelito Road or onsite access roads.
  - b. The Plan shall clearly identify any areas where grading, trenching, or other construction related activities would encroach within the critical root zone of any native or specimen tree and within 6 feet of the drip line for blue oaks and valley oaks. All encroachment is subject to review and approval by the County.

- c. Temporary fencing of all native and specimen trees shall be installed to protect the critical root zone. All onsite oaks shall be fenced outside of the critical root zone and all blue oaks and valley oaks shall be fenced at least 6 feet beyond the drip line. Fencing of chain link or other material acceptable to P&D shall be at least 3 feet in height and shall be staked every 6 feet. The Project owner/operator shall place signs stating "Tree Protection Area" at 15-foot intervals on the fence. Fencing and signs shall be included in Project building plans as a Tree Protection Plan Exhibit, shall be installed prior to issuance of the Land Use Permit for construction, and shall remain in place throughout all grading and construction activities.
- d. Any encroachment within the critical root zone of native trees and within 6 feet of the drip line for blue oaks and valley oaks shall adhere to the following standards:
  - 1. Any paving shall be of pervious material (gravel, brick without mortar, or turf block).
  - 2. Any trenching required within the critical root zone of a protected tree shall be done by hand.
  - 3. Any roots 1 inch in diameter or greater encountered during grading or trenching shall be cleanly cut and sealed.
- e. Construction equipment staging and storage areas shall be located in designated staging and lay-down areas depicted on Project plans submitted for Land Use Permit. No construction equipment shall be parked, stored, or operated within the protected areas. No fill soil, rocks, or construction materials shall be stored or placed within the protected area.
- f. All utility corridors and irrigation lines shall be shown on the Tree Protection Plan Exhibit. New utilities shall be located within roadways, driveways or a designated utility corridor such that impacts to trees are minimized.
- g. Any tree wells or retaining walls shall be shown on the Tree Protection Plan Exhibit as well as on grading and construction plans and shall be located outside of the critical root zone of all native trees and 6 feet beyond the drip line for blue oaks and valley oaks unless specifically authorized by the County.
- h. Access routes for equipment shall be checked for clearance prior to bringing any equipment onto the site. All trees and shrubs that require limbing or pruning shall be prepared at least 2 days prior to the arrival of the equipment and adhere to the following standards:
  - 1. All limbing shall be done under the supervision of a licensed arborist or qualified biologist.

- 2. Any inadvertently broken limbs shall be cleanly cut under the direction of a licensed arborist or qualified biologist.
- 3. In the event that damage to a native tree is so severe that its survival is compromised, the tree shall be replaced in kind as mentioned below for native trees.
- i. Only trees designated for removal on the approved Tree Protection Plan Exhibit may be removed. Any native trees which are removed, relocated, or damaged (more than 20 percent encroachment into the critical root zone or drip line for blue oaks and valley oaks) shall be replaced on a 10:1 (15:1 for blue oak and valley oak trees) basis with 1 gallon size saplings of the same species grown from seed obtained from the same watershed as the Project site. Where it is necessary to remove a tree and feasible to replant it, trees shall be boxed and replanted and a drip irrigation system with a timer shall be installed. No permanent irrigation shall occur within the critical root zone of any native or specimen tree or within 6 feet of the drip line of blue oak and valley oak trees. Drainage plans shall be designed so that tree trunk areas are properly drained to avoid ponding. Trees shall be planted, irrigated, and maintained until established (up to 5 years). The plantings shall be protected from predation by wild and domestic animals and from human interference by the use of staked, chain link fencing, and gopher fencing during the maintenance period.
- j. Any unanticipated damage that occurs to trees as a result of construction activities shall be mitigated in a manner approved by P&D. This mitigation shall include, but is not limited to, posting of a performance security, replacing native trees on a 10:1 (15:1 for blue oak and valley oak trees) ratio, and hiring a County-qualified arborist/biologist to evaluate all proposed native tree and shrub removals within 25 feet of potential ground disturbances. The arborist/biologist's report shall present biologically favorable options for access roads, utilities, drainages, and structure placement, taking into account native tree and shrub species, age, and health with an emphasis on preservation. All development and potential ground disturbances shall be designed to avoid the maximum number of native trees feasible. The required mitigation shall be undertaken immediately as directed by P&D, and a specific and detailed plan for replacement of all affected trees, including location and timing, shall be approved by P&D prior to any further work occurring on site.
- k. To guarantee tree replacement, the Project owner/operator shall provide a performance security acceptable to P&D and equal to the cost/value of implementing and maintaining the specific measures identified in the Tree Protection and Replacement Plan. Performance securities required for installation of replacement trees shall be released by the County after its inspection and

approval of such installation. Performance securities required for maintenance of replacement trees shall be released by the County after successful achievement of release criteria, as determined by the County.

**Plan Requirements:** The Tree Protection and Replacement Plan shall be submitted by the Project owner/operator to P&D for review and approval. All aspects of the Tree Protection and Replacement Plan shall be implemented by the Project owner/operator as approved. **Timing:** The Tree Protection and Replacement Plan shall be approved by P&D, and evidence of having obtained the performance security shall be provided to P&D prior to approval of the Land Use Permit for the first and all subsequent Project phases. Timing on each measure shall be stated where applicable; where not otherwise stated, all measures must be in place throughout all grading, construction, and operational activities.

<u>MONITORING</u>: P&D staff shall review building plans and the Tree Protection and Replacement Plan as necessary, and shall inspect the Project site, throughout all phases of development to ensure compliance with all tree protection and replacement measures. (*Mitigation Measure Bio-4*)

Bio-5

Pre-construction Plant Surveys. The owner/operator shall retain a County approved botanist to conduct appropriately timed pre-construction surveys for sensitive native plant species, including lichens, in all areas to be disturbed, including power line pole locations and access roads. In the event that a federally listed plant species is found on or near an area to be disturbed by the project, the FWS will be notified, the project will be adjusted to avoid impact, and other species protection measures recommended by the Service will be implemented. If a substantial portion of a "stand" of CNPS-listed or locally rare species needs to be removed for the Project and adjustment of the disturbance area boundaries to avoid the impact is not feasible, the loss will be mitigated by collection of seeds or other propagules from the plants during the appropriate time of the year. The seed or propagules shall be used for restoration in the immediate area (if suitable habitat continues to be present) or on a nearby, suitable location. In the case of having regional significance, the lichenologist lichens shall make recommendations of feasible methods to relocate and re-establish the lichens at a suitable nearby site, if avoidance is not feasible. Methods may include collecting, moving, and emplacing a sample of substrate supporting the lichen at a suitable The upper 3 to 6 inches of soil (topsoil and seedbank) shall be salvaged in all areas where the terrain allows it. Topsoil shall be windrowed and marked to keep it separated from other spoil. Topsoil piles shall be stabilized by covering the windrows or by spraying with hydromulch and binder to protect the soil from wind erosion. Salvaged topsoil shall be spread over all restored areas.

**Plan Requirements:** The detailed grading plan, showing the limits of the grading, shall be reviewed and approved by County staff prior to approval of the tentative Project map. If surveys indicate that replacement of sensitive native plants is necessary, the owner/operator shall prepare a detailed mitigation plan and submit it to the County for approval. The owner/operator shall file a performance security with the County to complete restoration. **Timing:** The mitigation plan shall be approved by the County prior to approval of the Land Use Permit for the first and all subsequent construction phases.

**MONITORING:** County staff will inspect the Project plans and site as well as review the mitigation plan to ensure compliance with this measure as appropriate. County staff will monitor construction and revegetation activities to ensure the plan is fully implemented. (*Mitigation Measure Bio-5*)

Bio-6

The Project owner/operator shall retain a Gaviota Tarplant Disturbance. qualified botanist approved by the California Department of Fish and Game (CDFG) and P&D to prepare a Gaviota Tarplant Mitigation Plan to address impacts to Gaviota tarplant and to oversee flagging of the perimeter of all approved work areas in Gaviota tarplant habitat. This Plan shall incorporate the requirements presented herein and submit it to P&D for review and approval. Gaviota tarplant habitat includes all areas of previously identified habitat plus any additional areas that are discovered during pre-construction surveys prior to ground disturbance. Gaviota tarplant is assumed to be present within all areas where it has been previously mapped even if it is not evident during preconstruction surveys because seedbank may be present that could germinate and establish under different environmental conditions. The Project design shall continue to be refined to minimize Gaviota tarplant habitat disturbance, the size of temporary excavation areas, and the size of areas where permanent loss shall occur. A determination shall be made of the total areas of (1) permanent habitat loss, (2) temporary excavations, and (3) surface disturbance for the construction phase of the Project. Site-specific mitigation measures shall be developed, in consultation with CDFG botanists, to minimize the extent of habitat disturbance and to minimize potential "take" of individuals of this species which is protected under the California Endangered Species Act (CESA). Measures and procedures shall be developed that address potential future impacts during the operations phase of the Project. Areas of temporary disturbance shall be mitigated at a 1:1 ratio using the measures described below. The Project owner/operator shall obtain a CESA permit from CDFG and shall prepare a mitigation monitoring and reporting plan meeting the requirements of CESA, as required by CDFG.

Where construction activities may impact occupied Gaviota tarplant habitat during the growing season (between the first rain and the middle of September), standing drying plants that still have ripening seed during the late fall of the year shall be collected prior to construction. Plants shall be collected by hand or in a basket mounted behind a mower. The collected material shall be dried immediately and stored dry to preserve the seeds. The salvaged plant material shall be spread on restored habitat prior to final soil stabilization. The "triple-lift topsoil salvage" procedures described below shall be employed to conserve the soil profile and soil seed bank. All topsoil handling in Gaviota tarplant habitat shall be monitored by a qualified botanist approved by CDFG and the County to work with Gaviota tarplant. Seedbank material shall be developed using the following procedures:

- a. All woody vegetation shall be cleared and stockpiled separately in a location where it shall be out of the way during construction.
- b. A 3- to 6-inch lift of soil shall be scraped from the area of Gaviota tarplant habitat where soil shall be excavated. The seedbank shall be stored in a location where it shall be out of the way during construction. The seedbank stockpile shall be clearly marked for identification and avoidance.
- c. A second 6- to 8-inch lift of the sandy soil horizon (shallower if bedrock or other soil type is encountered, such as clay) shall be scraped from the area. The topsoil lift shall be stockpiled in a location where it shall not be disturbed during construction and shall be clearly marked for identification and avoidance. The stockpiles shall be shaped to maximize water runoff.
- d. The stockpiled seedbank shall be kept dry and protected from wind erosion and disturbance per the measures for topsoil conservation throughout construction and until it is replaced on the restored sites. The stockpiles will be covered or treated with hydromulch and binder to form a crust over the soil and reduce loss to wind erosion, but the spray shall not be heavy enough to soak into the pile (to avoid soaking seeds and triggering seed germination).
- e. If the salvaged seedbank is being eroded by the wind, it shall be stabilized by spraying it with an organic soil binder used for hydroseeding.

Following excavations and other types of temporary ground disturbance in Gaviota tarplant habitat, the soil profile shall be rebuilt using salvaged and stockpiled materials by replacing them in reverse order as described below. The salvaged and dried Gaviota tarplants shall be spread on top. Procedures to be followed are:

a. The layers beneath the final seedbank layer shall be well compacted.

- b. The seedbank layer shall be more loosely compacted by spreading it dry or with minimal water. Tracking, rather than spraying, shall be used to pack the seedbank layer into place.
- c. Soil stabilization shall follow immediately.
- d. The replacement of seedbank and topsoil stockpiles shall be monitored by a botanist acceptable to CDFG and the County for work with Gaviota tarplant.
- e. Restored Gaviota tarplant sites shall be stabilized with a hydraulically applied mixture of biodegradable soil binder and wood fiber. The mulch shall be minimized so that light shall not be blocked from the tarplant seeds in the salvaged and replaced seed bank. No seed is required since the top layer on the restored site shall be composed of salvaged seed bank.

Permanent Gaviota tarplant habitat loss shall be mitigated by continuing to contribute toward the understanding of the taxonomy and ecology of this species by:

- a. Contributing to the accumulation of additional data on the range and size of subpopulations.
- b. Contributing to taxonomic research to clarify limits and relationships of Gaviota tarplant populations versus close relatives.
- c. Requesting that CDFG review the status of this species in light of recent discoveries of extensive populations.
- d. Contributing to baseline ecological research, such as germination or pollinator studies, that shall be useful for future management decisions.
- e. Participating in the regional Gaviota tarplant preserve on the Gaviota Coast.

The Project owner/operator shall provide a performance security acceptable to P&D and equal to the cost/value of implementing and maintaining specific measures identified to protect Gaviota tarplant habitat. Performance securities may be released by the County after successful achievement of approved release criteria.

**Plan Requirements:** The Project owner/operator shall submit the Gaviota Tarplant Mitigation Plan that includes the above requirements to P&D for review and approval. The detailed grading plan, showing the limits of the grading, shall be reviewed and approved by P&D staff prior to approval of the Land Use Permit for construction. The Project owner/operator shall file a performance security with the County to complete restoration. **Timing:** The Gaviota Tarplant Mitigation Plan shall be submitted by the Project owner/operator and reviewed

release criteria.

and approved by P&D prior to approval of the Land Use Permit for the first and all subsequent construction phases.

**MONITORING:** P&D shall monitor construction, restoration, and revegetation activities to ensure Gaviota tarplant protections are fully implemented. P&D staff shall verify that the perimeter of all approved work areas in Gaviota tarplant habitat are properly flagged prior to any ground disturbance in the area and shall monitor construction and revegetation activities to ensure the plan is fully implemented. (Mitigation Measure Bio-6)

**Bio-7 Kellogg's and Mesa Horkelia.** For Kellogg's and Mesa Horkelia habitats identified during pre-construction surveys (see Condition *Bio-5*), the Project owner/operator shall track over Kellogg's and Mesa Horkelia habitat, where the terrain shall safely allow it, rather than widening roads beyond the permanent road width, to minimize plant removal. The seedbank shall be salvaged and stockpiled separately from other spoil along roads and adjacent to other facilities constructed in Kellogg's and Mesa Horkelia habitat as described in Condition *Bio-3*, *Site Restoration and Revegetation Plan*, and Condition *Bio-6*, *Gaviota Tarplant Mitigation Plan*. Salvaged stockpiles shall be covered or sprayed with hydromulch and binder to crust the surface to minimize soil loss to wind erosion. Salvaged seedbank shall be spread over restored areas as described for Gaviota

**Plan Requirements:** The detailed grading plan, showing the limits of the grading, shall be reviewed and approved by P&D staff prior to approval of the final plans. If surveys indicate that replacement of Horkelia is necessary, the Project owner/operator shall prepare a detailed mitigation plan and submit it to the County for approval. The Project owner/operator shall file a performance security with the County to complete restoration. **Timing:** The Mitigation Plan and performance security shall be submitted by the Project owner/operator and reviewed and approved by P&D prior to approval of the Land Use Permit for the first and all subsequent construction phases.

tarplant, except that a normal mixture of mulch and binder shall be used. If the area is within Gaviota tarplant habitat, methods for the latter shall be used. The Project owner/operator shall provide a performance security acceptable to P&D and equal to the cost/value of implementing and maintaining specific measures identified to protect Kellogg's and Mesa Horkelia habitat. The performance security may be released by the County after successful achievement of approved

**MONITORING:** P&D shall monitor construction, restoration, and revegetation activities to ensure Kellogg's and Mesa Horkelia habitat protections are fully implemented. (*Mitigation Measure Bio-7*)

Bio-8 Native Grasslands. The Project owner/operator shall retain a County-approved botanist to resurvey the potentially affected area during the appropriate season and determine the total area with at least 10 percent coverage of native grassland species on the site (10% coverage defines "native grassland" habitat). If the total area of native grassland habitat that would be permanently removed is less than 10 percent of the total area of native grassland habitat within the Project area, loss of native grasses shall be mitigated by seedbank salvage and replacement as described for Horkelia (Condition *Bio-7*).

If the total area of native grassland habitat that would be permanently removed for the Project exceeds 10 percent of the total area of native grassland habitat within the Project area, seed shall be collected from the populations of native grasses and native grassland species on the Project sites prior to the start of construction. The seed shall be stored dry and included in the seed mixture applied to the restored areas. Drill seeding shall be performed for mixtures that include native grass seed.

The Project owner/operator shall provide a performance security acceptable to P&D and equal to the cost/value of implementing and maintaining specific measures identified to protect native grasslands. Performance securities may be released by the County after successful achievement of approved release criteria.

**Plan Requirements:** P&D staff shall review and approve the detailed grading plan, showing the limits of the grading. If pre-construction surveys indicate that replacement of native perennial bunchgrass is necessary, the Project owner/operator shall prepare a detailed mitigation plan a performance security and submit both to P&D for review and approval. **Timing:** Detailed native grassland mitigation plans and performance securities shall be submitted to P&D for review and approval, and shall be approved, prior to approval of the Land Use Permit for each construction phase, as applicable.

**MONITORING:** P&D staff shall monitor construction and revegetation activities to ensure required protections of native grasslands are fully implemented. (*Mitigation Measure Bio-8*)

**Bio-9** Wetland and Creeks Avoidance and Restoration. The Project owner/operator shall make every effort to minimize the area and degree of impact to State and

Federal wetlands and other Waters of the U.S. associated with placement of bridges, siting of the Operations and Maintenance (O&M) facility, and other construction-related tasks. All potential jurisdictional areas that may be disturbed by construction shall be delineated following all applicable standards associated with features regulated by the State of California, Santa Barbara County, and U.S. Army Corps of Engineers (USACE) for regulated wetlands, including documentation of specific surveys for presence of listed plant, invertebrate, or wildlife species that may occur there. The delineations shall apply the Arid West Supplement to the USACE Wetland Delineation Manual guidelines and shall map all features using a sub-meter differential global positioning system (DGPS). Based on the delineation, the Project owner/operator shall consult with a wetland hydrologist and botanist to design construction so that direct loss of wetland communities shall be minimized and hydrological conditions supporting the wetland shall be conserved to the maximum extent feasible, consistent with Project objectives. All final construction design plans and mapped wetland features shall be clearly presented in a Wetland and Creeks Avoidance and Restoration Plan submitted to P&D for review and approval. The Wetland and Creeks Avoidance and Restoration Plan shall include the WTG corridors as well as other project components and shall specify methods, including those referenced herein, for the restoration of lost and/or disturbed features associated with bridge crossings and siting of the O&M facility, including calculations, proposed restoration locations, cattle or other disturbance barriers, plant mixes, quantitative restoration goals (maximum criteria for weedy species and minimum criteria for native hydrophytic plants), and temporal and native plant composition success criteria.

At a minimum, any temporarily disturbed wetlands associated with bridge crossings or siting of the O&M facility shall be restored to pre-construction conditions at an areal ratio of 1:1, with a clearly defined temporal goal and success criteria. If any jurisdictional feature is permanently lost, it shall be mitigated by the creation of the same type of wetland in the Project area at an areal ratio of 2:1. All wetland areas within 50 feet of Project-related ground disturbance shall be protected from siltation by placement of silt fence, straw bales (composed of certified weed-free straw), or other barriers. Barriers shall be in place prior to ground disturbance.

No fueling of vehicles or equipment shall occur within 100 feet of the top of any creek bank or within 100 feet of any seep or spring. Spill containment measures shall be implemented at all refueling sites. In the event that petroleum products escape into a creek, seep, or spring, every effort shall be made to immediately

remove the material using plastic sheets, absorbent blankets, or other materials, as necessary.

Runoff from fresh concrete shall be directed away from the top of any creek bank and from any seep or spring into a plastic-lined hollow. Any washout from concrete trucks shall be collected within a designated contained and lined area and removed from the site. Dried concrete scraps shall be removed and all trash and litter shall be picked up and removed from the construction sites at the end of each day.

Performance criteria for restoration shall be identified in the Wetland and Creeks Avoidance and Restoration Plan. The Project owner/operator shall provide a performance security acceptable to P&D and equal to the cost/value of implementing and maintaining the specific restoration measures identified in the Wetlands and Creeks Avoidance and Restoration Plan.

Plan Requirements: The Wetland and Creeks Avoidance and Restoration Plan and the Project grading plan showing the limits of the grading shall be reviewed and approved by P&D prior to approval of the Land Use Permit for construction. The Project owner/operator shall file the performance security with the County prior to P&D approval of the Land Use Permit for construction. Timing: The Wetland Delineation and Avoidance and Restoration Plan shall be submitted to the County for approval prior to approval of the Land Use Permit for any project construction that may affect wetlands. Any proposed removal or temporary disturbance to jurisdictional features shall be approved by the County, CDFG, and the USACE prior to any construction that may affect wetland features. Sitespecific wetland creation/restoration plans shall be developed and approved by the County, in consultation with CDFG and USACE, as appropriate, prior to approval of the Land Use Permit for construction. The Project owner/operator shall independently consult with CDFG and USACE as necessary. The Plan shall be implemented within one year of the disturbance and in consultation with CDFG and P&D staff. The Plan shall be implemented as required throughout all Project phases.

**MONITORING:** A County-approved biological/wetland monitor shall be present for all activities that have the potential to directly or indirectly affect regulated wetland features. P&D staff shall monitor construction and restoration activities to ensure the plan is fully implemented. (*Mitigation Measure Bio-9*)

**Bio-10** Riparian Habitat Restoration. The Project owner/operator shall consult with the U.S. Army Corps of Engineers (USACE), the California Department of Fish

and Game (CDFG) and the County regarding impacts to Honda Creek, and other crossings if applicable. During this consultation, a determination shall be made as to whether a Riparian Habitat Restoration Plan will be required. If so, the Project owner/operator shall retain a qualified ecologist to prepare and implement a site-specific Riparian Habitat Restoration Plan for those creeks that may be disturbed by Project construction or operations. This Plan shall include, but is not limited to, the following elements:

- a. Restoration shall include native riparian species from locally obtained plants and seed stock.
- b. The new plantings shall be monitored for a period of 2 to 3 years to ensure successful establishment. Dead plants shall be replaced in kind.
- c. The new plantings shall be irrigated with drip irrigation on a timer and shall be weaned off of irrigation when root zones are established.
- d. Removal of native species in the creek shall be prohibited.
- e. Non-native species located in the work area shall be removed from the creek.

**Plan Requirements:** If such plan is required, the Project owner/operator shall submit a Riparian Habitat Restoration Plan to P&D for review and approval, in consultation with the USACE and CDFG. The Project owner/operator shall provide a performance security acceptable to P&D and equal to the cost/value of implementing the Plan to ensure restoration. **Timing:** If required, the Plan shall be approved by P&D, USACE, and CDFG prior to approval of the Land Use Permit for each Project phases, as appropriate.

<u>MONITORING</u>: P&D staff shall review Project plans and conduct site inspections as necessary inspect the Project plans and site as well as review the restoration plan for compliance with this measure as appropriate. The County staff will monitor plan implementation to ensure compliance. Permit compliance signature is required for performance security release. (Mitigation Measure Bio-10)

## WILDLIFE PROTECTION

**Pre-Construction Wildlife Surveys.** The Project owner/operator shall retain a County-approved biologist to perform a wildlife survey prior to disturbance of WTG sites. The biologist shall survey the surrounding area out to a 300-foot radius from the WTG site, the WTG footings, access roads, and staging, parking, and lay down areas prior to grading or the use of any explosives. Surveys shall be completed within 3 days before the start of initial vegetation clearance or

ground disturbance in any affected area. Results of the surveys shall be provided to P&D prior to ground disturbance. If any wildlife species are found, they shall be relocated by a qualified individual to similar habitat at least 300 feet away from construction activity.

**Plan Requirements:** Project owner/operator shall provide at least 48-hour prior notification to P&D staff and the County's EQAP OEC of each pre-construction survey. The EQAP OEC may attend all or part of each survey and shall report to P&D at least monthly on survey and wildlife relocation activities. This condition shall be printed on all Project plans. On a monthly basis, the Project owner/operator shall report compliance with this measure in writing to County staff on survey and relocation activities. **Timing:** This measure shall be implemented prior to ground disturbances during all construction phases.

**MONITORING:** P&D staff shall review reports and site inspect as necessary during construction. County staff will inspect the Project plans and site, as well as review the monthly reports to ensure compliance with this measure, as appropriate. (Mitigation Measure Bio-11a)

**Bio-11.b** Fencing Plan. To minimize the amount of disturbance to wildlife habitat, construction boundaries shall be clearly marked with fencing or staking that shall be replaced as needed during construction. Fencing shall clearly delineate the project construction areas, including areas devoted to WTGs; power line poles; temporary and permanent access roads; stockpiles; staging, parking and lay down areas; areas where spoil shall be used to control erosion; and areas for associated facilities.

**Plan Requirements:** A detailed Fencing Plan, showing the location of required fencing shall be reviewed and approved by P&D staff. A specific reference to the Fencing Plan and the requirement to comply with it shall be printed on all Project grading and building plans. **Timing:** The detailed fencing plan shall be submitted to P&D for review and approval, and shall receive such approval, prior to P&D approval of the Land Use Permit for construction.

<u>MONITORING</u>: P&D staff and the EQAP OEC shall site inspect as needed. P&D shall review construction monitoring reports to ensure the Plan is fully implemented. (*Mitigation Measure Bio-11b*)

**Bio-11.c Biological Monitoring.** The Project owner/operator shall retain a County-approved environmental monitor ("LWEP Monitor") during project construction

to monitor construction activities and to ensure compliance with all mitigation measures.

The LWEP Monitor shall be present onsite during all vegetation removal and during all of the initial ground disturbance activities for all aspects of the project, and shall regularly inspect the project site as needed after the initial ground disturbances to ensure that all mitigation measures are being implemented. The LWEP Monitor shall ensure that wildlife do not become entrapped in the excavations during installation of the WTGs and associated underground collection system from the WTGs to the substation (i.e., open trenches). Safeguards shall be implemented during daytime periods of non-activity and overnight, such as a placing a platform over the entire excavation site, flush with the ground surface, or exclusionary fencing. A form of egress (such as a ramp) shall be placed within the excavated area to provide an exit to accidentally trapped wildlife. The LWEP Monitor shall be responsible for ensuring these safeguards are in place on a daily basis.

**Plan Requirements:** The LWEP Monitor shall work closely and cooperatively with County staff and County's consultants on a daily basis or as needed. **Timing:** The LWEP Monitor shall be designated prior to the start of construction and shall be retained throughout all construction phases.

**MONITORING:** County staff will confirm that the LWEP Monitor is employed prior to start of construction and continues throughout all construction phases. (*Mitigation Measure Bio-11c*)

**Bio-11.d Monitoring Report.** The LWEP Monitor shall provide the County with Construction Monitoring and Biological Resources Mitigation Reports on a biweekly basis. The reports shall include a description of the activities that have occurred onsite, wildlife species encountered, relocation efforts, wildlife mortalities and injuries, violations or issues with construction activities, and any project-related resolutions.

**Plan Requirements:** The owner/operator shall consult and obtain any necessary permits from the appropriate regulatory agencies and provide copies to County staff. The LWEP Monitor shall report compliance with this measure in writing to County staff on survey and monitoring activities on a bi-weekly basis. Reports may be submitted electronically. **Timing:** The reports shall be submitted in the first and third week of each month to detail the previous two weeks' activities, during the first and subsequent construction phases.

**MONITORING:** P&D will review the biweekly reports and inspect the Project site as appropriate to ensure compliance with this measure. (*Mitigation Measure Bio-11d*)

#### BIO-12 NESTING BIRDS AND ROOSTING BATS

**Bio-12.a** Schedule Ground Disturbance to Avoid Nesting Season. All construction-related activities that include vegetation removal and initial ground disturbances in habitats where a biological monitor does not have a clear view of the ground shall be scheduled, as feasible, to avoid the bird nesting season (February 1 through August 31) to reduce impacts to nesting birds in the Project vicinity. If construction activities are scheduled to begin during the nesting season, the owner/operator shall still attempt to remove or mow vegetation before the onset of nesting season to reduce the threat of violating the Migratory Bird Treaty Act.

**Plan Requirements:** This Condition shall be printed on all Project plans. The LWEP Monitor shall be designated to monitor the implementation of this Condition and shall be retained throughout all construction phases. **Timing:** Construction-related activities subject to this Condition shall be scheduled, as feasible, from August 31 through February 1.

**MONITORING:** P&D staff shall review and approve Project plans prior to approval of the Land Use Permit for construction. P&D staff shall review the monthly compliance reports to ensure implementation of the requirements of this Condition. (Mitigation Measure Bio-12a)

Bio-12.b Buffer Zones. If ground disturbance or vegetation removal is scheduled to occur during the avian nesting or bat roosting season (from February 1 through August 31), the Project owner/operator shall fund a County-approved biologist to survey for active avian nests and roosting bats immediately prior to the start of construction in a given area (including removal or trimming of trees and shrubs). The survey shall occur at the sites of construction activity, as well as up to 500 feet away. If an active raptor nest is found, no construction activity shall occur within 500 feet of the nest or as directed by the County-approved biologist unless otherwise directed by CDFG. The County-approved biologist shall conduct a study to collect more detailed information on nesting raptors in the Project area. Areas of dense vegetation, including the riparian corridors along Miguelito Creek, the eucalyptus groves onsite, and mixed evergreen forest within 500 feet of Project facilities shall be surveyed at weekly intervals to collect data on nesting activities.

If any other active avian species nest or roosting bats are found, construction activity shall not occur within 150 feet of the area or as directed by the County-approved biologist unless otherwise directed by CDFG. The CDFG shall be consulted prior to any disturbance of bat maternity roosts. During the breeding season (February 1 through August 31,) efforts shall be made as directed by the biological monitor to dissuade birds from using facilities and construction equipment. Active nests and roosts shall be temporarily marked with flagging to warn workers and monitored by a biologist to ensure that construction activities do not impact these sites. The Project owner/operator shall provide all workers on the site an updated map of active nests so that construction activities within the buffers can be avoided. Construction activities and timing shall be modified to avoid impacts to nesting avian species, and bat maternity roosts. Buffer areas shall be maintained until fledglings have left the nest and the biological monitor has cleared the area.

**Plan Requirements:** The Project owner/operator shall consult with and obtain any necessary permits from the appropriate regulatory agencies and provide copies to P&D of all permits. On a bi-weekly basis, the Project owner/operator shall report on survey and monitoring activities conducted in compliance with this measure in writing to P&D staff (electronic submittal is acceptable). **Timing:** The Project owner/operator shall submit the Monitoring Report in the first and third week of each month to detail the previous two weeks, activities. This measure shall be implemented throughout the first and all subsequent construction phases.

**MONITORING:** P&D shall review the bi-weekly reports and inspect the Project site as necessary to ensure compliance with this measure. (*Mitigation Measure Bio-12b*)

Bio-13 El Segundo Blue Butterfly Habitat. The Project owner/operator shall retain a qualified, County-approved entomologist to conduct directed surveys for the El Segundo Blue Butterfly (ESBB) during the flight season (approximately mid-June to August) within all areas of coast buckwheat known to occur on the Project site, including areas that could be affected by construction, operation, or maintenance of the project. The surveys shall be documented and shall include a description of survey methodology, description and maps of the surveyed areas, and identification of locations of any ESBB observed within the Project area (including maps and GPS coordinates). Conditions at the sites where ESBB are located shall be described by the entomologist, including vegetation, soils, exposure, and other factors that may influence the occurrence of ESBB at that site.

A Plan to restore and/or enhance ESBB habitat shall be prepared by a County-approved botanist with input from a County-approved entomologist. The goal of the Plan shall be to establish coast buckwheat with other Central coast scrub species on areas having sandy soils and judged suitable for this type of restoration or enhancement by the Project biologist and County-approved entomologist. The restoration or enhancement shall, to the extent feasible, occur in or adjacent to an area of existing habitat supporting coast buckwheat on sandy soils or in a suitable area disturbed by the project. The Plan shall identify sites to be restored or enhanced and describe the approach to restoration and enhancement, including proposed density of coast buckwheat plants, which shall be generally consistent with the density of coast buckwheat in occupied ESBB habitat in the Project region, and performance criteria reflecting that density. Restoration or enhancement shall be conducted on an acre-for acre- basis. If ESBB has been found on the site, the Plan shall be submitted to the U.S. Fish and Wildlife Service approval prior to implementation.

Suitable ESBB habitat adjacent to construction areas shall be clearly marked for avoidance (e.g., by orange plastic construction fencing). The delineation shall be directed and approved by a County-approved biologist.

**Plan Requirements:** This Condition shall be printed on all Project plans. On a monthly basis, the Project owner/operator shall report on surveying and monitoring activities conducted in compliance with this measure in writing to County staff. **Timing:** This measure shall be implemented during all Project phases.

<u>MONITORING</u>: P&D shall review the Project plans and the monthly reports for compliance with this measure, and conduct site inspections as appropriate. (*Mitigation Measure Bio-13*)

## SENSITIVE WILDLIFE SPECIES

**Bio-14.a** California Horned Lizard. The Project owner/operator shall fund a County-approved biologist to survey construction areas including the sites of footings for the WTGs and power poles, access roads, and staging, parking, and lay down areas, for California horned lizards. Surveys shall be completed within 3 days before the start of initial vegetation clearance or ground disturbance in any affected area. The survey may be done in conjunction with surveys for groundnesting birds. However, the survey for horned lizards shall be performed regardless of season of the year. If horned lizards are found, they shall be

relocated by a qualified individual to similar habitat at least 300 feet away from construction activity.

**Plan Requirements:** This Condition shall be printed on all Project plans. On a monthly basis, the Project owner/operator shall report on survey and relocation activities conducted in compliance with this measure in writing to County staff. **Timing:** This measure shall be implemented throughout all construction phases.

**MONITORING:** P&D staff shall review the Project plans and the monthly reports for compliance with this measure, and conduct site inspections as necessary. (*Mitigation Measure Bio-14a*)

- Bio-14.b Silvery Legless Lizard. The Project owner/operator shall retain a County-approved biologist to survey for silvery legless lizards that could potentially occur in areas with Central Coast scrub and annual grassland with a shrub component. The biologist shall work with the equipment operator during initial vegetation clearance to identify those areas that would require legless lizard mitigation, and then to salvage and relocate exposed animals. The following technique shall be employed to avoid impacts to the silvery legless lizard:
  - a. Following initial vegetation clearance in pre-identified areas, grading shall be done in two consecutive 6-inch layers.
  - b. With each lift, the biologist shall check the areas for possible relocation of silvery legless lizards. If any are found, they shall be moved to similar habitat near shrubs at least 100 feet from the construction sites.
  - c. Monitoring for legless lizards shall be discontinued when grading reaches depths greater than 12 inches.

**Plan Requirements:** This Condition shall be printed on all Project plans. On a monthly basis, the Project owner/operator shall report in writing to P&D staff on compliance with the monitoring and relocation activities required by this Condition. **Timing:** This measure shall be implemented throughout the first and all subsequent construction phases.

**MONITORING:** P&D staff shall review Project plans, site inspect as necessary, and review the monthly reports to ensure compliance with this measure. (*Mitigation Measure Bio-14b*)

**Bio-14.c** San Diego Desert Woodrat. The Project owner/operator shall retain a County-approved biologist to survey the locations of the WTGs and access routes

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prior to construction, as well as for a distance of 50 feet away for signs of the San Diego desert woodrat. The following techniques shall be employed to avoid impacts to the San Diego desert woodrat:

- a. If signs of this species are found at or near the areas to be disturbed (such as a small stick nest within a rock overhang), it shall be evaluated for potential impact due to construction activities.
- b. If disturbance to a nest is likely to occur, the animal shall be live-trapped and relocated to a distance of 300 feet from Project activities and within similar habitat.

**Plan Requirements**: This Condition shall be printed on all Project plans. On a monthly basis, the Project owner/operator shall report in writing to P&D staff on compliance with the monitoring and relocation activities required by this Condition. **Timing**: This measure shall be implemented throughout the first and all subsequent construction phases.

**MONITORING**: P&D staff shall review Project plans, site inspect as necessary, and review the monthly reports to ensure compliance with this measure. (*Mitigation Measure Bio-14c*)

Bio-14.d American Badger. The Project owner/operator shall retain a County-approved biologist to survey, prior to construction, for badger dens in the Project area, including areas within 250 feet of all Project facilities, Wind Turbine Generator (WTG) sites, and access roads. The survey shall be performed regardless of season of the year. If badger dens are found, each den shall be classified as inactive, potentially active, or definitely active. Inactive dens shall be excavated by hand and backfilled to prevent reuse by badgers. Potentially and definitely active dens shall be monitored for 3 consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) at the entrance. If no tracks are observed in the tracking medium after 3 nights, the den shall be excavated and backfilled by hand. If tracks are observed, the den shall be progressively blocked with natural materials (rocks, dirt, sticks, and vegetation piled in front of the entrance) for the next 3 to 5 nights to discourage the badger from continued use. The den shall then be excavated and backfilled by hand to ensure that no badgers are trapped in the

**Plan Requirements**: This Condition shall be printed on all Project plans. On a monthly basis, the Project owner/operator shall report in writing to P&D staff on compliance with the survey and burrow excavation requirements of this

Condition. **Timing:** This measure shall be implemented throughout the first and all subsequent construction phases.

**MONITORING:** P&D staff shall review Project plans, site inspect as appropriate, and review the monthly reports to ensure compliance with this measure. (*Mitigation Measure Bio-14d*)

**Bio-14.e** 

Sensitive Avian Species. A County-approved biologist shall conduct a study in the spring season prior to the onset of construction activities to assess the density of special status passerines and other ground-nesting birds in areas of the Project site potentially subject to disturbance. Plots shall be established in various habitats and checked at weekly intervals to monitor for new nests of ground-nesting birds that are sensitive species, including California horned lark, California rufous-crowned sparrow, grasshopper sparrow, and burrowing owls. The surveys shall be conducted as long as birds are nesting in the Project area between February 1 and August 31. The surveys shall be discontinued when it is apparent that nesting has ceased for the season. Surveys for burrowing owls shall be conducted prior to construction in the Project area, including areas within 300 feet of all Project facilities, WTG sites, and access roads. The survey shall be performed regardless of season of the year due to this species' being present in the winter.

If construction is to occur between February 1 and August 31, all sites to be disturbed shall be surveyed for ground-nesting and shrub-nesting birds immediately prior to construction in a given area. The emphasis shall be on California horned lark, western burrowing owl, California rufous-crowned sparrow, and grasshopper sparrow. The survey shall occur at the sites of construction activity, as well as up to 300 feet away. If an active nest is found, no construction activity shall occur within 300 feet of the nest or as determined by the biological monitor and updated maps showing active nesting locations shall be distributed to the biological monitors, EQAP OEC, and crew foreman on a weekly basis. The nest shall be monitored to record any potential construction-related effects. Construction activities and timing may be modified as directed by the County to avoid impacts to nesting passerines or other ground-nesting birds.

Frequent disturbance (every few days) may be initiated in some Project areas just prior to the nesting season to discourage nesting in the construction corridor.

During both the construction and operational phases, a speed limit of 15 mph shall be established and enforced. The speed limit shall reduce the potential for loss of bird species, including passerines, due to collisions with vehicles.

**Plan Requirements:** This Condition shall be printed on all Project plans. On a bi-weekly basis, the Project owner/operator shall report on survey results and buffer area design in writing to P&D. The reports may be submitted electronically. **Timing:** The requirements of this Condition shall be implemented throughout the first nesting season from February 1 through August 31 for nesting species, and year-round for western burrowing owls and all subsequent nesting seasons during the Project construction phases. The reports shall be submitted in the first and third week of each month to detail the previous two weeks' activities.

**MONITORING:** P&D staff shall review Project plans, site inspect as necessary, and review the bi-weekly reports to ensure compliance with this Condition. (*Mitigation Measure Bio-14e*)

## BIO-15 AVIAN AND BAT OPERATIONAL IMPACTS MITIGATION

#### Bio-15.a

**Turbine Siting.** The turbines shall be sited so that each tower is located at least 500 feet away from critical biological resources identified in preconstruction surveys, specifically: active raptor nest sites, active state or federally listed species' nests, open water which would attract birds or bats (including stockponds), thicker riparian habitat in Canada Honda and Miguelito creeks, eucalyptus tree groves, or vernal pools, if present. The turbines shall be sited so that each tower is located at least 250 feet from the un-named intermittent tributaries containing Central Coast Riparian Scrub habitat located up-gradient of major streams. Preconstruction surveys (see Condition *Bio-11.a*) shall identify existing raptor nests and other sensitive resources. The Project owner/operator shall, in consultation with the California Department of Fish and Game, attempt to dissuade raptors from building new nests within 500 feet of any turbine.

**Plan Requirements:** This measure shall be printed on all Project plans. **Timing:** During the preconstruction and construction phases, the Project owner/operator shall submit weekly written survey results and buffer area design to P&D. These reports may be provided electronically. The requirements of this Condition shall be implemented throughout the first and all subsequent construction phases.

**MONITORING:** County staff will inspect the Project plans and site and review the weekly reports to ensure compliance with this measure. (*Mitigation Measure Bio-15a*)

- **Bio-15.b** WTG and Project-Element Design. To minimize the likelihood of collisions of birds with Wind Turbine Generators (WTGs), onsite power collection lines, the design features of all WTGs and project facilities shall include the following:
  - a. Collection lines shall be placed underground (rather than overhead) to minimize perching locations and electrocution hazards to birds, except where undergrounding would create potential for serious erosion (e.g., crossing steep canyons) or other serious impacts that could be avoided with overhead lines.
  - b. All overhead collection line conductors shall be spaced to minimize the potential for raptor electrocution using the latest APLIC (2006) guidelines for line spacing. Further, construction and work procedures shall be consistent with the Avian Power Line Interaction Committee (APLIC) guidelines entitled "Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006."
  - c. WTGs with low rotational speed (approximately 10 to 23 revolutions per minute [RPM]) and tubular towers shall be used. WTG blades shall not rotate when the WTG is not in operation.
  - d. All permanent meteorological towers shall be unguyed.

**Plan Requirements:** These requirements shall be printed on Project plans. The Project owner/operator shall provide final plans, including design element plans to P&D for review and approval. **Timing:** P&D shall review and approve Project plans prior to approval of the Land Use Permit for each construction phase. The requirements of this Condition shall be implemented throughout the first and all subsequent construction phases.

**MONITORING:** P&D shall inspect in the field as necessary to ensure compliance with this Condition. (Mitigation Measure Bio-15b)

## BIO-16 BIRD AND BAT MONITORING AND ADAPTIVE MANAGEMENT PLAN

A Monitoring and Adaptive Management Plan is required, due to the uncertainty of the project's operational impacts to birds and bats. The Plan shall be developed and implemented in an effort to provide maximum feasible mitigation for those impacts. Monitoring studies of bird activity and fatalities at the site shall be required to collect information on bird activity and fatalities caused by wind farm operations. In addition, an Adaptive Management Plan (AMP) shall be implemented if the bird or bat mortalities trigger specified thresholds.

The County will enforce the following measures unless CDFG adopts them as part of a Sec. 2081 incidental take permit or Sec. 1602 streambed alteration agreement. <sup>1,2</sup> In reviewing and approving the final plan and applying the required measures, the County will consult with CDFG and USFWS, as appropriate.

The Plan shall be prepared by a County-approved biologist and be subject to County approval. The Plan shall include the four elements outlined in subsections 16.a to 16.d below.

# BIO-16.a Before-After/Control-impact (BACI) Study.

Conduct BACI surveys under direction of a County-approved biologist. The purpose of the BACI surveys is to compare pre- and post-construction bird use on the site; to assess the effects of the project on avian species; to assist in determining whether additional mitigation elements are necessary; and to collect research data to better understand wind power industry impacts and provide regulatory agencies with data for future projects. Study reports shall include estimates of average bird usage on the site and information on the location of species within the site, flight elevations and patterns of activity, and WTG avoidance behavior. The study data and reports shall be provided to the County for review. The surveys shall be conducted from the time of project approval through each project construction phase and for two years following first delivery of power for that phase.

The methodology shall include methods for interpreting and summarizing the data, and the contents, format and schedule for reports. The methodology should follow the recommendations of the CEC Guidelines (2007)<sup>3</sup>, insofar as feasible without causing delays to the project construction schedule or start of operations. The methodology may incorporate the Applicant's current BACI methods as appropriate and explain any substantive changes between the studies currently being conducted by the Applicant and the methodology proposed for approval. The methodology could be modified during the course of the BACI study, with concurrence of the County and project operator.

Section references are to sections of the California Fish and Game Code.

If CDFG, as a Responsible Agency, enforces Mitigation Measure Bio-Wildlife-16, the County would not be involved in oversight or monitoring. The measure is written assuming it is under County jurisdiction, but if CDFG assumes responsibility references to the County would be replaced with CDFG.

California Guidelines for Reducing Impacts To Birds And Bats From Wind Energy Development (2007)

# BIO-16.b Bird/Bat Mortality Study.

Conduct a bird and bat mortality study under direction of a County-approved biologist. The purpose of mortality surveys is to estimate mortality rates for different species on the site attributable to collisions with WTGs and to identify individual WTGs or groups/strings of WTGs that cause unanticipated levels of mortality. The information will be used to determine whether the mortality thresholds of the Adaptive Management Plan (see AMP, below) have been reached. In addition, the collected data will add to the body of knowledge to provide regulatory agencies with data for future projects. Brief quarterly reports including tabulated search data and annual reports including analysis of the year's data shall be prepared. The study data and reports shall be provided to the County for review. Monitoring shall be conducted for the first full 2 years after all WTGs are in operation for each project construction phase. Additional years of monitoring could be required if the mortality of special status bird and bat species exceeded thresholds (see AMP, below).

The general design of the study should follow recommendations of the CEC Guidelines (2007), or improved methodologies if appropriate, including methods for carcass search surveys, scavenger studies, evaluation of researcher efficiency, data analysis and reporting methodology. Specifically, carcass searches shall occur once every two weeks at 30% of the WTGs, as recommended in the CEC Guidelines. Reports shall include mean estimated fatalities and 90% confidence intervals for species or appropriate bird and bat groups. The plan shall include training of project operations staff in handling and reporting avian fatalities encountered in the course of their regular activities. The selection of which WTGs to monitor may be adjusted from year to year (or as appropriate). Sampling methodology and sample locations to be approved by the County. If the AMP were triggered by excess fatalities, the frequency or design of carcass searches could be modified, as provided in the AMP.

# **BIO-16.c** Reduce Prey Base Near Turbines.

Conduct a program under direction of a County-approved biologist to reduce the densities of California ground squirrels, rabbits, and other small mammals in the Project area. Limiting the number of burrowing mammals is intended to reduce the attraction of raptors to the Project area, and thus lower the potential for mortality resulting from collisions with WTGs and power lines on the project site. The program plan should emphasize, but not be limited to existing, mapped small mammal colonies. The plan shall be subject to County approval. Brief quarterly reports including the study data shall be provided to the County for review. The reports may be provided electronically. The program shall begin during the construction phase and continue for 2 years of Project operation. The County

could modify or discontinue the program if new information indicates it is ineffective or harmful.

## Minimum program elements:

- a. Monitoring within the permanent disturbance area around WTGs and collection line pad locations for small mammal (including California ground squirrel) activity. If burrows are found at the pads, those holes shall be filled. Pad overhangs shall be filled with soil. Gravel shall be placed in a perimeter at least 5 feet out from the edges of the pad to discourage small mammals from burrowing.
- b. Removal of accumulated material under and near WTGs and collection line power poles, such as piles of rocks from construction and extra equipment or parts. Such accumulated material may attract prey for raptors such as California ground squirrels and brush rabbits.
- c. Implementation of other feasible measures to control small mammal populations could be required, based on recommendations of the biologist and results of the Bird/Bat Mortality Study, described below.

# BIO-16.d Adaptive Management Plan (AMP).

Develop an Adaptive Management Plan (AMP) to be activated in the event that bird or bat mortality exceeds specified threshold levels. The AMP provides a structured framework to guide response, in case project operations result in excessive mortality that was unforeseeable at the time of EIR certification and project approval. The AMP defines two impact categories and corresponding response options, as described below. The *Adaptive Management Threshold Criteria* table below summarizes the thresholds that will trigger Level 1 and Level 2 actions by the County.

# Level 1 – First Alert and Enhanced Survey.

If recorded bird or bat fatalities reach the threshold criteria for Level 1 (*Adaptive Management Threshold Criteria*), the project operator shall notify the County within 24 hours and make any required notifications to CDFG and USFWS.

The carcass search frequency shall be increased in the vicinity of the specific WTG(s) suspected of being responsible, to determine whether WTG(s) are at cause and to better understand the causal factors and circumstances contributing to the fatalities. Carcass search patterns and extent may be modified, survey frequency may be increased up to twice per week, and supplementary field observations may be required for up to six months, if necessary to assess the pattern or frequency of fatalities. The additional information would facilitate a

more informed response in the event that mortality levels reach Level 2. The project operator shall provide wind velocity data for the area of the fatalities if the County determines that the data are important for assessing the cause of fatalities or for designing enhanced search patterns.<sup>4</sup> Details of the enhanced monitoring program will be subject to County approval.

Mortality monitoring shall conclude if fatalities remain below Level 2 thresholds for 2 consecutive years. If Level 2 thresholds are reached or exceeded, the County may require additional year(s) of monitoring until fatalities fall below Level 2 thresholds.

# Level 2 – Response Options.

If recorded bird or bat fatalities reach the threshold criteria for Level 2 (*Adaptive Management Threshold Criteria*), the project operator shall notify the County within 24 hours and make any required notifications to CDFG and USFWS.

The cause of bird and bat fatalities at wind farms is often indeterminate, due to the condition of the carcasses, activity of scavengers, and wide radius of land-fall. The County shall require Level 2 response options only if it determines with reasonable certainty that the fatalities are caused by wind farm operations and which WTGs are at cause. The determination must be based on substantial evidence. Changes in bird use of the site observed in the BACI studies should be taken into account in the evaluation of impacts and response options. Measures required must be reasonable, feasible, and specifically targeted to reduce fatalities at the particular problem WTG(s).

The following Level 2 response options should be considered by the County, in consultation with CDFG, and implemented if determined to be feasible and likely to reduce or compensate for further fatalities similar to those that triggered the Level 2 response. Such measures shall not be undertaken without appropriate environmental review, if applicable. Less extreme, less costly measures shall be exhausted before more extreme or costly measures are required.<sup>6</sup>

<sup>&</sup>lt;sup>4</sup> The data may be provided as hourly average wind speed and direction in the project area, or as otherwise agreed with the County. If the data is considered proprietary, it may be provided under a confidentiality agreement with the County.

One of the primary objectives for operations monitoring stated in the CEC Guidelines is to determine whether the avoidance, minimization, and mitigation measures implemented for the project were adequate or whether additional corrective action or compensatory mitigation is warranted.

If excessive fatalities of endangered or protected bird or bat species, as determined by CDFG or USFWS, were to occur, these agencies could require curtailment of operations of the offending WTG(s). In such a case, any negotiations with the Applicant or possible enforcement actions would be the responsibility of CDFG and USFWS, and not the County.

- 1. Habitat modifications to make the site less attractive to impacted species, including intensified efforts to reduce the prey base (e.g., ground squirrels), weed control, grazing management.
- 2. Project modifications. Modifications must have a sound scientific basis, but need not be proven definitely effective, such as installing "dummy towers" at end of WTG rows; painting of WTG blades on selected WTGs to increase their visibility; audible warnings on towers; or other new or experimental technologies to divert birds/bats or react to the presence of at-risk species. If appropriate, a modification may be implemented as a controlled experiment to test efficacy in reducing mortality.
- 3. Implementation of a mitigation research component at the LWEP site at an appropriate department of a local college or university (e.g., Environmental Science or Wildlife Biology department); species-related research to improve knowledge of a species and conservation needs.
- 4. Contribution to a program to enhance recovery of the special status species impacted by the project; contribution to research program on wind project impacts to birds and bats.
  - If any of these measures are implemented, the project operator, in consultation with the County, should implement an effectiveness evaluation program to assess the intended and unintended effects of the measure. The measure should be reversed, discontinued, or modified if little or no reduction in mortality is demonstrated within a reasonable time or if it leads to unintended, adverse consequences, as determined by the County.
- 5. WTG Shutdowns. Special preventative measures shall be implemented if large-scale bird or bat mortality events are foreseeable. Shutdown or operational restrictions shall be required for specific WTG(s) if the Director of Planning and Development, in consultation with the California Department of Fish and Game, makes all of the following determinations:
  - i. Fatalities of Federal or California Listed Species, California Fully Protected Species, or non-listed sensitive bird or bat species, resulting from WTG collisions at a specific location (i.e., a single WTG or group of up to 3 WTGs), exceed the *Level 2 Thresholds* established for the entire project<sup>7</sup> (e.g., more than 2 golden eagle fatalities at a location within a year);
  - ii. The mortality monitoring studies conducted pursuant to Condition Bio-16.b demonstrate that the fatalities are caused by the identified WTG(s) and the fatalities follow a distinct pattern that indicates excessive fatalities (as defined

<sup>&</sup>lt;sup>7</sup> See *Adaptive Management Threshold Criteria*, below.

in Subsection (i) above) will predictably recur at that location, and that operational restrictions on the specific WTG(s) will significantly reduce future fatalities;

- iii. All other Level 2 Response Options that could potentially reduce fatalities have been considered and cannot be implemented within the time required to reduce the impending, excessive fatalities;
- iv. The required WTG shutdowns or operational restrictions have not been found infeasible.

The owner/operator shall implement the required shutdown(s) or operational restrictions within 24 hours of notification by the Director. Shutdowns or operational restrictions shall be limited to the specific WTG(s) responsible for excessive fatalities. Shutdowns may include temporary or permanent shutdowns. Operational restrictions means restricted operating hours during periods of elevated risk to birds and bats, based on substantiated, case-specific risk factors (which could include time of day, season, weather, etc.). Shutdown or operational restriction requirements shall be designed to minimize impacts to electrical generation to the maximum extent feasible, consistent with reducing excessive fatalities of protected and sensitive species.

Upon request by the permittee, the Director shall hold a hearing within 4 business days to consider whether the shutdown or operational restriction should continue. The permittee's request shall include all evidence supporting the request. The Director shall determine whether continuation of the shutdown(s) or operational restrictions are warranted, based on the above criteria (i. to iv.), including financial feasibility. The Director may amend, lift, or extend the shutdown or operational restrictions at the hearing or subsequently.

The owner/operator may appeal the Director's decision to the Planning Commission, as provided in Section 35.102.040 of the Land Use and Development Code. The Planning Commission shall hold a noticed public hearing on the appeal no later than the first regularly scheduled hearing at or after 45 days of the filing of an appeal. The appeal shall include a detailed explanation of the objection, which may include financial infeasibility, and any relevant supporting information or data. Technical or financial information pertinent to the Planning Commission decision, but which the owner/operator claims to be confidential or proprietary, may be provided to the Director under a claim of confidentiality. Any financial information provided shall be certified by the owner/operator's chief financial officer. The Planning Commission decision may be appealed to the

Board of Supervisors. If so, the Planning Commission decision shall remain in force pending a final decision by the Board.

Further WTG shutdowns or restricted operations shall not be required after the conclusion of mortality monitoring, as provided above (see Condition Bio-16.d., *Level 1 – First Alert and Enhanced Survey*).

# Adaptive Management Threshold Criteria<sup>8</sup>

Actions required if number of fatalities caused by WTGs reaches these thresholds in any consecutive 12-month period.

	Level 1	Level 2
	<ul> <li>Notify County</li> <li>Increase carcass search frequency in specified area(s)</li> </ul>	Notify County     Adaptive measures to reduce fatalities
Federal or Calif. listed species or Calif. Fully Protected Species	1 fatality	2 fatalities
Non-listed Sensitive Species (CSC, WL, and Local Species of Concern)	2 fatalities (birds) 2 fatalities (bats)	3 fatalities (birds) 3 fatalities (bats)
Non-sensitive Raptors	3 fatalities	5 fatalities

These thresholds apply to the actual numbers of carcasses attributable to project facilities or operations recovered in the regular biweekly carcass searches. However, incidental finds (i.e., outside of the regular biweekly searches) of carcasses attributable to the project of federally or state listed bird or bat species or California FPS shall also count toward the thresholds. The numbers assume the carcass searches comprise a 30% random sample of the 65 WTG locations, or 20 WTGs.

**Plan Requirements and Timing (for Mitigation Measures Bio-16a-16d):** Approval of the entire Bird and Bat Monitoring and Adaptive Management Plan by the County, in consultation with CDFG, is required prior to approval of the Land Use Permit for the first and subsequent project phases.

<u>MONITORING</u>: The County will ensure that the BACI, mortality monitoring, and prey base reduction measures are implemented. The County will review all monthly, quarterly, and annual reports provided pursuant to the Avian and Bat Mitigation Plan and ensure that appropriate adaptive management measures are undertaken if AMP thresholds are reached. (Mitigation Measure Bio-16)

<sup>&</sup>lt;sup>8</sup> The basis of these criteria is discussed in the Final EIR, Section 3.5.7.5.

## **CULTURAL RESOURCES**

#### CulRes-1

Additional Archaeological Resources. If a Project element requiring ground disturbance cannot be located at least 500 feet from the mapped boundaries of an archaeological site, then an Extended Phase 1 investigation shall be conducted by employing a small number of shovel test units (STU). These STUs shall be used to determine the actual subsurface boundary of the archaeological site relative to the proposed disturbance, and therefore verify whether or not the site would be affected by the disturbance. The STUs shall be 20 inches in diameter and excavated in arbitrary 8-inch levels.

If the presence of cultural materials is confirmed in areas that would be disturbed by Project construction, then Project construction activities shall be reviewed and redesigned to the greatest extent feasible, consistent with Project objectives, to avoid impacts on confirmed cultural resource sites (see Mitigation Measure *CulRes-7*).

If a recorded archaeological site can not be avoided through Project redesign, then Phase 2 subsurface testing shall be conducted to evaluate the nature, extent, and significance of the cultural resources. This evaluation program shall be designed to assess each archaeological site consistent with County Archaeological Guidelines and shall involve the following:

- a. Controlled hand excavation and surface collection of a representative sample of the site deposit determined by a County-approved archaeologist
- b. A detailed analysis of the material recovered
- c. An assessment of cultural resource integrity
- d. Preparation of a final report with recommendations for impact mitigation if necessary.

Should this program determine that the affected archaeological sites are significant, Phase 3 mitigation in the form of data recovery excavation shall be implemented consistent with County Archaeological Guidelines.

Plan Requirements and Timing: All work shall be funded by the Project owner/operator. The scope of work for the study(s) shall be prepared by P&D or by a County-approved archaeologist and reviewed and approved by P&D. The study(s) shall be performed prior to final design so that any necessary modifications can be incorporated into the plans. The County archaeological specialist or the County-approved archaeologist shall submit a final report to the P&D detailing the results of the study(s) prior to approval of the Land Use Permit

for construction. Any subsequent modifications resulting from the study(s) shall be incorporated into the final plans and be subject to review and approval by the County prior to approval of the Land Use Permit for the first phase of construction and prior to approval of the Land Use Permits for subsequent project phases.

<u>MONITORING</u>: P&D will review results of study, determine the course of action, and ensure that approved recommendations are carried out. (*Mitigation Measure CULT-1*)

#### CulRes-2

**Archaeological Isolates.** Where ground disturbance is proposed within 100 feet of Archaeological Isolates LWF Iso-1, Iso-8, Iso-9, Iso-10, and Iso-11, a single STU shall be excavated within 3 feet of the isolate in order to determine if there are subsurface deposits present. If the isolate cannot be relocated, the STU shall be placed in the general vicinity of its mapped location. If subsurface cultural deposits are identified, they shall be assessed and characterized in accordance with Condition E-1.

Plan Requirements and Timing: The Project owner/operator shall fund the above-referenced study. The scope of work for the study shall be prepared by a County-approved archaeologist and reviewed and approved by P&D. The findings of the study shall be submitted to P&D and P&D shall determine if additional protective measures shall be required. The study shall be performed prior to approval of the Land Use Permit for the first phase of construction and prior to approval of the Land Use Permits for subsequent Project phases that involve disturbance in this area.

<u>MONITORING</u>: P&D will review results of study, determine follow-up courses of action, and conduct site inspections as needed during construction. (Mitigation Measure CULT-2)

#### CulRes-3

Unanticipated Discoveries. Should human remains, historic or prehistoric artifacts, or other potentially important cultural materials be unearthed or otherwise discovered at any time during activities associated with the development of the Project area, work in the immediate vicinity of the discovery shall be suspended until a County-approved archaeologist and Native American representative evaluate the significance of the find pursuant to Phase 2 investigations as specified in the County's Cultural Resource Guidelines (1993). If the cultural resources are found to be significant, they shall be subject to a Phase 3 mitigation program consistent with these Guidelines and funded by the Project owner-operator. In the event that suspected human remains are discovered, the County Coroner shall be contacted in accordance with state law.

**Plan Requirements and Timing:** This Condition shall be printed on all building and grading plans prior to approval of Land Use Permit for the first phase of construction and prior to approval of the Land Use Permits for subsequent project phases.

**MONITORING:** P&D shall review plans to confirm that this measure is printed on the plans and shall spot check that this measure is noted on the plans in the field. (*Mitigation Measure CULT-3*)

**CulRes-4 Archaeological and Native American Monitors.** A County-approved archaeologist and Native American monitor shall monitor all ground disturbances to ensure that any previously unidentified cultural resources are recorded.

**Plan Requirements and Timing:** Prior to the start of construction, a contract or Letter of Commitment between the Project owner/operator and a County-approved archaeologist, consisting of a project description and scope of work, shall be executed. The contract shall be executed and submitted to P&D for review and approval prior to the issuance of the Land Use Permit for the first phase of construction and prior to the issuance of the Land Use Permits for subsequent project phases.

<u>MONITORING</u>: P&D staff shall confirm monitoring by the County-approved archaeologist and P&D grading inspectors and the EQAP OEC will spot-check field work. (*Mitigation Measure CULT-4*)

**CulRes-5 Pre-Construction Workshop.** The EQAP OEC shall conduct a pre-construction workshop with cultural resource specialists, Native American monitors, and construction workers and personnel. This workshop shall stress the importance of cultural resources and discuss penalties for their illicit disturbance.

**Plan Requirements and Timing:** The pre-construction workshop shall occur prior to commencement of any construction-related activity. All construction personnel shall attend the workshop and receive training. The Project owner/operator shall keep workshop training records available for review by the County upon request.

**MONITORING:** P&D staff shall review the training material prior to any trainings, spot-check during construction to ensure compliance with this requirement, and request and review training attendance records, if determined necessary. (*Mitigation Measure CULT-5*)

#### CulRes-6

**Avoidance of Cultural Resources.** Avoidance of cultural resource sites is the preferred measure, and all impacts to California Register of Historical Resources (CRHR) eligible sites shall be avoided to the greatest extent feasible, consistent with Project objectives.

Plan Requirements and Timing: As Project design plans are being finalized, the County and its qualified archaeologist shall review 1 inch to 400 feet (1":400') or better scale orthotopo maps of the areas of known Project impacts and provide an assessment of direct adverse effects to CRHR-eligible or unevaluated cultural resources. Recommendations for plan adjustments to avoid all eligible resources to the extent feasible shall be made and design adjustments may be necessary. Final Project layout (for example, Wind Turbine Generator placement, access road alignment, power pole locations, and staging areas) shall include measures to avoid eligible sites where feasible. All work shall be completed as part of final design, and any necessary modifications shall be incorporated into the final plans. The County shall confirm that this measure has been conducted prior to approval of the Land Use Permit for the first phase of construction and prior to Land Use Permit approvals for subsequent Project phases.

**MONITORING:** P&D staff shall review and approve plans prior to approval of the Land Use Permit and shall spot-check in the field during ground-disturbing activities. (*Mitigation Measure CULT-6*)

#### CulRes-7

**Final Plan Notification.** The Project owner/operator shall include a note on a separate informational sheet to be recorded with the final plans for each construction phase designating the known archaeological sites as unbuildable areas, unless the archaeological site is formally evaluated by a County-approved archaeologist as ineligible for the California Register of Historical Resources or a Phase 3 data recovery program has been implemented. The areas shall not be identified as archaeological sites on the informational sheet.

**Plan Requirements and Timing:** P&D staff shall review the informational sheet prior to approval of the Land Use Permit for the first phase of construction and prior to approval of Land Use Permits for subsequent Project phases.

**MONITORING:** P&D staff shall spot-check in the field to ensure compliance. (*Mitigation Measure CULT-7*)

#### CulRes-8

**Temporary Fencing.** Known, unevaluated, or determined significant archaeological sites and 50-foot buffer areas shall be temporarily fenced with

chain link flagged with color or other material authorized by the County where ground disturbance is proposed within 500 feet of the site and buffer.

**Plan Requirements and Timing:** The fencing requirement shall be shown on approved grading and building plans. Plans are to be approved prior to approval of the Land Use Permit for the first phase of construction and prior to Land Use Permits for subsequent project phases. Fencing shall be in place prior to start of construction. The areas to be fenced shall not be identified as archaeological sites on the informational sheet.

**MONITORING:** P&D staff shall verify installation of fencing by reviewing photo documentation or by site inspection prior to initiation of construction and shall verify that the fencing remains in place throughout grading and construction through site inspections. (*Mitigation Measure CULT-8*)

# **FIRE PROTECTION**

- **Fire-1 Fire Protection Plan.** The Project owner/operator shall prepare a Fire Protection Plan that meets SBC Fire Department requirements. The plan shall contain, but is not limited to, the following provisions:
  - a. All construction equipment shall be equipped with appropriate spark arrestors and carry fire extinguishers.
  - b. A fire watch with appropriate fire fighting equipment shall be available at the Project site at all times when welding activities are taking place. Welding shall not occur when sustained winds exceed that set forth by the SBCFD unless a SBCFD approved wind shield is onsite.
  - c. A vegetation management plan shall be prepared to address vegetation clearance around all WTGs and a regularly scheduled brush clearance of vegetation on and adjacent to all access roads, power lines, and other facilities.
  - d. Operational fire water tanks shall be installed prior to construction.
  - e. Provisions for fire/emergency services access if roadway blockage occurs due to large loads during construction and operation.
  - f. Cleared, maintained parking areas shall be designated; no parking shall be allowed in non-designated areas.
  - g. The need for and/or use of dedicated repeaters for emergency services.

**Plan Requirements:** The Fire Protection Plan shall be provided to the SBCFD and the County for approval. **Timing:** The plan shall be approved prior to Land Use Permit for the first phase of construction.

**MONITORING:** The onsite monitor shall confirm that appropriate measures are implemented during construction. County fire inspectors shall verify that operations measures and periodically spot check for compliance during operations. (*Mitigation Measure FPES-1*)

**Fire-2** Smoking and Open Fires. Smoking and open fires shall be prohibited at the Project site during construction and operations, except that during operations smoking may be permitted in clearly signed, designated areas.

**Plan Requirements:** All contractors and sub-contractors shall be notified in writing prior to or upon arrival at the site that smoking and open fires are prohibited at all times on the Project site. **Timing:** A copy of the notification shall be provided to P&D prior to issuance of the Land Use Permit for the first and subsequent phases of construction.

**MONITORING:** The County staff shall verify the notification prior to Land Use Permits for each phase of construction, and the onsite monitor shall confirm compliance during construction. (Mitigation Measure FPES-2)

**Fire-3 Gravel Around Substation.** Gravel shall be placed around the perimeter of the Project Substation as a fire prevention measure.

**Plan Requirements:** This requirement shall be noted on building plans. **Timing:** Gravel shall be installed prior to the start of operations.

<u>MONITORING</u>: The County shall verify that gravel has been installed. (*Mitigation Measure FPES-3*)

**Fire-4**Access Roads. Access roads shall remain passable by emergency vehicles for the duration of the Project. Turn-around requirements at the terminus of access roads shall be included in roadway designs. The final design shall be approved by the SBC Fire Department, and the final access road map (including topographic map) shall be provided to both the SBC Fire Department and the City of Lompoc Fire Department.

**Plan Requirements:** The approved access road design shall be included on the final building plans with a notation that the roads shall remain passable at all

times. **Timing:** The plans shall be approved prior to approval of the Land Use Permit for the first phase and all subsequent phases of construction.

<u>MONITORING</u>: P&D staff shall verify SBC Fire Department approval of the access road design plan prior to construction approval and confirm compliance upon completion of construction. SBC Fire Department inspectors shall periodically verify that the access roads are maintained in an acceptable condition. (*Mitigation Measure FPES-4*)

**Fire-5 Water Supply.** The Project owner/operator shall demonstrate to the County that sufficient water can be obtained from the new shallow well or existing spring on the property and/or by trucking water in from offsite supplies to adequately supply the Operations & Maintenance facility needs while maintaining 5,000 gallons of stored water for fire-fighting purposes.

**Plan Requirements:** Evidence demonstrating adequate water supply shall be submitted to P&D and SBC Fire Department for review and approval. **Timing:** The evidence demonstrating adequate water supply shall be submitted for review and approval prior to approval of the Land Use Permit for the first phase of construction.

**MONITORING**: County inspectors shall confirm compliance during operations. (*Mitigation Measure FPES-5*)

## **GEOLOGY AND SOILS**

**Geo-1 Seismicity.** Project facilities shall be designed to Uniform Building Code Seismic Zone 4 standards.

**Plan Requirements and Timing:** The Project owner/operator shall submit plans for buildings and structures to P&D indicating standards to the satisfaction of the County. P&D shall review and approve the plans prior to approval of the Land Use Permit for the first and subsequent phases of construction.

**MONITORING:** P&D building staff shall inspect the site prior to occupancy clearance for the Operations & Maintenance facility and prior to operation of the WTGs and power line. (*Mitigation Measure Geo-1*)

**Geo-2 Grading and Drainage Plan.** The Project owner/operator shall prepare a final Grading and Drainage Plan, designed to minimize erosion and landslides, which includes the following measures:

- a. Use diversion structures and spot grading to reduce siltation into adjacent streams during grading and construction activities
- b. Design grading on slopes steeper than 3:1 to minimize surface water runoff
- c. Limit grading during construction to the dry season (April 15 to November 1) to the extent practicable. If grading needs to be done outside of the dry season, the owner/operator will coordinate grading work with the County and will follow all applicable guidelines
- d. Keep soil damp during grading activities to reduce the effects of dust generation
- e. Stockpile excess topsoil on site and segregate it from other soils to facilitate future land restoration
- f. Install erosion control structures where appropriate, including temporary erosion control structures, such as trench plugs and water bars, on moderately steep slopes
- g. If slope stabilization impacts cannot be avoided, submit detailed plans of the excavation (with limits of cut and fill and slope restoration method) prior to construction for review and approval.
- h. Restore soil elevation/topography consistent with the approved grading and erosion control plans.
- i. Reseed all exposed graded surfaces with deep-rooted, native, drought-tolerant ground cover to minimize erosion. Geotextile binding fabrics shall be used if necessary to hold slope soils until vegetation is established.
- j. Construct cut slopes no steeper than 1.5:1 unless topographic constraints prevent this possibility; then, incorporate special design features to prevent slope failure.
- k. Construct fill slopes no steeper than 2:1 unless topographic constraints prevent this possibility; then, incorporate special design features to prevent slope failure.
- 1. Strip areas to receive fill of vegetation, organic topsoil, debris, and other unsuitable material. Place engineered fill in layers not exceeding 12 inches in loose thickness, properly moistened and compacted, and tested for 90 percent compaction.
- m. Where fill is placed upon a natural or excavated slope steeper than about 5:1 (20 percent), construct a base key at the toe of the fill and bench the fill into the existing slopes. Embed the base key at least 2 feet into competent inorganic soils; then bench the fill horizontally into the existing slope at least 2 feet normal to the slope as the fill is brought up in layers.

- n. Designate a place for temporary storage of construction equipment at least 100 feet from any water bodies.
- o. Project grading and earthwork shall be observed and tested by a geotechnical engineer or his representative to verify compliance with these mitigation measures.

**Plan Requirements:** The Grading and Drainage Plan shall be submitted for review and approval by the County, including County Flood Control, prior to approval of the Land Use Permit for the first phase of construction and prior to the Land Use Permit for subsequent Project phases. The Plan shall be designed to address erosion and sediment control during all Project phases. The Project owner/operator shall ensure consistency between the Plan and the Site Restoration and Revegetation Plan (Condition *Bio-3*). Plan requirements shall be noted on all grading and building plans. The Project owner/operator shall notify P&D prior to commencement of grading.

**Timing:** Erosion and sediment control measures shall be in place throughout grading and development of the site until all disturbed areas are permanently stabilized. Graded surfaces shall be reseeded within 60 days of grading completion, with the exception of surfaces graded for the placement of structures. These surfaces shall be reseeded if construction of structures does not commence within 60 days of grading completion.

**MONITORING:** The EQAP OEC shall photo-document revegetation and ensure compliance with the plan. P&D grading inspectors shall monitor technical aspects of the grading activities. (*Mitigation Measure Geo-2*)

- **Geo-3 Expansive Soils.** Soil analyses shall be completed to assess site-specific expansion potential. Once Project design has been finalized and the criteria for the facility performance have been established, the Project soils engineer and P&D shall review the mitigation measures and modify them as appropriate. If further measures are considered necessary to mitigate problems posed by expansive soils, the following alternatives shall be considered:
  - a. Over-excavation of expansive soils and replacement with non-expansive fill.
  - b. Support of structures on drilled shaft foundations.
  - c. Lime treatment of expansive subgrades.

**Plan Requirements:** Soil analyses and performance criteria shall be completed and submitted to the County for review and approval. **Timing:** Prior to approval of the Land Use Permits for the first and subsequent construction phases.

<u>MONITORING</u>: County building inspectors shall inspect the site to ensure that construction complies with the appropriate performance standards. (*Mitigation Measure Geo-3*)

**Geo-4 Project Support Facilities.** Project support facilities such as bridge foundations shall be sited on cut pads to provide relatively uniform foundation support and reduce differential settlement. Alternatively, structure foundations shall be designed to tolerate potential differential settlement.

**Plan Requirements and Timing:** Building plans shall be submitted to P&D for review and approval prior to approval of the Land Use Permit for the first phase of construction and prior to approvals of Land Use Permits for subsequent Project phases.

**MONITORING:** County building inspectors will inspect the site to ensure that construction complies with the appropriate standards. (*Mitigation Measure Geo-4*)

## LAND USE

**Lu-1 Compliance with FAA Regulations.** The WTG lighting plan shall comply with FAA requirements (see also Condition C-4).

Plan Requirements: The Project owner/operator shall demonstrate that the FAA-required WTG lighting plan complies with FAA requirements, but does not exceed required visibility. The Project owner/operator shall submit copies of the following to the County, as evidence of compliance with FAA requirements: (1) FAA Form 7460-1 as submitted to FAA; (2) all communications with the FAA concerning the proposed lighting plan; and, (3) the final FAA-approved lighting plan. Timing: The final lighting plan shall be reviewed and approved by P&D (excepting FAA requirements) prior to approval of the Land Use Permit for the first phase and subsequent phases of Project construction.

**MONITORING:** P&D staff shall ensure that coordination with the FAA occurs during final design engineering. P&D staff shall inspect the WTGs upon completion to ensure that the installed lighting conforms to the approved Lighting Plan. (Mitigation Measure LU-1)

**Lu-2 Staking of Coastal Zone.** The Project owner/operator shall install exclusion fencing or stake the coastal zone boundary to ensure that no construction activities enter the coastal zone area.

**Requirements and Timing**: The installation of exclusion fencing or staking shall be completed prior to the start of construction activities within the WTG corridors adjacent to the coastal zone.

**MONITORING:** P&D staff shall conduct site inspections prior to and during construction to confirm and enforce compliance. (Mitigation Measure LU-2)

**Lu-3 Decommissioning and Reclamation Plan.** The Project owner/operator shall develop a Decommissioning and Reclamation Plan that addresses facility decommissioning, abandonment, and post-abandonment reclamation efforts.

Plan Requirements and Timing: The Decommissioning and Reclamation Plan shall be submitted to the County for review and approval as part of the Project owner/operator's permit application for a discretionary permit for facility decommissioning and abandonment. The Plan shall be implemented during facility abandonment, with reclamation efforts following. This requirement shall apply in the case of partial decommissioning as well as decommissioning of the entire project.

**MONITORING:** P&D staff shall review and approve the Decommissioning and Reclamation Plan as part of discretionary permit review for project decommissioning and abandonment. The plan shall be implemented during County inspections of abandonment and reclamation activities. (Mitigation Measure LU-3)

## **NOISE**

**Noise-1 WTG Maintenance.** The Project owner/operator shall maintain all Wind Turbine Generators in excellent working order to minimize operational noise impacts.

**Plan Requirements:** The Project owner/operator shall provide maintenance records to P&D, upon request, demonstrating that the WTGs are being maintained appropriately. **Timing:** This requirement shall be enforced throughout the life of the Project.

<u>MONITORING</u>: P&D staff shall enforce compliance with this condition. (*Mitigation Measure NOI-1*)

#### Noise-2

Construction Hours. All Project construction activities, including those that involve use of heavy equipment (i.e., greater than 2-axle vehicles) along San Miguelito Road, shall be limited to between the hours of 7:00 a.m. to 10:00 p.m., Monday through Friday, unless otherwise approved by the County, except that construction at the project site within 1,600 feet of nonparticipating residences shall be limited to 7:00 a.m. to 6:00 p.m. Work may occur within the WTG sites after hours or on weekends and holidays, subject to at least 48 hours written authorization from the County. Weekend and holiday work shall be limited to 8:00 a.m. to 5:00 p.m. Requests for weekend and holiday work shall be submitted to the County for approval one week in advance, and shall include a description of the activity to occur, including equipment usage and duration. All complaints received regarding weekend and holiday work shall be immediately submitted to the County.

Plan Requirements: The owner/operator shall include notes on the final plans requiring compliance with the construction time limits for blasting or pile driving. County staff will confirm that the notification is included on the final plans prior to issuance of the Land Use Permit for the first phase of construction and prior to issuance of the Land Use Permits for subsequent phases of the Project. County staff shall review all requests for weekend and holiday work, and issue written approvals or denials as applicable. County staff shall consider all noise complaints when reviewing subsequent requests for weekend/holiday work. Timing: Conditions will be enforced throughout all construction periods.

**MONITORING:** P&D staff shall inspect the site during construction to enforce compliance with this condition. (*Mitigation Measure NOI-2*)

#### Noise-3

**Telephone Number for Noise Complaints.** The Project owner/operator shall establish a telephone number for use by the public to report any significant undesirable noise conditions associated with the construction and operation of the Project. If the telephone is not staffed 24 hours per day, the Project owner/operator shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This telephone number shall be posted at the Project site during construction in a manner visible to passersby, and shall be maintained until the Project has been operational for at least 1 year.

**Plan Requirements:** The owner/operator shall establish a phone number and required features prior to Land Use Permit for the first phase of construction and prior to Land Use Permits for subsequent Project phases. **Timing:** Conditions will be enforced throughout all construction periods.

<u>MONITORING</u>: County staff will inspect the site during construction to enforce compliance with this condition. (*Mitigation Measure NOI-3*)

**Noise-4 Noise Complaint Resolution Plan.** Throughout the construction and operation of the Project, the Project owner/operator shall document, investigate, and evaluate all complaints and attempt to resolve all Project-related noise complaints.

Plan Requirements and Timing: The Project owner/operator shall submit a Noise Complaint Resolution Plan to P&D for review and approval prior to approval of the Land Use Permit for the first phase of construction and prior to approval of Land Use Permits for subsequent phases of the Project. The Plan shall describe the specific steps that shall be carried out by the Project owner/operator in response to noise complaints. The final determination as to whether the response is adequate shall be made by P&D. The noise complaint forms shall include instructions for filing the form with the Project owner/operator and with P&D. Plan requirements shall be enforced throughout all construction and operation periods.

**MONITORING:** P&D staff shall review forms submitted and ensure that complaints are being resolved. The County may require further noise analyses and require additional mitigation measures, if appropriate. (Mitigation Measure NOI-4)

**Noise-5 Maintenance of Construction Equipment.** Construction contractors shall be required to ensure that construction equipment is well-tuned and maintained according to the manufacturer's specifications, and that the standard noise reduction devices on the equipment are in good working order at all times.

**Plan Requirements:** The Project owner/operator shall ensure that equipment is maintained in good working order during construction. **Timing:** These requirements shall be enforced throughout all construction periods.

**MONITORING:** P&D staff shall inspect the site during construction to enforce compliance with this Condition. (*Mitigation Measure NOI-5*)

**Noise-6 Resident Notification.** In coordination with P&D, the Project owner/operator shall hold a pre-construction meeting for residents of Miguelito Canyon Road to review upcoming construction activities and associated noise and traffic. The Project owner/operator shall notify residences within 1 mile of any unusually loud construction activities, including the use of helicopters, blasting or pile driving, at

least 1 week prior to their scheduled occurrence. In addition, the San Miguelito Road residents shall be notified at least one week prior of any anticipated road/lane closures and property owner ingress/egress restrictions. Such activities shall be limited to between the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday, unless otherwise approved by P&D.

**Plan Requirements:** The Project owner/operator shall provide proof of notification to the County 1 week prior to the schedule occurrence of loud construction activities. An example of the notification shall be provided to P&D prior to approval of the Land Use Permit for the first phase of construction and prior to approval of the Land Use Permits for subsequent phases of the Project. **Timing:** These requirements shall be enforced throughout all construction periods.

**MONITORING:** P&D staff shall review the notice and enforce compliance with this Condition. (*Mitigation Measure NOI-6*)

Noise-7

**Acoustical Analysis.** Project facilities shall be designed and operated to ensure the noise level attributable to the Project does not exceed 43.3 dBA  $L_{eq}$  (1-hour) under normal operating conditions at any existing nonparticipating residences, or 58.3 dBA  $L_{eq}$  at participating residences. The Project owner/operator shall submit a detailed acoustical analysis of the final site layout and selected Wind Turbine Generators (WTGs) to P&D for review. All calculations or modeling input and output files shall be made available to P&D. The analysis shall include all available vendor sound-level data (specified as either guaranteed or expected), including a site-specific analysis of how sound power levels increase with wind speed.

If a stall-controlled WTG is selected, sound power level data must be sufficient to estimate maximum sound levels under any stall condition because this could fall outside the range reported by IEC 61400-11 (IEC, 2006). Control strategies, if available, to reduce Project noise levels also shall be discussed and evaluated.

**Plan Requirements:** The acoustical analysis and final layout and specification of WTGs shall be submitted to P&D for review and approval. P&D acceptance of the acoustical analysis and WTG layout does not constitute endorsement nor relieve the Project owner/operator from ensuring the actual WTG operating noise levels are in compliance with the limits of 43.3 dBA  $L_{eq}$  (1-hour) at nonparticipating residences, and 58.3 dBA  $L_{eq}$  at the participating residences. **Timing:** The County shall review and approve the acoustical study and final

WTG layout prior to approval of the Land Use Permits for the first and all subsequent project phases.

<u>MONITORING</u>: P&D staff shall ensure that the final Project building plans incorporate the WTG layout and turbine specifications, as used for the approved acoustical analysis. (*Mitigation Measure NOI-7*)

Noise-8

**Noise Monitoring and Control Plan.** The Project owner/operator shall prepare and submit a Noise Monitoring and Control Plan to P&D for review and approval prior to approval of the first Land Use Permit for the Project. The Project owner/operator shall be responsible for all expenditures associated with this analysis and post-construction monitoring, including County staff time.

Plan Requirements: The Plan shall be authored and implemented under the direction of a County-approved professional acoustical engineer or an engineer who is certified by the Institute of Noise Control Engineering to characterize the existing ambient noise levels in terms of CNEL, L<sub>dn</sub>, and L<sub>eq</sub> (1-hour) and determine the actual noise level generated by the Project at the participating and nonparticipating residences. Monitoring existing conditions shall occur for sufficient periods to characterize the existing noise levels during daytime and nighttime conditions and a range of wind speeds that includes calm conditions and wind speeds typical for WTG operation. Operational noise monitoring shall occur at the same locations for a period of at least 72 continuous hours of WTG operation. If the analysis finds that the noise generated by the WTGs exceeds 43.3 dBA L<sub>eq</sub> (1-hour) or causes an increase of greater than 10 dBA CNEL at nonparticipating residences or exceeds  $58.3 \ dBA$   $L_{eq}$  at the participating residences, the Project owner/operator shall develop and implement measures to reduce Project noise levels to comply with these limits. Such measures shall be submitted to P&D for review and approval prior to implementation. mitigation noise monitoring may be conducted at the County's discretion by the County's acoustical consultant.

**Timing:** P&D staff shall review and approve the Plan prior to approval of the Land Use Permit for the first and all subsequent development phases. Noise measurements to characterize baseline ambient noise levels shall commence at least 3 months prior to site grading, or as otherwise approved by P&D. Operational noise monitoring shall commence within 3 months following startup of commercial operations.

<u>MONITORING</u>: P&D staff shall verify that the acoustical analysis and post-construction mitigation measures are implemented as required by this Condition. (*Mitigation Measure NOI-8*)

**Noise-9 Maintenance Hours During Operations.** Maintenance or other routine noise-generating operations activities within 1,600 feet of nonparticipating residences shall be limited to weekdays between the hours of 8:00 a.m. to 5:00 p.m. only, unless activities are for emergency repairs or as otherwise approved by the County.

**Plan Requirements:** This requirement shall be noted on all final plan sets for Project components that are within 1,600 feet of nonparticipating residences. **Timing:** Restrictions on maintenance hours shall be in place during the operational phase of the Project. P&D shall verify restrictions are printed on Project plans prior to approval of applicable Land Use Permit(s) for construction and/or operations.

**MONITORING:** P&D shall verify that maintenance hour restrictions are enforced throughout operation of the Project. The Project owner/operator shall provide documentation of timing of maintenance work upon request from P&D. (Mitigation Measure NOI-9)

#### PALEONTOLOGICAL RESOURCES

**Paleo-1 Pre-Construction Workshop.** The Project owner/operator shall conduct a preconstruction workshop with a County-qualified paleontologist, or individual qualified to identify paleontological resources, and construction workers and other Project personnel.

**Plan Requirements:** The workshop shall inform personnel what fossil resources are and what they look like, what to do and who to notify in case of a paleontological discovery, and penalties for the illicit disturbance of fossils. All construction personnel shall receive training and attendance at the training shall be documented. The Project owner/operator shall maintain training records onsite for review by P&D, if requested. **Timing:** The training workshop shall occur prior to commencement of any construction-related activity.

**MONITORING:** P&D staff shall receive and review the workshop training materials prior to any training, spot check in the field to ensure compliance with

this requirement, and request and review training attendance records, if determined necessary. (Mitigation Measure PALEO-1)

**Paleo-2 Monitoring Program.** Paleontological resources monitoring of mechanical disturbance only in Project areas known to have moderate to high sensitivity sediments shall occur concurrently with those construction activities. Monitoring shall be performed by an individual determined by the County to be qualified to identify paleontological resources. Based on field data, a decrease or increase in the monitoring of specific activities and areas may be identified.

**Plan Requirements and Timing:** Prior to start of construction, a contract or Letter of Commitment between the owner/operator and the monitor, consisting of a project description and scope of work, shall be prepared. The contract shall be executed and submitted to the County for review and approval prior to the issuance of the Land Use Permit for the first phase of construction and all subsequent construction phases.

**MONITORING:** P&D staff shall verify field monitoring by the County-qualified archaeologist and P&D grading inspectors shall spot check field work. (Mitigation Measure PALEO-2)

- **Paleo-3 Discovery of Fossils.** If fossils are found by the paleontological monitor, EQAP OEC, or construction personnel, the following actions shall be taken:
  - a. Follow appropriate notification procedures;
  - b. Assessment of the find, usually in the field by the Project paleontologist and determination of recovery procedures;
  - c. Provisions for construction avoidance until a find is assessed and, if recovery is called for, scientifically recovered; construction-related excavations would continue in other areas away from the discovery;
  - d. Provisions for continued monitoring of construction in all appropriate areas while the find is being recovered;
  - e. Post-field initial study and curation preparation and subsequent curation.

**Plan Requirements:** Fossils that may be discovered during construction shall first be assessed to determine whether they are scientifically significant and whether recovery measures are warranted. If recovery is recommended, it shall be completed in a manner reflecting scientific standards currently applied to paleontological excavations. Within those limits, all appropriate measures shall

be taken to expedite recovery and to minimize interference with construction scheduling. P&D shall be notified within 48 hours of a paleontological resources discovery assessed by the Project paleontologist to be significant and warranting recovery. The paleontological monitor shall periodically update the P&D during the recovery, and notify P&D upon completion of recovery. **Timing:** This measure shall be in effect throughout all construction phases.

<u>MONITORING</u>: P&D staff shall verify that this requirement is properly implemented through regular contact with the paleontological monitor, Project owner/operator, and site visits as appropriate. (Mitigation Measure PALEO-3)

# RISK OF ACCIDENTS, HAZARDOUS MATERIALS, AND SAFETY

**Risk-1** Hazardous Materials Management Plan. The Project owner/operator shall prepare a Hazardous Materials Management Plan that meets SBC Fire Department requirements.

**Plan Requirements and Timing:** A copy of the final Plan and evidence of Fire Department approval shall be filed with P&D prior to approval of the Land Use Permit for the first phase of construction.

**MONITORING:** P&D staff shall verify the completion and approval of the Plan and the SBC Fire Department shall enforce the requirements of, and verify compliance with, the Plan throughout construction and operation of the Project. (*Mitigation Measure RISK-1*)

**Risk-2 Refueling Vehicle Signs.** Refueling vehicles shall have a sign listing pertinent contacts to notify in the event of a spill.

**Plan Requirements and Timing:** A copy of the notification to all contractors regarding this requirement shall be provided to P&D prior to approval of the Land Use Permit for each construction phase.

**MONITORING:** P&D staff shall verify the notification and confirm compliance during construction. (*Mitigation Measure RISK-2*)

**Risk-3** Construction Fueling Location. Construction fueling shall be designated such that sensitive areas are avoided. The Project owner/operator shall provide written notification of this requirement to all contractors.

**Plan Requirements and Timing:** The notification shall be provided to contractors prior to their arrival onsite and a copy of the notification shall be filed with P&D prior to approval of the Land Use Permit for the first and subsequent phases of construction.

<u>MONITORING</u>: P&D staff shall verify the notification has been filed and shall spot-check during construction to verify compliance with this Condition during construction. (*Mitigation Measure RISK-4*)

**Risk-4 Equipment Maintenance.** All equipment shall be adequately maintained to minimize operational losses of hazardous materials and to reduce the risk of accidental spillage.

**Plan Requirements and Timing:** The Project owner/operator shall notify all contractors of this requirement in writing prior to their arrival at the Project site. A copy of the notification shall be filed with P&D prior to approval of the Land Use Permit for each phase of construction.

**MONITORING:** P&D staff shall confirm the notification has been filed and shall spot-check during construction to verify compliance with this Condition during construction. (*Mitigation Measure RISK-3*)

**Risk-5** Tower Failure and Blade Throw. All WTGs along public roadways shall adhere to the public road setback of the combined WTG tower and blade height. (Note: At this time, this requirement prevents siting of WTGs along the southern portion of the Middle turbine corridor as shown on Figure 2-2 in the final EIR. However, if San Miguelito Road and Sudden Road are converted to private roads beyond their intersection, siting of WTGs will be restricted but not prevented in this area.)

**Plan Requirements:** This requirement shall be included as a note on final design plans showing the WTG layout. **Timing:** The final plans shall be provided to the County for review and approval prior to approval of the Land Use Permit for the first and subsequent construction phases.

<u>MONITORING</u>: P&D staff shall confirm compliance during construction. (*Mitigation Measure RISK-5*)

## TRAFFIC AND CIRCULATION

**Traf-1 Traffic Management Plan (TMP).** The Project owner/operator shall prepare a TMP for submittal to the County of Santa Barbara, City of Lompoc, and Caltrans.

The purpose of the TMP is to address potential hazards associated with Project truck traffic. The Plan shall include required measures such as informational signs, flagmen when equipment may result in blockages of throughways, and traffic control to implement any necessary changes in temporary lane configuration. Specific provisions of the Plan shall include:

- f. Location and use of flag persons and pilot cars during the delivery of large loads.
- g. Requirements to limit the hours for transporting heavy loads to minimize traffic impacts.
- a. Limit on the number of heavy loads per day, or to specific days.
- b. Advance notification of residents, emergency providers, and hospitals when roads may be partially or completely closed.
- c. Protocols for passage of emergency vehicles and regular traffic when heavy vehicles are traveling at slow speeds.
- d. Provision of adequate parking for workers, construction vehicles, and trucks.
- e. Encouragement of measures for using carpooling, shuttle buses, cycling, or motorcycling to travel to the construction site.
- f. Transportation Demand Management (TDM), including agreements, employee information, reporting, and traffic count monitoring.
- g. Protocols for road repair pursuant to Condition *Traf-2* and handling oversize loads pursuant to Condition *Traf-3*, below.

**Plan Requirements and Timing:** Provisions of the TMP shall be noted on grading and building plans. The TMP and grading and building plans shall be submitted to P&D and reviewed and approved by P&D prior to approval of the Land Use Permit for the first and all subsequent construction phases. TMP requirements shall be in force throughout all construction phases.

**MONITORING:** P&D staff shall ensure that measures are included in the TMP and plans and shall verify compliance with the TMP requirements throughout construction. (*Mitigation Measure TC-1*)

**Traf-2 Roadway Repairs.** The Project owner/operator shall enter into an Agreement with affected jurisdictions to ensure that any damage to roadways attributable to Project traffic is mitigated through repair or reconstruction to original conditions. The Project owner/operator shall photograph or videotape roads prior to construction to ensure that final repairs are sufficient to return the road to pre-

construction conditions. The Project owner/operator shall comply with the requirements of the hauling permits from affected jurisdictions.

Plan Requirements: All road repair requirements shall be included in the TMP (see Condition *Traf-1*). The Project owner/operator shall pay for any repairs needed during the construction phase to maintain the roads in acceptable condition, as determined by the TMP. At the conclusion of each major construction phase, all affected roads shall be restored to pre-construction conditions in consultation with the affected jurisdictions. In addition, prior to the start of the rainy season, the roadways impacted by construction activities and heavy load delivery shall be surveyed to ensure that any roadway damage will not be subject to further damage from erosion caused by precipitation. If roadways are determined to need repair, interim repairs shall be proposed for review and approval by the affected jurisdictions and implemented in an approved timeframe to avoid further roadway damage.

**Timing:** The TMP shall be approved prior to approval of the Land Use Permit for the first and all subsequent Project phases. Conditions shall be enforced throughout all construction phases.

**MONITORING:** P&D and Public Works staff, as appropriate, shall confirm that requirements are included in the approved TMP, road damage is adequately documented, and required repairs are completed. (*Mitigation Measure TC-3*)

Traf-3

Oversize Loads. The Project owner/operator shall implement special traffic control measures and obtain all necessary permits for oversize loads from Caltrans, the City of Lompoc, and the County of Santa Barbara, as appropriate. The Project owner/operator shall obtain permits from the County of Santa Barbara to trim or remove trees, or both, on San Miguelito Road for the safe movement of oversized trucks. Longer trucks may be restricted to specific routes if turning radii are not sufficient on current truck routes. The Project owner/operator shall prepare a survey, which shall be conducted by a qualified, County-approved engineer, to determine if the large loads required for this project may be transported along southern San Miguelito Road without grading of embankments or damage to trees or other vegetation (apart from minor trimming of overhead branches). The survey shall be based on the actual load dimensions and vehicles to be used in transporting the largest turbine parts and other Project parts and materials. If the survey indicates that grading, tree removal, or other vegetation damage may occur, all potentially affected areas shall be included in the Project grading and drainage plans, and other applicable plans, including the Erosion Control Plan, Site Restoration Plan, and Tree Protection and Replacement Plan.

(see Conditions Wat-1, Bio-3, and Bio-4). County oak tree replacement requirements and any other applicable permit conditions relating to biological, cultural, geological, and water resources shall apply.

**Plan Requirements:** All requirements shall be included in the TMP. The Project owner/operator shall file copies of all oversize load/heavy haul permits with P&D prior to the first delivery. The Project owner/operator shall provide the County with the large load transportation survey, including all information on load sizes, for review and approval. **Timing:** Conditions shall be enforced throughout all construction phases. TMP and large load transportation survey shall be submitted to, and approved by, P&D prior to the issuance of the Land Use Permit for the first phase of construction and for subsequent Project phases, as applicable.

**MONITORING:** P&D staff shall verify that all required permits have been filed. P&D staff shall review the large load survey and verify that the all applicable plans, conditions, and requirements are included in the Plan and implemented as necessary to mitigate damage to embankments, trees, or vegetation. (Mitigation Measure TC-4)

## WATER RESOURCES

Wat-1 Erosion Control Plan. An Erosion Control Plan for Project construction shall be developed by a registered engineer to minimize potential impacts to surface water quality during construction activities. A Storm Water Pollution Prevention Plan (SWPPP) that incorporates Regional Water Quality Control Board requirements/BMPs and the measures listed below will be acceptable to comply with this requirement.

Best available erosion and sediment control measures shall be implemented during grading and construction, which could include but are not limited to:

- Use of sediment basins;
- Gravel bags;
- Silt fences;
- Geo-bags or gravel and geotextile fabric berms;
- Erosion control blankets;
- Coir rolls;
- Jute net:
- Certified straw bales (to avoid the introduction of noxious or invasive weeds).

Additional measures could include:

- Minimizing the size of the disturbed area associated with grading/construction;
- Stockpiling all excavated soils and protecting them from wind and water erosion;
- Revegetating disturbed areas;
- Limiting grading during construction to the dry season to the extent practicable.

If grading needs to be done outside of the dry season, the Project owner/operator shall coordinate grading work with P&D and the County Public Works Department and shall follow all applicable guidelines. Rainy season erosion control measures shall be implemented to control runoff and erosion in the event that revegetation is not completed prior to the rainy season.

Sediment control measures shall be maintained for the duration of the grading period and until graded areas have been stabilized by structures, long-term erosion control measures or landscaping.

Construction entrances and exits shall be stabilized using gravel beds, rumble plates, or other measures to prevent sediment from being tracked onto adjacent roadways. Any sediment or other materials tracked off site shall be removed the same day as they are tracked using dry cleaning methods.

Plan Requirements and Timing: The Erosion Control Plan (or SWPPP) shall be submitted to P&D for review and approval prior to approval of the Land Use Permit for the first and subsequent phases of construction. The Plan shall be designed to address erosion and sediment control during all Project phases. Plan requirements shall be noted on all grading and building plans. The Project owner/operator shall notify P&D and the EQAP OEC prior to commencement of grading. Erosion and sediment control measures shall be in place throughout grading and development of the site until all disturbed areas are permanently stabilized.

**MONITORING:** P&D staff shall verify compliance with requirements of the Erosion Control Plan. P&D grading inspectors shall monitor technical aspects of the construction activities in the field. (*Mitigation Measure WAT-1*)

**Wat-2 Road Widening Plan**. The Project owner/operator shall prepare a Road Widening Plan showing all watercourse encroachments and submit the Plan to P&D for review and approval. The Plan shall demonstrate that any roadway widening within or adjacent to a watercourse is the minimum practicable, and that the widening does not adversely affect the creek channel or flow pattern. The road widening plan shall also demonstrate that access to the City of Lompoc Frick

Springs Water Treatment Facility, and its operations and delivery systems, will not be compromised.

**Plan Requirements:** Plan requirements shall be noted on all grading and building plans and shall be reviewed and approved by P&D. The Project owner/operator shall notify P&D and the EQAP OEC prior to commencement of grading. **Timing:** The Road Widening Plan shall be submitted for review and approval by P&D prior to approval of the Land Use Permit for the first and subsequent construction phases, as applicable.

**MONITORING:** P&D shall verify compliance with the Road Widening Plan through site inspections as needed during construction. Grading inspectors shall monitor technical aspects of the construction activities. (Mitigation Measure WAT-2)

# IV. Additional Required Project-Specific Conditions:

## **DECOMMISSIONING AND ABANDONMENT**

**Decommissioning and Abandonment.** Upon abandonment of project operations the Project owner/operator shall submit a Demolition and Restoration Plan to restore the Project site to pre-construction conditions.

The Project shall be deemed abandoned if either of the following occurs:

- a. None of the turbines have produced electricity in more than one year, unless the cessation is due to one or more of the following conditions:
  - 1. Unresolved mechanical or technical problems;
  - 2. One or more force majeure events (e.g., major earthquake or fire);
  - 3. Turbines are required to shut down to comply with other requirements of this Conditional Use Permit or the requirements of other jurisdictional authorities, and the Project owner/operator has provided a plan including timetable, satisfactory to the Director of Planning and Development, to address the conditions and return the turbines to service.
- b. The County has established that more than 50 percent of the installed turbines are actively being removed or are in disrepair and there is no demonstrated plan, including timetable, satisfactory to the Director and the Project owner/operator and endorsed by a qualified engineer familiar with wind turbine technology, to restore the equipment and return the turbines to service.

Upon determination by the Director that either of the above criteria is present on the project site, the Director shall give written notice to the Project owner/operator that the Project has been deemed abandoned. The Project owner/operator shall submit an Abandonment and Restoration Plan for review and approval and obtain the appropriate permit applications applicable at that time to the County required to demolish, restore and revegetate the site. The Plan shall specifically identify a schedule for equipment and structure removal any site restoration and any facilities, including roadways, proposed to be left on site.

The County shall take appropriate action in the event the Project owner/operator fails to comply with this condition. This action may include pursuit of legal remedies for zoning violation and use the abandonment/decommissioning financial assurance to remove the turbines and restore the site to pre-construction conditions.

# **Decom-2** Financial Assurance for Abandonment and Restoration. The Project owner/operator shall submit to the Director:

- a. An itemized cost estimate for removal of all structures and equipment and restoration of the project site and an estimate from a qualified party of the reclamation value of the turbines and electrical infrastructure. The bases for all estimates shall be identified and documented. The estimates shall be revised and updated and resubmitted to P&D every five years.
- b. The Project owner/operator shall submit to the County a financial assurance mechanism acceptable to the County for the cost of removal of structures and equipment and restoration of the project site. The amount of the assurance shall be based on the itemized cost estimate minus the reclamation value of the turbines and electrical equipment. The reclamation value may only be credited to the cost of removal of structures and equipment and not to site restoration costs. The financial security shall be in place for the life of the Project. The County will release the security upon successful completion of structure and equipment removal and site restoration, as determined by the County.

## RECLAIMED WATER

## **RecWat-1** Reclaimed water shall be subject to the following hauling and use controls:

a. Use sites shall be approved by the Regional Water Quality Control Board and the State and local health departments.

- b. Truck drivers shall be instructed as to the requirements contained herein and the potential health hazards involved with the reuse of wastewater.
- c. Tank trucks and other equipment which contain or come in contact with reclaimed water shall be clearly identified with warning signs.
- d. Tank trucks used for reclaiming water shall be thoroughly cleaned of septage or other contaminants prior to use.
- e. Use of reclaimed water shall not create any odor or other nuisance.
- f. Reclaimed water shall be confined to the authorized use area.
  - 1. Ponding or runoff of reclaimed water shall not occur.
  - 2. Aerosol formation during uses involving spraying must be minimized.
- g. Reclaimed water shall be applied so as to prevent public or employee contact with the water.
- h. Reclaimed water must not be introduced into any permanent piping system and no connection shall be made between the tank truck and any part of a domestic water system.
- i. Tank trucks shall be cleaned and disinfected after the project is completed.
- j. Tank trucks used to transport reclaimed water shall not be used to carry domestic water.

**Plan Requirements and Timing:** This condition shall be printed on all grading and construction plans. All conditions to be carried out whenever reclaimed water is on site.

MONITORING: P&D will site inspect throughout grading and construction activities.

# V. County Rules & Regulations / Legal Requirements

- **Rules-1 Agreement to Comply.** Prior to approval of the first Land Use Permit for the Project, the Project owner/operator shall sign and record an Agreement to Comply with the project description and all conditions of approval.
- **Rules-2** Environmental Quality Assurance Program (EQAP). Prior to issuance of the Land Use Permit for the first phase of construction, an Environmental Quality Assurance Program (EQAP) shall be prepared according to procedures established by Santa Barbara County P&D, paid for by the Project owner/operator and submitted for review and approval to P&D.

Plan Requirements: The EQAP shall include, at a minimum, the following:

- a. All conditions and mitigation measures imposed on this project and the impacts they are mitigating separated by subject area.
- b. A plan for coordination and implementation of all measures and the plans and programs required therein.
- c. A description of all measures the Project owner/operator will take to assure compliance, including field monitoring, data collection, management and coordination of all field personnel and feedback to field personnel and affected County agencies including P&D. Contractor feedback responsibilities include weekly, monthly and quarterly reports (as specified in EQAP) to be prepared throughout grading, construction, and operations. These shall include status of development, status of conditions, incidents of non-compliance and their results and any other pertinent or requested data.
- d. A contractor to carry out the EQAP shall be selected by P&D. The contractor(s) will be under contract and responsible to the County, with all costs to be funded by the Project owner/operator. The EQAP contractor shall appoint at least one On-site Environmental Coordinator (OEC) responsible for overall monitoring, but shall employ as many qualified specialists as necessary, as determined by P&D, to oversee specific mitigation areas (e.g. archaeologists, biologists). In addition, the monitor has the authority and ability to ensure compliance with all project conditions and to stop work in an emergency.
- e. The EQAP shall also provide for any appropriate procedures not specified in the conditions of approval to be carried out if they are necessary to avoid environmental impacts.

**Timing:** The EQAP shall be submitted to P&D for review and approval, and shall be approved, prior to issuance of the first Land Use Permit for the Project. The Project owner/operator shall implement the requirements of the EQAP throughout all development phases of the Project.

## Rules-3 Compliance with Departmental letters required as follows:

- a. Air Pollution Control District
- b. Fire Department
- c. Public Works Road Division
- d. Public Works Water Division
- **Rules-4 Mitigation Monitoring required**: The applicant shall ensure that the project complies with all approved plans and all project conditions including those which must be monitored after the project is built and occupied. To accomplish this, the applicant agrees to:
  - a. Contact P&D compliance staff as soon as possible after project approval to provide the name and phone number of the future contact person for the project and give estimated dates for future project activities.
  - b. Contact P&D compliance staff at least two weeks prior to commencement of construction activities to schedule an on-site pre-construction meeting with the owner, compliance staff, other agency personnel and with key construction personnel.
  - c. The owner/operator shall provide an initial deposit of \$25,000 and execute an Agreement for Payment of Compliance Fees and Consultant Costs with the County to adequately fund project permit compliance. All reasonable expenses incurred by the County or County contractors for permit condition implementation and enforcement of permit conditions shall be reimbursed by the owner/operator within 30 days of invoicing by County. All such activities may be conducted by an independent consultant under contract to the County, if deemed necessary by County.
- VI. This permit is issued pursuant to the provisions of Section 35.82.060 of the County Land Use & Development Code and is subject to the foregoing conditions and limitations; and this permit is further governed by the following provisions:
  - a. If any of the conditions of the Conditional Use Permit are not complied with, the Commission, after written notice to the permittee and a noticed public hearing,

may in addition to revoking the permit, amend, alter, delete or add conditions to this permit at a subsequent public hearing noticed for such action.

- b. A Conditional Use Permit shall become null and void and automatically revoked if the use permitted by the Conditional Use Permit is discontinued for more than one year.
- c. Said time may be extended by the Commission one time for good cause shown, provided a written request, including a statement of reasons for the time limit extension request is filed with Planning and Development prior to the expiration date.

Dianne Black	
Director of Development Services,	
For JOHN BAKER, DIRECTOR	
Date	

xc: Minute Book (original copy)

Case File:

Permanent File

Fire Department

Flood Control

Park Department

**Public Works** 

**Environmental Health Services** 

**APCD** 

County Surveyor

**Deputy County Counsel** 

County Chief Appraiser

Owner / Applicant: Pacific Renewable Energy Generation, LLC Agent: John Stahl, Gaviota Energy Group, Inc.

Planner: John Day, Energy Division

the Lompoc Wind Energy Project. For a detailed discussion of the impacts and the entirety of the mitigation measures, please refer to Sections 3.2 Note to reader: Table ES-1 presents a summary only of the Class I impacts (significant and unmitigable to a level of insignificance), identified for through 3.15. The entire mitigation measures are also available for review in Appendix D, Mitigation Monitoring Plan. Due to the substantial edits to and reordering of the biological resources impacts and mitigation measures, deletions are not shown in the table below.

TABLE ES-1 Summary of Class I Impacts and Mitigation Measures

Residual Impact	Significant
Mitigation Measure Summary	BIO-15a: Siting. The turbines shall be sited so that each tower is located at least 500 feet away from critical biological resources identified in preconstruction surveys. specifically: active raptor nest sites, active state or federally listed species' nests. open water which would attract birds or bats (including stock-ponds), thicker riparian habitat in Canada Honda and Miguelito creeks, eucalyptus tree groves, or vernal pools, if present. The turbines shall be sited so that each tower is located at least 250 feet from the un-named intermittent tributaries containing Central Coast Riparian Scrub habitat located up-gradient of major streams. Preconstruction surveys (described in MM Bio-11a) shall identify existing raptor nests and other sensitive resources. The Applicant shall, in consultation with the CDFG, attempt to dissuade raptors from building new nests within 500 feet of any turbine.  BIO-15b: Appropriate WTG and Project-Element Design. To minimize the likelihood of collisions of birds with WTGs and onsite power poles and collection lines?, the design features of all WTGs and project related facilities shall include the following:  a) Underground (rather than overhead) collection lines shall be used to minimize perching locations and electrocution hazards to birds, except where undergrounding would create potential for serious erosion (e.g., crossing steep canyons) or other serious impacts that could be avoided with overhead lines.  b) All overhead collection lines shall be spaced to minimize the potential for raptor electrocution using the latest APLIC (2006) guidelines for line spacing. Further, construction and work procedures shall be consistent with the APLIC guidelines "Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006."
Impact Summary	Unknown numbers of special status and non-sensitive birds and daying through collisions with the WTGs over the duration of the Project.
Resource Phase/Project Impact Sun Area Component¹	Operations
Resource Area	<u>BIO-10</u>

Where this table attributes impacts to the power line, it should be understood that power line related impacts would be less than significant with application of the Avoidance and Protection Measures (see Section 2.8.5).

Note: These provisions are applicable only to 34.5 KV collection lines at the project site. Avoidance and Protection Measures for the proposed 115 KV PG&E power line arecovered separately in Section 2.8.5.

Lompoc Wind Energy Project / 06CUP-00000-00009 Planning Commission Hearing Date: September 30, 2008

TABLE ES-1 Summary of Class | Impacts and Mitigation Measures

Suffilliary of Glass	ourninary of class i impacts and ivilligation ineasures	igation ineasures		
Resource Area	Phase/Project Component <u>1</u>	Impact Summary	Mitigation Measure Summary	Residual Impact
			c) WTGs with low rotational speed (approximately 10 to 23 revolutions per minute [RPM]) and tubular towers shall be used. WTG blades shall not rotate when the WTG is not in operation.	
			d) All permanent meteorological towers shall be unguyed.	
			BIO-16a: Before-After/Control-impact (BACI) Study. Conduct BACI surveys under direction of a County-approved biologist. The purpose of the BACI surveys is	
			to compare pre- and post-construction bird use on the site; to assess the effects of the project on avian species; to assist in determining whether additional mitigation elements are necessary and to collect research data to better understand wind	
			power industry impacts and provide regulatory agencies with data for future	
			information on the location of species within the site, light elevations and patterns of	
			activity, and vvi or avoidance behavior. The study data and reports shall be provided to the County for review. The surveys shall be conducted from the time of project to the County for review.	
			approval through each project construction phase and for two years following first delivery of power for that phase.	
			BIO-16b: Bird/Bat Mortality Study. Conduct a bird and bat mortality study under	
			direction of a County-approved biologist. The purpose of mortality surveys is to	
			WTGs and to identify individual WTGs or groups/strings of WTGs that cause	
			unanticipated levels of mortality. The information will be used to determine whether the mortality thresholds of the Adaptive Management Plan (see AMP, below) have	
			been reached. In addition, the collected data will add to the body of knowledge to	
			provide regulatory agencies with data for luture projects. Brief quarterry reports including tabulated search data and annual reports including analysis of the year's	
			data shall be prepared. The study data and reports shall be provided to the County for review. Monitoring shall be conducted for the first full 2 years after all WTGs are	
			in operation for each project construction that a Additional years of monitoring	
			court be required in the mortality of special status billy and bat species exceeded thresholds (see AMP, below).	
			BIO-16c:. Reduce Prey Base Near Turbines. Conduct a program under direction	
			of a County-approved biologist to reduce the densities of California ground squirrels.	
			burrowing mammals is intended to reduce the attraction of raptors to the Project	

TABLE ES-1
Summary of Class | Impacts and Mitigation Measures

Summary of Class	delinially of class I impacts and mingation measures	igation incasures		
Resource Area	Phase/Project Component <u>1</u>	Impact Summary	Mitigation Measure Summary	Residual Impact
			area, and thus lower the potential for mortality resulting from collisions with WTGs and power lines on the project site. The program plan should emphasize, but not be limited to existing, mapped small mammal colonies. The plan shall be subject to County approval. Brief quarterly reports including the study data shall be provided to the County for review. The reports may be provided electronically. The program shall begin during the construction phase and continue for 2 years of Project operation. The County could modify or discontinue the program if new information indicates it is ineffective or harmful.	
			BIO-16d: Adaptive Management Plan (AMP). Develop an Adaptive Management Plan (AMP) to be activated in the event that bird or bat mortality exceeds specified threshold levels. The AMP provides a structured framework to guide response, in case project operations result in excessive mortality that was unforeseeable at the time of EIR certification and project approval.	
VIS-1	Construction and Operations/ LWEF, Power Line <sup>3</sup>	WTGs and related structures have the potential to be visible in the vicinity of the Project.	VIS-1: Materials Storage. All construction materials and excavated materials shall be stored away from San Miguelito Road, whenever possible, to reduce impacts on mountain views.  VIS-2: Location of Construction Activities. Construction activities and materials storage shall be confined to within the WTG corridors, staging areas, and the Project Substation and operations and maintenance (O&M) facility areas.  VIS-4: Landscape and Lighting Plan: In accordance with the Santa Barbara County Land Use Element, Visual Resources Policies, Policy 1, the Applicant shall be required to submit a landscaping plan to the County for review and approval. In addition, any facility lighting shall be included. Measures to minimize the attraction of birds to facility lighting shall be developed and presented in the plan.	Significant
			OCC GIOU MILIGARIOI INCASAI C LOTI.	

<sup>3</sup> Visual impacts of the 115 kV power line in the vicinity of the project would be less than significant.

TABLE ES-1 Summary of Class I Impacts and Mitigation Measures

Resource Area	Phase/Project Component <u>1</u>	Impact Summary	Mitigation Measure Summary	Residual Impact
VIS-2	Construction and Operations/ LWEF	Westernmost WTGs would be visible to users of Jalama Beach County Park. Northeastern—most WTGs would be visible to users of Miguelito County Park.	VIS-3 Contribution to County Parks Fund. The Applicant shall make a one-time \$100,000 payment to the County. This money shall be used by the County Parks Department exclusively to preserve and enhance the natural beauty of Miguelito County Park and Jalama Beach County Park.  See Mitigation Measure LU-1.	Significant
VIS-4	Operations/ Power Line <sup>3, 4</sup>	Placement of the power line in the area of SR-1 introduces a significant new series of power poles that would silhouette against the skyline.	See Avoidance and Protection Measure PL-5, Section 2.8.5 A-VIS-4: Power Line Relocation/Pole Height. At the southeast corner of the City of Lompoc, where the power line route would be visible from SR-1, the following measures shall be used, where technically feasible, to minimize visual impacts: longer spans between the poles; shorter poles; straddle ridgeline with two poles instead of a single pole on the ridge line.	Significant

4 Power Line Route Alternative 1 (see Section 5.3.2) would reduce visual impacts of the power line to less than significant.

Project. For a detailed discussion of the impacts and the entirety of the mitigation measures, please refer to Sections 3.2 through 3.15. The entire mitigation measures are also available for review in Appendix D, Mitigation Monitoring Plan. Due to the substantial edits to and reordering of Note to reader: Table ES-2 presents a summary only of the Class II impacts (significant but mitigable) identified for the Lompoc Wind Energy the biological resources impacts and mitigation measures, deletions are not shown in the table below.

TABLE ES-2 Summary of Class II Impacts and Mitigation Measures

Resource	Resource Phase/Project Impact Sum Area Component <sup>5</sup>	Impact Summary	Mitigation Measure Summary	Residual Impact
AQ-2	Construction/ LWEF, Power Line	Particulate matter emissions during construction would result from soil disturbance, travel on unpaved roads, mobile source exhaust emissions, and concrete batch plants.	A-AQ-2: Dust Control Plan. A Dust Control Plan shall be prepared by the Applicant.	Less than Significant
<u>BIO-1</u>	Construction	Approximately 127 acres of vegetation and wildlife habitat will be temporarily impacted by construction, with an additional 43 acres being permanently disturbed (e.g., by construction of roads, pads, facilities sites).	BIO-1: Worker Education and Awareness Program. The Applicant shall fund a County-approved biologist to develop and implement a worker education and awareness program (WEAP) specific to the Project. The program shall be presented to all individuals involved in the construction and O&M phases of the Project. The program shall be presented program shall include information focused on sensitive habitats and species.  BIO-2: Ground Disturbance. The Applicant shall minimize the amount of disturbance to the extent feasible including areas devoted to WTGs; power line poles; temporary and permanent access roads; stockpiles; staging, parking and lay down areas; areas where spoil shall be used to control erosion; and areas for associated facilities. Construction activities shall avoid sensitive areas, such as riparian zones, forests, etc., where feasible. Construction shall avoid all wetlands regulated by Santa Barbara County, CDFG, and USACE (see Mitigation Measure BIO-9) where feasible. Parking, lay down, storage areas, and other sites of superficial disturbance shall be located in previously disturbed areas or in annual grassland (except in Gaviota tarplant habitat) and will be mowed, versus graded, where feasible to keep root structures in place; thereby, facilitating future revegetation. Permanent access roads shall follow routes used for construction access to reduce the amount of new road construction. Vehicles and equipment access shall follow marked routes. Indiscriminant cross-country vehicle travel shall	Significant

Where this table attributes impacts to the power line, it should be understood that power line related impacts would be less than significant with application of the Avoidance and Protection Measures (see Section 2.8.5).

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TABLE ES-2 Summary of Class II Impacts and Mitigation Measures

Area	Component <sup>5</sup>	impact Summary	Mingation Measure Summary	Impact
			not be allowed.	
			BIO-3: Site Restoration and Revegetation Plan. The Applicant shall retain a County-approved botanist to prepare and implement a site restoration and	
			revegetation plan.	
			BIO-8: Native Perennial Bunchgrass. The Applicant shall retain a	
			County-approved botanist to resurvey the potentially affected area during the appropriate season and determine the total area with at least 10 percent cover by	
			native grassland species on the site (=native grassland habitat). If the total area of	
			native grassiand habitat that would be permanently removed is less than 10 percent of the total area of native grassland habitat within the Project area, loss of native	
			grasses shall be mitigated by seedbank salvage and replacement as described for Horkelia.	
			<b>BIO-11b: Fencing.</b> To minimize the amount of disturbance to wildlife habitat, the	
			Applicant shall clearly define in the field: the project construction areas, including	
			areas devoted to WTGs; power line poles; temporary and permanent access roads; etockniles: staning parking and lay down areas; areas where social shall be used to	
			control erosion; and areas for associated facilities. Project boundaries shall be	
			clearly marked with fencing or staking that shall be replaced as needed.	
			BIO-11c: Biological monitoring. The Applicant shall fund a County-approved,	
			Environmental Monitor during Project construction to monitor construction activities	
			shall be present onsite during all vegetation removal and during all of the initial	
			ground disturbance activities for all aspects of the project, and shall regularly inspect	
			the project site as needed after the initial ground disturbances to ensure that all	
			mitigation measures are being implemented. The biologist shall ensure that wildlife	
			associated underground collection system from the WTGs to the substation (i.e.,	
			open trenches). Safeguards shall be implemented during daytime periods of non-	
			activity and overnight, such as a placing a platform over the entire excavation site,	
			ilush with the ground surface, or exclusionary rencing. A form of egress (such as a ramp) shall be placed within the excavated area to provide an exit to accidentally	
			trapped wildlife. The biologist shall be responsible for ensuring these safeguards are	
			In place on a daily basis.	
			BIO-11d: Monitoring Report. On a bi-weekly basis, the County-approved, Environmental Monitor shall provide the County a Construction Monitoring and	

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TABLE ES-2 Summary of Class II Impacts and Mitigation Measures

Resource Area	Resource Phase/Project Impact Sum Area Component <sup>5</sup>	Impact Summary	Mitigation Measure Summary	Residual Impact
			Biological Resources Mitigation Report. This report shall include a description of the activities that have occurred onsite, wildlife species encountered, relocation efforts, wildlife mortalities and injuries, violations or issues with construction activities, and any project-related resolutions.	
<u>BIO-2</u>	Construction	Tree trimming or removal may be required during transport of WTGs or power line installation. A small portion of the proposed roadway network would affect tree-dominated vegetation; power line construction would occur close to wooded areas.	BIO-4: Tree Protection and Replacement Plan. The Applicant shall retain a County-approved botanist or arborist to design and implement a tree protection and replacement plan in order to protect existing native trees and minimize adverse effects of grading and construction. No ground disturbance, including grading for buildings, access ways, easements, and subsurface grading, shall occur within the critical root zone of any native tree unless specifically authorized by the approved tree protection and replacement plan.  See also Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-11c, d above.	Significant
<u>BIO-3</u>	Construction	Direct loss of wetlands and seeps would occur at creek crossings and the proposed O&M facility. Direct loss of wetlands and seeps within the WTG corridor are not expected; however, there is potential for loss should the project configuration change. Additionally, soil erosion or spills could reduce water quality during construction.	BIO-9: Protection of Creeks, Springs, and Wetlands. The Applicant shall make every effort to minimize the area and degree of impact to State and Federal wetlands and other Waters of the U.S. associated with placement of bridges, siting of the O&M facility, and other construction-related tasks. Additionally, all potential jurisdictional areas that may be disturbed by construction shall be delineated following all applicable standards associated with features regulated by the State of California, Santa Barbara County, and USACE for regulated wetlands, including documentation of specific surveys for presence of listed plant, invertebrate, or wildlife species that may occur there. A wetland avoidance and restoration shall be prepared to ensure protection to wetland areas, restoration of temporarily disturbed wetland areas, and 2:1 replacement of any wetlands permanently lost.  See also Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-10, BIO-11c, d, GEO-2, WAT-1, AND WAT-2.	Significant

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TABLE ES-2 Summary of Class II Impacts and Mitigation Measures

Resource	Phase/Project	Impact Summary	Mitigation Measure Summary	Residual
Area	Component <del>2</del>			Impact
<u>BIO-5</u>	Construction	Construction would result in 10.3 acres (8.1 % of site total) of permanent and 22.3 acres (17.4% of site total) of temporary loss or disturbance to Gaviota tarplant and its		Less than Significant
	<u>Operations</u>	Occasional disturbance to small areas of Gaviota tarplant habitat may occur as a result of operations or maintenance activities involving clearing or vehicle operation in occupied habitat.	boundaries to avoid the impact is not teasible, the loss will be mitigated by collection of seeds or other propagules from the plants during the appropriate time of the year.  BIO-6: Gaviota Tarplant Disturbance. The Applicant shall retain a qualified botanist approved by CDFG and the County to address impacts to Gaviota tarplant and oversee flagging of the perimeter of all approved work areas in Gaviota tarplant habitat. Gaviota tarplant habitat will include all areas of previously identified habitat plus any additional areas that are discovered during preconstruction surveys prior to ground disturbance. Gaviota tarplant will be assumed to be present within all areas where it had been previously mapped even if it is not evident during preconstruction surveys (because seedbank may be present that could germinate and establish under different environmental conditions). The Project design shall continue to be refined to minimize Gaviota tarplant habitat disturbance, the size of temporary excavation areas, and the size of areas where permanent loss shall occur. A Gaviota tarplant shall be prepared detailing measures for restoration of temporarily disturbed tarplant sites and measures to compensate for permanent losses.  See also Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-11c, d above.	Less than Significant
<u>BIO-6</u>	Construction	A number of other special-status plant species may be present onsite or in the power line corridor and could be lost during construction.	BIO-7: Kellogg's and Mesa Horkelia Habitats. For Kellog's and Mesa Horkelia habitats identified during pre-construction surveys (see Mitigation Measure BIO-5, above), the Applicant shall track over Kellogg's and Mesa Horkelia habitat, where the terrain shall safely allow it, rather than widening roads beyond the permanent road width to minimize plant removal. The seedbank shall be salvaged and stockpiled separately from other spoil along roads and adjacent to other facilities constructed in Kellogg's and Mesa Horkelia habitat as described for Gaviota tarplant. Salvaged stockpiles shall be covered or sprayed with hydromulch and binder to crust the surface to minimize soil loss to wind erosion. Salvaged seedbank shall be spread over restored areas as described for Gaviota tarplant.	Less than Significant

TABLE ES-2 Summary of Class II Impacts and Mitigation Measures

Cullinally Of Cir	ואי וווווים מהממיות וווו	definition of class in impacts and initigation incastings		
Resource Area	Phase/Project Component <sup>5</sup>	Impact Summary	Mitigation Measure Summary	Residual Impact
			Gaviota tarplant habitat, methods for the latter shall be used. If the area is within Gaviota tarplant habitat, methods for the latter shall be used.  See also Mitiration Measures BIO-1 BIO-2 BIO-3 BIO-5 and BIO-11c d above	
<u>BIO-8</u>	Construction and Operations	Nesting birds could potentially lose nests through destruction or abandonment.		Significant Significant

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TABLE ES-2 Summary of Class II Impacts and Mitigation Measures

Resource Area	Phase/Project Component <u>5</u>	Impact Summary	Mitigation Measure Summary	Residual Impact
			area. Areas of dense vegetation, including the riparian corridors along Miguelito Creek, the eucalyptus groves onsite, and mixed evergreen forest within 500 feet of Project facilities shall be surveyed at weekly intervals to collect data on nesting activities. If any other active avian species nest or roosting bats are found, construction activity shall be limited to within 150 feet of the area or as directed by the County-approved biologist unless otherwise directed by CDFG.	
			BIO-14e: Sensitive Avian Species. The County-approved biologist shall conduct a study in the spring season prior to the onset of construction activities to assess the density of special status passerines and other ground-nesting birds in areas of the project site potentially subject to disturbance. Plots shall be established in various habitats and checked at weekly intervals to monitor for new nests of ground-nesting birds that are sensitive species, including California horned lark, California rufouscrowned sparrow, grasshopper sparrow, and burrowing owls. The surveys shall be	
			conducted as long as birds are nesting in the Project area between February 1 and August 31. The surveys shall be discontinued when it is apparent that nesting has ceased for the season. Surveys for burrowing owls shall be conducted prior to construction in the Project area, including areas within 300 feet of all Project facilities, WTG sites, and access roads. The survey shall be performed regardless of season of the year due to this species' being present in the winter.	
			If construction is to occur between February 1 and August 31, all sites to be disturbed shall be surveyed for ground-nesting and shrub-nesting birds immediately prior to construction in a given area. If an active nest is found, no construction activity shall occur within 300 feet of the nest or as determined by the biological monitor and updated maps showing active nesting locations shall be distributed to the biological monitors. EQAP inspector, and crew foreman on a weekly basis.	
			See also Mitigation Measures BIO-1, BIO-2, and BIO-11c, d above.	
<u>BIO-9</u>	Construction and Operations	Direct and indirect impacts may occur to special-status wildlife species. Those with higher potential for injury or fatalities by vehicles or equipment, loss of habitat, or disturbance of burrows	BIO-13: Pre-construction Surveys and Conservation of El Segundo Blue Butterfly (ESBB). The applicant shall retain a qualified, County-approved entomologist to conduct directed surveys for the ESBB during the flight season (approximately mid-June to August) within all areas of coast buckwheat known on the LWEP site, including areas that would be affected by construction, operation, or maintenance of the project. The surveys shall be documented including a description of methodology, description and maps of the surveyed areas, and identification of locations of any ESBB observed within the proposed Project area (including maps and GPS coordinates). Conditions the sites where ESBB are	Less than Significant

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TABLE ES-2 Summary of Class II Impacts and Mitigation Measures

Suffilliary Of Cia	Suffilliary of Grass II Illipacts and Miligation Measures	ningailon Measures		
Resource Area	Phase/Project Component <u>5</u>	Impact Summary	Mitigation Measure Summary	Residual Impact
		and nests include reptiles, raptors, and passerines.	located shall be described by the entomologist including vegetation, soils, exposure, and other factors that may influence the occurrence of ESBB at that site.	
			A plan to restore and/or enhance ESBB habitat shall be prepared by a County-approved botanist with input from a County-approved entomologist.	
			<b>BIO-14a: California Horned Lizard.</b> The Applicant shall fund a County-approved biologist to survey construction areas, including the sites of footings for WTGs and	
			power poles, access roads, and staging, parking, and lay down areas, for California horned lizards. Surveys shall be completed within 3 days before the start of initial	
			vegetation clearance or ground disturbance in any affected area. The survey may be done in conjunction with surveys for ground-nesting birds. However, the survey	
			Tor normed lizards shall be performed regardless of season of the year. If normed lizards are found, they shall be relocated to similar habitat at least 300 feet away from construction activity.	
			BIO-14b: Silvery Legless Lizard. The Applicant shall retain a County-approved biologist to survey for silvery legless lizards that could potentially occur in areas with	
			Central Coast scrub and annual grassland with a shrub component. The biologist shall work with the equipment operator during initial vegetation clearance to identify those areas that would require legless lizard mitigation, and then to salvage and	
			relocate exposed animals.	
			BIO-14c: San Diego Desert Woodrat. The Applicant shall retain a County-approved biologist to survey the locations of WTGs and access routes prior	
			to construction, as well as for a distance of 50 feet away for signs of the San Diego desert woodrat. If disturbance to a nest is likely to occur, the animal shall be livetranced and relocated to a distance of 300 feet from Project activities and within	
			inapped and relocated to a distance of 500 feet norm reject activities and within similar habitat	
			<b>BIO-14d: American Badger.</b> The Applicant shall retain a County-approved biologist to survey, prior to construction, for badger dens in the Project area, including areas	
			within 250 feet of all Project facilities, WTG sites, and access roads. The survey shall be performed regardless of season of the year. If badger dens are found, each	
			den shall be classified as inactive, potentially active, or definitely active. Measures shall be taken to discourage continued use of active dens, and the dens shall be	
			excavated and backfilled aster confirming no badgers are trapped inside.	
			See also Mitigation Measures BIO-1, BIO-2, BIO-11a, b, c, d and BIO-14e above.	

TABLE ES-2 Summary of Class II Impacts and Mitigation Measures

Resource	Resource Phase/Project Impact Sum	Impact Summary	Mitigation Measure Summary	Residual
Area	Component⁵	•		Impact
<u>BIO-11</u>	<u>Operations</u>	Birds and bats may collide with power poles and meteorological towers.	See Mitigation Measures BIO-15a, b and BIO-16a, b, c, d above.	Less than Significant
<u>BIO-14</u>	Construction and Operations	Invasive species carried from other work sites may establish on site and displace native plant species or interfere with revegetation; and topsoil removal and equipment operation may reduce the ability of soils to support	BIO-10: Riparian Habitat Restoration. During consultation with the USACE and CDFG for impacts to Honda Creek (and other crossings, if applicable), a determination shall be made regarding whether a riparian habitat restoration plan will be required. If so, the Applicant shall retain a qualified ecologist to prepare and implement a site-specific creek restoration plan.  See also Mitigation Measures BIO-1, BIO-2, BIO-6 and BIO-11c, d above.	Less than Significant
CULT-1	Construction and (potentially) Operations / LWEF, Power Line	Construction activities could result in significant impacts to 48 20 prehistoric archaeological sites.	A-CULT-1: Additional ArchaeologicalSurveys_Investigations. If it is determined that a Project element requiring ground disturbance cannot be located at least 400 500 feet from the mapped boundaries of an archaeological site, a new Phase 1 survey of that specific location shall be conducted. If this survey confirms that ground disturbance would be call this conducted by employing a small number of shovel test units (STU). These STUs would be used to determine the actual subsurface boundary of the archaeological site relative to the proposed disturbance, and therefore verify whether or not the site would be affected by the disturbance. The STUs should be 20 inches in diameter and excavated in arbitrary 8-inch levels. If the presence of cultural materials is confirmed in areas that would be disturbed by Project construction, then Project construction activities should be reviewed and redesigned, to the greatest extent feasible, to avoid impacts on confirmed cultural resource sites (see Mitigation Measure CULT-7).  If a recorded archaeological site can not be avoided through Project redesign, then Phase 2 subsurface testing shall be conducted to evaluate the nature, extent, and significance of the cultural resources. This evaluation program shall be designed to assess each archaeological site consistent with County Archaeological sites are significant.	Significant

TABLE ES-2 Summary of Class II Impacts and Mitigation Measures

Resource Area	Resource Phase/Project Impact Sum Area Component <sup>5</sup>	Impact Summary	Mitigation Measure Summary	Residual Impact
			Phase 3 mitigation in the form of data recovery excavation shall be implemented consistent with County Archaeological Guidelines.	
			A-CULT-2: Archaeological Isolates. In the case where ground disturbance is proposed within 30 100 feet of Archaeological Isolates LWF Iso-1, Iso-8, Iso-9, Iso-10, and Iso-11, a single STU should be excavated within 3 feet of the isolate in order to determine if there are subsurface deposits present. If the isolate cannot be relocated, the STU should be placed in the general vicinity of its mapped location. If subsurface cultural deposits are identified, they should be assessed and characterized in accordance with Mitigation Measure A-CULT-1.	
			A-CULT3: Road Preparation. Whore existing graded ranch roads pass through an archaeological site, such roads may be utilized and widened through the site area by surfacing them with a 6-inch layer of imported gravel or soil that is free of cultural materials and recognizably different from the site soils. Surfacing the road with gravel should also occur for a distance of 100 feet beyond the mapped boundary of a site, except in cases where the boundary has been established through subsurface testing. Gravel from site LWE-111 should not be used for this purpose because it contains cultural material.	
			A-CULT-5CULT-4: Archaeological and Native American Monitors. A County-approved archaeologist and Native American monitor shall monitor all ground disturbances in all areas containing known archaeological materials to ensure that any previously unidentified cultural resources are recorded.	
			<b>CULT 46: Avoidance of Cultural Resources.</b> Avoidance of cultural resource sites is the preferred measure, and all impacts to CRHR eligible sites shall be avoided to the greatest extent <u>feasible possible</u> .	
			<b>CULT-72:</b> Final Plan Notification. The Applicant shall include a note on a separate informational sheet to be recorded with the final plans for each construction phase designating the known archaeological sites as unbuildable areas, unless the archaeological site is formally evaluated by a County- approved archaeologist as ineligible for the CRHR or a Phase 3 data recovery program has been implemented. The areas shall not be identified as archaeological sites on the informational sheet.	
			CULT-83: Temporary Fencing. Known unevaluated or determined significant archaeological sites and 50-foot buffer areas shall be temporarily fenced with chain link flagged with color or other material authorized by the County where ground	

TABLE ES-2 Summary of Class II Impacts and Mitigation Measures

Resource	Resource   Phase/Project   Impact Sum	Impact Summary	Mitjaation Measure Summary	Residual
Area	Component <sup>5</sup>			Impact
			disturbance is proposed within 400500 feet of the site and a buffer.	
CULT-2	Construction/ LWEF, Power Line	Impacts to unidentified subsurface archaeological resources may occur as a result of earth-disturbing activities	A-CULT-4CULT-3: Unanticipated Discoveries. Should human remains, historic or prehistoric artifacts, or other potentially important cultural materials be unearthed or otherwise discovered at any time during activities associated with the development of the Project area, work in the immediate vicinity of the discovery shall be suspended until a County-approved archaeologist and Native American representative are retained by the Applicant to evaluate the significance of the find pursuant to Phase 2 investigations as specified in the County Guidelines (County, 1993). If the cultural resources are found to be significant, they shall be subject to a Phase 3 mitigation program consistent with County Cultural Resource Guidelines and funded by the Applicant. In the event that suspected human remains are discovered, the County Coroner shall be contacted in accordance with state law.  See Mitigation Measure A-CULT-4 above.	Less than Significant
CULT-3	Construction/ LWEF, Power Line	Impacts to known and unidentified archaeological resources may occur as a result of increased public access via new or improved roads.	A-CULT-6CULT-5: Pre-construction Workshop. The County shall conduct a pre-construction workshop with cultural resource specialists, Native American monitors, and construction workers and personnel, stressing the importance of cultural resources and discussing penalties for their illicit disturbance.	Less than Significant
FPES-1	Construction and Operations/ LWEF, Power Line	The Project could result in an increased risk of wildland fires that could spread to more developed areas. Fire risks include vehicle exhaust, sparks, welding, parking on dry grass, and fuel tanks.	A-FPES-1: Fire Protection Plan. The Applicant shall prepare a Fire Protection Plan that meets SBCFD requirements. The plan shall contain (but not be limited to) the following provisions:  a. All construction equipment shall be equipped with appropriate spark arrestors and carry fire extinguishers.  b. A fire watch with appropriate fire fighting equipment shall be available at the Project site at all times when welding activities are taking place. Welding shall not occur when sustained winds exceed that set forth by the SBCFD unless a SBCFD-approved wind shield is onsite.  c. A vegetation management plan shall be prepared to address vegetation clearance around all WTGs and a regularly scheduled brush clearance of vegetation on and adjacent to all access roads and other facilities.	Less than Significant

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TABLE ES-2 Summary of Class II Impacts and Mitigation Measures

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Resource Area	Phase/Project Component <u>5</u>	Impact Summary	Mitigation Measure Summary	Residual Impact
			<ul> <li>d. Operational fire water tanks shall be installed prior to construction.</li> <li>e. Provisions for fire/emergency services access if roadway blockage occurs due to large loads during construction and operation.</li> <li>f. Cleared, maintained parking areas shall be designated; no parking shall be allowed in non-designated areas.</li> <li>g. The need for and/or use of dedicated repeaters for emergency services.</li> <li>A-FPES-2: Smoking and Open Fires. Smoking and open fires shall be prohibited at the Project site during construction and operations.</li> </ul>	
FPES-2	Construction and Operations/ LWEF	Although the Project contains many elements that would reduce potential for severe fires, fire risks would be increased through operation of the WTGs, Project Substation, power lines, and access roads. The O&M facility would include fire suppression infrastructure.	FPES-44: Access Roads. Access roads shall remain passable by emergency vehicles for the duration of the Project. To the extent practicable, no access roads shall exceed a 12 percent grade. In the event an access road is unable to meet this requirement, the access road shall be constructed such that the portion of the roadway segment that exceeds the 12 percent grade is as short as possible. All roadways exceeding a 10 percent grade shall be paved or covered with aggregate acceptable to SBCFD. Turn-around requirements at the terminus of access roads shall be included in roadway designs. The final design shall be approved by the SBCFD, and the final access road map (including topographic map) shall be provided to both the SBCFD and the City of Lompoc Fire Department.  A-FPES-3: Install Gravel around Substation. Gravel shall be placed around the perimeter of the Project Substation as a fire prevention measure.  FPES-5: Water Supply. The Applicant shall demonstrate to the County that sufficient water can be obtained from the new shallow well or existing spring on the property and/or by trucking in from offsite supplies to adequately supply the O&M facility needs while maintaining 5,000 gallons of stored water for fire-fighting purposes.  See Mitigation Measures A-FPES-1 and A-FPES-2 above.	Less than Significant
FPES-3	Construction and Operations/ LWEF, Power Line	The Project would have the potential to increase demand for fire protection services.	See <b>Mitigation Measures A₌FPES-1 and A₌FPES-2</b> above.	Less than Significant
FPES-5	Construction	The Project would	See Mitigation Measure FPES-44 above.	Less than

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TABLE ES-2 Summary of Class II Impacts and Mitigation Measures

Resource Area	Phase/Project Component <sup>5</sup>	Impact Summary	Mitigation Measure Summary	Residual Impact
	and Operations/ LWEF, Power Line	introduce tall towers and a new power line into an Extreme Fire Hazard Area. In the event that controlled burns are required in the Project area, fire fighters would need to take the new structures into consideration.		Significant
GEO-3	Construction/ LWEF, Power Line	Construction activities could increase the potential for landslides and cause or reactivate existing landslides.	A-GEO-2: Grading and Drainage Plan. The Applicant shall prepare a final Grading and Drainage Plan, designed to minimize erosion and landslides.	Less than Significant
LU-5	Operations/ LWEF	The Preject would result in increased noise levels during construction. Noise from WTG operation would impact quality of life of certain residences near the turbine corridors.	See Mitigation Measure NOI-7 below.	Less than Significant
NOI-1	Construction/ LWEF	Some types of construction equipment would generate short-term noise impacts (Class II) to nonparticipating residences less than 2,000 feet from a construction area.	A-NOI-1: WTG Maintenance. The Applicant shall maintain all WTGs in excellent working order to minimize operational noise impacts.  NOI-2: Construction Hours. All Project construction activities, including those that involve use of heavy equipment (i.e., greater than 2-axle vehicles) along San Miguelito Road, shall be limited to between the hours of 7:00 a.m. to 10:00 p.m. Monday through Friday, unless otherwise approved by the County, except that construction at the project site within 1,600 feet of non-participating residences shall be limited to 7:00 a.m. to 6:00 p.m. Work may occur within the WTG sites after hours or on weekend and holidays, subject to at least 48 hours written authorization from the County, and shall be limited to 8:00 a.m. to 5:00 p.m. Requests for	Less than Significant

TABLE ES-2 Summary of Class II Impacts and Mitigation Measures

Mitigation Measure Summary		Impact Summary MI
all be of the social because the family of t	weekend and holiday work shall be submitted to the County for approval in advance and shall include a description of the activity to occur, including equipment usage and duration. All complaints received regarding weekend and holiday work shall be immediately submitted to the County. All Project construction activities shall be limited to between the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday, unless otherwise approved by the County. No construction activities are allowed on state holidays.	weekend and holiday work sha and shall include a description and duration. All complaints regimed and duration. All complaints regimed to between the hours of unless otherwise approved by state holidays.
the pue consum the pue consum purs pand till lephor ner visa pand till lephor ner visa be	NOI-23: Telephone Number for Noise Complaints. The Applicant shall establish a telephone number for use by the public to report any significant undesirable noise conditions associated with the construction and operation of the Project. If the telephone is not staffed 24 hours per day, the Applicant shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This telephone number shall be posted at the Project site during construction in a manner visible to passersby and the number shall be maintained until the Project has been operational for at least 1 year.	NOI-23: Telephone Number to use by telephone number for use by conditions associated with the telephone is not staffed 24 he answering feature, with date phone is unattended. This telephone is unattended. This telephone is unattended and maning construction in a maning construction construction in a maning construction con
esolu Applica solve a	NOI-43: Noise Complaint Resolution Plan. Throughout the construction and operation of the Project, the Applicant shall document, investigate, and evaluate all complaints and attempt to resolve all legitimate Project-related noise complaints NOI-45: Maintenance of Construction Equipment. Construction contractors shall	NOI-43: Noise Complaint Repertation of the Project, the Complaints and attempt to result of NOI-45: Maintenance of Co
nstruc er's sp ipmen	NOI-42: Maintenance of Construction Equipment. Construction contractors so be required to ensure that construction equipment is well tuned and maintained according to the manufacturer's specifications, and that the standard noise reduction devices on the equipment are in good working order.	NOI-45: Maintenance of Co be required to ensure that cc according to the manufacture reduction devices on the equ
on. In ing for ties an I mile sers, blacks, bl	NOI- <u>6</u> £: Resident Notification. In coordination with the County, the Applicant shall hold a pre-construction meeting for residents of Miguelito Canyon Road to review upcoming construction activities and associated noise and traffic. The Applicant shall notify residences within 1 mile of any unusually loud construction activities, including the use of helicopters, blasting or pile driving, at least 1 week prior to their scheduled occurrence. In addition, the Miguelito Canyon residents shall be notified at least one week prior of any anticipated road/lane closures and property owner.	NOI-65: Resident Notification of a pre-construction meet upcoming construction activities and notify residences within including the use of helicopte scheduled occurrence. In additional of an including at least one week prior of an additional of an including the use of helicopte scheduled occurrence.
Such a lay thr	ingress/egress restrictionsSuch activities shall be limited to between the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday, unless otherwise approved by the County.	ingress/egress restrictions. 38:00 a.m. to 5:00 p.m., Mond County.
<b>is.</b> The to the Patitions	NOI-76: Acoustical Analysis. The LWEF will be designed and operated to ensure the noise level attributable to the Project does not exceed 4443.3 dBA Leq (1 hour) under normal operating conditions at any existing nonparticipating residences, or	Adjacent NOI-76: Acoustical Analys nonparticipating the noise level attributable to residences could be under normal operating conc

TABLE ES-2 Summary of Class II Impacts and Mitigation Measures

Resource	Resource   Phase/Project   Impact Sum	Impact Summary	Mitigation Measure Summary	Residual
Area	Component <u>5</u>			Impact
	LWEF	exposed to noise levels greater than 4443.3 dBA Leq (50 dBA LenCNEL); and four of the nine participating	8958.3 dBA Leq at participating residences. The Applicant shall submit to the County a detailed acoustical analysis of the final site layout and selected WTGs. All calculations or modeling input and output files shall be made available to the County. The analysis shall include all available vendor sound-level data (specified as either guaranteed or expected), including a site-specific analysis of how sound power levels increase with wind speed.	
		residences could be exposed to noise levels at or greater than 59 dBA Leq (65 dBA Leg COEL).	If a stall-controlled WTG is selected, sound power level data must be sufficient to estimate maximum sound levels under any stall condition because this could fall outside the range reported by IEC 61400-11 (IEC, 2006). Control strategies, if available, to reduce Project noise levels also shall be discussed and evaluated.  NOI-78: Noise Monitoring and Control Plan. The Applicant shall prepare and submit a "Noise Monitoring and Control Plan" prior to zoning clearance.	
			NOI-89: Maintenance Hours. Maintenance or other routine noise-generating activities within 1,600 feet of nonparticipating residences shall be limited to weekdays between the hours of 8:00 a.m. to 5:00 p.m. only, unless activities are for emergency repairs or as otherwise approved by the County.	
			See Mitigation Measures NOI-1, NOI-2, and NOI-3, and NOI-4 above.	
PALEO-1	Construction/ LWEF, Power Line	Ground-disturbing activities such as mechanical excavation, drilling, or trenching could affect paleontological	Mitigation PALEO-1: Pre-construction Workshop. The County shall conduct a pre-construction workshop with a County-qualified paleontologist or individual qualified to identify paleontological resources and construction workers and other personnel. The workshop shall inform personnel what fossil resources are and what they look like, what to do and who to notify in case of a paleontological discovery, and penalties for the illicit disturbance of fossils.	Less than Significant
		resources.	Mitigation PALEO-2: Implement Monitoring Program. Paleontological resources monitoring of mechanical disturbance only in Project areas known to have moderate to high sensitivity sediments will occur concurrently with those construction activities. Monitoring will be performed by an individual determined by the County to be qualified to identify paleontological resources. Based on field data, a decrease or increase in the monitoring of specific activities and areas may be identified.	
			Mitigation PALEO-3: Discovery of Fossils. If fossils are found by the monitor or by construction personnel, the following actions will be taken:	
			a. Follow appropriate notification procedures	

TABLE ES-2 Summary of Class II Impacts and Mitigation Measures

Resource Area	Resource Phase/Project Impact Sum Area Component <sup>5</sup>	Impact Summary	Mitigation Measure Summary	Residual Impact
			<ul> <li>b. Assessment of the find, usually in the field by the Project paleontologist and determination of recovery procedures</li> <li>c. Provisions for construction avoidance until a find is assessed and, if recovery is called for, scientifically recovered; construction-related excavations would continue in other areas away from the discovery</li> <li>d. Provisions for continued monitoring of construction in all appropriate areas while the find is being recovered</li> </ul>	
PALEO-2	Construction/ LWEF, Power Line	Unauthorized collection of fossils by construction workers or operational personal may occur.	e. Post-fleid initial study and curation preparation and subsequent curation. See <b>Mitigation Measure PALEO-1</b> above.	Less than Significant
RISK-1	Operations/ LWEF	Risk to the public from WTG collapse would be limited, though ene or tweseveral WTGs could be located within 500 feet of a short segment of road with light trafficolose to lightly-traveled County roads. The Project is expected to present a low risk of blade throw; nonetheless, a risk exists.	RISK-54: Tower Failure and Blade Throw. WTGs shall not be sited within 500 feet of a public road-All WTGs along public roadways shall adhere to the public road setback of the combined WTG tower and blade height.	Less than Significant
TC-2	Construction/ LWEF, Power Line	Long, heavy trucks used to deliver equipment during construction could present safety concerns, and physical modifications to the roadway or nearby	A-TC-1: Traffic Management Plan (TMP). The Applicant shall prepare a TMP for submittal to the County of Santa Barbara, City of Lompoc, and Caltrans. The purpose of the TMP is to address potential hazards associated with Project truck traffic. The plan will require measures such as informational signs, flagmen when equipment may result in blockages of throughways, and traffic control to implement any necessary changes in temporary lane configuration.  A-TC-2: Traffic Mitigation Fees. The Applicant shall pay the appropriate traffic mitigation fees to the County of Santa Barbara.	Less than Significant

TABLE ES-2 Summary of Class II Impacts and Mitigation Measures

Sullillaly Of Ola	outilitially of class if illipacts and infligation measures	IIIIgalioii Measures		
Resource Area	Phase/Project Component⁵	Impact Summary	Mitigation Measure Summary	Residual Impact
		trees and power lines may be required.	TC-4: Oversize Loads. Oversize loads require the implementation of special traffic control measures and require permits from affected jurisdictions. Since loads will be delivered to the site using state, city, and County roads, permits shall be required from Caltrans, the City of Lompoc, and the County of Santa Barbara. The Applicant shall obtain permits from the County of Santa Barbara to trim or remove trees, or both, on San Miguelito Road for the safe movement of oversized trucks. Longer trucks may have to be restricted to specific routes if turning radii are not sufficient on current truck routes.	
TC-5	Construction/ LWEF, Power Line	Trucks carrying heavy equipment could damage existing streets.	TC-3: Roadway Repairs. The Applicant shall enter into an agreement with affected jurisdictions to ensure that any damage to roadways attributable to Project traffic is mitigated through repair or reconstruction to original conditions. Roads will be photographed or videotaped prior to construction to ensure that final repairs are sufficient to return the road to pre-construction conditions. The Applicant shall also comply with the requirements of the hauling permits from affected jurisdictions prior to the construction of the Project.  See also Mitigation Measures A-TC-1 and A-TC-2 above.	Less than Significant
WAT-5	Construction and Operations/ LWEF, Power Line	The Project could result in the removal or reduction of vegetation from the buffer zone of streams, creeks, or wetlands, which could affect water quality.	WAT-1: Erosion Control Plan. An Erosion Control Plan for Project construction (the County acknowledges that a SWPPP that incorporates all of the RWQCB requirements/BMPs and the measures listed below would be acceptable to comply with this requirement) shall be developed by a registered engineer to minimize potential impacts to surface water quality during construction activities. Best available erosion and sediment control measures shall be implemented during grading and construction.  WAT-2: Minimize watercourse encroachment in road widening. Prior to final approval of the Project, a road widening plan showing all watercourse encroachments shall be submitted to Santa Barbara County for review and approval. The plan shall demonstrate that any roadway widening within or adjacent to a watercourse is the minimum practicable, and that the widening does not adversely affect the creek channel or flow pattern. The road widening plan shall also demonstrate that access to the City of Lompoc Frick Springs Water Treatment Facility, and its operations and delivery systems, will not be compromised.  A-RISK-1. The Applicant shall prepare a Hazardous Materials Management Plan that moets SBCFD requirements.	Significant
			A-RISK-2. Refueling vehicles shall have a sign listing pertinent contacts to notify in	

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TABLE ES-2 Summary of Class II Impacts and Mitigation Measures

عات ام زیاسانه	Sammary of States in impacts and image incased so	inguini modouloo		
Resource Area	Phase/Project Component <sup>5</sup>	Impact Summary	Mitigation Measure Summary	Residual Impact
			the event of a spill.	
			A-RISK-3. All equipment shall be adequately maintained to minimize operational losses of hazardous materials and to reduce the risk of accidental spillage.	
			A-RISK-4. Construction fueling shall be designated such that sensitive areas are avoided.	
			See also Mitigation Measures BIO-1, BIO-2, BIO-2, BIO-9, BIO-10, GEO-2, RISK-1, RISK-2, RISK-3, AND RISK-4 ABOVE.A-BIO-16, A-BIO-18, A-BIO-19, A-BIO-29, BIO-2, AND A-GEO-2 above.	

Energy Project. For a detailed discussion of the impacts and the entirety of the mitigation measures, please refer to Sections 3.2 through 3.15. The Note to reader: Table ES-3 presents a summary only of the Class III impacts (adverse but less than significant) identified for the Lompoc Wind entire mitigation measures are also available for review in Appendix D, Mitigation Monitoring Plan. Due to the substantial edits to and reordering of the biological resources impacts and mitigation measures, deletions are not shown in the table below.

TABLE ES-3
Summary of Class III Impacts and Mitigation Measures

Resource Area	Resource Phase/Project Impact Sumi	Impact Summary	Mitigation Measure Summary	Residual Impact
AG-1	Construction and Operations/ LWEF, Power Line	Development of the LWEF and power line installation would result in the temporary and permanent disturbance of farmland.		Not Applicable
AQ-1	Construction/ LWEF, Power Line	Exhaust emissions from construction equipment would result in short-term emissions of NO <sub>x</sub> and ROC.	A-AQ-1: Construction Equipment Emission Reduction Plan. A Construction Equipment Emission Reduction Plan shall be prepared by the Applicant based on the construction impact mitigation measures for equipment exhaust summarized in the Santa Barbara Air Pollution Control District guide.	Not Applicable
AQ-3	Operations/ LWEF, Power Line	Exhaust emissions from workers driving onsite and a forklift would result in longtern emissions of NO <sub>x</sub> and ROC. Fugitive dust emissions from workers driving on unpaved roads would result in long-term emissions of PM <sub>10</sub> .		Not Applicable

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TABLE ES-3
Summary of Class III Impacts and Mitigation Measures

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Resource Area	Phase/Project Component	Impact Summary	Mitigation Measure Summary	Residual Impact
<u>BIO-1</u>	Operations	Minor disturbances to common vegetation are expected during O&M.	See Mitigation Measure BIO-1 above.	Not Applicable
<u>BIO-2</u>	Operations	Only minor disturbances to common vegetation are expected from ongoing vegetation clearances for fire management and safety.	See Mitigation Measures BIO-1, BIO-2, BIO-3. BIO-4 and BIO-11c, d above.	Not Applicable
<u>BIO-4</u>	Construction	A minor amount of riparian vegetation (several square feet) would be removed during bridge construction at Honda Creek; soil erosion would result in minor impacts on water quality.	See Mitigation Measures BIO-1 thru BIO-4, BIO-9, BIO-10 and BIO-11c, dabove.	Not Applicable
<u>BIO-7</u>	Construction	Individual animals could be injured or killed by vehicles, equipment, explosives, or large holes during construction.	See Mitigation Measures BIO-1, BIO-2, and BIO-11a, b, c, d above.	Not Applicable

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TABLE ES-3
Summary of Class III Impacts and Mitigation Measures

Resource Area	₫ )	hase/Project Impact Summary	Mitigation Measure Summary	Residual Impact
<u>BIO-9</u>	Construction and Operations	Direct and indirect impacts may occur to special-status wildlife special-status wildlife species. Those with higher potential for injury or fatalities by vehicles or equipment, loss of habitat, or disturbance of burrows and nests including mammals.	See Mitigation Measures BIO-1, BIO-2, BIO-11a, b, c, d and BIO-14c, d above.	Not Applicable
<u>BIO-12</u>	Operations	Birds with habitat within 200 feet of WTG towers may be displaced.	See Mitigation Measures BIO-16a, b, c, d above.	Not Applicable
<u>BIO-13</u>	Construction and Operations	Indirect impacts to wildlife during construction would result from a variety of sources, which could result in temporary displacement. During operations, increases to impacts compared to pre-Project levels would be minor.	See Mitigation Measures BIO-11a, b above.	Not Applicable
EEU-2	Construction and Operations/ LWEF, Power Line	Construction and operation of the Project would result in consumption of diesel fuel and gasoline.		Not Applicable

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TABLE ES-3
Summary of Class III Impacts and Mitigation Measures

Resource Area	Resource Phase/Project Impact Sum Area Component	Impact Summary	Mitigation Measure Summary	Residual Impact
EEU-3	Construction and Operations/ Power Line	Temporary and long- term modifications to the PG&E system would be required to implement the Project, including a temporary power line and upgrades to PG&E's existing electrical system.		Not Applicable
FPES-4	Construction and Operations/ LWEF, Power Line	The influx of workers may temporarily increase the need for paramedic services during construction, although only about 10 staff would be required during operations.		Not Applicable
FPES-6	Construction and Operations/ LWEF	For security and safety reasons, the Applicant may request that Sudden Road and upper Miguelito Canyon Road become a private road, which would be required to have a lock that could be opened by fire and other emergency service providers.		Not Applicable

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TABLE ES-3
Summary of Class III Impacts and Mitigation Measures

Resource Area	Resource Phase/Project Impact Sum Area Component	Impact Summary	Mitigation Measure Summary	Residual Impact
GEO-1	Construction and Operations/	Risk of damage to structures by fault rupture is very low.		Not Applicable
	LWEF, Power Line			
GEO-2	Construction and Operations/	A major earthquake could result in ground shaking and	A-GEO-1: Seismicity. Project facilities shall be designed to Uniform Building Code Seismic Zone 4 standards.	Not Applicable
	LWEF, Power Line	יין עמייין איניין א		
GEO-4	Construction/	Construction could	See <b>Mitigation Measure A-GEO-2</b> above.	Not Applicable
	LWEF, Power Line	increase the potential for erosion from water and wind.		
GEO-5	Construction and Operations/	Structures would be designed to appropriate	<b>A-GEO-3: Expansive Soils.</b> Soil analyses shall be completed for expansion potential. Once Project design has been developed and the criteria for the facility performance have been established, the soils engineer shall review these and	Not Applicable
	LWEF, Power Line	engineering standards and would not be susceptible to	modify them as appropriate. If further measures are considered necessary to mitigate problems posed by expansive soils, the following alternatives shall be considered:	
		significant damage produced by		
		expansive soils.	<ul> <li>b. Support of structures on drifted shall foundations.</li> <li>c. Lime treatment of expansive subgrades.</li> </ul>	
			See Mitigation Measure A-GEO-1 above.	
GEO-6	Construction and Operations/ LWEF	Testing has determined that leach lines would be a suitable method of sewage effluent		Not Applicable
		disposal.		

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TABLE ES-3 Summary of Class III Impacts and Mitigation Measures

Resource	Resource Phase/Project Impact Sum Area Component	Impact Summary	Mitigation Measure Summary	Residual Impact
GEO-7	Construction and Operations/ LWEF, Power Line	Compressible soil and subsidence potential is considered low. Collapsible soil may be present within alluvial valleys and could cause settlement damage to structures and roadways.	A-GEO-4: Project Support Facilities. Project support facilities such as bridge foundations shall be sited on cut pads to provide relatively uniform foundation support and reduce differential settlement. Alternatively, structure foundations shall be designed to tolerate potential differential settlement.  See Mitigation Measure A-GEO-1 above.	Not Applicable
LU-1	Construction and Operations/ LWEF, Power Line	The Project would comply with development standards.  becauseincluding impacts to aesthetic/visual resources that would be mitigated to the extent feasible through the implementation of mitigation measures identified in Section 3.2.5.8.	LU-2: Staking of Coastal Zone. The Applicant shall install exclusion fencing or stake the coastal zone boundary to ensure that no construction activities enter the coastal zone area.  LU-3: Decommission and Reclamation Plan: The Applicant shall develop a Decommission and Reclamation Plan that addresses facility decommission, abandonment, and post-abandonment reclamation efforts.	Not Applicable
LU-2	Construction and Operations/ LWEF, Power Line	The Project would affect air navigation through the use of if helicopters were used during construction and the installation of WTGs and meteorological towers.	Mitigation Measure &-LU-1: Compliance with FAA Regulations. The WTG lighting plan shall comply with FAA requirements.	Not Applicable

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TABLE ES-3
Summary of Class III Impacts and Mitigation Measures

Resource Area	Resource Phase/Project Impact Sum Area Component	Impact Summary	Mitigation Measure Summary	Residual Impact
F-N-3	Operations/ LWEF	The Project would be designed to avoid interference with VAFB operations, such as radar, telemetry antennas, and microwave links, specifically VTRS located on Sudden Peak. The Project footprint is within existing space launch hazard corridors that need to be evacuated periodically to ensure public safety and evacuation agreements would be pursued.	Mitigation A-LU-2: Compliance with VAFB Requirements. The final WTG layout and Project operations shall not conflict with VAFB operations.	Not Applicable
LU-4	Construction/ LWEF, Power Line	Construction activities would result in increased traffic in relatively quiet neighborhoods.	See Mitigation Measure TC-1 above.	Not Applicable
LU-5	Construction/ LWEF	The Project would result in increased noise levels during construction. Noise from WTG operation would impact quality of life of certain residences near the turbine corridors.	See Mitigation Measures NOI-2, NOI-3. NOI-4 and NOI-6 above.	Not Applicable

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TABLE ES-3
Summary of Class III Impacts and Mitigation Measures

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Resource Area	Phase/Project Component	Impact Summary	Mitigation Measure Summary	Residual Impact
RISK-2	Operations/ LWEF	Blade icing and ice throw would not be expected to occur; additionally, there would be limited human activity in the Project area.		Not Applicable
RISK-3	Operations/ LWEF, Power Line	Electromagnetic fields are a possible issue when associated with the siting of high voltage overhead power lines or cables less than 200-feet from residences.	Mitigation Measure RISK-2: Electromagnetic Field Effect Reduction. The 115-kV power line shall be constructed with low-cost EMF reduction measures incorporated where the line is located less than 200 feet (ground distance) from residences or other occupied structures. These measures may include siting the power lines 200 feet or more from residences or employing phasing between the conductors to minimize or eliminate EMF. The measure shall conform to those described in California Public Utilities guidelines. See Avoidance and Protection Measure PL-7, Section 2.8.5.	Not Applicable
RISK-4	Construction and Operations/ LWEF, Power Line	Utility and turbine Construction workers would be exposed to a number of risks, including electrical shock and falls. There is also risk to members of public who incidentally or intentionally enter the Project site.		Not Applicable
RISK-5	Construction and Operations/ LWEF, Power Line	Accidental spills or leakage of hazardous materials could occur, including fuels (gasoline and diesel), lubricants, motor oil, and paints.	See Mitigation Measures A-RISK-1, A-RISK-2, A-RISK-3, and A-RISK-4 above.	Not Applicable
TC-1	Construction/ LWEF, Power	Project-related construction traffic would temporarily	See Mitigation Measures A-TC-1 and A-TC-2 above.	Not Applicable

TABLE ES-3
Summary of Class III Impacts and Mitigation Measures

Resource Area	Resource Phase/Project Impact Sum Area Component	Impact Summary	Mitigation Measure Summary	Residual Impact
	Line	affect traffic levels and LOS on Project area roadways.		
TC-3	Construction/ LWEF, Power Line	Heavy-haul trucks would be required to transport large and heavy equipment subject to weight, height, and load limitations.	TC-42: Oversize Loads. Oversize loads require the implementation of special traffic control measures and require permits from affected jurisdictions. Since loads will be delivered to the site using state, city, and County roads, permits shall be required from Caltrans, the City of Lompoc, and the County of Santa Barbara. The Applicant shall obtain permits from the County of Santa Barbara to trim or remove trees, or both, on San Miguelito Road for the safe movement of oversized trucks. Longer trucks may have to be restricted to specific routes if turning radii are not sufficient on current truck routes.  See Mittigation ♣-Measures TC-1 and ♣-TC-2 above.	Not Applicable
TC-4	Construction/ LWEF, Power Line	During peak construction, several oversized trucks per day could slow traffic and necessitate temporary blockages of intersections.	Mitigation Measure TC-13: Roadway Repairs. The Applicant shall enter into an agreement with affected jurisdictions to ensure that any damage to roadways attributable to Project traffic is mitigated through repair or reconstruction to original conditions. Roads will be photographed or videotaped prior to construction to ensure that final repairs are sufficient to return the road to pre-construction conditions. The Applicant shall also comply with the requirements of the hauling permits from affected jurisdictions prior to the construction of the Project.  See Mitigation Measure TC-1 and A-TC-2 above.	Not Applicable
TC-5	Construction and Operations/ LWEF, Power Line	Project vehicles could track dust and soil onto public roads.	See Mitigation Measures A-TC-2 above and WAT-1.	Not Applicable
VIS-1	Construction and Operations/ LWEF, Power Line	WTGs and related structures have the potential to be visible in the vicinity of the Preject.	A-VIS-1: Materials Storage. All construction materials and excavated materials shall be stored away from San Miguelite Road, whenever possible, to reduce impacts on mountain views.  A-VIS-2: Location of Construction Activities. Construction activities and materials storage shall be confined to within the WTG right of way, staging areas, and the Project Substation and operations and maintenance (O&M) facility areas.	Less than Significant

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TABLE ES-3
Summary of Class III Impacts and Mitigation Measures

Resource Area	Phase/Project Component	Phase/Project Impact Summary Component	Mitigation Measure Summary	Residual Impact
<u>VIS-2</u>	Construction and Operations/	WTGs would be visible from La Purisima Mission.	See Mitigation Measure LU-1 above.	
VIS-3	Operations/ LWEF	WTGs would be visible throughout the SR-1 corridor and the Lompoc Valley	See Mitigation Measure LU-1 above.	Not Applicable
VIS-5	Construction and Operations/ LWEF, Power Line	Construction and operation of the power line would be visible from public roadways.	Mitigation Measure A-VIS-3: Power Line. Where possible, particularly on nonparticipating ranches, the power line shall follow the existing distribution lines. Where possible, existing distribution and power lines shall be built below the proposed power line to consolidate facilities.—See Avoidance and Protection Measure PL-4, Section 2.8.5.	Not Applicable
WAT-1	Construction/ LWEF, Power Line	The proper implementation of erosion and sedimentation control would reduce erosion rates during and after construction to essentially natural rates.	A-WAT-1. Erosion Control Plan. An Erosion Control Plan for Project construction shall be developed by a registered engineer to minimize potential impacts to surface water quality during construction activities. Best available erosion and sediment control measures shall be implemented during grading and construction.  If grading needs to be done outside of the dry season, the Applicant shall coordinate grading work with the County and shall follow all applicable guidelines. Rainy season erosion control measures shall be utilized to control runoff and erosion in the event that revegetation is not completed prior to the rainy season.  Sediment control measures shall be maintained for the duration of the grading period and until graded areas have been stabilized by structures, long-term erosion control measures or landscaping.  Construction entrances and exits shall be stabilized using gravel beds, rumble plates, or other measures to prevent sediment from being tracked onto adjacent roadways. Any sediment or other materials tracked off site shall be removed the same day as they are tracked using dry cleaning methods.  See Mitigation Measures A-BIO-19 and A-GEO-2 above.	Not Applicable
WAT-2	Construction/	Water quality could	See Mitigation Measures Risk-1 to Risk-4.	Not Applicable

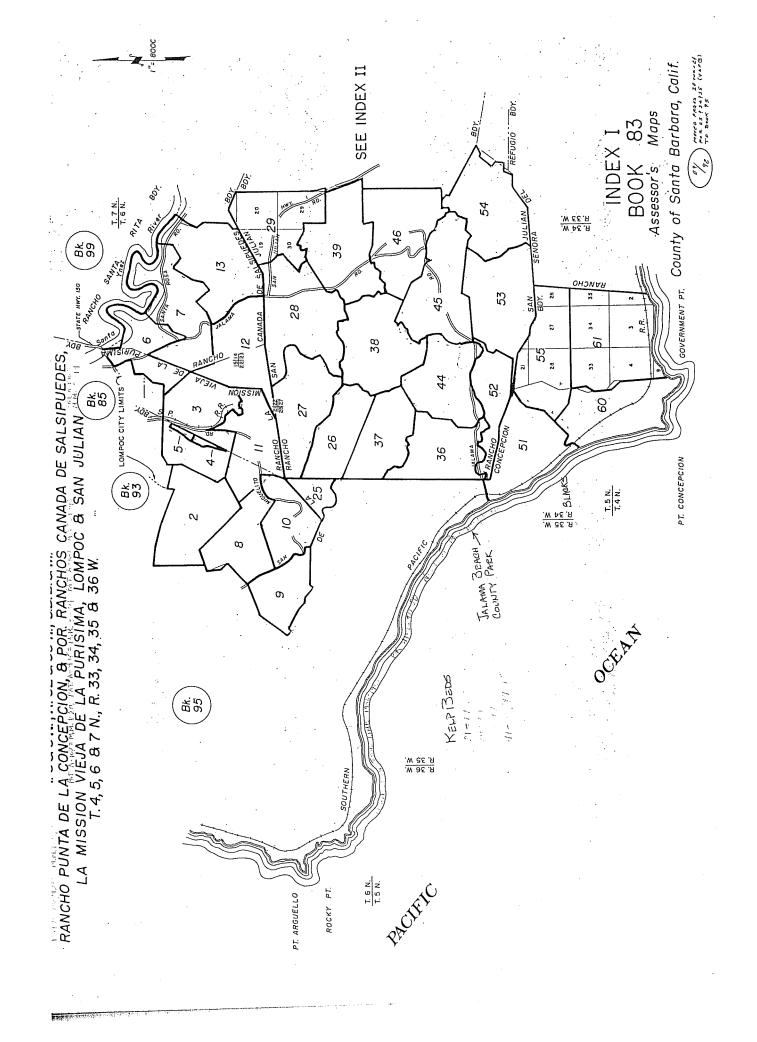
TABLE ES-3
Summary of Class III Impacts and Mitigation Measures

Resource Area	Resource Phase/Project Impact Sumr Area Component	Impact Summary	Mitigation Measure Summary	Residual Impact
	LWEF, Power Line	be affected by small fuel or oil spills, concrete, and trash and litter during construction.		
WAT-3	Construction and Operations/ LWEF, Power Line	Although some acres will be temporarily and permanently disturbed by changes to stormwater runoff/flooding, hydrologic conditions would remain about the same as current conditions.	WAT-2: Minimize watercourse encroachment in road widening. Prior to final approval of the Project, a road widening plan showing all watercourse encroachments shall be submitted to Santa Barbara County for review and approval. The plan shall demonstrate that any roadway widening within or adjacent to a watercourse is the minimum practicable, and that the widening does not adversely affect the creek channel or flow pattern. The road widening plan shall also demonstrate that access to the City of Lompoc Frick Springs Water Treatment Facility, and its operations and delivery systems, will not be compromised.	Not Applicable
WAT-4	Construction and Operations/ LWEF	The Project would not substantially deplete groundwater supplies or interfere with groundwater recharge. Effluent from facility drains would be disposed of through a proposed leach line system.	See Mitigation Measure FPES-4.	Not Applicable

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TABLE ES-4
Summary of Class IV Impacts and Mitigation Measures

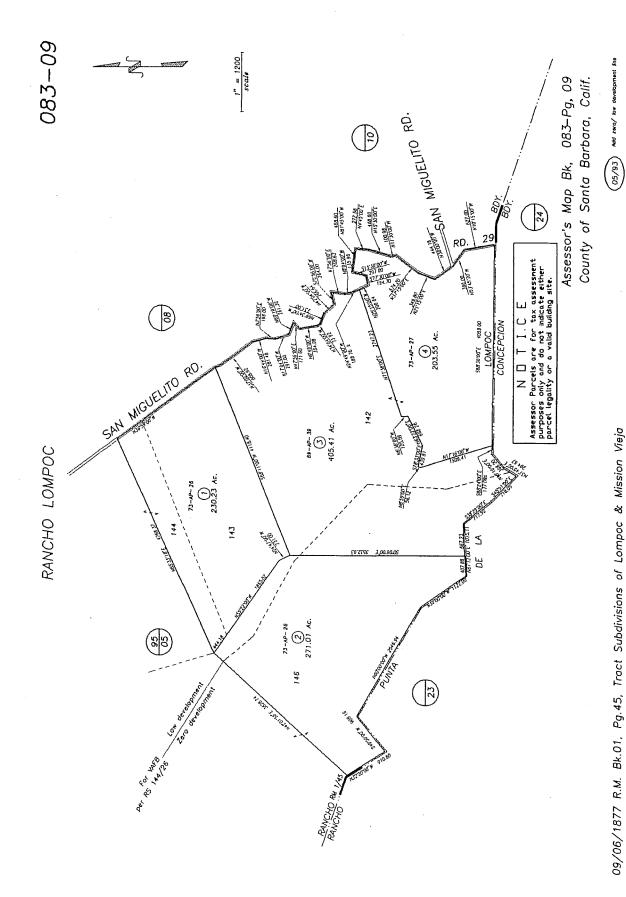
2000				
Resource Area	Phase/Project Component	Impact Summary	Mitigation Measure Summary	Residual Impact
AG-1	Construction and Operations/ LWEF, Power Line	Development of the LWEF and power line installation would provide financial support to property owners.		Beneficial
EEU-1	Operations/ LWEF, Power Line	The Project could generate up to 350/285 million kWh of electricity annually.		Beneficial



/h...

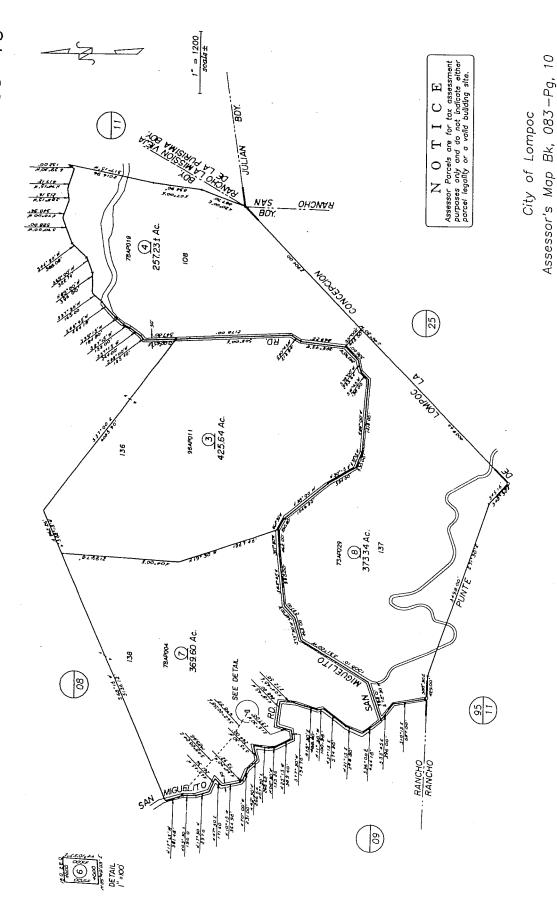
, Tract "Subdivisions Lompoc & Mission Vieja" , Pg. 45 09/06/1877 R.M. Bk. 1

06/00) 05 Added City Limit Line AS A ISLAND



09/06/1877 R.M. Bk.01, Pg.45, Tract Subdivisions of Lompoc & Mission Vieja

. .\_



R.M. Bk. 1 , Pg. 45 , Tract Lompoc & Mission Vieja

(02/97) 03 New Ag. Preserve #

County of Santa Barbara, Calif.

DE LA COGS CE.

3,505

rotation= 45°

1" = 1200 scale ±

RANCHO LA MISSION VIEJA DE LA PURISIMA BDY

(I) 368.88 Ac. 73-AP-29

(9) -4 4 72 AC 73-AP-29

2

(2)

7J-4P-29

18.88Ac

(2g)

339.30418

(26) (23) 3.11± AC 70-AP-124

(4) 155 AC

NOTE: All parcels within VAFB Low Development Zone

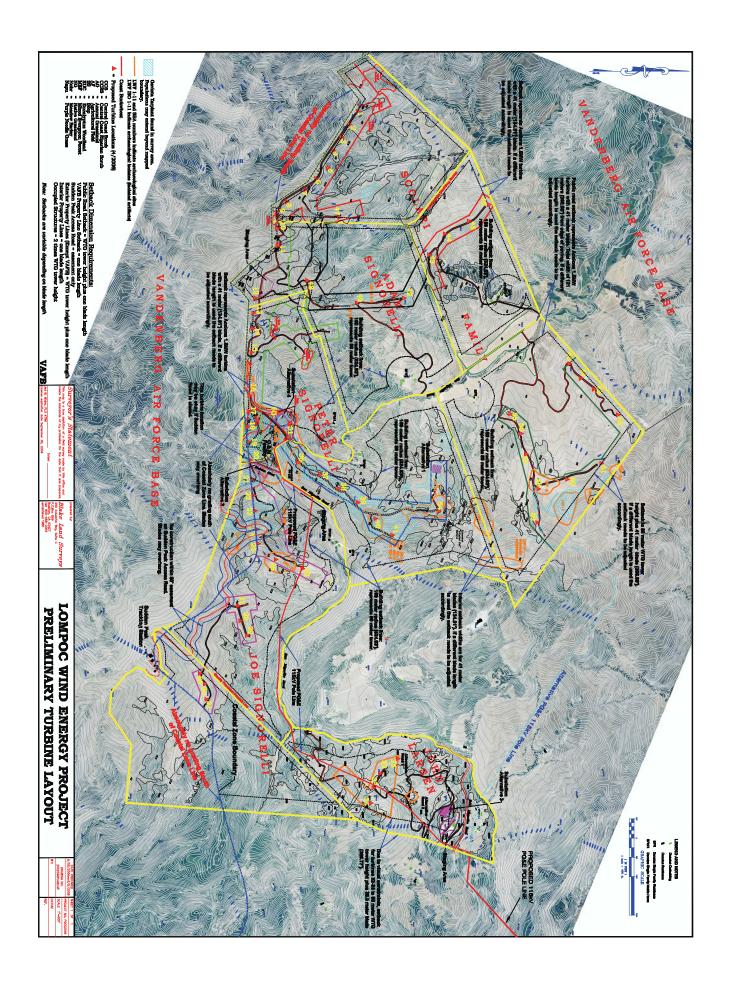
3 8.31 Ac. 70-AP-124

Oronad Oronad

Assessor Parcels are for tax assessment purposes only and do not Indicate either parcel legality or a valid building site. NOTICE

Assessor's Map Bk, 083-Pg, 25 County of Santa Barbara, Calif.

(LD/03) 21 & 22 INTO 23



#### RECOMMENDED MODIFICATION TO PROPOSED FINAL EIR

Staff recommends that the following text be inserted into Mitigation Measure BIO-16.d Adaptive Management Plan (AMP); Level 2 – Response Options; following #4 on Page 3.5-108 of the proposed Final EIR. (Please refer to the discussion in Section 6.1.1.1 of this staff report.)

- 5. WTG Shutdowns. Special preventative measures shall be implemented if large-scale bird or bat mortality events are foreseeable. Shutdown or operational restrictions shall be required for specific WTG(s) if the Director of Planning and Development, in consultation with the California Department of Fish and Game, makes all of the following determinations:
  - i. Fatalities of Federal or California Listed Species, California Fully Protected Species, or non-listed sensitive bird or bat species, resulting from WTG collisions at a specific location (i.e., a single WTG or group of up to 3 WTGs), exceed the Level 2 Thresholds established for the entire project (e.g., more than 2 golden eagle fatalities at a location within a year);
  - ii. The mortality monitoring studies conducted pursuant to Condition Bio-16.b demonstrate that the fatalities are caused by the identified WTG(s) and the fatalities follow a distinct pattern that indicates excessive fatalities (as defined in Subsection (i) above) will predictably recur at that location, and that operational restrictions on the specific WTG(s) will significantly reduce future fatalities;
  - iii. All other Level 2 Response Options that could potentially reduce fatalities have been considered and cannot be implemented within the time required to reduce the impending, excessive fatalities;
  - iv. The required WTG shutdowns or operational restrictions have not been found infeasible.

The owner/operator shall implement the required shutdown(s) or operational restrictions within 24 hours of notification by the Director. Shutdowns or operational restrictions shall be limited to the specific WTG(s) responsible for excessive fatalities. Shutdowns may include temporary or permanent shutdowns. Operational restrictions means restricted operating hours during periods of elevated risk to birds and bats, based on substantiated, case-specific risk factors (which could include time of day, season, weather, etc.). Shutdown or operational restriction requirements shall be designed to minimize impacts to electrical generation to the maximum extent feasible, consistent with reducing excessive fatalities of protected and sensitive species.

Upon request by the permittee, the Director shall hold a hearing within 4 business days to consider whether the shutdown or operational restriction should continue. The permittee's request shall include all evidence supporting the request. The Director shall determine whether continuation of the shutdown(s) or operational restrictions are warranted, based on the above criteria (i. to iv.), including financial feasibility. The Director may amend, lift, or extend the shutdown or operational restrictions at the hearing or subsequently.

The owner/operator may appeal the Director's decision to the Planning Commission, as provided in Section 35.102.040 of the Land Use and Development Code. The Planning Commission shall hold a noticed public hearing on the appeal no later than the first regularly scheduled hearing at or after 45 days of the filing of an appeal. The appeal shall include a detailed explanation of the objection, which may include financial infeasibility, and any relevant supporting information or data. Technical or financial information pertinent to the Planning Commission decision, but which the owner/operator claims to be confidential or proprietary, may be provided to the Director under a claim of confidentiality. Any financial information provided shall be certified by the owner/operator's chief financial officer. The Planning Commission decision may be appealed to the Board of Supervisors. If so, the Planning Commission decision shall remain in force pending a final decision by the Board.

Further WTG shutdowns or restricted operations shall not be required after the conclusion of mortality monitoring, as provided in measure Bio-16.d. (See *Level 1 – First Alert and Enhanced Survey, above.*)

#### Day, John

From:

sunset@verizon.net

Sent:

Wednesday, September 19, 2007 5:57 PM

To:

Day, John Drude, Kevin

Cc: Subject:

WTG:s

John, Cheryl and I have been pouring over this EIR for the WTG project in Lompoc. We feel we have some valid issues.

Aesthetic issues- not adaquately addressed EIR compares Lompoc to Altamont Wind Energy Area near Thayer, (not a coastal area).

Since the existance of cultural resources is known a Phase 2 and Phase 3 historical resources report should be included in the EIR.

Since a portion of the WTG's are visible from Jalama Beach, the California Coastal Commission should provide a Consistency Determination.

Eventhough substantial numbers of protected birds and bats are at risk of dying through collisions with the WTG' and there is no proven method to prevent such collisions, the inpact is considered significant and unavoidable (class I) the mitigation measures are inadaquate, (pg 3.5-53).

Noise impacts are not adaquately mitigated.

Has a determination been made on the Williamson Act, as these Ranches will now be it appears with the extensive corridors ( commercial properties ).

We have been doing some home work. Again thanks again for the information.

Sincerely,

George and Cheryl Bedford



Ruth Coleman, Director

DEPARTMENT OF PARKS AND RECREATION Channel Coast District 911 San Pedro Street Ventura, CA 93001 805/585-1850 Fax 805/585-1857

October 5, 2007

Bethany Clough, Chair County of Santa Barbara Central Board of Architectural Review Planning and Development Department 123 East Anapamu Santa Barbara, CA 93101-2058

Re: 07BAR-00000-00156 Lompoc Wind Energy Project

Dear Ms. Clough:

California State Parks is committed to reducing the affects of climate change and supports the State's goals for developing renewable energy – including the development of wind energy alternatives where feasible and appropriately sited. With that in mind, we also recognize the importance of your role as our County's Central Board of Architectural Review (CBAR) for reviewing projects like the Lompoc Wind Energy Project and ensuring that if approved, this project meets all of the County's policies and standards for land use and compatibility.

As proposed, the Lompoc Wind Energy Project is the first of its kind for Santa Barbara County. For that reason alone, the impacts of your decision to recommend further conceptual review, grant exemptions to existing land use policies, impose exemption conditions or simply approve the project to move forward – will certainly have long reaching affects for this project and future projects of this kind.

With that said, the following is a list of concerns that we believe should be fully evaluated before the project is approved to move forward.

1. Ridgeline and Hillside Development Guidelines (Land Use and Development Code, Sec. 35.62.040.B). Exemptions to the Guidelines are provided for certain structures (Sec. 35.62.040.B.1) and for minor topographic variation (Sec. 35.62.040.B.3), however, these exemptions do not apply to wind turbines. CBAR may exempt certain projects from design review under the Guidelines (Sec. 35.62.040.B.2). In discussions with Planning and Development staff, it was mentioned that CBAR may recommend to the County Planning Commission that an exemption may be granted under Section 35.62.040.B.2b that reads;

B. Clough October 5, 2007 Page 2

**LUDC Section 35.62.040.B.2.b:** In certain circumstances, allowing greater flexibility in the guidelines will better serve the interests of good design, without negatively affecting neighborhood compatibility or the surrounding viewshed.

Questions: What is the criteria for evaluating how wind turbine generators (WTG'S) designed for world-wide installation that range from 315 to 492 feet in height qualify as "good design"? Also, what is the criteria for determining whether the siting of the WTG'S does or does not "negatively affect" neighborhood compatibility or the surrounding viewshed?

2. During a recent project site tour, a representative for the applicant informed us that the conceptual site maps included in the project DEIR that identified as many as five WGT'S visible from the historic corridor at La Purisima Mission State Historic Park were incorrectly sited by the project's consultant. The representative assured us that the incorrect WTG site maps would be corrected and included in the final EIR. How is it possible for you to assess whether the WTG'S planned for the ridgeline above Miguelito Canyon (visible from Jalama County Beach Park and La Purisima Mission SHP) will negatively affect the surrounding viewshed when the exact locations for WTG'S have yet to be determined? Would your decision to evaluate the impacts of proposed WTG'S be better informed if you knew exactly where each WTG is to be sited?

If CBAR considers granting the applicant an exemption to the County's Ridgeline and Hillside Development Guidelines, State Parks would encourage CBAR to consider granting the applicant a conditional exemption that restricts the siting of WTG'S within the historic viewshed of the La Purisima Mission SHP or within the cultural landscape of Jalama Beach County Park – two popular and highly valued public parks.

3. Visual Resources. If your Commission determines that this project is not fully exempt from the design review under the Guidelines, we support County staff's recommendation that you provide comment on the Aesthetic/Visual Impacts analysis (Sec. 3.2) in the Draft EIR prepared for this project.

Questions: Is this project consistent with the County's visual resource policies, as discussed in the Draft EIR (Sec. 3.10.4)? If not, what actions should the applicant take to make the project consistent? Has the applicant adequately addressed the cumulative impacts that the project will have on the existing cultural landscape of the Lompoc Valley and the Jalama Beach coastline?

B. Clough October 5, 2007 Page 3

Balancing our County's high standards for land use with the expectations of our citizen's for maintaining a high-quality of life truly is an important and essential responsibility. As the Chairperson for our County's CBAR, I am confident that your insight and commitment for protecting special places like La Purisima Mission, Jalama County Beach Park and the cultural landscapes that they share will guide your decisions today and in the future.

If you have any questions or concerns with regards to the stewardship of La Purisima Mission State Historic Park or concerns expressed in this letter, please contact me at 805/585-1847 or via email at <a href="mailto:rroja@parks.ca.gov">rroja@parks.ca.gov</a>.

Respectfully,

Richard A. Rojas

District Superintendent

CC: John Day, Santa Barbara County Planning & Development Department

## RECEIVED COUNTY OF SANTA BARBARA

November 5, 2007

John Day Planning and Development County of Santa Barbara, California NOV - 8 2007

PLANNING AND DEVELOPMENT DEPARTMENT - ENERGY DIVISION

Dear Sir,

On October 13, 2007, Governor Schwarzenegger signed assembly Bill 821 – legislation authored by assembly member Pedro Nava which will now require hunters to use non-lead ammunition within the range of the California Condor.

Santa Barbara County is within that range. I do not believe that a project such as the proposed Lompoc Wind Energy Project, located in Miguelito Canyon would be compatible with the multi-million dollar efforts already spent for the Condor Recovery Program.

Projects such as this one are well known to cause high avian mortality rates and would definitely have a negative impact on the efforts of the Condor Recovery Program, as well as any other protected birds which inhabit the area such as Golden Eagles.

Sincerely:

Ed Benhart

1328 West Loquat Lompoc, Calif. 93436

Ed Benhart

Cc:

Governor:

Arnold Schwarzenegger

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Senator:

Abel Maldonado

Assemblyman:

Pedro Nava

Assemblyman:

Sam Blakeslee

Supervisor:

Joni Gray

Mayor:

Dick DeWees



November 21, 2007

Mr. John Day Santa Barbara County Energy Division 123 E. Anapamu St. Santa Barbara, CA 93101 jday@co.santa-barbara.ca.us.

#### VIA EMAIL

RE: California Guidelines For Reducing Impacts To Birds And Bats From Wind Energy Development

Dear Mr. Day:

This letter is submitted by the Environmental Defense Center ("EDC") regarding Santa Barbara County's Draft Environmental Impact Report ("DEIR") for the Lompoc Wind Energy Project, as well as the County's review of other pending or future wind energy projects. The California Energy Commission has recently approved the *California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development* ("Guidelines"). Draft versions of these Guidelines were released in 2006 and in 2007, and in our September 4, 2007 comment letter regarding the DEIR for the Lompoc Wind Energy Project, EDC requested that the County consider the recommendations in these Guidelines to correct significant flaws in the DEIR. We request that these, now final, Guidelines be considered as you continue your environmental review of the Lompoc Wind Energy Project. The Guidelines are available at http://www.energy.ca.gov/renewables/06-OII-1/.

In addition, we would like to respond to your statement (in an email sent to Misa Ward of the California Energy Commission, dated Sept. 7, 2007) that parties who referenced these Guidelines in their comments on the Lompoc Wind Energy Project

November 21, 2007 Mr. John Day

Santa Barbara County Energy Division

RE: California Guidelines For Reducing Impacts to Birds
And Bats From Wind Energy Development

DEIR asserted that the DEIR "is inadequate because it does not follow the protocol recommended in the draft Guidelines." To clarify, this was not EDC's contention. As discussed at length in our comment letter, the DEIR fails to meet CEQA requirements pertaining to the analysis of the environmental baseline for bird and bat use of the Project area, potential bird and bat impacts from the Project, and identification of mitigation measures to avoid or minimize impacts. These flaws must be corrected to conduct an adequate environmental analysis.

The Guidelines were jointly developed by the California Energy Commission and the California Department of Fish and Game with the assistance of a science advisory committee and extensive input from a wide range of stakeholders, including representatives from the wind energy industry, resource agencies, and environmental groups. As a result, this document represents the most current state of scientific knowledge and a balanced consideration of the means to assess, avoid, minimize and mitigate bird and bat impacts from wind energy projects. For these reasons, we identified the Guidelines as an appropriate standard for assessing and mitigating bird and bat impacts from the Lompoc Wind Energy Project.

For these same reasons, we also urge the County to consider and implement, as appropriate, the recommendations in these Guidelines for other pending and future wind energy projects in Santa Barbara County. EDC strongly supports the implementation of renewable energy projects, including wind energy projects, in Santa Barbara County, however, it is critical that such projects be constructed and operated to avoid and minimize environmental impacts to the maximum extent feasible. The Guidelines provide a consistent, science-based framework for the evaluation and mitigation of bird and bat impacts, and will thus benefit both wind energy proponents in the County and the County's bird and bat populations.

Sincerely,

/s/ Karen M. Kraus Staff Attorney

Doug Anthony

cc:

### Day, John

From:

Malinda Putnam [malindajane@gmail.com]

Sent:

Saturday, February 23, 2008 10:09 AM

To:

Day, John

Subject: lompoc wind generation project

# Dear Mr. Day:

I urge you to delay not one second in your approval of the wind power project proposed near Lompoc by Acciona. Entire species are vanishing while we withdraw from our fossil fuels addiction. I am familiar with the ecosystem (including the avian species) in the area of the proposed project and it will adapt. It will be harmed far less by this project than has been the case with oil and gas projects in the area. The effects of this particular project are going to be so minimal that it should have been granted a negative declaration under California's environmental quality laws.

Scott Putnam 18 Hollister Ranch Gaviota, CA 93117

### Day, John

From:

claude.pasquis@gmail.com

Sent:

Saturday, May 17, 2008 3:33 PM

To: Cc: Day, John Claude Pasquis

Subject:

Santa BarbaraCounty Wind farm

#### John,

I have been a big fan of this project ever since I first read about it over 18 months ago. PLEASE do whatever you can to help this project be completed. Our state, our country, all the citizens of our planet need more alternative energy sources. I realize that yours is not the first wind farm, but the sooner your project is completed, the sooner other communities will follow your lead and understand the viability of these technologies.

Thank You Claude Pasquis Brea California claude.pasquis@gmail.com

Sent from my iPhone

RECEIVED

N SEP 15 2008

S.B. COUNTY

To All Concerned PLANNING & DEVELOPMENT

Sept. 12, 2008

(revised from letter of 8/28/07)

My wife and I moved to Lompoc 38 years ago in order to teach in local schools. We consider ourselves loyal, concerned citizens of this area, and will remain through our retirement years. We would like to take this opportunity to express strong support for the development of alternative energy production.

We attended the August 6th, 2007 Environmental Impact Report presentation in Lompoc, and left the event encouraged by the considerations which were showcased. Of course, we have concerns about any such project; primarily two:

- 1. Migratory flyways. The wind turbine project must consider this to be a priority for mitigation. As a retired biology teacher I could not abide the wholesale slaughter of migrating birds and bats. However, project managers could employ and cooperate with wildlife researchers to assess the least threatening corridors in the project zone, and could adjust the height, color and seasonal timing of operation for the turbines in the zone. Developers have much to prove to us in this area, but it can be done.
- 2. Residents in the ground zero passage. Our neighbors in the Migulito Canyon area must be treated with utmost respect and sensitivity. These residents will unavoidably pay the greatest personal price for the privilege of being part of cutting edge technology. Hopefully, project leaders would meet frequently with those most directly affected by the disruptions. They should be assured that, after the "dust settles" on the phased project, they would be left with vastly improved roads, access routes, and appropriate infrastructure improvements for each property owner.

Now for the issue of visibility. Our home is in the south hills of town, near Beattie Park, and we will certainly have a clear view of new power lines, as currently proposed, and may have a view of several of the tallest turbine towers above the hilltops to the southwest. Our view: WE CAN LIVE WITH IT! It is incomprehensible to us that citizens, even those from as far away as Vandenberg Village, could take a distant, minimal view of turbine blades to be some sort of blight or embarrassment. A preferred viewpoint, one which shows some vision, might be one of pride----that the Lompoc area could act as a

pioneer for energy alternatives! Be proud of these efforts, as we're already falling behind the rest of the world.

We have recently returned from Europe. Of relevance to the turbine issue is the fact that we found many areas in the Netherlands and Spain which had operating wind turbines. Throughout Holland and other provinces turbines were spinning away, sometimes immediately adjacent to 400 yr. old windmills which tourists travel to admire. In Spain, wind turbine "forests" were prominently displayed on ridgetops, rising above vast olive groves. The citizens and their governments were proud of the progressive efforts to find alternatives for energy; there was no attempt to hide their efforts.

In conclusion, we wish to encourage Lompoc residents— all Americans for that matter, to take the long view, to rise to the big picture, of our future needs. All important change must start somewhere, then evolve to efficiency. Our energy needs are great and growing. We must do everything possible to lessen our dependence on fossil fuels— especially from the sources which have a history of negative impacts on our foreign policies, and also to prevent the sort of energy extortion we Californians suffered at the hands of corrupt corporations, such as Enron, a few years ago.

Rather than endlessly attend to "not in my back yard" arguments we need to take a collective attitude of activism and pride in all efforts to co-exist with our natural environment. We can insist on commitment to our concerns; we can hold project managers to their word; we can help shape our own future. We urge Lompoc citizens to get involved with the assurance of quality in such projects.

Sincerely, Patrick & Wynn Clevenger

Lompoc