Department of Water and Power the City of Los Angeles

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April 16, 2004

TO: State, County, Local Agencies, and Interested Parties

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report,
Pine Tree Wind Development Project
Los Angeles Department of Water and Power, City of Los Angeles

The City of Los Angeles Department of Water and Power (LADWP) will be the lead agency and will prepare an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) for the proposed Pine Tree Wind Development Project. The proposed project involves the construction of 80, 1.5-megawatt (MW) wind turbine generators, several meteorological towers, an electrical collection system, a substation, a transmission line to connect with the regional electrical grid, an operations and maintenance (O & M) building, and access roads. The project is being undertaken to increase the amount of electrical power that is produced using clean and renewable energy sources and to help meet overall demand for electrical power in the Southern California area.

The purposes of this Notice of Preparation (NOP) are to provide notification that the LADWP will prepare a Draft EIR to assess potential adverse environmental impacts resulting from implementation of the proposed project and to solicit information on the scope of the environmental analysis for the proposed project. The Draft EIR will include topical content required by CEQA and will focus, as appropriate, on environmental impacts determined within the attached Initial Study to be potentially significant (see significance determination on Page 4). This approach is consistent with CEQA Guidelines Section 15063(c)(3)(A) relating to the purposes of an Initial Study that include focusing the EIR on effects determined to be potentially significant.

Since the proposed project also affects lands under jurisdiction of the U.S. Department of the Interior, Bureau of Land Management (BLM), an environmental document pursuant to the National Environmental Policy Act (NEPA) is also required. LADWP, as the CEQA lead

agency, and BLM, as the NEPA lead agency, are cooperating to prepare one environmental document for the proposed project that satisfies both Acts.

The LADWP invites the views of your agency or organization regarding the scope and content of the environmental information to be included in the EIR, including any information that would be necessary to meet any statutory responsibilities related to the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other discretionary approval for the project.

The project location, description, and CEQA Initial Study describing the potential effects of the proposed project as they are presently understood are contained in the attached materials.

Pursuant to Section 21083.9 of the Public Resources Code a Scoping Meeting will be held on May 7, 2004 at 1:30 PM at the offices of the Kern County Planning Department located at 2700 M Street, Bakersfield, CA, 93301 to receive agency comments on the preparation of an Environmental Impact Report.

Comments focusing on your area of expertise, your agency's area of jurisdiction, or issues relative to the environmental analysis should be addressed to Mr. Charles Holloway at 111 N. Hope Street, Room 1044, Los Angeles, CA 90012, or sent by FAX to (213) 367-4710. The Initial Study and supporting documentation may also be viewed at this location and also can be accessed via the Internet at http://www.ladwp.com/ladwp/cms/ladwp004156.jsp. Due to time limits imposed by state law, your response to this notice must be received by the LADWP no later than 5:00 p.m. on May 18, 2004. Please include the name and telephone number of the contact person for your agency or organization. The LADWP appreciates your interest and participation in the environmental review process.

Sincerely,

Charles C. Holloway

Charles C. Holloway
Supervisor of Environmental Assessment

enclosures

DEPARTMENT OF WATER AND POWER
CITY OF LOS ANGELES

CEQA INITIAL STUDY
FOR THE PINE TREE WIND DEVELOPMENT PROJECT

April 2004

TABLE OF CONTENTS

CITY OF LOS ANGELES
OFFICE OF THE CITY CLERK
ROOM 395, CITY HALL
LOS ANGELES, CALIFORNIA 90012
CALIFORNIA ENVIRONMENTAL QUALITY ACT
INITIAL STUDY
AND CHECKLIST
(Article IV – City CEQA Guidelines)

LEAD CITY AGENCY	**COUNCIL DISTRICT**	**DATE**
City of Los Angeles, Department of Water and Power 111 N. Hope Street, Room 1044 Los Angeles, CA 90012	N/A	April 14, 2004

PROJECT TITLE/NO.	**CASE NO.**
Pine Tree Wind Development Project	WP007-04

PREVIOUS ACTIONS CASE NO.	☐ **DOES have significant changes from previous actions.** ☐ **DOES NOT have significant changes from previous actions.**
NONE	

PROJECT DESCRIPTION:

The proposed project involves the construction of 80, 1.5-megawatt (MW) wind turbine generators, several meteorological towers, an underground and overhead electrical collection system, a substation, a 10-mile-long, 230 kilovolt (KV) transmission line to connect with the regional electrical grid, an operations and maintenance (O&M) building, as well as access roads. All project facilities except primary site access roads and a portion of the electrical transmission line would be constructed on private property. The primary access road crosses both private lands and lands under jurisdiction of the Bureau of Land Management. Please see the Project Description (starting on page 5) for additional explanation of the proposed project.

PROJECT LOCATION:

The project site is located in the southern Sierra Nevada Mountains in Kern County, California. The project site is approximately 6 miles west of California State Highway 14, about 12 miles north of the town of Mojave and 15 miles northeast of the city of Tehachapi. The primary access to the property is from State Highway 14 (Highway 14) via Jawbone Canyon Road.

PLANNING DISTRICT	**STATUS:** ☐ **PRELIMINARY** ☐**PROPOSED_____** ☐**ADOPTED date**
N/A	

EXISTING ZONING	**MAX. DENSITY ZONING:** N/A	☐ **DOES CONFORM TO PLAN**
PLANNED LAND USE & ZONE: A (Exclusive Agriculture)/ WE (Wind Energy)	**MAX. DENSITY PLAN:** N/A	☐ **DOES NOT CONFORM TO PLAN**

SURROUNDING LAND USES: Open Space Agricultural Natural Resource	**PROJECT DENSITY:** N/A	☐ **NO DISTRICT PLAN**

☞ **DETERMINATION (to be completed by Lead City Agency)**

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions on the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Charles C. Holloway

SIGNATURE

Supervisor of Environmental Assessment
TITLE

Charles C. Holloway
PRINTED NAME

Environmental Services, LADWP
FOR

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of a mitigation measure has reduced an effect from "Potentially Significant Impact" to "Less Than Significant Impact." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analysis," cross referenced).

5) Earlier analysis must be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR, or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion should identify the following:

   1) Earlier Analysis Used. Identify and state where they are available for review.
   2) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   3) Mitigation Measures. For effects that are "Less Than Significant With Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A sources list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whichever format is selected.

9) The explanation of each issue should identify:
   1) The significance criteria or threshold, if any, used to evaluate each question; and
   2) The mitigation measure identified, if any, to reduce the impact to less than significant.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒ I. Aesthetics	☐ II. Agricultural Resources	☒ III. Air Quality
☒ IV. Biological Resources	☒ V. Cultural Resources	☒ VI. Geology and Soils
☐ VII. Hazards and Hazardous Materials	☒ VIII. Hydrology and Water Quality	☒ X. Land Use and Planning
☐ X. Mineral Resources	☐ XI. Noise	☒ XII. Population and Housing
☐ XIII. Public Services	☐ XIV. Recreation	☒ XV. Transportation/Traffic
☐ XVI. Utilities and Service Systems	☒ XVII. Mandatory Findings of Significance	

PROJECT DESCRIPTION

OVERVIEW OF THE PROJECT

The Los Angeles Department of Water and Power (LADWP) proposes a wind energy generation project that would consist of 80, 1.5-megawatt (MW) wind turbine generators. The project would also include several meteorological towers, an underground and overhead electrical collection system, a substation, an operations and maintenance (O&M) facility and yard, and access roads. LADWP is working with Wind Turbine Prometheus, LLC (WTP), a wind energy development company, to develop and construct the proposed project. Upon completion of construction, the project would be owned and operated by LADWP. As part of the proposed project, LADWP would also construct and operate approximately 10 miles of 230-kilovolt (kV) transmission line, which would connect the proposed project substation to an existing LADWP 230-kV transmission line.

PROJECT LOCATION

The proposed project property is located in the southern Sierra Nevada Mountains in Kern County, California. The property is approximately 6 miles west of California State Highway 14 and about 12 miles north of the town of Mojave and 15 miles northeast of the city of Tehachapi (see Figure 1, Project Region). The primary access to the project property is from Highway 14 via Jawbone Canyon Road, which enters the property at its northeastern corner (see Figure 2, Project Location).

PROJECT OBJECTIVES

The goal of the proposed project is to reduce air pollutant emissions and dependence on fossil fuels related to the generation of electrical energy by LADWP. Specific objectives related to this goal are to:

- Provide generation capacity to help meet the electrical energy demand of the Southern California region.

- Provide an increased share of electrical generation capacity with clean and renewable energy sources.

Energy Demand

The purpose of the proposed project is to provide a wind energy electrical generation facility with an annual generating capacity of approximately 330 gigawatt hours (GWh). This capacity would be supplied from 80 wind turbines with a nameplate capacity of 1.5 MW each. Nameplate capacity refers to a turbine's maximum ability to generate electricity under ideal conditions.

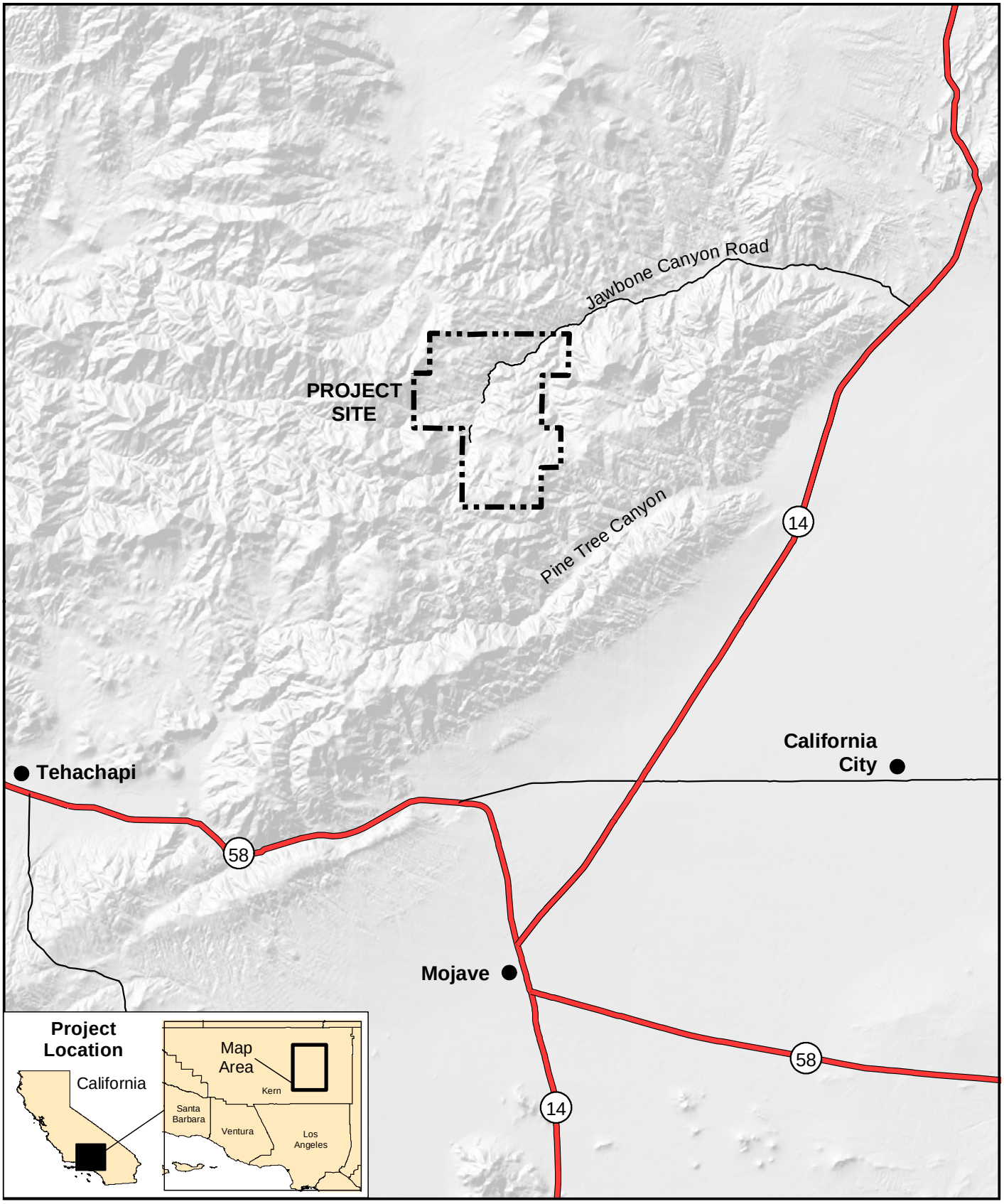
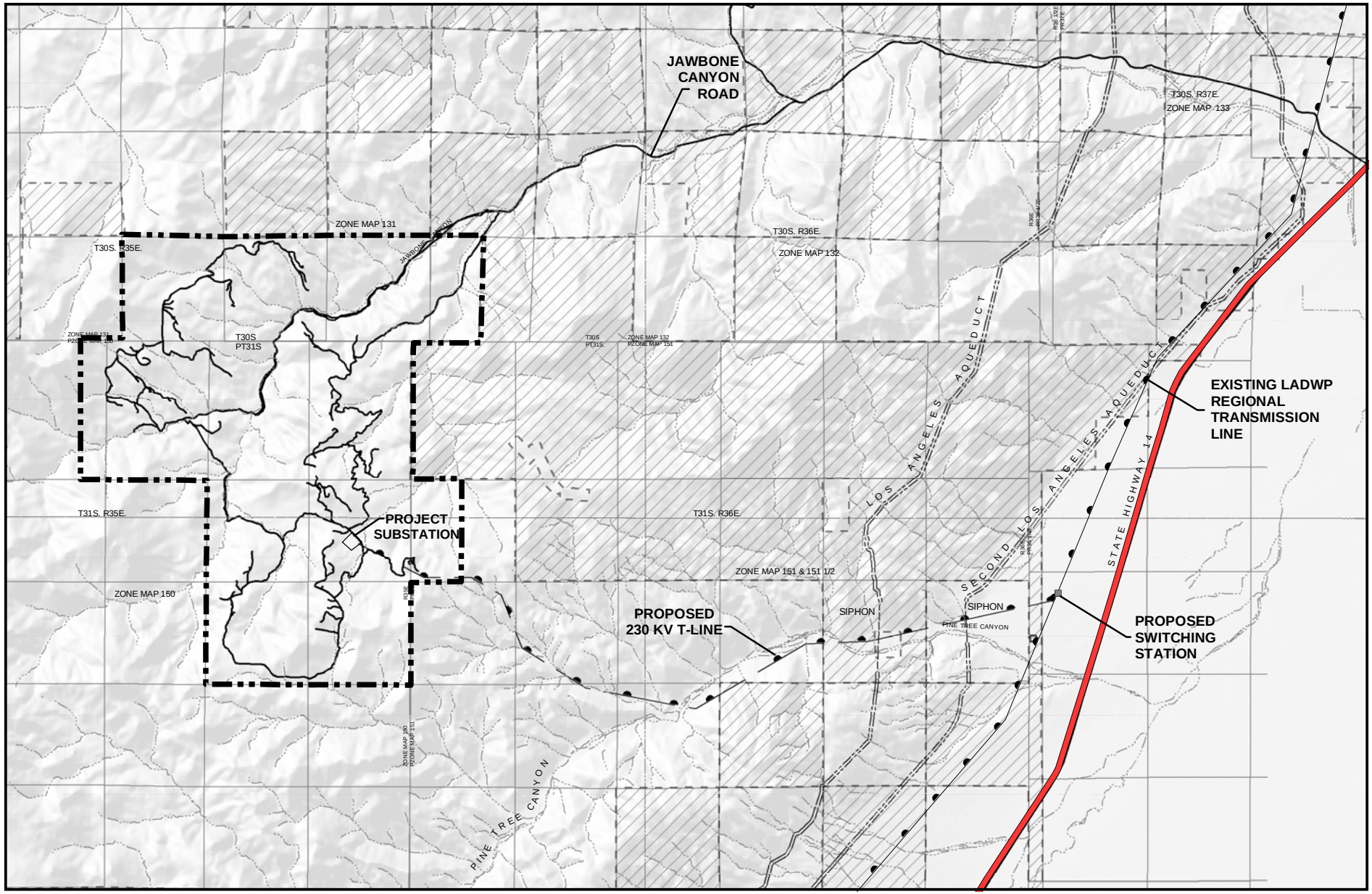


Figure 1
Project Region



Legend

- Study Area
- BLM Parcel
- Highway 14
- Transmission Line
- Aqueduct
- Stream

1 0 1 Miles

Figure 2
Project Location

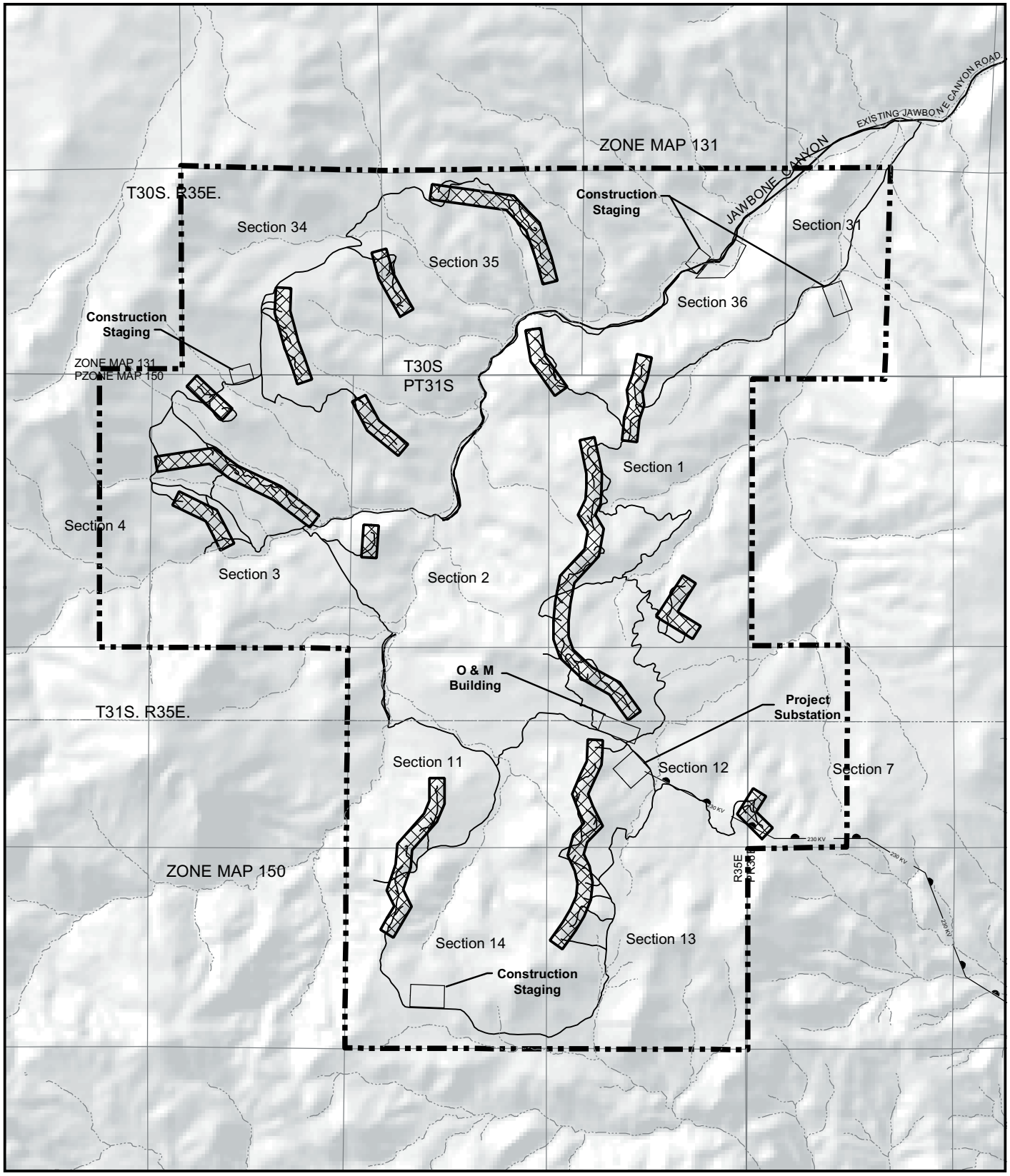
Based on the wind characteristics at the project site, the project is anticipated to produce at an approximate 31 to 32 percent net capacity factor. The net capacity factor is a ratio of the actual total annual production and the total potential annual production for all turbines net of losses. The total potential annual production is a product of total nameplate capacity (120 MW) and the total hours in a year. Using an estimated annual average residential usage for the LADWP service area of 5,900 kilowatt hours (Brown, 2002), the annual electrical production from the project would provide power for approximately 56,000 homes. Using a factor of approximately three persons per home in Los Angeles County (U.S. Census Bureau), the proposed project would meet the residential energy needs of approximately 168,000 people in Southern California.

This generation capacity from the proposed project is needed to help meet the future electrical energy demands of the Southern California region. Demand for electricity in Southern California has grown at a steady, moderate pace since the early 1990s. According to the LADWP Integrated Resource Plan, as amended and adopted by the Board of Water and Power Commissioners and the Los Angeles City Council (August 15, 2000), annual growth in demand in Los Angeles is expected to average about 1.5 percent, or an average of about 80 MW per year, over the next 16 years. It is estimated that between the years 2004 and 2010, the net peak demand for electricity in the city will grow by 450 MW, or approximately 7.5 percent (from 5,920 MW to 6,370 MW).

Clean and Renewable Energy Sources

The proposed wind energy project is needed to meet LADWP commitments to supply an increased share of its electrical generation capacity from clean and renewable energy sources as a means to reduce air pollutant emissions and dependence on fossil fuels. The proposed project would bring LADWP's renewable energy production to about 4 percent of its total electrical production capacity, up from a current level of about 2.5 percent.

Based on wind characteristics at the project site, periods of peak generation for the proposed project are expected to coincide with periods of peak demand for electricity in Southern California, during the summer months. Generation of electricity from the proposed project would produce no air pollutant emissions and would offset the need to provide an equivalent quantity of power through combustion of fossil fuels. Based on the projected generating capacity of the project, the reduction in the combustion of fossil fuels that would be realized from the proposed project is predicted to lower air emissions of nitrogen oxides by at least 8 tons per year and lower emissions of carbon monoxide by at least 11 tons per year, depending on the type of fossil fuel used in generation. In addition, emissions of carbon dioxide, a "greenhouse" gas believed to contribute to global warming, would be reduced by at least 200,000 tons per year. Because it is dependent only on wind to produce electricity, the proposed project would not require the extraction, refinement, or transmission of fossil fuels.



Legend

- Study Area
- Wind Energy Districts
- Stream
- Transmission Line
- Project Roads

0.5 0 0.5 Miles

Figure 3
Project Site Plan

GENERAL SETTING OF PROJECT SITE AND SURROUNDINGS

The proposed wind turbines would be located along selected ridgelines on privately owned land consisting of approximately 8,000 acres (approximately 12.5 square miles, see Figure 3, Project Site Plan). This land is composed of holdings of the Hansen Ranch (owned by the Hansen Family Limited Trust) and GE Wind Energy, LLC. The property included in the project would be leased from these owners under a long-term agreement.

The property consists of moderately steep terrain ranging from about 3,000 feet above mean sea level (MSL) in elevation in the northeastern corner to about 5,000 feet above MSL in the southwestern corner. A number of small intermittent streams are also located on the site, all of which ultimately drain into either Jawbone Canyon, along the north side of the property, or Pine Tree Canyon, to the south side of the property. Both Jawbone and Pine Tree canyons drain into the Fremont Valley, to the east of the project property. The proposed project site has excellent wind resource characteristics. Average wind speeds at the site are approximately 14 to 18 miles per hour.

Vegetative cover on the property consists of a mix of oak and pinyon-juniper woodland, scrub and chaparral, and grassland. A number of sensitive plant and wildlife species are known to exist in the vicinity of the project. These include desert tortoise (*Gopherus agassizii*), Mohave ground squirrel (*Spermophilus mohavensis*), Kern buckwheat (*Eriogonum kenneryi* var. *pinicola*), and various raptor species.

The property is essentially undeveloped, but it is currently and has historically been used as grazing land for cattle. Because of the relatively small footprint of the wind turbines and other project elements, this grazing use would be essentially unaffected and could continue after project implementation. Given the historical use of the site, there is a relatively extensive system of existing unpaved roads throughout the property. A small ranch headquarters building, which is located in the central portion of the project property, is the only occupied structure within the property. However, it is used only intermittently. There are a few other older, abandoned buildings and ranch facilities also located within the property. There are a number of known archaeological resources located within the property boundaries. The property is designated 8.3 Extensive Agriculture (minimum 80 or 20 acre parcel size) and 8.3/2.4 (Extensive Agriculture/ Steep Slope) in the Kern County Year 2000 General Plan. The property is currently zoned Estate (20) (Estate – minimum lot size of 20 acres).

The area surrounding the proposed project property is also essentially undeveloped. The project property is bounded primarily by privately owned land except along a portion of its eastern boundary and a portion of its northern boundary, which adjoin federally owned land administered by the U.S. Department of Interior, Bureau of Land Management (BLM). The Pine Tree Canyon Road transmission line alignment passes through approximately 1 mile of BLM-administered land east of the project property and a total of approximately 9 miles of private land.

The northern portion of the project property is located within the Jawbone-Butterbredt Area of Critical Environmental Concern (ACEC). This ACEC, which consists of both public and private

property, has been designated by the BLM because of cultural and wildlife values. The area within the ACEC adjacent to the project property consists primarily of privately owned land; federal lands in this area are open to the public by permit only. The Jawbone Canyon Road access to the project property passes through the Jawbone-Butterbredt ACEC, including the Jawbone Canyon Open Area (a designated off-road vehicle use area) and approximately five non-contiguous miles of BLM-administered land.

The Sky River Ranch wind turbine development, owned by Florida Light and Power, is located on private property along Sweet Ridge, which rises above 5,000 feet in elevation and runs in a north-south direction approximately 1 mile west of the project property. Sweet Ridge is generally the tallest ridgeline in the vicinity of the project property, and it separates the local watershed east and west. The Sky River Ranch wind development consists of 342 approximately 150-foot-tall turbines, which are visible from various locations within the project property.

A segment of the Pacific Crest National Scenic Trail is also located approximately 1 to 2 miles west of the western boundary of the project property. In the vicinity of the project property, it generally parallels the Sky River Ranch wind development primary access road, usually to the west of the ridgeline (i.e., on the opposite side of the ridgeline from the project). However, to the south of the project property, the trail is located to the east of the ridgeline (i.e., on the same side of the ridgeline as the project). Only intermittent views of the project property may be available from the trail.

Highway 14 is a four-lane, divided highway located east of the proposed project. Along with U.S. Highway 395, which it intersects north of the project site, Highway 14 provides a north-south thoroughfare along the eastern side of the Sierra Nevada. Two existing LADWP high-voltage transmission lines run roughly parallel to and approximately 0.5 to 1 mile west of Highway 14 in the vicinity of the project property. One of these existing lines would provide an interconnection point for the proposed project to the main power transmission grid. The first and second Los Angeles Aqueducts, which are encased in buried and aboveground pipelines in the region of the proposed project, also run roughly parallel to and west of Highway 14, crossing the Jawbone Canyon access road to the project property.

Edwards Air Force Base (EAFB), which is located approximately 20 miles south of the project site, and Naval Weapons Station China Lake (NWSCL), which is located approximately 35 miles northeast of the project site, both maintain low-altitude Military Training Routes (MTRs) in the area of the project property to conduct aviation training exercises. The area is within the Joint Service Restricted R-2508 airspace complex.

PROJECT ZONING AND RIGHTS-OF-WAY

To construct the proposed project, the property surrounding the turbines would require a zone change to be designated as a Wind Energy (WE) Combining District by the County of Kern. According to the Kern County Zoning Code, the intent of the WE designation is to promote the use of wind power as “an alternative to fossil-fuel-generated electrical power in areas of the county which are identified to have suitable wind resources for production of commercial

quantities of wind-generated electrical power" and to develop this resource "in a manner that provides a harmonious balance between the suitability of a project site with existing area land use and physical surroundings." According to the Energy Element of the Kern County General Plan, the County "shall allow for the continued development of wind energy in primary wind resource areas." The WE Combining District designation would apply to bands of property approximately 400 feet wide surrounding the wind turbines. This would involve a total of approximately 425 acres within the boundaries of the project property.

The WE Combining District designation can be applied only in zoning districts with an Exclusive Agriculture (A), Natural Resource (NR) with a minimum lot size of 20 acres, or Estate (E) with a minimum lot size of 20 acres. Consistent with this provision, the project property is currently zoned E-20 (Estate, 20-acre minimum lots). However, in the Land Use, Open Space, and Conservation Elements of the Kern County Year 2000 General Plan, the property is designated as 8.3 Extensive Agriculture (minimum 80 or 20 acre parcel size) and 8.3/2.4 (Extensive Agriculture/ Steep Slope). According to the Kern County General Plan, this designation applies to "large amounts of land with relatively low value-per-acre yields, such as livestock grazing" and which are not under a Williamson Act Contract. To establish zoning consistency with this General Plan designation, as required by the California Government Code, the project property would be changed to an A zone (Exclusive Agriculture) designation prior to the assignment of the WE district designation. This would involve a total of approximately 7,800 acres.

A right-of-way grant would be required from the BLM to cross approximately 1 mile of BLM-administered land along Pine Tree Canyon Road for the proposed project transmission line. To provide access to the project property for both construction activities and long-term project O&M, a right-of-way would also be required from the BLM to cross approximately 2.5 miles of BLM-administered land along Jawbone Canyon Road that is not currently located within the county right-of-way.

PROJECT COMPONENTS

Wind Turbines

The primary component of the proposed project is a series of 80, 1.5-MW nameplate capacity wind turbines. Although each turbine has the ability to generate a maximum of 1.5 MW of electricity under ideal operating conditions, the actual conditions related to wind speed at the project property vary considerably on a seasonal, daily, and site-specific basis. Based on wind characteristics and other factors at a particular site, the actual energy output for a turbine over a year's time can be expressed as a percentage of the maximum nameplate capacity. This is known as the turbine's capacity factor. Based on meteorological analysis of the project property, the estimated net capacity factor for the entire project ranges from 31 percent to 32 percent. According to this range of capacity factors, the 80 turbines would provide an annual generation capacity of approximately 330 GWh.

The proposed turbines have a horizontal axis with a three-bladed rotor. The turbines would be mounted on tubular steel towers with internal maintenance access ladders. The total height of the tower to the hub of the rotor blades is 65 meters (213 feet). The diameter of the rotor is 77 meters (253 feet). The total height of the turbine at the highest point of the rotor blade's rotation is 103.5 meters (340 feet). The ground clearance for the rotor blades at their lowest point of rotation is 26.5 meters (87 feet). The base of the tower is approximately 15 feet in diameter. The towers and turbines would be neutral in color and would have a non-reflective finish.

The rotor blades would turn at approximately 20 rpm at peak production. The gearbox in the nacelle would increase the rotational speed of the high-speed shaft that drives the generator at 870 to 1600 rpm to provide electrical power at 60 hertz. The blades are made of fiberglass and epoxy resin and are equipped with a sophisticated lightning suppression system. The turbines are designed to withstand wind speeds in excess of 120 miles per hour, a speed that exceeds recorded and projected maximum wind speeds in the project area. When wind speeds exceed a prescribed level (between 55 and 70 miles per hour), the turbines are equipped to reduce speed through an individual blade pitch control system that feathers the blade out of the wind. During emergency conditions, the mechanical braking system would automatically engage to fully stop the rotor after the rotor reaches a predetermined minimum speed. After an emergency stop is executed, remote restarting is not possible. The turbine must be inspected in person, and the stop-fault must be reset manually before automatic operation will be reactivated.

Each turbine nacelle is equipped with an internal fire detection system with sensors located in the nacelle as well as the tower base. In the event of a fire, the turbine is immediately shut down, and an alarm condition is activated in the control that will notify operating personnel.

Substation and O&M Facility

The substation would consist of a fenced yard area containing the 34.5-kV to 230-kV step-up transformer, substation, and related electrical control equipment. The O&M facility would consist of a storage and equipment yard and an approximate 35-foot-high, 60-foot by 120-foot building containing offices for O&M personnel, a control and relay room, a workshop area, spare parts storage, training rooms, restrooms, and a lunchroom.

Electrical Transmission Line

An overhead 230-kV transmission line would connect the project substation to an existing LADWP transmission line located west of and generally paralleling Highway 14. The proposed transmission line would be approximately 10 miles in length. It would originate at the project substation in the south-central part of the project property and travel southeastward through privately owned land until it intersected Pine Tree Canyon Road to the southeast of the project property. The line would then generally parallel Pine Tree Canyon Road eastward to the existing LADWP transmission line at Highway 14. This proposed route would cross two parcels of BLM land for a total length of approximately 1.1 miles. The conductor wires would be mounted on a tubular steel monopole tower to reduce the transmission line footprint. However, terrain and other factors may require that freestanding steel lattice towers be used in some locations, such as at angles in the alignment. The towers would be approximately 110 feet in height and spaced

approximately 1,100 feet apart (approximately five towers per mile). A small switching station would be required at the interconnection between the project transmission line and the existing LADWP transmission line.

PROJECT CONSTRUCTION

Turbine Siting

Previous planning analysis for the siting of the proposed wind turbines considered a broader study area of over 21,500 acres. Due to constraints imposed by such factors as terrain and MTRs, and in an effort to minimize potential impacts to existing sensitive biological and cultural resources, the boundaries of the project property were narrowed to their present configuration, encompassing approximately 8,000 acres. Within these narrowed boundaries, the objective of the project is to optimize wind energy production based on a cost-benefit analysis that balances construction, operations, and maintenance considerations with the anticipated output of each turbine. A primary factor in this analysis is the quality of the wind resource at a particular site within the property. Based on this analysis, 80 turbines would be sited along selected ridgelines within the project property (see Figure 3, Project Site Plan).

Figure 2 illustrates the zones within which the 80 project wind turbines would potentially be located. The turbines would be grouped along separate ridges in "strings" ranging in size from 2 to 16 towers. The spacing between individual towers within a string would be a minimum of 1.4 times the diameter of the rotor blades (approximately 353 feet), but towers within a string would otherwise be located based on existing environmental and engineering considerations to minimize impacts and facilitate construction.

As mentioned previously, the area is within the Joint Service Restricted R-2508 airspace complex and both EAFB and NWSCL maintain MTRs that overfly the vicinity of the proposed project. The military is concerned about any vertical obstructions located within the boundaries of the MTRs because of the potential impact they may have on critical testing and training missions. The proposed project has been closely coordinated with representatives from both EAFB and NWSCL, and significant MTR-related constraints on turbine siting within the broader project study area have been identified. Among other considerations, the proposed turbine sites were selected considering these constraints. Therefore, based on the proposed turbine heights and locations, and in consideration of other environmental factors already present in the area, EAFB and NWSCL have determined that the configuration of the proposed project would create a less than significant impact to their flight operations.

Field Survey and Geotechnical Investigations

Before construction would commence, detailed engineering studies and geotechnical investigations would be performed to identify subsurface conditions that would affect the final design of the project and determine the precise location of the project's permanent and temporary (i.e., construction-related) facilities, including the wind turbines, roads, electrical cables, substation, O&M building, materials laydown/stockpile areas, and equipment staging areas.

Primary Construction Activities

The project construction would be performed in several stages and would include the following primary activities:

- Grading of roads, turbine pads, and crane pads
- Grading of the substation, materials laydown, and equipment staging areas
- Construction of the turbine tower foundations and transformer pads
- Installation of the electrical collection system
- Erection and assembly of the wind turbines
- Construction and installation of the substation and O&M facility including water well and septic system
- Construction of the 230-kV transmission line
- Plant commissioning and energization

Road Construction and Site Grading

To operate and maintain the turbines, the proposed project would require a network of service roads to provide access to the turbine sites, the substation, and the O&M facility. These roads would generally need to be 16 feet wide. However, to deliver large and heavy components and equipment to the turbine sites during project construction, most project roads would need to be 20 feet wide. In addition, to operate large equipment, including a truck- or track-mounted crane required to hoist the turbine components into position, access roads approximately 34 feet wide would be required at the turbine strings to provide access to each turbine site.

As discussed above, an extensive network of roads currently exists within the project property. These roads would be used for the project to the extent possible, but some regrading, reconstruction, and/or widening of most roads would be necessary. Some blasting may be necessary for road grading activities. Approximately 2 miles of existing 16-foot-wide road would be upgraded and utilized for the project construction and operations. Approximately 2 miles of existing 16-foot-wide road would be upgraded to be used during construction only. Approximately 15.5 miles of existing roads would be widened to 20 feet, and approximately 6 miles of existing road would be widened to 34 feet for both construction and operations. About 0.5 miles of new 20-foot-wide road and about 9 miles of new 34-foot-wide road would be required for both construction and operations. In addition, about 0.5 mile of new temporary construction road would be required. Portions of the Jawbone Canyon access road northeast of the project property may also require widening or other improvements.

Figure 3, Project Site Plan, indicates the location of the proposed project roads. A total of approximately 35.5 miles of roads would be necessary for the project, including about 23.5 miles of existing roads (upgraded or widened) for construction and operations; 2 miles of existing roads for construction only; 9.5 miles of new roads for construction and operations; and 0.5 miles of new roads for construction only. All these roads would be unpaved.

In addition to roads, a number of other areas associated with project construction and operations must be cleared and graded. During the construction phase, equipment and materials laydown and staging areas would be required. These areas, totaling approximately 45 acres, would be located in the northeastern, northwestern, and southern portions of the project property. They would provide for the offloading of all major components and construction equipment from flatbed trucks for temporary storage and restaging for delivery to individual wind turbine sites or the substation/O&M facility site. Several relatively small temporary material stockpile and turnout areas would also be located throughout the project property during construction. A small concrete batch plant would also be located at one of the laydown and staging areas to provide concrete for the turbine, substation, and O&M building foundations.

A total of approximately 21 acres would be cleared and graded as a site for the substation/O&M facility. These facilities would be located on relatively level terrain in the south-central portion of the property to minimize the length of the electrical collection system.

Each turbine tower would require a level pad of approximately 50 feet by 50 feet. In order to accomplish the erection and assembly of the turbines, a large truck- or track-mounted crane would be required to hoist the extremely heavy components as high as the hub height of 213 feet. A cleared and level area approximately 35 feet by 60 feet would be required adjacent to each tower site to accommodate the crane.

It is anticipated that any cutting and filling from road and pad grading would be balanced on site. No fill material would be deposited in canyons. Surplus sand and gravel from onsite grading activities are anticipated to be of a sufficient amount to meet the needs of a construction borrow pit. Project road construction and site grading would involve the use of several pieces of heavy machinery, including bulldozers, track-hoe excavators, front-end loaders, dump trucks, motor graders, water trucks, rock drills, and rollers.

A Storm Water Pollution Prevention Plan (SWPPP) will be developed for the project to minimize erosion and the potential for discharge of pollutants from the site due to clearing, grading, and other construction activities. The SWPPP will be prepared along with the project grading plan. Site-specific Best Management Practices will be developed emphasizing the control of erosion and sedimentation through such measures as retaining the original vegetative cover where possible; reducing the velocity of surface runoff and directing it away from disturbed areas; and promptly stabilizing disturbed areas through revegetation or the use of inert materials such as straw mulching or erosion control matting. Silt fences and sediment barriers would be maintained throughout construction and beyond until disturbed areas have been fully stabilized with vegetation. Check structures, such as rock dams, hay bale check dams, dikes, and swales, would be used where appropriate to reduce runoff velocity as well as to direct surface runoff away from disturbed areas.

Turbine Foundations and Erection

Depending on the soil and geotechnical conditions at each turbine site, the turbine tower would be mounted on a spread footing type foundation or a vertical mono-pier foundation. Excavation for the foundation would be required at each turbine site. Some blasting may be required. Some

of the excavated material would be used as fill for road and site grading. The remainder would be stockpiled at the turbine site while the concrete foundations were poured and cured. The stockpiled material would be properly protected with coverings, and the surrounding area would be protected with fences, hay bales, or other barriers to contain sediment flows. After the foundations have properly cured, the excavated material would be used as backfill around and above the foundations. Regardless of the foundation type that is used, the area of the foundation that would be exposed at the surface would be only slightly larger than the diameter of the tower base (15 feet) to allow for the bolting of the tower to the foundation. A pad-mounted transformer would be located adjacent to the base of each tower, requiring an approximately 8-foot by 8-foot concrete pad.

Because of its height, the turbine's monotube tower would be erected on the foundation in three sections. The nacelle housing the main mechanical components of the turbine would then be hoisted by crane onto the completed tower. The rotor blades would be erected in one of two methods. Either they would be attached to the nose cone on the ground, and the entire rotor assembly would then be hoisted into place on the nacelle, or they would be individually hoisted into place on the nose cone already attached to the nacelle. The large crane necessary for the turbine erection would move between individual turbine sites along the 34-foot-wide roads within each turbine string. After a string of turbines was completed, the crane would be broken down and transported by tractor trailer to the next turbine string along the 20-foot-wide project access roads. This approach would minimize the amount of road grading required for project construction.

Electrical Collection System

Electrical power generated by the wind turbines would be transformed and collected through a network of cables that would terminate at the project substation. Power from the turbines would be fed through a breaker panel located at the turbine base inside the tower and connected to a pad-mounted step-up transformer. The transformers would be connected to underground cables that would interconnect all of the turbines electrically. The underground cables would be installed in a trench that would generally run at the edge of project roads and would typically be 3 to 4 feet deep. Due to terrain or to avoid excessively long runs, the collection cables would occasionally become overhead lines for relatively short distances. The collection cables would connect to larger feeder lines that would run to the main substation. At the substation, the electrical power from the turbines would be stepped up to transmission level at 230 kV. In locations where two or more sets of underground lines converge, underground vaults and/or pad-mounted switch panels would be used to tie the lines together into one or more sets of larger feeder conductors. The project will require a total of approximately 20 miles of underground and 1 mile of overhead lines to collect all of the power from the turbines and route it to the substation.

Construction Traffic

Traffic generated during construction would include worker traffic; truck traffic associated with the onsite batch plant; truck traffic for transporting wind turbine components, concrete and reinforcing steel, mechanical equipment, and construction consumables; water trucks; and the

delivery of construction equipment such as cranes and earth-moving machines. It is anticipated that there will be approximately 30 transportation loads of components and materials per wind turbine location. As many as 2,700 truck trips may be required throughout the construction period for the erection related to the 80 turbines. The heavier loads anticipated would be the main power transformer, which weighs approximately 150,000 pounds, and the turbine nacelles, which weigh approximately 112,000 pounds. The nacelle is assembled in nearby Tehachapi, so trips on public highways would be relatively short. Trucks delivering earth-moving and other construction equipment to the project property would unload the equipment and depart the site, only to return when construction is complete. It is anticipated that approximately four large and nine small cranes would be required during construction, along with approximately 20 bulldozers, trenchers, and other earth-moving machines. Concrete trucks used in the construction of all foundations would be delivered to and remain at the project area until foundation construction was complete.

Construction Schedule and Personnel

It is anticipated that approximately 10 months would be required to construct the project. The average workforce on site would consist of approximately 120 workers. During peak periods, it is expected that about 140 personnel would be on site at once, as multiple disciplines complete their work simultaneously. Construction activity would normally take place during single 10-hour shifts, 6 days per week, for the duration of project construction. However, to ensure that construction activities remain on schedule and to take advantage of weather conditions, additional shifts may be employed at times during construction. The delivery of large loads on Jawbone Canyon Road would be minimized during peak periods of recreational use in the Jawbone Canyon Open Area. During peak periods, it is anticipated that, with carpooling, the daily employee trips would average about 60, in addition to a daily average of 35 trips per day for light duty delivery and construction trucks. The laydown and staging areas would provide sufficient space for construction crew vehicle parking, and no other construction-related parking areas would need to be provided on the property.

PROJECT OPERATIONS AND MAINTENANCE

With completion of construction, approximately 10 to 12 employees would operate and maintain the project on a permanent basis. Routine maintenance of the turbines would be necessary to maximize performance and detect potential problems. Routine activities related to maintenance would consist primarily of daily travel, generally by pickup trucks, of O&M personnel who would test and maintain the wind generation facilities. Most servicing would be performed “up-tower” (within the nacelle, without using a crane to remove the turbine from the tower). Occasionally, the use of a crane and possibly equipment transport vehicles may be necessary for cleaning, repair, adjustments, or replacement of the rotors or equipment contained in the nacelle. Additionally, all roads, pads, and trenched areas would be regularly inspected and maintained to minimize erosion.

Monitoring the operations of the wind turbines would be conducted both from computers located in the base of each turbine tower and from the O&M facility using telecommunication linkages and computer-based monitoring.

Periodic exchanging of lubricants and hydraulic fluids in the operating mechanisms of the turbines and towers would occur. All lubricants and hydraulic fluids would be carefully stored, used, and disposed in accordance with applicable laws and regulations.

DECOMMISSIONING

Decommissioning refers to the dismantling of the project elements and restoration of the site upon completion of the operating life of the facility. Periodic replacement of equipment can extend operating life indefinitely, depending on future demand for electricity generated by the project. Therefore, the estimated life of the project depends primarily on the demand for power, which is expected to continue growing. However, the project is expected to have a life of a minimum of 20 years.

At the end of the project's useful life, LADWP would obtain any necessary authorization from the appropriate regulatory agencies and from the landowners to decommission the facilities. Decommissioning would involve removing the turbines and support towers, transformers, and substation, and removing the upper portion of foundations so that they are not exposed at the surface. Generally, turbines, electrical components, and towers would either be resold or recycled for scrap. All unsalvageable materials would be disposed of at authorized sites in accordance with applicable laws and regulations.

Site reclamation would be based on site-specific requirements and techniques commonly employed at the time the area is reclaimed. As necessary, this could include regrading, spot replacement of topsoil, and revegetation of project-disturbed areas. Foundations would be removed to a depth of 2 feet, or less if bedrock is encountered. Project access roads would be reclaimed or left in place based on landowner preference. The land would then revert exclusively to landowner control.

AGENCIES, PERMITS, AND APPROVALS

The Pine Tree Wind Development Project environmental documentation would be prepared to facilitate approval by federal, state, and local agencies having jurisdiction over one or more aspects of the project, which would include complying with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Based on initial consultations between LADWP and BLM, it has been determined that LADWP would be the lead local agency for compliance with CEQA and BLM would be the lead federal agency for compliance with NEPA. Kern County is a key public agency with authority over land use and would be a "responsible" agency for purposes of complying with CEQA. It is anticipated that the Pine Tree Wind Development Project would require the following permits, approvals, and/or confirmations prior to construction of the project facilities. The list is tentative and may be

modified as a result of field investigations and further consultation with responsible and permitting agencies.

Local Agencies

Los Angeles Department of Water and Power (CEQA Lead Agency)

- CEQA compliance
- Approval to construct the proposed project

County of Kern

- Zone Change from "E-20" to "A" and A(WE) Districts (ref. Zone Change: Zone Map 131, Zone Map 150, Zone Map 151).
- Construction, building, and grading permits consistent with Kern County Codes

State Agencies

California Department of Fish and Game

- Streambed Alteration Agreement, CFG Code Section 1602;
- California Endangered Species Act, CFG Code Section 2081 (formal consultation on potential effects on state listed species)

California Regional Water Quality Control Board, Lahontan Region

- Clean Water Act, Section 402 General Construction Activity Storm Water Permit and Storm Water Pollution Prevention Plan

California Department of Transportation

- Right of Way Encroachment Permit for Highway 14
- Permit for transport of oversize loads

California Highway Patrol

- Notification of transport of oversize loads

Federal Agencies

Bureau of Land Management (NEPA Lead Agency)

- NEPA compliance
- Right-of-way grant
- National Historic Preservation Act Section 106 compliance

U.S. Fish and Wildlife Service

- Federal Endangered Species Act, Section 7 (formal consultation on potential effects to federal listed species)

Federal Aviation Agency

- Notice of Proposed Construction or Alteration (Form 7460-1)

REFERENCES

(1) Brown, Richard E. and Jonathan G. Koomey, "Electricity Use in California: Past Trends and Present Usage Patterns." Ernest Orlando Lawrence Berkeley National Laboratory, University of California, Berkeley (2002)

(2) Earth Systems Southwest, "Study of Geotechnical and Seismic Hazards for the Pine Tree Wind Development Project" (2003)

(3) Federal Emergency Management Agency, Flood Insurance Rate Map, Community-Panel Numbers 060075 1125B & 060075 1375B (1986)

(4) Hart, E.W. "Fault Rupture Hazard Zones in California: California Division of Mines and Geology Special Publication 42" (1977)

(5) Kern County Planning Department, "Energy Element of the Kern County General Plan" (1990)

(6) Kern County Planning Department, "Kern County Zoning Ordinance" (2003)

(7) Kern County Planning Department, "Land Use, Open Space, and Conservation Elements of the Kern County Year 2000 General Plan" (1994)

(8) Kern County Planning Department, "Noise Element of the Kern County Year 2000 General Plan" (1994)

(9) Los Angeles Department of Water and Power Integrated Resource Plan (IRP), amended and adopted by the Board of Water and Power Commissioners and the Los Angeles City Council (August 15, 2000)

(10) U.S. Census Bureau, State and County Quick Facts, Los Angeles County, California. http://quickfacts.census.gov/qfd/states/06/06037.html

INITIAL STUDY CHECKLIST (To be completed by the Lead City Agency)

PROPONENT NAME	PHONE NUMBER:
City of Los Angeles, Department of Water and Power Environmental Services, Charles Holloway	**(213) 367-0285**

PROPONENT ADDRESS
111 N. Hope Street, Room 1044
Los Angeles, CA 90012

AGENCY REQUIRING CHECKLIST	DATE SUBMITTED:
City of Los Angeles, Department of Water and Power	**April 14, 2004**

PROPOSAL NAME (If Applicable)

(Same as Project Title)

	1. AESTHETICS - *Would the project:*	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(a)	Have a substantial adverse effect on a scenic vista?	**X**			
(b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	**X**			
(c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	**X**			
(d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			**X**	

Comments: *1(a).* The topography surrounding the project site is mountainous, with tall rocky ridges. In general, views of the project components such as wind turbines from outside of the project boundaries would be blocked by major ridgelines. However, some project components may be visible from specific locations on surrounding property, such as the Pacific Crest Trail. This issue will be further addressed in the EIR. Potentially sensitive viewpoints, if any, will be identified and views of wind turbines and transmission facilities from public vantage points will be analyzed to aid the assessment of the visual impacts.

1(b). Highway 14, to the east of the project site, is an eligible state scenic highway. Some project components, such as access roads and overhead transmission lines may be visible from segments of the highway. However, these project components are not expected to substantially damage scenic resources such as trees, rock outcroppings, or historic buildings. The proposed access road, Jawbone Canyon Road, is an existing County Road with no known scenic resources within its right-of-way. The potential impact of the project relative to Highway 14 will be addressed in the EIR.

1(c). All of the project components, except for existing access roads and a portion of the project transmission line, would be located on private property, portions of which are used for agricultural grazing. Project facilities would change the visual character or quality of the project site. This issue will be addressed in the EIR.

1(d). New lighting of project components would be minimal. Minor surface lighting at the substation in the central portion of the site would affect a very small area and would not be directed to surrounding areas. Aviation obstruction lights could be required on some wind turbines by the Federal Aviation Administration (FAA). However, no significant light and glare impact would occur since such lighting is designed to be effective when directly viewed from above, project components would not generally be visible from public vantage points, and components would be less likely to be seen from these vantage points at night. Also, aviation lighting is not known to be a source of excessive glare that would damage dark sky conditions in state or national parks or wilderness areas, the closest of which are Red Rock Canyon State Park (located approximately 10 miles northeast of the project property) and the Bright Star Wilderness Area (located approximately 12 miles north of the project property.

2.	**AGRICULTURAL RESOURCES -** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. *Would the project:*	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				**X**
(b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				**X**
(c)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				**X**

Comments: *2(a).* The project site is not designated as Farmland by the California Department of Conservation. Therefore, the project would not convert Farmland to non-agricultural use.

2(b). The project site is not currently encumbered with Williamson Act contracts although portions of the project site are eligible. The project site is designated as Extensive Agriculture, 20 acres minimum, on the County of Kern General Plan, and portions of the site have historically been used for low-intensity cattle grazing. This use could remain at the discretion of the landowner. Though the project would slightly reduce the amount of land that could be used for grazing, the impact would not be significant since agricultural use could continue and the project would bring the site zoning into consistency with the underlying agricultural general plan designation.

2(c). The project site is not designated as Farmland and would not change the existing environment in such a way that would result in conversion of Farmland to non-agricultural use.

3.	**AIR QUALITY -** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. *Would the project:*	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(a)	Conflict with or obstruct implementation of the applicable air quality plan [e.g., the South Coast Air Quality Management District (SCAQMD) Plan or Congestions Management Plan?	**X**			
(b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	**X**			
(c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			**X**	
(d)	Expose sensitive receptors to substantial pollutant concentrations?				**X**
(e)	Create objectionable odors affecting a substantial number of people?				**X**

Comments: *3(a).* The project site is located within the Mojave Desert Air Basin, which is under the jurisdiction of the Kern County Air Pollution Control District. The project site is located within an area that is in federal and state non-attainment for ozone and particulate matter less than 10 microns in diameter (PM_{10}). Construction of the project would result in emissions from construction equipment that would include both ozone and PM_{10}. The construction emissions may be substantial in relation to Kern County's air quality attainment plan; therefore, the EIR will include an assessment of the project's potential air emissions and impact on air quality. Once the project is operational, the only pollutants generated would be during maintenance activities that would include a minor amount of travel on unpaved roads. The project's potential air emissions will be estimated and the level of impact will be further addressed in the EIR.

3(b). Because the project site is in an area already in non-attainment for ozone and PM_{10}, project construction activities have the potential to contribute to an existing air quality violation. The EIR will address this potential impact.

3(c). The project site is in a region that is in federal and state non-attainment for ozone and PM_{10}. Emissions during construction of the project would contribute to a cumulative net increase in these criteria pollutants; however, such increase is temporary and short term, limited to the construction period. Relative to operations, the project could offset or defer combustion of fossil fuel emissions needed to generate power for the Southern California area. That is, an increase in the percentage of

power produced with clean wind energy would either eliminate or defer the need to produce an equivalent amount of power using fossil fuels somewhere in the LADWP power generation system. A net cumulative reduction in emissions during the operations phase of the project would result; however, the reduction would be realized incrementally throughout the air basins where LADWP produces power.

3(d). The project site is located in a remote area of Kern County and there are no sensitive receptors for local air pollutant emissions or pollution hot spots.

3(e). The project would not include the types of emissions sources or activities that are normally associated with odor impacts.

4.	**BIOLOGICAL RESOURCES -** *Would the project:*	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	**X**			
(b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	**X**			
(c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				**X**
(d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	**X**			
(e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?				**X**

4.	**BIOLOGICAL RESOURCES** - *Would the project:*	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	**X**			

Comments: *4(a).* The project would be located in an area where candidate, sensitive, and special status species, such as desert tortoise, Mohave ground squirrel, raptors, and various sensitive plant species are known to occur. The potential impact of the project on these species will be addressed in the EIR. The U.S. Fish and Wildlife Service and California Department of Fish and Game were consulted about the potential impacts to species under each agency's jurisdiction. A biological study is currently being prepared to evaluate the project's impact on biological resources.

4(b). The project has the potential to adversely affect some riparian habitats on the site. Several predominantly ephemeral drainages within the project footprint would be modified to facilitate crossing during construction. Most of these improvements will require consideration under Section 1602 of the California Fish and Game Code pertaining to Notification of Streambed Alteration. The EIR will include evaluation of issues and impacts associated with construction affecting riparian areas.

4(c). The project site does not contain any federally protected wetlands or waters as defined by Section 404 of the Clean Water Act. While the majority of the drainages are ephemeral washes, there are approximately four intermittent stretches along Jawbone Creek. Drainages within the project area flow into two large washes (Jawbone Canyon and Pine Tree Canyon), then east into the Mojave Desert and ultimately into Koehn Lake. Koehn Lake is an essentially dry inland lake approximately 12 miles north of California City that has no distributary or other outlet. The Corps of Engineers was consulted and confirmed that the project does not affect waters used for interstate commerce or meet other requirements for navigability under 33CFR Part 328.3(a)(1). Based on this statute and the Solid Waste Agency of Northern Cook County Supreme Court decision (No. 99-1178), the Corps determined that a Section 404 permit is not required. Therefore, the project would not adversely affect federally protected wetlands.

4(d). Biological studies are being conducted to determine whether project components would interfere with movement of wildlife species, impede the use of wildlife nursery sites, or otherwise affect nesting sites. This issue will be addressed in the EIR.

4(e). There are no local County policies or ordinances protecting biological resources, such as Oak Tree Ordinances, that are applicable to the project.

4(f). The project site lies within land covered by the California Desert Conservation Area (CDCA) Plan. The CDCA Plan serves as the land use guide for management of public lands within the CDCA to protect the natural environment while also balancing various other considerations under a multiple use policy. An amendment to the CDCA Plan, the West Mojave Plan (WMP), is currently under consideration. The WMP might serve as the habitat conservation plan applicable to the project site. Included under the WMP is the Jawbone/Butterbredt Area of Critical Environmental Concern (ACEC),

within which the northern portion of the project property is located. This ACEC has been designated by BLM because of cultural and wildlife values of these lands. The potential for the project to conflict with the CDCA and ACEC will be addressed in the EIR.

5.	**CULTURAL RESOURCES** - *Would the project:*	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(a)	Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations Section 15064.5?	**X**			
(b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations Section 15064.5?	**X**			
(c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			**X**	
(d)	Disturb any human remains, including those interred outside of formal cemeteries?	**X**			

Comments: *5(a).* The northern part of the project site was used for cattle grazing, and there are some older structures on site that may be associated with past ranching activities. These structures may be historically significant. A cultural resources study is currently being conducted, the results of which will be addressed in the EIR.

5(b). There are a number of known important archaeological resources located within the project site and area. A cultural resources study is currently being conducted to evaluate the project's potential impacts on archaeological resources. Preliminary site evaluation has allowed cultural resource constraints to be considered in turbine and facility siting decisions. This issue will be addressed in the EIR.

5(c). The project is located in a mountainous area of the southern Sierra Nevada Range northwest of the Fremont Valley. The site is characterized by deeply incised valleys and steep hillsides. Regional lithologic units consist of intrusive and extrusive igneous rocks, metamorphic rocks, Tertiary sedimentary rocks, and Quaternary alluvium. In general, the igneous and metamorphic rock formations and the Quaternary alluvium are not known to be fossiliferous, and the likelihood of encountering fossils during construction in these formations is low. Construction in Tertiary sedimentary rock formations has moderate potential of encountering fossils. The Tertiary sedimentary formations at the site are not known as unique or significant paleontological resource. Though impact to significant resources is unlikely, the project would provide for, through standard construction specification, the protection of any fossils discovered during construction until the find can be evaluated by qualified individual.

5(d). Preliminary cultural resources reconnaissance indicates that a human burial site may exist within the project area. This burial site would be avoided. This aspect is being evaluated in the cultural resources assessment and will be included in the EIR.

6.	**GEOLOGY AND SOILS** - *Would the project:*	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.		**X**		
	ii) Strong seismic ground shaking?		**X**		
	iii) Seismic-related ground failure, including liquefaction?				**X**
	iv) Landslides?	**X**			
(b)	Result in substantial soil erosion or the loss of topsoil?	**X**			
(c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	**X**			
(d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	**X**			
(e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?			**X**	

Comments: *6(a), i).* According to the study of geotechnical and seismic hazards for the Pine Tree Wind Development Project (Earth Systems Southwest, 2003), no known active or potentially active faults are known to exist or were observed within the portion of the project site to be occupied by the wind turbine facilities. The site is not located within any currently designated State of California Alquist-Priolo Earthquake Fault Zone as designated by Hart (1977). However, the proposed 230-kV transmission line would cross the Garlock Fault near the mouth of Pine Tree Canyon (also near the second Los Angeles Aqueduct). The transmission line would be designed in accordance with the values and parameters given in the California Building Code (CBC), and any related impacts are considered mitigated to less than significant.

6(a), ii). According to a study of geotechnical and seismic hazards for the Pine Tree Wind Development Project (Earth Systems Southwest, 2003), the project site could be subject to potentially severe seismic shaking during the design life of the proposed wind turbines. The project site is located within the influence of several fault systems that are considered to be active or potentially active.

In particular, the project site would be subject to strong ground motion from the active or potentially active Garlock and related faults located approximately 1 mile from the southeast corner of the project site and crossing the proposed project transmission line. The project site is located in Seismic Zone 4 of the 2001 CBC. Project structures would be designed in accordance with the values and parameters given in the CBC, and any related impacts are considered mitigated to less than significant.

6(a), iii). According to a study of geotechnical and seismic hazards for the Pine Tree Wind Development Project (Earth Systems Southwest, 2003), the potential for liquefaction to occur is considered negligible because of the shallow depth to bedrock over most of the site, and in particular, at proposed sites for wind turbines.

6(a), iv). Portions of the proposed access roads and some of the turbines are located along steeply sloping terrain with gradients in excess of 50%. Such areas may be susceptible to slope instability such as rock falls and landslides. Proposed grading in these areas could create unstable cut and fill slopes. Additional engineering design would be needed to mitigate this hazard. These impacts and mitigation measures will be addressed further in the EIR.

6(b). Implementation of the project requires vegetation clearing and grading activities that have the potential to result in substantial soil erosion. Widening of existing dirt roads and construction of new dirt roads would be required. Other project components, such as staging areas and power distribution structures, would also require clearing and grading. This issue will be further addressed in the EIR.

6(c). As noted in 6(a) (iv), above, the project site would be constructed partly on steep slopes that may be unstable and necessary grading for access roads and turbines could create unstable cut and fill slopes. However, the potential for liquefaction is low, as noted in 6(a) (iii), above. According to the geotechnical and seismic hazards study (Earth Systems Southwest, 2003), further investigation would be needed to identify potentially unstable slopes, weak or expansive soils, rock and excavation conditions, and foundation conditions. These factors will be further addressed in the EIR.

6(d). As noted in 6(c) above, expansive soils may be encountered at the project site and additional review of these conditions will be included in the EIR.

6(e). A septic tank is proposed for installation at the on-site O&M building. The installation of a septic system is subject to evaluation and permit from the County of Kern.

7.	**HAZARDS AND HAZARDOUS MATERIALS -** *Would the project:*	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(a)	Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?			**X**	
(b)	Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			**X**	

7.	**HAZARDS AND HAZARDOUS MATERIALS** - *Would the project:*	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				**X**
(d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				**X**
(e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			**X**	
(f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				**X**
(g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				**X**
(h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			**X**	

Comments: *7(a).* Significant quantities of hazardous materials would not be routinely transported, used, or disposed. Hazardous materials expected to be used during construction of the project include blasting materials and petroleum products for lubrication and fuel. Operation of the project would require routine use of a relatively small amount of hazardous materials, including lubricants and hydraulic fluids. These materials would be transported, used, and disposed according to applicable safety standards, and they do not pose a significant hazard to the public or the environment.

7(b). Hazardous materials expected to be used during construction of the project include blasting materials and petroleum products for lubrication and fuel. Project operations would involve the routine use of a relatively small amount of hazardous materials, including lubricants and hydraulic fluids. Applicable safety standards would be implemented during the use of these materials, and there are no site-specific conditions that would pose reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

7(c). There are no existing or proposed schools within one-quarter mile of the project site.

7(d). Government Code Section 65962.5 refers to a list of facilities that may be subject to the Resource Conservation and Recovery Act (RCRA) corrective action program. No listed RCRA sites occur on the subject property, and there are no known hazardous materials on the project site.

7(e). The project is located in an area overlain by military use airspace, and the FAA has designated the airspace over this region as a military operations area. The area is within the Joint Service Restricted R-2508 airspace complex. The designated flight paths over the project site involve numerous MTRs starting at 200 feet above ground level and increasing in height up to 10,000 feet above sea level. These MTRs are primarily associated with training at EAFB and NWSCL. The total height of each turbine at the highest point of the rotor blade's rotation is approximately 340 feet. At this height, the wind turbines would extend into the lower elevations of flight corridors above the site, creating a potential navigation hazard related to MTRs.

LADWP and WTP have consulted with both EAFB and NWSCL and have developed a configuration of wind turbines that resolves the potential for interference with the MTRs. The military reviewed the site plan and found that the plan as currently proposed would avoid potentially significant impacts on MTRs and, as long as the blade height of the turbines would remain below 360 feet above ground level, would not compromise the training and testing mission of the affected installations.

7(f). There are no private airstrips within 2 miles of project components and no hazards from such operations are applicable to the project site.

7(g). There are no regional or public agency-mandated emergency response or emergency evacuation plans applicable to the proposed project, and the project would not interfere with such plans.

7(h). The project has the potential to increase the risk of wildland fire from construction activities such as sparks emitted during welding and operation of internal combustion engines. During construction, the risk of human-caused accidental wildland fires would be increased. However, proper safety precautions will be implemented to protect both natural resources and investment in equipment. Typical fire safety standards would be implemented, including (1) all construction and maintenance vehicles at the site would carry a shovel and fire extinguisher, (2) a 10-foot fuel break would be constructed around all permanent facilities (except roads), (3) mats, shields, and wind breaks would be used during welding in open areas, (4) cigarette smoking would be prohibited within the project site, and (5) Occupational Safety and Health Administration, County, and LADWP fire prevention requirements would be enforced. With implementation of these standard safety measures, the increased risk of wildland fires is considered less than significant.

8.	**HYDROLOGY AND WATER QUALITY** - *Would the project:*	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(a)	Violate any water quality standards or waste discharge requirements?	**X**			
(b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			**X**	
(c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site?	**X**			
(d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	**X**			
(e)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?				**X**
(f)	Otherwise substantially degrade water quality?	**X**			
(g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				**X**
(h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	**X**			
(i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				**X**
(j)	Inundation by seiche, tsunami, or mudflow?				**X**

Comments: *8(a).* The project has the potential to cause soil erosion, which could result in impacts to downstream water quality. Potential runoff from equipment wash-off areas could also affect water quality. The project's potential to contribute to water quality standards violations will be further addressed in the EIR.

8(b). Water supplied by LADWP from the Los Angeles Aqueduct (in Jawbone Canyon) would be the primary source of water during the construction phase of the project for concrete mixing, dust suppression, and equipment wash-off. The construction water use would be temporary and of a relatively small quantity. Potable water needed during operation of the project would be supplied by a commercial bottled water supplier. Relatively small volumes of non-potable water for sanitary functions during project operations may be obtained from a new on-site well.

8(c). Access to various project components would require multiple stream crossings during construction and operation of the project. The stream crossings have the potential to cause erosion or siltation. This issue will be further addressed in the EIR.

8(d). Implementation of the project requires vegetation clearing, which has the potential to result in increased surface runoff. Widening of existing dirt roads and construction of new dirt roads would be required and could also increase runoff. Other project components, such as staging areas and power distribution structures, would also require clearing and grading. The project's potential to cause flooding on- or off-site from increased runoff will be further addressed in the EIR.

8(e). The project has the potential to increase surface runoff. However, there are no existing or planned stormwater drainage systems in the project vicinity. Therefore, the project would not contribute to exceeding the capacity of existing or planned public stormwater drainage systems.

8(f). In addition to the water quality impacts discussed above, runoff from equipment wash-off areas has the potential to degrade water quality. The EIR will discuss project-related activities that have the potential to substantially degrade water quality.

8(g). The project does not include the construction of housing and would not place housing within a designated flood hazard area.

8(h). Pine Tree and Jawbone canyons are designated flood zones according to the Federal Emergency Management Agency (FEMA). Flood Insurance Rate Maps have been prepared by FEMA, which graphically depict designated flood zones of "A" within the defined channel ways. Community panel numbers 060075 1375B and 1125B, dated September 29, 1986, identify these areas having a 1-percent chance of flows being equaled or exceeded in any given year. Permanent structures placed in the floodplain would be subject to flood hazard review prior to issuance of building permits. This issue will be reviewed in the EIR.

8(i). The project would not expose people or structures to a significant risk of loss, injury, or death involving flooding. The project does not involve construction of levees or dams and would not result in the failure of levees or dams.

8(j). The project site is not in an area that is at risk of inundation by seiche, tsunami, or mudflows.

9.	**LAND USE/PLANNING** - *Would the project:*	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(a)	Physically divide an established community?				**X**
(b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	**X**			
(c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	**X**			

Comments: *9(a).* The project is not located in the vicinity of an established community and would not physically divide any existing communities.

9(b). In the Kern County Year 2000 General Plan (1994), the project site is designated as Map Code 8.3 (Extensive Agriculture, 20-acre minimum) and 8.3/2.4 (Extensive Agriculture/Steep Slope), reflecting the current grazing use of the property. Under the County's Zoning Ordinance, the project site is zoned E (Estate) with a 20-acre Minimum Lot Size. As part of the project, the zoning at the project site would be changed from E-20 to A (Exclusive Agriculture). In addition, the areas surrounding the wind turbines would be designated WE (Wind Energy) Combining Districts. The intent of a WE Combining District is to promote the use of wind power as "an alternative to fossil-fuel-generated electrical power in areas of the County which are identified to have suitable wind resources for production of commercial quantities of wind-generated electrical power," and to develop this resource "in a manner that provides a harmonious balance between the suitability of a project site with existing area land use and physical surroundings." The conformity zone change to Exclusive Agriculture would take place on about 7,800 acres. The WE Combining District would then be applied only to approximately 425 acres of land surrounding the turbines, resulting in a zoning designation in these areas of A-WE. The project would bring the site zoning into consistency with the Kern County Year 2000 General Plan, consistent with the California Government Code. However, because the zoning change is an item of discretion, the compatibility of the project relative to zoning and general plan issues will be addressed in the EIR.

9(c). As noted previously in response to question 4(f), the project site lies within lands covered by the CDCA Plan as amended by the WMP. The CDCA Plan and the WMP serve respectively as the land use management plan and habitat conservation plan for lands within the project area. The potential for the project to conflict with the CDCA, WMP, and other related planning areas, such as the Jawbone/Butterbredt ACEC, will be addressed in the EIR.

10.	**MINERAL RESOURCES** - *Would the project:*	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				**X**
(b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				**X**

Comments: *10(a).* There are no known statewide and regionally valuable mineral resources at the project site.

10(b). There are no locally important mineral resource recovery sites at the project site. No mineral resource zones are located within the project site as indicated by the Kern County General Plan.

11.	**NOISE** - *Would the project result in:*	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			**X**	
(b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				**X**
(c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			**X**	
(d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			**X**	
(e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				**X**
(f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				**X**

Comments: *11(a).* There is one ranch house in the northwest portion of the project site that is occasionally occupied but does not serve as a place of primary residence. In accordance with Chapter

19.64 (WE Combining District) of the Kern County Zoning Ordinance, a legal agreement would be reached with the owner of this ranch house indicating the owner's written consent for the project, and a noise impact easement for the construction and operation of the project would be acquired. The area surrounding the project property is generally undeveloped, with no noise-sensitive uses, as defined in Chapter 19.64 of the Zoning Code and in the Noise Element of the Kern County General Plan, within several miles. Based on the requirements and standards established in Chapter 19.64, which require noise impact analysis if any sensitive uses are located within 1 mile in a prevailing downwind direction or within 0.5 mile in any other direction of the project's exterior boundary, the project would not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance.

11(b). The operation of the wind turbines would not generate perceptible groundborne vibrations.

11(c). The project would increase the ambient noise levels at the project site due to wind turbine operations. As mentioned above in 11(a), other than a single ranch house located within the project property, the area surrounding the project property is generally undeveloped, with no noise-sensitive uses within several miles. In accordance with Chapter 19.64 (WE Combining District) of the Kern County Zoning Ordinance, which requires noise impact analysis if any sensitive uses are located within 1 mile in a prevailing downwind direction or within 0.5 mile in any other direction of the project's exterior boundary, this increase in ambient noise is not expected to create a significant impact.

11(d). Construction of the project would cause a temporary or periodic increase in ambient noise levels in the project vicinity. Construction noise would include heavy construction equipment and could include blasting to assist site grading. However, the project occurs in an area with no permanent occupants within several miles of the wind area boundaries. While blasting may be audible in areas surrounding the project site, the distance from source to receptor of well over 1 mile would conform to County zoning requirements and would be less than significant.

11(e). The project is not located within an airport land use plan or within two miles of a public airport.

11(f). The project is not located within the vicinity of a private airstrip.

12.	**POPULATION AND HOUSING -** *Would the project:*	**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	**X**			
(b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				**X**
(c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				**X**

Comments: *12(a)*. The construction phase of the project would last approximately 10 months and could require the temporary location of some construction personnel and family members to the communities near the project site. This could induce a potentially significant temporary population growth in the area. The extent of the temporary population growth will be further addressed in the EIR. Once operational, the project would require approximately 10 to 12 permanent workers. In the context of the regional population, this would not be a significant impact. The project is not expected to otherwise induce substantial population growth. The project is being built to accommodate existing and projected energy demands rather than to provide excess capacity for future growth.

12(b). The project would not decrease the existing housing stock and would not require construction of replacement housing elsewhere.

12(c). The project would not displace people from their current housing and would not necessitate the construction of replacement housing elsewhere.

13.	**PUBLIC SERVICES -** W*ould the project:*	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(a)	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	i) Fire Protection?			**X**	
	ii) Police Protection?				**X**
	iii) Schools?				**X**
	iv) Parks?				**X**
	v) Other public facilities?				**X**

Comments: *13(a), i).* Construction of the project includes welding and use of explosives, which may pose an increased fire hazard. Proper fire-safety standards would be followed relative to construction and operations. For example, such activities would take place in areas cleared of vegetation, and adequate fire fighting equipment would be available on-site. In addition, the Kern County Fire Department would be consulted prior to conducting these activities. Due to the short duration of the potential increase in fire hazard, new fire protection facilities would not be constructed. Operation of the project does not emit sparks or otherwise pose an increased fire hazard. Wind turbines would incorporate state-of-the-art lightning suppression systems. Therefore, the project would not increase the demand for fire protection or necessitate the construction of new fire protection facilities.

13(a), ii). The project would not permanently increase the local population and would not require the construction of new police protection facilities. While the project area is technically under the jurisdiction of the Kern County Sheriff's Department, the project would not necessitate the increase in patrol by the Sheriff's Department. Project lands would remain private, with controlled access. Private security forces would be used to secure on-site facilities.

13(a), iii). The project would not permanently increase the local population and would not require the construction of new schools.

13(a), iv). The project would not permanently increase the local population and would not require the construction of new parks.

13(a), v). Upon completion of project construction, the project would be owned and operated by LADWP, a public utility. In this regard, the project facilities would become public facilities and part of the LADWP power generation infrastructure. The project would not permanently increase the local population and would not require the construction of other new public facilities.

14.	**RECREATION -**	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				**X**
(b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				**X**

Comments: *14(a).* The project would not increase the use of existing parks or cause a shift in park usage patterns in existing parks. Therefore, the project would not accelerate the physical deterioration of existing parks.

14(b). The project does not include recreational facilities or require the construction or expansion of recreational facilities.

15.	**TRANSPORTATION/TRAFFIC** - *Would the project:*	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(a)	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			**X**	
(b)	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			**X**	
(c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?			**X**	
(d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	**X**			
(e)	Result in inadequate emergency access?				**X**
(f)	Result in inadequate parking capacity?				**X**
(g)	Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				**X**

Comments: *15(a).* Delivery of materials to the project site is estimated to require approximately 28 trips per turbine over an 8-month period. This increase in traffic would not be significant in relation to the capacity or existing traffic flows on the principal access route (Highway 14).

15(b). The amount of truck traffic delivering materials to the project site is not significant in relation to traffic levels of service.

15(c). The airspace over the project site has flight restrictions established by the FAA due to military activities. This issue has been resolved as discussed in Item 7(e) above.

15(d). Delivery of project components over public roads has a potential to increase road hazards. Some of the project components would require permits for wide/long loads. Turning movements from Highway 14 to Jawbone Canyon Road by oversize trucks could pose traffic hazards. Construction traffic along Jawbone Canyon Road itself could also pose traffic hazards within the Jawbone Open Area. This issue will be addressed in the EIR.

15(e). The project would not block existing emergency access routes. The access roads widened as part of the project would facilitate emergency access to and from the site.

15(f). The project would not affect off-site parking capacity. Project-related parking requirements would be accommodated on-site.

15(g). The project would not conflict with existing use of alternative transportation.

16.	**UTILITIES AND SERVICE SYSTEMS -** *Would the project:*	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				**X**
(b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				**X**
(c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				**X**
(d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			**X**	
(e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				**X**
(f)	Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?				**X**
(g)	Comply with federal, state, and local statutes and regulations related to solid wastes?				**X**

Comments: *16(a).* The project would not be connected to a wastewater treatment facility; thus no impact would occur.

16(b). The project would not require the construction or expansion of new community wastewater treatment facilities. A septic system would be installed for the workers at the O&M building. Non-potable water for construction would be obtained primarily from the Los Angeles Aqueduct (in Jawbone Canyon) and trucked to the site. Additional water for construction may be derived from a new water well on-site. During project operations, bottled water would be used for potable uses, and relatively small amounts of water from a new on-site well may be used for non-potable uses. The well construction would require a permit from the Kern County.

16(c). The project site is not served by existing storm water drainage facilities and would not require the construction or expansion of existing public facilities.

16(d). LADWP has sufficient water supplies to serve the proposed project during construction. Potable water use during operations would be minimal and primarily served via commercial bottled water company. Small volumes of non-potable water for sanitary functions during project operations may be obtained from a new on-site well.

16(e). The project would not be connected to a wastewater treatment plant; thus a determination by the wastewater service provider is not necessary for this project.

16(f). The project would not generate a substantial quantity of solid waste during construction. Once the project construction is completed, a small amount of waste would be generated during O&M activities.

16(g). The project would comply with federal, state, and local statutes and regulations related to solid waste and disposal of other wastes such as lubricating oils and hydraulic fluids.

17.	**MANDATORY FINDINGS OF SIGNIFICANCE -**	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	**X**			
(b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	**X**			
(c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	**X**			

Comments: *17(a).* Based on the discussions in the sections above, the project has the potential to have significant impacts on aesthetics, air quality, biological resources, cultural resources, geology and soils, land use/planning, noise, hydrology and water quality, population and housing, and transportation/traffic. The potential impacts to these resource areas will be further addressed in the EIR.

17(b). The project has the potential to have cumulatively considerable impacts. As required under CEQA, the cumulative impacts will be addressed in the EIR.

17(c). Based on the discussions in the sections above, the project has the potential to cause significant environmental impacts that may cause adverse effects on human beings, which will be addressed in the EIR.

PREPARED BY:	**TITLE:**	**TELEPHONE NO.:**	**DATE:**
Charles C. Holloway	Supervisor of Environmental Assessment	(213) 367-0285	April 14, 2004