DRAFT ENVIRONMENTAL IMPACT REPORT
FOR THE
REVISED COMMERCIAL WECS 20 PERMIT PROJECT

Submitted pursuant to the requirements of the
California Environmental Quality Act

by the

CITY OF DESERT HOT SPRINGS

and

ENERGY UNLIMITED, INCORPORATED

State Clearinghouse No.
2005101120

The following may be contacted for additional information regarding this document:

Steven Mendoza
Assistant City Manager
City of Desert Hot Springs
65950 Pierson Boulevard
Desert Hot Springs CA 92240
(760) 329-6411

David F. Scriven
Krieger & Stewart, Incorporated
3602 University Avenue
Riverside, California 92501
(951) 684-6900

Comments on this document are due by May 10, 2007 and should be sent to Steven Mendoza at the above address.

CITY OF DESERT HOT SPRINGS
65950 PIERSON BOULEVARD
DESERT HOT SPRINGS, CA 92240
(760) 329-6411

CITY OF DESERT HOT SPRINGS
DRAFT ENVIRONMENTAL IMPACT REPORT
FOR THE
REVISED COMMERCIAL WECS 20 PERMIT PROJECT

MARCH 2007

Prepared by

KRIEGER & STEWART, INCORPORATED
ENGINEERING CONSULTANTS
3602 UNIVERSITY AVENUE
RIVERSIDE, CALIFORNIA 92501
(951) 684-6900

SIGNATURE _____

DATE _____

554-9
(REPORTS/CEQA/554/554-9)
VEM/DFS/blt

TABLE OF CONTENTS

TABLE OF CONTENTS

PAGE

PAGE

TABLE OF CONTENTS
(continued)

TABLES

FIGURES

APPENDICES

DRAFT ENVIRONMENTAL IMPACT REPORT

1. INTRODUCTION

A. General

Desert Hot Springs and the Coachella Valley have substantial and important renewable energy resources, which include the San Gorgonio Wind Resource Area within the San Gorgonio Pass, extending into the City of Desert Hot Springs (City) and its Sphere-of-Influence. The west end of the City is a proven wind energy resource area, where there are approximately 160 acres zoned for wind farm development, a portion of which is currently developed and operating as a wind farm.

The San Gorgonio Pass is one of five major wind resource areas in California. The San Gorgonio Wind Resource Study (Wagstaff and Brady and Robert Odland Associates, 1982) and subsequent analyses delineate those portions of the wind resource area that offer an economically viable (developable) wind resource. The continued development of commercial-scale wind turbine generator (wind turbine or turbine) projects in the City and western Sphere-of-Influence areas indicate the viability of additional City lands for continued commercial-scale wind turbine generator development. Wind energy development started in the San Gorgonio Pass area in the early 1980s, and was originally regulated by the U.S. Bureau of Land Management and the County of Riverside. During the mid-1990s, the cities of Desert Hot Springs and Palm Springs each annexed wind farms into their incorporated areas.

The annexed area, referenced above, was designated I-E within the City of Desert Hot Springs. The I-E (Industrial-Scale Energy Production) District in the City, as described in the City of Desert Hot Springs Zoning Ordinance (2000), is intended to promote the development and harvesting of the City's wind energy and other energy resources in the western areas of the City, while ensuring compatibility with adjacent land uses. Additionally, this land use district provides for the development of interim uses including, but not limited to, properly screened equipment storage yards, plant nurseries, recreation (non-structural), etc., which do not impair the long-term ability to develop and harvest wind energy and other energy resources.

The Revised Commercial WECS 20 Permit Project (Project) site is located within the existing 160-acre (approximate size) WECS 20 Wind Park. The existing WECS 20 Wind

Park comprises 69 existing wind turbines. The proposed Project is intended to further develop the City's wind energy resources by constructing, operating, and maintaining eight (8) new GE 1.5 megawatt (MW) wind turbine generators in a single north-south row (with the two end turbines at a total height of approximately 329 feet and the six turbines in between at a total height of approximately 340 feet), along with wiring, conduit, and appurtenances; removing sixteen (16) existing smaller Bonus 65 kW wind turbine generators; constructing a single-story (40 foot by 100 foot) storage building; and the expansion of an existing outdoor storage area within the existing WECS 20 Wind Park, which is located in the I-E District, described above, in the City. The Project does not include an expansion of the WECS 20 Wind Park boundaries.

B. Background

Energy Unlimited, Incorporated (EUI) was formed in 1980 with the aim of developing and operating wind projects. EUI has owned and/or managed about 50 MW of projects in the San Gorgonio Pass, Colorado, and Pennsylvania, with several hundred megawatts in new projects now in various stages of development.

EUI's existing WECS 20 Wind Park was approved by the County of Riverside in 1985 for the development of 128 65-kilowatt (kW) Bonus wind turbine generators. Construction of the wind park commenced in 1985 with the erection of 65 Bonus wind turbine generators by the end of the year. A second phase of construction in 1992 added an additional 8 Bonus Mark 3 120 kW wind turbines. Although WECS 20 was approved for 128 wind turbines, a lesser number of turbines was constructed for technical and economic reasons. The WECS 20 Wind Park has been operated continuously by EUI since its inception. To date, of the 73 wind turbines constructed, 4 of the original 65 Bonus wind turbines were decommissioned and removed. It is anticipated that additional Bonus wind turbines will be retired and removed from the wind park as these turbines reach the end of their useful lives. The area that includes the WECS 20 Wind Park was annexed to the City in 1994. The existing WECS 20 Permit expires in 2015.

In November of 2000, EUI submitted applications with the City to install eight new wind turbines within the existing WECS 20 Wind Park. The Conditional Use Permit and accompanying Variance were approved in January, 2001. Construction of the turbines had not commenced by the time the permits expired two years after their issuance. In

April, 2003, EUI applied with the City to have the permits re-approved; however, their request was denied by the City Planning Commission, who directed EUI to provide additional information regarding potential environmental impacts. EUI completed and submitted these additional reports, which became part of a Planning Commission Hearing on November 19, 2004, during which the City Council determined that an Environmental Impact Report would be required for the Project. Areas to be analyzed in greater detail are: aesthetics, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, public services, transportation and traffic, and utilities and service systems.

C. Purpose and Scope of EIR

The purpose of this Draft Environmental Impact Report (DEIR) is to provide decision-makers, public agencies, and the general public with an objective and informational document that fully discloses the potential environmental effects of the Project. The Environmental Impact Report (EIR) process is designed to facilitate the objective evaluation of potentially significant environmental impacts (direct, indirect, and cumulative) of the Project and its alternatives. The EIR will also identify mitigation measures intended to reduce the potential adverse environmental impacts of the Project to a level of insignificance.

The City of Desert Hot Springs (City) is the Lead Agency for subject Project. As Lead Agency, the City is principally responsible for preparing California Environmental Quality Act (CEQA) documents for the Project and determining whether an EIR is required. Based on the Environmental Assessment prepared by the City, the City has determined that the Project may result in potentially significant environmental impacts, and has required that an EIR be prepared in order to provide an analysis of such impacts.

The Project applicant, Energy Unlimited, Incorporated (EUI), has applied with the City for Variance No. 05-04 (a request to exceed the 200-foot height limit, as specified in Section 159.08.030(2)(J)(e)(1)(a) of the Desert Hot Springs Municipal Zoning Ordinance), Conditional Use Permit No. 09-04 (a request to construct the Project within the existing WECS 20 Wind Park), Development Permit No. 24-04, and Design Review No. 22-04 (for the design and location of the storage building and outdoor storage area

that will be developed in conjunction with the wind turbines), of which approvals are required in order to implement the Project.

The CEQA, California Public Resources Code sections 21000 et seq., requires the preparation of an EIR for any action that has the potential to significantly affect the quality of the environment. This DEIR for the Energy Unlimited, Incorporated Revised Commercial WECS 20 Permit Project (Project) has been prepared by Krieger & Stewart, Incorporated, under contract with EUI, for the City, in order to comply with the provisions of CEQA.

This is a public information document. Information contained herein is intended to address the environmental impacts expected to result from the Project, and to satisfy the disclosure requirements of CEQA and the State CEQA Guidelines.

D. Agencies That May Use This Document

- City of Desert Hot Springs Planning Commission and City Council
  - Variance No. 05-04
  - Conditional Use Permit No. 09-04
  - Development Permit No. 24-04
  - Design Review No. 22-04

- California Regional Water Quality Control Board
  - National Pollution Discharge Elimination System (NPDES) Permit

- California Department of Fish and Game
  - Permits related to jurisdictional waters, if applicable

- United States Department of Fish and Wildlife
  - Permits related to federal endangered or threatened species, if applicable

E. Environmental Impact Review Process

A Notice of Preparation (NOP) was distributed to the State Clearinghouse (Governor's Office of Planning and Research), public agencies, and other interested parties on

October 26, 2005. A copy of the NOP and comments received in response thereto are contained in Appendix I. A scoping meeting was also held at the City of Desert Hot Springs on November 14, 2005.

The City has filed a Notice of Completion (NOC)/Notice of Availability of the Draft Environmental Impact Report with the State Clearinghouse. In accordance with State CEQA guidelines, a 45-day public review period is required. Following the close of this review period, responses to comments will be prepared and presented as part of the Final Environmental Impact Report (FEIR).

2. SUMMARY

A. Potentially Significant Effects and Proposed Mitigation

Summary of Potential Impacts	Mitigation Measure	Level of Significance After Mitigation
Aesthetics		
Impact: The Project may adversely impact scenic viewsheds.	**1.** The eight wind turbines will be painted white, with a matte or galvanized finish. The storage building will be painted in an earth-tone, such as beige.	**Impact is mitigated below a level of significance.**
	2. All Project grading will comply with the City's regulations in order to minimize adverse impacts to viewsheds.	
	3. Upon removal of the 16 Bonus wind turbines, the area where each individual Bonus wind turbine was located shall be remedied. The site shall be evaluated and any soil contamination shall be removed, structural foundations (cutting to six feet below grade) and all manmade debris shall be removed from the site, and the area shall be replanted with plant material native to the Coachella Valley. Monitoring of all such activities shall be undertaken by a qualified biological monitor, who shall file a written report of findings to the City upon completion of the site remediation as outlined above.	
	4. During ongoing operation and maintenance of the Project, only surplus turbine parts too large to be stored in the storage building will be stored in the open storage area. Prior to storing any additional items in the open storage area which are not large turbine parts, a list of said items will be submitted in writing to the City for approval. Decommissioned wind turbines, including inoperable or wrecked machinery, motor vehicles, construction equipment, and construction debris will not be stored onsite.	
	5. The outdoor storage area shall be inspected annually by the City.	
	6. No advertising sign or logo shall be placed or painted on any commercial WECS.	
	7. No commercial WECS shall be located where the center of the tower is within 1320 feet (0.25 mile) of State Route 62.	
	8. All aspects of the Project's development shall adhere to Wind Energy Conversion Systems (WECS) requirements as adopted in Section 159.08.030(2)(J) of the City's Municipal Zoning Ordinance.	

Summary of Potential Impacts	Mitigation Measure	Level of Significance After Mitigation
Impact: The Project may adversely impact light in night skies and nighttime illumination in residential areas.	**9.** All lighting equipment and devices will be shielded or recessed so that direct light and glare are contained within the boundaries of the Project site, away from adjoining properties and public rights-of-way.	**Impact is mitigated below a level of significance.**
	10. Project development shall comply with the City's adopted outdoor lighting standards as specified in Section 159.20.030 of the Desert Hot Springs Municipal Zoning Code.	
	11. Lighting plans indicating proposed lighting levels and methods to minimize impact on adjacent properties shall be reviewed and approved by the City prior to installation. Modification, alteration, or addition to any approved lighting shall not be undertaken prior to approval by the City.	
Air Quality		
Impact: The Project may have short-term adverse PM10 and NOX emissions during construction.	**12.** Prior to commencement of any demolition, grading, or construction activities, the Project applicant will prepare and submit for City Engineering Department review and approval a Fugitive Dust (PM_{10}) Mitigation Plan.	**Impact is mitigated below a level of significance.**
	13. Traffic speeds of no greater than 15 miles per hour will be observed on all unpaved roadways.	
	14. All grading operations will be suspended when wind speed (as instantaneous gusts) exceeds 25 miles per hour.	
	15. Trucks importing and/or exporting soil or other loose material will be covered and/or watered down prior to entering public streets to minimize potential fugitive dust.	
	16. Soil binders will be spread on unpaved roads and parking areas, and/or AQMD-approved soil stabilizers will be applied according to manufacturer's specifications to all inactive construction areas (previously graded areas that remain inactive for 96 hours).	
	17. SCAQMD Rule 403 shall be adhered to, ensuring the clean-up of construction-related dirt on approach routes to the site.	

Summary of Potential Impacts	Mitigation Measure	Level of Significance After Mitigation
Biological Resources		
Impact: The Project may result in adverse effects on sensitive plant and/or animal species in the area.	**18.** Thirty days prior to commencement of construction, the Project site shall be re-surveyed by a qualified biologist for the presence of sensitive species. Additionally, a qualified biological monitor will be onsite during all construction activities. The biological monitor will have the authority to halt or divert construction activities which may be in violation of the stipulations herein. The biological monitor will file a final report with the City Planning Department at the conclusion of construction.	**Impact is mitigated below a level of significance.**
	19. All construction personnel will participate in a biological awareness training program prior to commencement of construction activities, and a report verifying same will be provided to the City Planning Department.	
Impact: The Project may result in adverse effects on native plant communities at the Project site.	**20.** Upon removal of the 16 Bonus wind turbines, the area where each individual Bonus wind turbine was located shall be remedied. The site shall be evaluated and any soil contamination shall be removed, structural foundations (cutting to six feet below grade) and all manmade debris shall be removed from the site, and the area shall be replanted with plant material native to the Coachella Valley. Monitoring of all such activities shall be undertaken by a qualified biological monitor, who shall file a written report to the City of findings upon completion of the site remediation as outlined above.	**Impact is mitigated below a level of significance.**
	21. All barrel cacti located in areas anticipated to be impacted by the Project will be transplanted into portions of the property that will remain as natural open space. The transplantation sites will, as closely as possible, match the original barrel cacti locations with regards to soils, slope, and aspect.	
	22. All turbine sites will be clearly marked prior to grading in order to limit damage to adjacent vegetation. Grading and vegetation removal will be limited to construction areas.	
	23. Construction and maintenance traffic will utilize existing roads, and vehicle parking will be limited to existing disturbed areas.	
	24. Grading onsite will be limited to construction areas only. All town sites and access road locations will be clearly marked prior to the initiation of any ground-disturbing activity. No construction activities shall occur adjacent to Super Creek. All staging areas shall occur on previously-disturbed areas.	
	25. During construction and ongoing maintenance operations, wind farm personnel will be restricted to approved dirt roads only. No unauthorized grading of the site will be permitted.	

Summary of Potential Impacts	Mitigation Measure	Level of Significance After Mitigation
	26. Applicant will be responsible for controlling and removing all trash and/or windblown debris generated on the site during construction and routine maintenance operations.	
	27. All construction personnel will participate in a biological awareness training program prior to commencement of construction activities, and a report verifying same will be provided to the City Planning Department.	
Impact: The Project has the potential to impact desert tortoise, which is listed as threatened by the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG).	**28.** In order to ensure that no desert tortoises are harmed and that the tortoises can continue to utilize the Project site during the operation and maintenance phases of the Project, a desert tortoise survey will be performed within 24 hours prior to commencement of construction, and all construction activities will be monitored by a qualified biologist.	**Impact is mitigated below a level of significance.**
	29. No construction activities will occur within 100 feet of desert tortoise. If a desert tortoise is found onsite, construction activities should cease within 100 feet of the animal. The desert tortoise will be allowed to move offsite of its own volition.	
	30. No construction activities will occur within 100 feet of desert tortoise burrows. Any burrows located during preconstruction desert tortoise surveys should be fenced with temporary fencing to provide a 100-foot buffer around the burrow. Fences should consist of a non-breachable barrier and support structures.	
	31. Construction activities (including parking and laydown areas) will utilize existing access roads and previously-disturbed areas to the maximum extent feasible. Temporary exclusion fencing will be placed around staging areas.	
	32. The biological monitor will supervise and approve the construction and placement of desert tortoise exclusion fence around burrows and staging areas. The biological monitor will inspect the temporary fencing at least weekly. Corrective actions will be taken promptly to maintain the integrity of the tortoise barrier. Fencing should be dismantled and removed following Project completion.	
	33. The biological monitor will maintain a complete record of all desert tortoises encountered. The record shall include: location, date and time, life history, general condition, and identification numbers.	
	34. Any Project-related vehicle or equipment operating on unpaved roads should not exceed a speed limit of 25 miles per hour.	
	35. Contractor will be required to keep all vehicles on existing roads. No cross-country travel will be authorized except under emergency situations.	

Summary of Potential Impacts	Mitigation Measure	Level of Significance After Mitigation
	36. Employees will inspect beneath parked vehicles and equipment prior to traveling. If an employee discovers a tortoise, the employee shall notify the biological monitor.	
	37. All trash will be contained in raven- and coyote-proof containers. All trash will be transported offsite on a weekly basis.	
	38. No pets or firearms will be allowed within the Project's construction boundaries, or other associated work areas, at any time.	
	39. The Project will reduce water usage during construction to the extent possible, such that excess water does not act as an attractant to tortoises.	
	40. All construction materials, vehicles, and equipment will be removed from the site upon completion of the Project.	
Impact: The Project has the potential to impact burrowing owl, which is considered a Federal Species of Special Concern by USFWS and a California Species of Special Concern by CDFG.	**41.** Within 30 days prior to any construction activities, a focused burrowing owl survey will be conducted (using California Department of Fish and Game protocol) on the areas of the Project site anticipated to be disturbed (approximately 1.35 acres), plus a buffer area as recommended by the Project biologist. If ground-disturbing activities are delayed or suspended for more than 30 days after the survey, the site shall be resurveyed. A survey report for the Project shall be prepared and submitted to the California Department of Fish and Game for review and to the City for review and approval.	**Impact is mitigated below a level of significance.**
	42. Any burrowing owl burrows that cannot be avoided shall be mitigated at a 2:1 ratio with artificial burrows located in an adjacent protected area that provides a minimum 0.61 acres of protected habitat. The configuration of the protected habitat shall be approved by the California Department of Fish and Game. If required by the California Department of Fish and Game, the Project applicant shall provide funding for long-term management and monitoring of the protected lands.	
	43. If burrowing owls must be moved away from the disturbance areas, passive relocation techniques shall be used and only during the non-breeding season (September 1 to January 31). If impacts to burrowing owls are approved, then a relocation program shall be developed pursuant to California Department of Fish and Game and United States Fish and Wildlife Service review and approval.	
	44. Should the Project affect the foraging areas of any owls located adjacent to the Project, then the same mitigation ratio and acreage would also be recommended.	
	45. Applicant will avoid impacts to washes and wash vegetation.	

Summary of Potential Impacts	Mitigation Measure	Level of Significance After Mitigation
	46. All proposed development will incorporate the maximum amount of existing onsite natural open space and native vegetation into the Project and landscaping.	
	47. Applicant will salvage desirable desert plant species that would be destroyed by Project implementation, for use in landscaped areas.	
	48. Applicant shall provide to all employees an educational brochure that describes the sensitive nature of indigenous plants, animals, and ecosystems. A copy of said educational brochure shall be submitted to the City for approval prior to issuance of any building permits.	
	49. Prior to grading, the applicant shall develop a plan to reduce the impact of night lighting on open space and/or mitigation areas adjacent to the Project site.	
Impact: The Project has the potential to impact Coachella Valley round tailed ground squirrel, which is considered a Federal Species of Special Concern by USFWS and a California Species of Special Concern by CDFG.	**50.** Within 30 days prior to construction, a preconstruction survey for Coachella Valley round-tailed ground squirrel will be conducted on the areas of the Project site anticipated to be disturbed (approximately 1.35 acres), plus a buffer area as recommended by the Project biologist. If ground-disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site shall be resurveyed. A survey report for the Project shall be prepared and submitted to the California Department of Fish and Game for review and to the City for review and approval.	**Impact is mitigated below a level of significance.**
	51. If found on the Project site, any squirrels must be moved away from the disturbance areas, and a relocation program shall be developed pursuant to California Department of Fish and Game review and approval.	
	52. Applicant will avoid impacts to washes and wash vegetation.	
	53. All proposed development will incorporate the maximum amount of existing onsite natural open space and native vegetation into the Project and landscaping.	
	54. Applicant will provide to all employees an educational brochure that describes the sensitive nature of indigenous plants, animals, and ecosystems. A copy of said educational brochure shall be submitted to the City for approval prior to issuance of any building permits.	
	55. Prior to grading, the applicant must develop a plan to reduce the impact of night lighting on open space and/or mitigation areas adjacent to the Project site.	

Summary of Potential Impacts	Mitigation Measure	Level of Significance After Mitigation
Cultural Resources / Paleontological Resources		
Impact: Project grading may result in the discovery of previously unknown cultural and/or paleontological resources.	**56.** An approved Tribal Cultural Resource Monitor shall be present during any survey and/or any ground-disturbing activities. Should buried cultural deposits be encountered, the Monitor may request that destructive construction halt and the Monitor shall notify a Qualified (Secretary of the Interior's Standards and Guidelines) Archaeologist to investigate and, if necessary, prepare a mitigation plan for submission to the State Historic Preservation Officer, the Agua Caliente Tribal Historic Preservation Office, and the Morongo Band of Mission Indians.	**Impact is mitigated below a level of significance.**
	57. If buried cultural materials are discovered during any earth-moving operation associated with the Project, all work in that area should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds. The archaeologist shall be empowered to temporarily stop or redirect grading activities to allow removal of abundant or large artifacts. The archaeologist shall also be required to curate specimens in a repository with permanent retrievable storage and submit a written report to the Planning Director for review and approval prior to occupancy of the first building on the site.	
	58. Once artifact analysis is completed, a final written report detailing the results of all research procedures and interpretation of the site shall be submitted to the Development Director for review and approval prior to occupancy of the first building on the site.	
	59. A qualified paleontologist shall review the Project construction plans and shall create a plan for periodic monitoring in order to determine the presence or absence of older Pleistocene-age sediments that may contain fossils. If earth-moving activities reach potentially fossilliferous sediments and/or exceed 10 feet in depth, then continuous monitoring for paleontological resources, along with a program to mitigate impacts to those resources, will be implemented. The monitor should be prepared to quickly salvage fossils as they are unearthed to avoid construction delays.	

Summary of Potential Impacts	Mitigation Measure	Level of Significance After Mitigation
	60. If buried paleontological materials are discovered during any earth-moving operations associated with the Project, all work in that area will be halted or diverted until a qualified paleontological monitor can evaluate the nature and significance of the finds. The paleontological monitor will be empowered to temporarily stop or redirect grading activities to allow removal of abundant or large artifacts. The paleontological monitor shall also be required to curate specimens in a repository with permanent retrievable storage and submit a written report and inventory to the Development Director for review and approval prior to occupancy of the first building on the site. The report should include a discussion of the significance of all recovered specimens. The report and inventory, when submitted to the Development Director, would signify completion of the Program to mitigate impacts to paleontological resources.	
	61. If human remains are encountered at the Project site during construction, the County Coroner will be notified immediately, and all construction activities will be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.	
Geology and Soils		
Impact: Strong ground motion resulting from earthquake activity may impact the site during the anticipated life of the Project. Additionally, the site is highly susceptible to being impacted by rock falls and seismically-induced landslides.	**61.** As recommended in the Update to Geotechnical Engineering Report (2000) by Earth Systems Southwest, additional geologic and geotechnical studies will be performed prior to commencement of construction, which are to include additional soil borings to a depth of 40 feet or refusal along the alignment of the turbines. At least three soil borings will be performed to evaluate the soil conditions to support the wind turbines. The additional studies will also include an analysis of Project wind turbine foundation compliance with the current Uniform Building Code.	**Impact is mitigated below a level of significance.**
	63. The minimum seismic design of the Project will comply with the current edition of the Uniform Building Code for non-building structures.	
	64. Site development shall be in conformance with all recommendations as specified in the Update to Geotechnical Engineering Report (2000) by Earth Systems Southwest.	

Summary of Potential Impacts	Mitigation Measure	Level of Significance After Mitigation
Hazards and Hazardous Materials		
Impact: The turbines have the potential to leak oil, which could seep into the soil.	**65.** The WECS 20 Wind Park will continue to operate in compliance with permits issued by the County of Riverside Department of Environmental Health and by the California Department of Toxic Substances Control.	**Impact is mitigated below a level of significance.**
	66. Monitoring of all turbines for oil leakage will be performed on a monthly basis, and monthly reports will be submitted to the City Planning Department.	
	67. Any oil leakage or spills will be reported immediately to the City Planning Department.	
	68. All new turbines will be equipped with oil pans or other oil containment devices in order to catch any oil in the event of a leak.	
Impact: The Project site is in a high fire hazard area.	**69.** All new turbine nacelle covers will have fire retardant applied for containment.	**Impact is mitigated below a level of significance.**
	70. Turbine rotor blades will be equipped with lightning protection, which will bring to the ground, and then dissipate, the current.	
	71. The two roads in between the turbines and nearby residences shall be maintained by EUI free of vegetation in order to serve as fire breaks.	
	72. The Project will comply with all Fire Department requirements and conditions.	
	73. The following areas will be cleared of vegetation and maintained by EUI as a fire/fuel break for as long as the turbines are in operation: • Thirty (30) feet around the periphery of the Project. Access roads that completely surround the Project may satisfy this requirement, if approved by the fire department. • Ten (10)-radius feet around all transformers and wind turbine towers. • Thirty (30) feet around all buildings. • All buildings or equipment enclosures of substantial size containing control panels, switching equipment, or transmission equipment, and no regular human occupancy, shall be equipped with an automatic fire extinguishing system. Plans for such systems must be submitted to the Fire Department for review or approval.	

Summary of Potential Impacts	Mitigation Measure	Level of Significance After Mitigation
	74. No permit shall be issued for the construction or placing of any structure onsite for the purpose of habitation or human occupancy without first establishing fire protection requirements as a condition of such permit. This requirement includes the establishment of a minimum fire flow per Division VIII of Riverside County Ordinance 546.	
	75. Service vehicles assigned to regular maintenance or construction at the Project site shall be equipped with a portable fire extinguisher of a 4A40 BC rating. All motor driven equipment shall be equipped with an approved spark arrestor.	
Impact: The Project may create a navigational flight hazard.	**76.** The Project will comply with current FAA standards for structures, and any required FAA permits or approvals shall be obtained prior to construction.. The most recent standards are published in the November 2005 report, Obstruction Lighting Standards for Wind Turbine Farms (DOT/FAA/AR-TN05/50). Pursuant to these standards, the Project will have one red light mounted on top of the northernmost wind turbine in the Project, and one red light mounted on top of the southernmost wind turbine in the Project. These two red lights will be utilized only at night, and will be simultaneously flashing. The Project will utilize fixtures that will minimize impacts to neighboring residents, such as red light emitting diode or rapid discharge style L-864 fixtures. Since the wind turbines will be painted white, daytime lighting is not recommended.	**Impact is mitigated below a level of significance.**
Hydrology		
Impact: Development of this Project will increase impermeable surfaces and landscape areas, which could produce additional runoff.	**77.** A hydrology study, drainage plan, and erosion control plan will be prepared and submitted to the City Engineer for review and approval. The Project will adhere to all recommendations based on the findings of said study and plans, which will be completed prior to issuance of a grading permit.	**Impact is mitigated below a level of significance.**
	78. For sites greater than 5 acres in size, the Project applicant will obtain coverage under the State Water Resources Control Board's General National Pollutant Discharge Elimination System (NPDES) permit for construction storm water discharges through the Regional Water Quality Control Board (RWQCB), Colorado River Basin Region prior to commencement of construction. A Notice of Intent, a Storm Water Pollution Prevention Plan (SWPPP), and a Monitoring Plan will be prepared as requirements of the NPDES permit. The SWPPP will include Best Management Practices (BMPs) in compliance with the NPDES program requirements.	

Summary of Potential Impacts	Mitigation Measure	Level of Significance After Mitigation
	79. The Project applicant will obtain all necessary permits, agreements, and approvals from appropriate agencies (such as the RWQCB and Mission Springs Water District) related to water quality and nuisance water issues.	
Noise		
Impact: Exterior noise levels have the potential to impact residential uses in the vicinity of the Project site.	**80.** In order to demonstrate that the Project will remain safely below the City CNEL criterion for WECS, acoustical analyses of the Project will be performed quarterly, commencing with construction and continuing until one year after completion, and reports of said analyses will be submitted to the City Planning Department. The applicant shall bear the cost of these analyses. Should any of these analyses indicate that noise levels are above allowed thresholds, steps shall be taken immediately to bring noise levels within acceptable thresholds.	**Impact is mitigated below a level of significance.**
	81. All construction activities, including the repair and maintenance of construction equipment on the Project site, shall comply with Section 130.03 of the City of Desert Hot Springs Municipal Code.	
	82. Noise-generating construction equipment operated on the Project site shall be equipped with effective noise control devices (i.e. mufflers, lagging, and/or motor enclosures).	
	83. All equipment shall be properly maintained to assure that no unnecessary noise, due to worn or improperly maintained parts, will be generated.	
	84. Truck deliveries and haul-offs shall only be permitted between the hours of 7:00 a.m. and 5:00 p.m. weekdays and 8:00 a.m. and 5:00 p.m. Saturdays. The haul routes shall be approved by the City Engineer.	
Public Services		
Impact: The Project may incrementally increase the demand for police, fire, public schools, and library services in the Project area.	**85.** The Project applicant will submit any and all required impact fees to the City, which may include but are not limited to the fire facilities impact fee, the police facilities impact fee, the general facilities impact fee, and the storm drain impact fee, as part of building permit fees.	**Impact is mitigated below a level of significance.**

Summary of Potential Impacts	Mitigation Measure	Level of Significance After Mitigation
Transportation / Traffic		
Impact: The Project will generate vehicular trips associated with installation of the turbines.	**86.** Prior to issuance of grading permits, a traffic plan to minimize traffic flow interference from construction activities shall be submitted for review and approval to the City Engineer.	**Impact is mitigated below a level of significance.**
	87. Project construction, operation, and maintenance activities will adhere to the recommendations described in the Energy Unlimited, Incorporated WECS 20 Wind Park Revised Permit Application Offsite Road and Traffic Impact Plan, prepared by Krieger & Stewart.	
Utilities and Service Systems		
Impact: The Project will generate construction waste.	**88.** All solid waste generated during Project construction will be disposed of in compliance with all State, Federal, and local statutes regulating solid waste (as set forth in City Ordinance No. 2005-14).	**Impact is mitigated below a level of significance.**

B. Areas of Controversy

The following are those areas of controversy known to the Lead Agency, including issues raised by agencies, members of the public, or both.

- Aesthetics

  - ***"The new turbines are too tall."*** The taller turbines are a current industry standard, and they allow for fewer and quieter turbines, while the smaller turbines are not cost-competitive in today's wind energy market. Additionally, the eight new turbines will be visible from less than 1% of residences within the City and the City's Sphere-of-Influence.

  - ***"There are too many turbines already."*** Two existing turbines in the WECS 20 Wind Park will be removed for each of the new turbines constructed (in accordance with City requirements); therefore, the Project will result in a net reduction of eight turbines. Additionally, visual impacts are minimized by constructing the turbines within the existing WECS 20 Wind Park, an area already populated by wind turbines. Removal of more than two existing turbines for each new turbine would decrease the efficiency of the wind park by removing currently operating, productive equipment from the existing wind park.

  - ***"Wind turbines are ugly and are an eyesore."*** The Project includes removing sixteen existing smaller turbines from, and adding eight new larger turbines to, the existing WECS 20 Wind Park, which will result in a net reduction of eight wind turbines in the WECS 20 Wind Park. Additionally, aesthetic impacts are minimized by constructing the turbines within the existing WECS 20 Wind Park, an area already populated by wind turbines; by painting the turbines in light environmental colors (white) to blend with the surrounding turbines and surrounding natural environment; and by revegetating the sites of the removed turbines.

- ***"Wind farms are not maintained, and they look like 'junk yards'."*** EUI has always maintained their wind farms, including the WECS 20 Wind Park, and will continue to do so upon construction of the eight new wind turbines. Parts, tools, and other equipment will be stored only in approved locations on the site, and decommissioned or inoperable wind turbines will not be stored onsite. Additionally, the Project site will be inspected monthly for compliance with maintenance and storage requirements, and monthly reports will be submitted to the City Planning Department.

- ***"Flashing lights on the tops of turbines are a nuisance and cannot be mitigated."*** Current Federal Aviation Administration (FAA) regulations require that, for navigational safety, a red light is to be mounted on top of the southernmost turbine and the northernmost turbine in the Project, and that the lights are to be flashing simultaneously. The FAA reports that studies suggest that the use of red light emitting diode or rapid discharge style L-864 fixtures are effective in reducing impacts on neighboring communities, as the fixtures' exposure time is minimal, thus creating less of a nuisance than many other types of fixtures. The Project will utilize lights that minimize impacts to neighboring communities, while meeting all FAA requirements. Since the lights will be flashing only at night and will be hundreds of feet above any residence, the lighting required by the FAA is not anticipated to have a significant effect on residences in the vicinity. All required permits or approvals will be obtained from the FAA prior to issuance of building permits.

  Refer to Section 10 for a detailed description of mitigation measures intended to reduce potential impacts upon aesthetics to a level of insignificance.

- Biological Resources

  - ***"Wind turbines are a hazard to migratory birds."*** AMEC (2004) has concluded that the potential for bird mortality resulting from the eight

proposed wind turbines is low, but not zero; however, risk factors associated with bird collisions are minimized by location, bird abundance, and turbine design. A recent (2005) California Energy Commission staff report on avian mortality from wind turbines compared the high-mortality areas of Altamont Pass and Solano County with the lower-mortality areas of Tehachapi Pass, San Gorgonio Pass, and Pacheco Pass. The staff findings and suggested policy options included: "The studies that have been completed report lower bird use and fatality rates in these wind areas [Tehachapi, San Gorgonio, and Pacheco]. Based on research results it may be appropriate for the Energy Commission to encourage re-powering and expansion in these areas." Lowering the number of turbines here and elsewhere in the San Gorgonio Pass as a result of re-powering is anticipated to decrease cumulative impacts to birds from collisions. See Biological Resources under Section 5 for a complete discussion of potential impacts upon migratory birds. Refer to Section 10 for a description of mitigation measures intended to reduce potential impacts upon biological resources to a level of insignificance.

- Hazards and Hazardous Materials

  - ***"Wind turbines are a fire hazard."*** In over twenty years of operation, EUI has had no turbine fires, and there have been no fires reported on any of the new GE wind turbines proposed for the Project. A records search dated October 4, 2006, performed by the Riverside County Fire Department, yielded results of no fire hazard or vegetation growth violations at the Project site for 2004-2005. The new turbine nacelle covers will have fire retardant applied for containment, and the new blades will be equipped with lightning protection to bring to the ground, and then dissipate, the current. Additionally, the WECS 20 Wind Park has two roads, with no vegetation, in between the turbines and the residences, which will be maintained free of vegetation by EUI to serve as fire breaks. The Project will comply with all Fire Department requirements and conditions.

- ***"If a wind turbine falls off a truck during transport to the Project site, it may block the only road into the site."*** The access route to the WECS 20 Wind Park is relatively flat, does not have any sharp turns, and proceeds generally away from residences in the area. In the unlikely event of a turbine falling off of a truck, the turbine would likely remain entirely on EUI property. The access road is for use only by EUI, its associates, and Metropolitan Water District, as the WECS 20 Wind Park is the sole destination of this road. EUI has utilized this access route without incident for over twenty years, and any temporary blockage thereof has no potential to impact the residential community or others in the Project area.

- ***"Wind turbines leak oil, which contaminates the soil and ground water."*** The existing turbines in the WECS 20 Wind Park are equipped with oil pans, which will catch any oil that may leak from the turbines. The soil below the turbines has not been contaminated with oil. The eight new turbines will also be equipped with oil pans or other oil containment devices. Because oil will not leak into the soil, the Project has no potential to contaminate the ground water. The use and management of the oil is regulated by the County of Riverside Department of Environmental Health, who has issued a Hazardous Materials Management Permit (Facility Number 89040), and the California Department of Toxic Substances Control has issued a permanent California EPA identification number for the Project site (CAL000237812). A records search performed by the Hazardous Materials Management Division of the Riverside County Department of Environmental Health yielded results of no reports found of complaints or violations pertaining to hazardous materials at the Project site. Additionally, EUI staff routinely check for oil leaks, and any leaks are immediately remedied. Upon completion of construction, monthly inspections for oil leaks will be performed, and monthly reports will be submitted to the City Planning Department.

- ***"Does EUI have an easement to use the roads on Metropolitan Water District (MWD) property?"*** EUI has an easement to use the roads on

MWD property. A copy of the easement is on file and may be viewed at the City Planning Department.

- ***"The access roads may not be sufficient to support the trucks and construction equipment."*** Nearby residents have raised concerns regarding the adequacy of the access roads to handle the trucks and construction equipment to be used during construction of the turbines. To ensure safety during construction operations, minor improvements may be performed as needed to the roads on MWD property and EUI's private access roads.

- ***"There is no grading plan submitted with this Project."*** EUI will submit a grading plan for City's review and approval prior to any earth-moving activities. All Project grading will be performed in accordance with the approved grading plan.

Refer to Section 10 for a description of mitigation measures intended to reduce potential impacts relating to hazards and hazardous materials to a level of insignificance.

- Noise

  - ***"Wind turbines generate too much noise, which is a nuisance to local residents."*** The Project is in compliance with the noise and land use compatibility standards as set forth in the City of Desert Hot Springs Comprehensive General Plan (2000), and is in compliance with the noise standards for commercial WECS as set forth in County of Riverside Ordinance 348. Operation of the Project is anticipated to result in only a 1 decibel (dB) increase over existing noise levels produced by the WECS 20 Wind Park (Hersh Walker Acoustics, 2004).

    According to the acoustical study by Hersh Walker Acoustics (2004), maximum noise levels anticipated to be generated by the Project are 47-48 dB at the nearest residence. This level is within the range (≤55 dB) of "Normally Acceptable: with no special noise reduction requirements,

assuming standard construction" (City of Desert Hot Springs Comprehensive General Plan, 2000). The anticipated noise levels also meet County of Riverside noise requirements for Commercial WECS as set forth in Ordinance 348, which require that noise levels to each receptor be at or below 55 dB.

C. Issues to be Resolved

All potential environmental impacts, which are summarized above and described in detail in Section 5, will be mitigated to a level of insignificance as described above and by the proposed mitigation measures described in Section 10.

The only feasible alternative to the Project is the No Project Alternative, as the potential environmental impacts of the Project as proposed are either less than or similar to those of each of the alternatives (see Sections 5 and 11). The Project as proposed is environmentally superior to the No Project Alternative because it allows for improved efficiency of the existing WECS 20 Wind Park by constructing, operating, and maintaining eight GE 1.5 MW wind turbine generators, while removing sixteen of the older 65 kW Bonus wind turbine generators. The sites of the removed turbines will either be included as part of one of the new turbine sites, or will be revegetated with native species, and will not be used for wind energy production in the future. Any potential environmental impacts of the Project will be mitigated to a level of insignificance as described in Section 10. Therefore, there are no issues remaining to be resolved.

3. PROJECT DESCRIPTION

A. Proposed Project

The Energy Unlimited, Incorporated Revised Commercial WECS 20 Permit Project (Project) consists of the construction, operation, and maintenance of eight (8) new GE 1.5 MW wind turbine generators in a single north-south row, downhill from the primary ridgeline of Whitewater Canyon, in the existing WECS 20 Wind Park. The wind turbines on the end of each row will be 100.25 meters (329 feet) tall (65-meter [213-foot] tower, 35.25-meter [116-foot] blade), and the six wind turbines in between will be 103.50 meters (340 feet) tall (65-meter [213-foot] tower, 38.50-[126-foot] blade), along with wiring, conduit, and appurtenances (such as switchgear). The project also includes the removal of 16 existing Bonus 65 kW wind turbines, the construction of a single-story (40 foot by 100 foot) storage building for parts and tools, and the expansion of an existing outdoor storage area for spare parts for the turbines. All structures will be constructed within the existing WECS 20 Wind Park. The Project does not include an expansion of the WECS 20 Wind Park Boundaries. See Figures 1, 2, and 3.

Project construction is anticipated to include grading, construction of turbine foundations (which will consist of the proprietary Patrick and Henderson tensionless pier using a large diameter, cast-in-place pier); erection of the wind turbine generators; electrical cable excavation and installation; and minor improvements to existing, unpaved, private access roads as necessary to ensure safety during construction. No improvements will be performed on paved, public roads. All grading will be consistent with an approved grading plan, which will be submitted to the City for review and approval prior to any Project grading. The Project is anticipated to temporarily disturb approximately 0.74 acre and permanently disturb approximately 0.61 acre of the approximately 160-acre site. For a detailed description of wind turbine equipment, see Wind Turbine Generator Technical Data in Appendix H.

Project operation and maintenance is anticipated to include maintenance of access roads and fire breaks free of vegetation and visits to each turbine site by EUI employees approximately once daily to visually check for equipment failure, oil leaks, and to ensure that all equipment is operating properly. Gearbox oil will be replaced in the turbines periodically, and the used oil will be stored onsite in four 55-gallon aboveground drums,

which will be removed from the site approximately twice annually by a licensed waste oil recycling company. Any oil leaks or equipment failure will be addressed promptly by EUI.

B. Land Use and Zoning

Land use of the Project site is designated I-E (Energy-Related Industrial) by the City of Desert Hot Springs Comprehensive General Plan (General Plan, 2000). The Project site is within the I-E District (Industrial-Scale Energy Production District of the City of Desert Hot Springs Zoning Ordinance (2000). The General Plan designations, zoning, and current land uses of the parcels adjacent to the Project site are summarized in the following table:

Surrounding Land Uses		
Direction	**Zoning**	**Current Land Use**
North	Open Space Mountain Reserve (OS/MR)	Vacant
South	Open Space Mountain Reserve (OS/MR & Residential Estate R-E-5)	Vacant/Scattered Single Family Residences
West	Open Space Mountain Reserve (OS/MR)	Vacant
East	Open Space Mountain Reserve (OS/MR)	Vacant/Aqueduct

Land to the north and west consists of open space. Land to the south consists of open space with scattered single-family residences beyond. Land to the east consists of open space, with the Colorado River Aqueduct traversing southwesterly along the easterly boundary of the Project site. State Route 62 is located approximately 0.5 mile easterly of the easterly boundary of the Project site, with open space and single family residences beyond.

The 80-acre parcel immediately northerly of the Project site was approved for the installation of wind turbines as part of the original Commercial Wind Energy Conversion Systems (WECS) Permit 20 in 1985, is currently undeveloped, and the approval has expired. The property beyond the Project site to the west and northwest is undeveloped, hilly land. There are scattered single-family residences, the majority of which are single-level structures, easterly and southerly of the Project site.

Immediately southwest of and adjacent to the Project site there are 98 turbines in the north half of Sections 1 and 2, and 10 of those 98 turbines are 1 MW wind turbines. There are also 228 wind turbines in the south half of Section 1. The Section 1 turbines have been operating for approximately 22 years, and the Section 1 permit is scheduled to expire in 2026. Seven additional megawatt-sized wind turbines have been approved for construction on the north half of Section 1 by the County of Riverside for operation until the year 2026, but have not yet been constructed. Just south of Section 1, on Whitewater Hill, there are 234 wind turbines, of which 47 are 1.5 MW wind turbines. In addition, two 3.0 MW turbines were approved by Riverside County in June 2006.

Another proposed wind project within County of Riverside jurisdiction is located in Section 5, Township 3 South, Range 4 East and proposes to construct 22 wind turbines of up to 327 feet in height, with the nearest turbine being approximately 4.5 miles southeasterly of the southeasterly corner of the existing WECS 20 Wind Park.

The Project is consistent with the land uses permitted by the City of Desert Hot Springs zoning and land use designations for the Project site.

C. Objectives

The Project objectives are as follows:

- Improve the productivity of the existing WECS 20 Wind Park by removing sixteen of the existing older wind turbines and constructing eight newer, more efficient wind turbines.

- Allow the existing WECS 20 Wind Park to improve its use of the local wind resource within existing site boundaries, thereby increasing the amount of renewable energy available for use without increasing the area of the WECS 20 Wind Park.

- Remove older, less efficient wind turbines, and restore the old turbine sites by revegetating the sites with native plant species, thus reducing the area of habitat taken by the wind turbines.

4. PROJECT'S ENVIRONMENTAL SETTING

A. Location

The Project site is located on approximately 160 acres in the southwest quarter of Section 31, Township 2 South, Range 4 East, San Bernardino Meridian, in the City of Desert Hot Springs, Riverside County, California, at an elevation of approximately 1,800 feet above mean sea level (MSL). The Project site is recorded with the County of Riverside as Assessor's Parcel Number 667-160-001. The City of Desert Hot Springs is located in the foothills of the San Bernardino Mountains, in the Coachella Valley, approximately 110 miles east of Los Angeles. The elevation of the City of Desert Hot Springs is approximately 1,185 feet above MSL. The Project site is located approximately 0.5 mile westerly of State Route 62, and approximately 2 miles northerly of Interstate 10.

The topography of the Project site is highly irregular, consisting of eastward and southward sloping ridges and stream channels. The overall effect is that of a highly dissected alluvial fan surface. Regional slope on the ridge tops is 5 degrees to the southwest. Approximately half of the site consists of slopes that are of 25 percent or greater grade. The ground surface is characterized by desert pavement, consisting of very coarse sands, gravels, and cobbles. Boulders to 3 feet in diameter are scattered on the surface, but are generally confined to the ridgetop areas.

The Project site is located within the existing WECS 20 Wind Park, which has been operating as a wind farm since 1985, and currently contains 69 wind turbines and unpaved maintenance roads (refer to Primary Exhibit Plot Plan/Site Disturbance Plan). The Project site is located several hundred feet above the surrounding desert basin in a very windy area of the San Gorgonio Pass, which is one of the windiest regions in California. There are thousands of wind turbines of various sizes located throughout the San Gorgonio Pass.

The 80-acre parcel immediately northerly of the Project site was approved for the installation of wind turbines as part of the original Commercial Wind Energy Conversion Systems (WECS) Permit 20 in 1985, is currently undeveloped, and the approval is expired. The property beyond the Project site to the west and northwest is undeveloped,

hilly land. There are scattered single-family residences, the majority of which are single-level structures, easterly and southerly of the Project site.

Immediately southwest of and adjacent to the Project site there are 98 turbines in the north half of Sections 1 and 2, and ten of those 98 turbines are 1 MW wind turbines. There are also 228 wind turbines in the south half of Section 1. The Section 1 turbines have been operating for approximately 22 years, and the Section 1 permit is scheduled to expire in 2026. Seven additional megawatt-sized wind turbines have been approved for construction on the north half of Section 1 by the County of Riverside for operation until the year 2026, and are not yet constructed. Just south of Section 1, on Whitewater Hill, there are 234 wind turbines, of which 47 are 1.5 MW wind turbines. In addition, two 3.0 MW turbines were approved by Riverside County in June 2006.

The existing WECS 20 Wind Park is comprised of 69 individual wind turbines with related existing transmission lines, which are located both on and off the Project site. Those transmission lines located offsite are within Southern California Edison Company-owned easements. All of the power generated from these wind turbines is sold to Southern California Edison Company under contract until the year 2015. The Project site will be used for wind energy production for the foreseeable future. The precise location, boundaries, and access routes of the Project site are shown in Figures 1, 2, 3, and 4. Visual simulations depicting the Project site with the proposed turbines installed are included in Appendix D.

B. Climate and Air Quality

The climate of Desert Hot Springs is characterized by temperatures ranging from average annual maximum temperatures of approximately 89 degrees Fahrenheit to average annual minimum temperatures of approximately 57 degrees Fahrenheit, and an average annual rainfall of approximately 5.5 inches (Western Regional Climate Center [WRCC] data for Palm Springs, California for the period of record 01/01/1927 to 10/31/2006). The warm summer months are tempered by low humidity. Desert Hot Springs and the entire Coachella Valley comprise a geographically and meteorologically unique area wholly contained within the Salton Sea Air Basin.

The region is currently impacted by significant air pollution levels caused by the transport of pollutants from coastal air basins to the west, primarily ozone, and by locally generated PM_{10}. The Coachella Valley is classified as a "severe-17" ozone non-attainment area under the Federal Clean Air Act (2000), and as a serious non-attainment area for PM_{10} in the Final 2003 Coachella Valley PM10 State Implementation Plan prepared by the South Coast Air Quality Management District.

C. Geology

The Project site is located at the eastern end of the San Gorgonio Pass. The San Andreas Fault Zone is the most significant potential seismic source in the Project vicinity. The nearest known seismic source is the San Andreas Fault (southern), which is classified as a Type A fault (moment magnitude ≥7.0 and slip rate ≥5), and is located less than 2 kilometers (<1.2 miles) from the Project site (Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada, Division of Mines and Geology, 1998).

The Project site is located on a ridge that is underlain by the Pleistocene-aged Cabazon Fanglomerate. This formation consists of semi-consolidated, poorly-bedded, poorly-sorted, pebbly to bouldery conglomerate. These deposits are alluvial in origin (deposited by flowing water) and have been uplifted by tectonic forces related to movements along the San Andreas Fault. The rugged topography at the site is primarily the result of the dissection of these deposits by erosion along currently active stream channels.

D. Soils

The Soil Survey of the Coachella Valley Area, prepared by the United States Department of Agriculture Soil Conservation Service, identifies the following soil types at the Project site (AMEC, 2000):

- Carsitas gravelly sand – a moderately sloping soil associated with alluvial fans.

- Chuckawalla cobbly fine sandy loam (9-30% slopes) – also associated with alluvial fans and remnants emanating from the San Gorgonio Mountains.

- Chuckawalla cobbly fine sandy loam (2-9% slopes) – on remnants of old alluvial fans emanating from the San Gorgonio Mountains.

- Lithic Torripsamments – rock outcrop complexes on the hillsides.

- Carsitas fine sand (0-5% slopes) – fine sandy soil on alluvial fans and valley fill.

E. Vegetation

Based on the AMEC report (2000), the Project site consists mainly of typical creosote bush scrub, dominated by creosote bush (*Larrea tridentata*), burrobush (*Ambrosia dumosa*), indigo bush (*Psorothamnus fremontii*), and brittlebush (*Encelia farinosa*). Several species of cacti were found on the site, including California barrel cactus (*Ferocactus cylindraceus*). The washes contained the highest number and variety of plant species. Plants common to these areas included catclaw (*Acacia greggii*), sweetbush (*Bebbia juncea*), and Mormon tea (*Ephedra californica*).

F. Wildlife Habitat

The Project site is located within the Upper Mission Creek/Big Morongo Canyon Conservation Area of the Recirculated Draft Coachella Valley Multiple Species Habitat Conservation Plan and Natural Communities Conservation Plan (CVMSHCP, 2007). According to the CVMSHCP, desert tortoise (*Gopherus agassizii*) is anticipated to occur on the Project site, and Sonoran creosote bush scrub and Sonoran mixed woody & succulent scrub communities have been determined present at the Project site. The Project site is not located within the Coachella Valley Fringe-Toed Lizard Fee Area.

The San Gorgonio Pass is a high-use nocturnal flyway for migratory songbirds. Both the spring and fall seasons have shown extensive bird flights. McCrary *et al.* (1983) estimated that 32 million birds flew through the Coachella Valley during spring of 1982, and 37 million birds during fall of 1982 (McCrary *et al.* 1984). Traffic rates of 5,000 to 10,000 birds per hour were recorded with radar equipment. Study sites ranged over a larger area than just the San Gorgonio Pass, extending to Palm Canyon, the Whitewater

floodplain, and Thousand Palms. Golden eagles have been recorded nesting at Whitewater Canyon, and are present in low numbers in the winter. Occasional turkey vultures are recorded in the San Gorgonio Pass, as are red-tailed hawks and a variety of less common raptors.

Potentially significant impacts of the Project on avian species and other biological resources are described in Section 5.

5. ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

A. Aesthetics

A project may have a significant impact on Aesthetics if it: (a) adversely affects a scenic vista or state scenic highway; (b) substantially damages scenic resources; (c) substantially degrades the existing visual character or quality of the site or its surroundings; or (d) creates a new source of substantial light or glare that would adversely affect day or nighttime views in the area. The Project consists of the construction, operation, and maintenance of eight 1.5 MW wind turbine generators in a single north-south row (with the two end turbines at a total height of approximately 329 feet, and the six turbines in between at a total height of approximately 340 feet), the removal of sixteen existing 65 kW Bonus wind turbine generators, the construction of one single-story (40 foot by 100 foot) storage building, and the expansion of an existing outdoor storage area. The outdoor storage area will be utilized for storage of large items such as turbine towers, blades, and nacelles; is screened by surrounding steep slopes (greater than 25 percent); and is not visible from any residences or from State Route 62.

Existing Conditions

The Project site, the existing WECS 20 Wind Park, is located approximately 0.5 mile westerly of State Route 62 (an officially designated State Scenic Highway), on the easterly side of the San Bernardino Mountains, and just westerly of the Colorado River Aqueduct. The vicinity of the Project site is characterized by hilly terrain, drainages interspersed among the hillsides, and scattered native vegetation. Additional wind farms approved by the County of Riverside and containing hundreds of wind turbines are located to the southwest, south, and southeast of the Project site, with more wind turbines visible in areas beyond. The Project site itself contains an existing wind farm, including 69 operating wind turbines and dirt roads that traverse the property providing access to all of these existing wind turbines.

Proposed Conditions

The Project proposes to remove sixteen of the existing wind turbines and replace them with eight new, taller turbines. The new turbines would be located on a ridgeline, downhill from the primary ridgeline of Whitewater Canyon. The new turbines would be arranged in a single north-south row. The older existing turbines are approximately 125 feet in height, while the proposed new turbines would be up to 340 feet tall. In addition to the wind turbines, an outdoor storage area and a 100-foot by 40-foot single-story storage facility are proposed.

Scenic Vista/Scenic Highway Impacts

The proposed turbines will be taller, extending further above the ridgeline, than the existing turbines, and would be visible from State Route 62 (a designated State Scenic Highway), as are the existing wind turbines. The City of Desert Hot Springs General Plan EIR (General Plan EIR) considered visual impacts and potential visual clutter related to Wind Energy Conversion Systems (WECS), and noted that visual resources in the area have already been impacted by existing turbines in the vicinity. The General Plan EIR notes that potential visual impacts are expected to be limited to short distances and will take a subordinate position in relation to the surrounding landscape (page III-135 of the General Plan EIR). As views from State Route 62 are already impacted by the existing wind farm as well as additional wind farms located nearby, the impact of taller, but fewer, wind turbines is not expected to be significant in comparison to the existing condition once mitigation measures to ensure minimization of impacts and consistency with the appearance (structure colors, vegetation, etc.) of the existing wind park are implemented.

The proposed structures would also be visible from future residences in the approved Highland Falls residential development located to the northeast of the Project site, as well as to the residences located in County of Riverside jurisdiction to the east and south. However, the existing structures are already visible to both the Highland Falls residential development and the County areas. Further, the primary views for future residences of the Highland Falls development are those views to the east across the valley.

The proposed siting of the structures complies with the scenic setback relating to State Route 62, as set forth in the City of Desert Hot Springs Zoning Ordinance (2000), which states, "No commercial WECS shall be located where the center of the tower is within 1,320 feet (0.25 mile) of State Route 62." A visual impact analysis was prepared for the Project and is included in Appendix D. Existing and proposed views from the new Highland Falls residential development are shown on Plates 5 and 6 in Appendix D.

Disturbed areas resulting from the removal of existing turbines could create visual impacts if left disturbed and untreated after removal is completed. To ensure that disturbed areas are returned to their natural state, a biologist will oversee revegetation of such areas.

Implementation of the Project will introduce new light sources on the Project site, which consist of illumination associated with onsite structures (such as the storage building), interior and exterior lighting, lights at the tops of the towers (as required by the Federal Aviation Administration [FAA]), and light from vehicles on the roadways and parking areas. The FAA requires that one red light be mounted atop both the northernmost wind turbine in the Project and the southernmost wind turbine in the Project, and that the lights flash simultaneously.

Since the Project site is located within the existing WECS 20 Wind Park, and the additional eight wind turbines will be maintained as part of the WECS 20 Wind Park, there will not be a significant increase in light from vehicles on the roadways and parking areas. Mitigation measures intended to reduce potential impacts upon aesthetics to a level of insignificance are listed below and are described in detail in Section 10.

- The eight wind turbines will be painted white, with a matte or galvanized finish. The storage building will be painted in an earth-tone, such as beige.

- All Project grading will comply with the City's regulations in order to minimize adverse impacts to viewsheds.

- Upon removal of the 16 Bonus wind turbines, the area where each individual Bonus wind turbine was located shall be remedied. The site shall be evaluated

and any soil contamination shall be removed, structural foundations (cutting to six feet below grade) and all manmade debris shall be removed from the site and the area shall be replanted with plant material native to the Coachella Valley. Monitoring of all such activities shall be undertaken by a qualified biologist, who shall file a report to the City of findings upon completion of the site remediation as outlined above.

- During ongoing operation and maintenance of the Project, only surplus turbine parts too large to be stored in the storage building will be stored in the open storage area. Prior to storing any additional items in the open storage area which are not large turbine parts, a list of said items will be submitted in writing to the City for approval. Decommissioned wind turbines, including inoperable or wrecked machinery, motor vehicles, construction equipment, and construction debris will not be stored onsite.

- The outdoor storage area shall be inspected annually by the City.

- No advertising sign or logo shall be placed or painted on any commercial WECS.

- No commercial WECS shall be located where the center of the tower is within 1320 feet (0.25 mile of State Route 62).

- All aspects of the Project's development shall adhere to Wind Energy Conversion Systems (WECS) requirements as adopted in Section 159.08.030(2)(J) of the City's Municipal Zoning Ordinance.

- All lighting equipment and devices will be shielded or recessed so that direct light and glare are contained within the boundaries of the Project site, away from adjoining properties and public rights-of-way.

- Project development shall comply with the City's adopted outdoor lighting standards as specified in Section 159.20.030 of the Desert Hot Springs Municipal Zoning Code.

- Lighting plans indicating proposed lighting levels and methods to minimize impact on adjacent properties shall be reviewed and approved by the City prior to installation. Modification, alteration, or addition to any approved lighting shall not be undertaken prior to approval by the City.

B. Agriculture Resources

A project may have a significant impact on Agriculture Resources if it: (a) converts Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses; (b) conflicts with existing zoning for agricultural use, or a Williamson Act contract; or (c) involves other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.

The City of Desert Hot Springs Comprehensive General Plan (2000) indicates that there is no prime agricultural farmland, no Farmland of Statewide Importance, no Unique Farmland, and no Williamson Act contract in place within the City limits or the City's Sphere-of-Influence; therefore, the Project will have no impact upon agricultural resources, and no mitigation measures relating to agriculture resources are required.

C. Air Quality

A Project may have a significant impact on Air Quality if it will: (a) conflict with or obstruct implementation of the applicable air quality plan; (b) violate any air quality standard or contribute substantially to an existing or projected air quality violation; (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; (d) expose sensitive receptors to substantial pollutant concentrations; or (e) create objectionable odors affecting a substantial number of people.

The following criteria are identified as thresholds for determining the significance of air quality impacts, if the project were to:

- Result in an adverse effect on existing air quality (e.g., 500 or more dwelling units).

- Result in an adverse effect to a sensitive use (e.g., school) located near a major air pollutant emission source.

Presented in the South Coast Air Quality Management District (SCAQMD) CEQA Air Quality Handbook (1993) is both a methodology for the quantification of project related air quality impacts and recommended thresholds to evaluate the significance of these emissions. In Chapter 6 of the SCAQMD CEQA Air Quality Handbook, the SCAQMD has established two types of air pollution thresholds (i.e., emission thresholds and additional indicators) to assist local governmental agencies in determining whether the projected emissions from the operational phase of a project will be significant. As stated in the SCAQMD CEQA Air Quality Handbook, "if the lead agency finds that the operational phase of a project has the potential to exceed either of the air pollution thresholds, the project should be considered significant." Both types of threshold factors are discussed below.

The Project region is currently impacted by significant air pollution levels. Coachella Valley is classified as a "severe-17" ozone non-attainment area under the Federal Clean Air Act (2000), and as a serious non-attainment area for PM_{10} in the Final 2003 Coachella Valley PM10 State Implementation Plan prepared by the South Coast Air Quality Management District. As indicated in the SCAQMD CEQA Air Quality Handbook, "The District considers a project to be mitigated to a level of insignificance if its impact is mitigated below the thresholds defined in Chapter 6 of the SCAQMD CEQA Air Quality Handbook."

The SCAQMD recommends that "additional indicators" (secondary effects) be used as screening criteria with respect to air quality. Relevant additional factors identified in the SCAQMD CEQA Air Quality Handbook include the following significance (criteria: 1) interference with the attainment of the Federal or State ambient air quality standards by

either violating or contributing to an existing or projected air quality violation; 2) generation of vehicle trips that cause a CO "hot spot"; 3) creation of, or subject receptors to, an objectionable odor onsite that could result in an accidental release of air toxic emissions or acutely hazardous materials posing a threat to public health and safety; 5) emissions of an air toxic contaminant regulated by SCAQMD rules or included on a Federal or State air toxic list; 6) the burning of hazardous, medical, or municipal waste as in waste-to-energy facilities; and/or, 7) emissions of carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of 10 in 1 million.

The SCAQMD CEQA Air Quality Handbook states that if a project generates emissions on an individual day during construction or operations phases exceeding 75 pounds per day for ROC, 100 pounds per day for NO_X, 550 pounds per day for CO, or 150 pounds per day for either PM_{10} or SO_X, then the project should be considered significant. The Project is anticipated to generate temporary, short-term increases in air pollutants during Project construction; however, the Project is not expected to exceed the daily significance thresholds described above. Additionally, contract documents will require construction contractors to equip all machinery and equipment with suitable air pollution control devices, and to use dust palliatives (such as water) to control dust emissions created by construction activities. Refer to Tables 1 through 4, Estimated Construction Air Pollutant Emissions, and Table 5, Estimated Operation and Maintenance Air Pollutant Emissions, for a detailed description of the estimated total daily air pollutant emissions anticipated during construction and operation of the Project. Because daily emission thresholds will not be exceeded by the Project, and the Project will not result in any of the "additional indicators" (secondary effects) described above, no further studies are needed. Mitigation measures intended to reduce potential impacts upon air quality are listed below and are described in detail in Section 10.

- Prior to commencement of any demolition, grading, or construction activities, the Project applicant will prepare and submit for City Engineering Department review and approval a Fugitive Dust (PM_{10}) Mitigation Plan.

- Traffic speeds of no greater than 15 miles per hour will be observed on all unpaved roadways.

- All grading operations will be suspended when wind speed (as instantaneous gusts) exceeds 25 miles per hour.

- Trucks importing and/or exporting soil or other loose material will be covered and/or watered down prior to entering public streets to minimize potential fugitive dust.

- Soil binders will be spread on unpaved roads and parking areas, and/or AQMD-approved soil stabilizers will be applied according to manufacturer's specifications to all inactive construction areas (previously graded areas that remain inactive for 96 hours).

- SCAQMD Rule 403 shall be adhered to, ensuring the clean-up of construction-related dirt on approach routes to the site.

D. Biological Resources

A project has a significant effect on Biological Resources if it will: (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 CDFG or USFWS; (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 CDFG or USFWS; (c) have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act, through direct removal, filling, hydrological interruption, or other means; (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; (e) conflict with any local policies or ordinances protecting biological resources; or (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.

Project actions are also evaluated in terms of impacts to species that do not fall into one

of the above categories, but which nevertheless are protected by federal or state regulations. Most often, such cases involve nests of birds, such as red-tailed hawks, which are not rare, but are still protected under the federal Migratory Bird Treaty Act and the California Department of Fish and Game Code.

The term "rare" species is usually interpreted to mean species that are on lists prepared by federal, state, or private organizations but are of lower sensitivity status than threatened or endangered species. Thus, the term "rare" refers to species listed by the California Native Plant Society, federal / state Species of Special Concern, or species considered sensitive by a local jurisdiction.

Evaluation of significance is typically different between threatened/endangered species as compared to non-listed or rare species. Any loss of threatened or endangered species or their habitat is considered a significant impact in relation to federal and state endangered species regulations. However, thresholds of significance for loss of rare species have not been codified in federal or state regulations. Generally, the term is interpreted in terms of whether the project action would jeopardize the continued persistence or viability of individuals or populations of the species in question.

The Project site, the WECS 20 Wind Park, has been operating as a wind farm since 1985. The site has been previously disturbed by the construction of wind turbines and maintenance roads. Based on the AMEC reports (2000, 2004), sensitive species and habitat that occur at the project site may be significantly impacted by the Project; however, such impacts will be reduced to a level of insignificance by incorporating the mitigation measures described in Section 10.

Vegetation and Habitats. According to the AMEC report (2000), no sensitive plant species occur or have a high probability of occurrence at the Project site. Vegetation at the Project site consists mainly of typical creosote bush scrub. In addition, barrel cactus is widespread at the Project site, and construction at the proposed turbine sites will result in the removal of several barrel cactus individuals. Although barrel cactus is not considered a sensitive species, it is of biological interest due to its longevity and slow growth rate of approximately one centimeter per year. It has been estimated that several

barrel cactus individuals on the Project site are well in excess of one hundred years old. Mitigation measures intended to reduce potential impacts upon vegetation and habitats to a level of insignificance are listed below and are described in detail in Section 10.

- Thirty days prior to construction, the Project site shall be re-surveyed by a qualified biologist for the presence of sensitive species. Additionally, a qualified biological monitor will be onsite during all construction activities. The biological monitor will have the authority to halt or divert construction activities which may be in violation of the stipulations herein. The biological monitor will file a final report with the City Planning Department at the conclusion of construction.

- All construction personnel will participate in a biological awareness training program prior to commencement of construction activities, and a report verifying same will be provided to the City Planning Department.

- Upon removal of the 16 Bonus wind turbines, the area where each individual Bonus wind turbine was located shall be remedied. The site shall be evaluated, and any soil contamination shall be removed, structural foundations (cutting to six feet below grade) and all manmade debris shall be removed from the site and the area regraded and landscaped with plant material native to the region (i.e. the Coachella Valley). Monitoring of such activities shall be undertaken by a qualified biological monitor, who shall file a written report of findings to the City upon completion of the site remediation as outlined above.

- All barrel cacti located in areas anticipated to be impacted by the Project will be transplanted into portions of the property that will remain as natural open space. The transplantation sites will, as closely as possible, match the original barrel cacti locations with regards to soils, slope, and aspect.

- All turbine sites will be clearly marked prior to grading in order to limit damage to adjacent vegetation. Grading and vegetation removal will be limited to construction areas.

- Construction and maintenance traffic will utilize existing roads, and vehicle parking will be limited to existing disturbed areas.

- Grading onsite will be limited to construction areas only. All town sites and access road locations will be clearly marked prior to the initiation of any ground-disturbing activity. No construction activities shall occur adjacent to Super Creek. All staging areas shall occur on previously-disturbed areas.

- During construction and ongoing maintenance operations, wind farm personnel will be restricted to approved dirt roads only. No unauthorized grading of the site will be permitted.

- Applicant will be responsible for controlling and removing all trash and/or windblown debris generated on the site during construction and routine maintenance operations.

- All construction personnel will participate in a biological awareness training program prior to commencement of construction activities, and a report verifying same will be provided to the City Planning Department.

Desert Tortoise. The Project may result in a potentially significant impact on the desert tortoise. During AMEC's survey (2000), a single desert tortoise burrow was observed immediately north of one of the proposed turbine locations (C41); however, all of the proposed turbine locations contain suitable desert tortoise habitat. Because desert tortoises could wander into construction areas, potential impacts could include the loss of a tortoise from activities associated with ground clearing or construction, or by vehicle collision. Conversely, tortoises are known to construct burrows under the concrete bases of wind turbines on Painted Hill. The turbines are compatible with tortoise populations as long as appropriate mitigation measures are observed for tortoise protection. Mitigation measures intended to reduce potential impacts upon the desert tortoise to a level of insignificance are listed below and are described in detail in Section 10.

- In order to ensure that no desert tortoises are harmed and that the tortoises can continue to utilize the Project site during the operation and maintenance phases

of the Project, a desert tortoise survey will be performed within 24 hours prior to commencement of construction, and all construction activities will be monitored by a qualified biologist.

- No construction activities will occur within 100 feet of desert tortoise. If a desert tortoise is found onsite, construction activities should cease within 100 feet of the animal. The desert tortoise will be allowed to move offsite of its own volition.

- No construction activities will occur within 100 feet of desert tortoise burrows. Any burrows located during preconstruction desert tortoise surveys should be fenced with temporary fencing to provide a 100-foot buffer around the burrow. Fences should consist of a non-breachable barrier and support structures.

- Construction activities (including parking and laydown areas) will utilize existing access roads and previously-disturbed areas to the maximum extent feasible. Temporary exclusion fencing will be placed around staging areas.

- The biological monitor will supervise and approve the construction and placement of desert tortoise exclusion fence around burrows and staging areas. The biological monitor will inspect the temporary fencing at least weekly. Corrective actions will be taken promptly to maintain the integrity of the tortoise barrier. Fencing should be dismantled and removed following Project completion.

- The biological monitor will maintain a complete record of all desert tortoises encountered. The record shall include: location, date and time, life history, general condition, and identification numbers.

- Any Project-related vehicle or equipment operating on unpaved roads shall not exceed a speed limit of 25 miles per hour.

- Contractor will be required to keep all vehicles on existing roads. No cross-country travel will be authorized except under emergency situations.

- Employees will inspect beneath parked vehicles and equipment prior to traveling. If an employee discovers a tortoise, the employee shall notify the biological monitor.

- All trash will be contained in raven- and coyote-proof containers. All trash will be transported offsite on a weekly basis.

- No pets or firearms will be allowed within the Project's construction boundaries, or other associated work areas, at any time.

- The Project will reduce water usage during construction to the extent possible, such that excess water does not act as an attractant to tortoises.

- All construction materials, vehicles, and equipment will be removed from the site upon completion of the Project.

Coachella Valley Round-Tailed Ground Squirrel. The Coachella Valley round-tailed ground squirrel (*Spermophilus tereticaudus chlorus)*, a California Species of Special Concern and a Federal Species of Concern, has a high probability of occurrence at the Project site. The Coachella Valley round-tailed ground squirrel (CVRGS) occurs in the flatter, sandy portions of the Coachella Valley, preferring habitat that is open and flat, with fine-textured sandy soils for burrowing. CVRGS hibernates from September to January, but is otherwise active during the day, avoiding the hot part of the day during summer. This small squirrel constructs burrows at the base of shrubs where it nests, with young from a single litter emerging in May. A single CVRGS was observed by AMEC during a 1999 survey of adjacent Section 1, identifying a burrow at the base of a creosote bush near a row of existing wind turbines. CVRGS have average home ranges of approximately 1.85 acres and can occur in densities as high as 100 squirrels per acre; therefore, it is likely that additional individuals inhabit the Project site. Mitigation measures intended to reduce potential impacts relating to the Coachella Valley round-tailed ground squirrel to a level of insignificance are listed below and are described in detail in Section 10.

- Within 30 days prior to any construction activities, a preconstruction survey for Coachella Valley round-tailed ground squirrel will be conducted on areas of the Project site anticipated to be disturbed (approximately 1.35 acres), plus a buffer area as recommended by the Project biologist. If ground-disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site shall be resurveyed. A survey report for the Project shall be prepared and submitted to the California Department of Fish and Game for review and to the City for review and approval.

- If found on the Project site, any squirrels must be moved away from the disturbance areas and a relocation program shall be developed pursuant to California Department of Fish and Game review and approval.

- Applicant will avoid impacts to washes and wash vegetation.

- All proposed development will incorporate the maximum amount of existing onsite natural open space and native vegetation into the Project and landscaping.

- Applicant will provide to all employees an educational brochure that describes the sensitive nature of indigenous plants, animals, and ecosystems. A copy of said educational brochure shall be submitted to the City for approval prior to issuance of any building permits.

- Prior to grading, the applicant must develop a plan to reduce the impact of night lighting on open space and/or mitigation areas adjacent to the Project site.

Bird Species. According to AMEC (2000), the prairie falcon (*Falco mexicanus*, a California Species of Special Concern), and the golden eagle (*Aquila chrysaetos*, a California Species of Special Concern) have a high probability of foraging, but not nesting, on the Project site. Le Conte's thrasher (*Toxostoma lecontei*, a California Species of Special Concern and a Federal Species of Concern) has a high probability of occurrence at the Project site, and the burrowing owl (*Speotyto cunicularia*, a California Species of Special Concern and a Federal Species of Concern) has a moderate probability of occurrence at the Project site. Both Le Conte's thrasher and the burrowing owl were

recorded at an adjacent site by AMEC during a previous survey (1984, 1999). Loggerhead shrike (*Lanius ludovicianus*, a California Species of Special Concern and a Federal Species of Concern) was observed at the Project site during AMEC's survey in 2000. Mitigation measures intended to reduce potential impacts upon bird species to a level of insignificance are listed below and are described in detail in Section 10.

- Burrowing Owl

  - Within 30 days prior to any construction activities, a focused burrowing owl survey will be conducted (using California Department of Fish and Game protocol) on the areas of the Project site anticipated to be disturbed (approximately 1.35 acres), plus a buffer area as recommended by Project biologist. If ground-disturbing activities are delayed or suspended for more than 30 days after the survey, the site shall be resurveyed. A survey report for the Project shall be prepared and submitted to the Department of Fish and Game for review and to the City for review and approval.

  - Any burrowing owl burrows that cannot be avoided shall be mitigated at a 2:1 ratio with artificial burrows located in an adjacent protected area that provides a minimum 0.61 acres of protected habitat. The configuration of the protected habitat shall be approved by the California Department of Fish and Game. If required by the California Department of Fish and Game, the Project applicant shall provide funding for long-term management and monitoring of the protected lands.

  - If burrowing owls must be moved away from the disturbance areas, passive relocation techniques shall be used and only during the non-breeding season (September 1 to January 31). If impacts to burrowing owls are approved, then a relocation program shall be developed pursuant to California Department of Fish and Game and United States Fish and Wildlife Service review and approval.

- Should the Project affect the foraging areas of any owls located adjacent to the Project, then the same mitigation ratio and acreage would also be recommended.

- LeConte's Thrasher and Loggerhead Shrike

  - Applicant will avoid impacts to washes and wash vegetation.

  - All proposed development will incorporate the maximum amount of existing onsite natural open space and native vegetation into the Project and landscaping.

  - Applicant will salvage desirable desert plant species that would be destroyed by Project implementation, for use in landscaped areas.

  - Applicant shall provide to all employees an educational brochure that describes the sensitive nature of indigenous plants, animals, and ecosystems. A copy of said educational brochure shall be submitted to the City for approval prior to issuance of any building permits.

  - Prior to grading, the applicant shall develop a plan to reduce the impact of night lighting on open space and/or mitigation areas adjacent to the Project site.

- Potential for Avian Collisions and Mortality

In order to further analyze impacts on avian species, and in response to comments received by the Lead Agency with concerns regarding turbine-related avian mortality, a Biological Assessment Update, which focuses on impacts to avian species, has been prepared by AMEC Earth and Environmental (2004), and is included in Appendix B.

Since the beginnings of large-scale commercial wind energy production in the early 1980s, the potential for adverse environmental impacts in the form of bird

mortality has been recognized. The American Wind Industry Association initiated studies of these potential impacts, followed by a number of state and federal agencies, notably the California Energy Commission. In 1994, the National Wind Coordinating Committee (NWCC) was formed as a collaborative endeavor, composed of representatives of electric utilities, state utility commissions, equipment suppliers, consumer advocates, and environmental interests. The NWCC formed an Avian Subcommittee to better understand and coordinate research on the risk of bird collisions with wind turbines, and has published the results of several studies and symposia, most of which are available on the internet.

Local governments, utilities, and land managers have sponsored site-specific studies of bird migration and collision potential in the San Gorgonio Pass. Riverside County and the Federal Bureau of Land Management assessed all environmental risks prior to approval of the initial wind turbine developments in the San Gorgonio Pass in the early 1980s. Southern California Edison Company sponsored technical studies using radar equipment to determine the intensity of bird migration through the San Gorgonio Pass. Both Riverside County and the California Energy Commission have performed monitoring studies to attempt to quantify the magnitude of the bird collision issue in the San Gorgonio Pass Wind Resource Area. The results of these technical studies are described below.

The California Energy Commission, in response to the Notice of Preparation for this DEIR (see Appendix I), recommended completion of baseline studies on the avian use of the Project site, post-construction monitoring for at least 3 years, the formation of a Technical Advisory Committee that would interpret the results of the monitoring surveys, and performance of a risk assessment of the potential for avian mortality at the site. Such baseline studies are intended for the siting of large new facilities rather than subject Project, which includes constructing, operating, and maintaining eight 1.5 MW turbines within the existing WECS 20 Wind Park, as well as removing sixteen of the existing 65 kW turbines from the WECS 20 Wind Park. The existing WECS 20 Wind Park currently contains sixty-nine wind turbines; implementation of the Project will reduce this number by eight. The opportunity to conduct a site assessment of avian use conditions prior to wind energy development (which is the intent of NWCC and U.S. Fish

and Wildlife Service guidelines) no longer exists at the Project site, since the Project site has already been operating as a wind farm for over twenty years. The Project involves the addition of only eight new turbines in a single row into the existing WECS 20 Wind Park, as well as the removal of 16 existing turbines from the WECS 20 Wind Park, resulting in a net reduction of eight wind turbines in the WECS 20 Wind Park; therefore, any increases in turbine-related bird mortality resulting from the Project will be biologically insignificant, and no further studies are necessary.

AMEC (2004) has concluded that the potential for bird mortality resulting from the eight proposed wind turbines is low, but not zero; however, risk factors associated with bird collisions are minimized by location, bird abundance, and turbine design. A recent (2005) California Energy Commission staff report on avian mortality from wind turbines compared the high-mortality areas of Altamont Pass and Solano County with the lower-mortality areas of Tehachapi Pass, San Gorgonio Pass, and Pacheco Pass. The staff findings and suggested policy options included: "The studies that have been completed report lower bird use and fatality rates in these wind areas [Tehachapi, San Gorgonio, and Pacheco]. Based on research results it may be appropriate for the Energy Commission to encourage repowering and expansion in these areas." Lowering the number of turbines here and elsewhere in the San Gorgonio Pass as a result of repowering is anticipated to decrease cumulative impacts to birds from collisions.

The San Gorgonio Pass is a high-use nocturnal flyway for migratory songbirds. McCrary et al. (1983) estimated that 32 million birds flew through the Coachella Valley during spring of 1982, and 37 million birds during the fall of 1982 (McCrary et al., 1984). Traffic rates of 5,000 to 10,000 birds per hour were recorded with radar equipment. The study site included the San Gorgonio Pass, extending to Palm Canyon, the Whitewater floodplain, and Thousand Palms. A majority of these migratory birds generally flew at heights of 200 to 400 meters (approximately 660 to 1,310 feet) above the ground, which is much higher than the tallest turbines. A smaller proportion (11%) flew below 127 meters (approximately 417 feet). On very windy nights, however, birds can be blown down closer to the ground or may seek shelter at ground level. In these instances, the turbines present a risk of collision.

Based on the AMEC report (2004), recorded mortality in the San Gorgonio Pass Wind Resource Area is small. County-sponsored mortality studies detected a small (<1%) mortality rate for migratory birds in the San Gorgonio Pass. According to San Gorgonio Wind Resource Area: Impacts of Commercial Wind Turbine Generators on Birds (McCrary et al. 1986), approximately 6,800 birds were killed annually in the area based on 38 dead birds found while monitoring nocturnal migrants; these included 25 species. Considering the number of nocturnal migrants relative to fatalities, the authors concluded that this level of mortality was biologically insignificant. The California Energy Commission (Anderson *et al*. 2000) documented 42 fatalities during quarterly searches of 360 turbines. The highest mortality occurred at turbines near water. The NWCC estimated that a total of 2.3 birds per tower per year would be killed in the San Gorgonio Wind Resource Area, based on a turbine count of 2,900.

- Risk Factors

The Project minimizes impacts by avoiding several risk factors involved with turbine placement. The primary factors influencing risk of collision and mortality to birds from wind turbines are location, bird abundance, and tower design. Location refers to the placement of a wind turbine with respect to local topography, vegetation, and water. Turbines placed on top of a ridge are more likely to be in the path of both migratory birds and resident soaring birds. Turbines placed near or over water present an even greater risk of bird collisions. Turbines adjacent to riparian vegetation or other areas with extensive bird use, such as forests and woodlands, present a greater risk of bird mortality.

The abundance of birds utilizing a migratory flyway is also an important factor in collision frequency. Areas that experience high passage rates are more at risk of collision than areas where migrants are less concentrated. Large soaring birds, such as hawks, eagles, and vultures are most at risk of collision with wind turbines. These birds utilize updrafts at the edge of canyon walls as a source of lift. With regards to turbine design, turbines using guy wires are more likely to present a risk of bird mortality than those without supporting cables. Turbines with fast-moving blades present a higher mortality risk than those with slow

blade movement. The use of warning lights on the tops of turbines may increase the attraction of nocturnal birds, including night migrants, to the turbines. Taller towers are more likely to encounter migratory birds than are shorter towers.

The location of the eight proposed wind turbines is downhill from the primary ridgeline of Whitewater Canyon, which is the safest location relative to the risk of bird collisions. The turbines are not near or over open water or near riparian vegetation, and the Desert Hot Springs location is not considered a high-use area for soaring birds. The Project site is located within a very high use migration corridor; however, bird passage takes place at higher altitudes. The proposed turbine models have tubular towers and do not employ guy wires, which places them among the safest designs relative to avian mortality. Additionally, as with most newer turbine models, the blades of the proposed wind turbines are slow-moving and are considered a lower risk to birds than those with fast-moving blades. The taller turbines are part of a current industry standard, and are being proposed in order to increase the efficiency of the WECS 20 Wind Park, and to maximize use of the wind resource available at the Project site.

As discussed above, the available evidence from avian collision studies in the San Gorgonio Pass to date indicates that impacts to birds in the Desert Hot Springs area resulting from the Project will be biologically insignificant; therefore, no mitigation measures for bird collisions and mortality are required for the Project.

Coachella Valley Multiple-Species Habitat Conservation Plan. The Project site is located within the Upper Mission Creek/Big Morongo Canyon Conservation Area of the Recirculated Draft Coachella Valley Multiple Species Habitat Conservation Plan and Natural Communities Conservation Plan (CVMSHCP, 2007). According to the CVMSHCP, desert tortoise (*Gopherus agassizii*) is anticipated to occur on the Project site, and Sonoran creosote bush scrub and Sonoran mixed woody & succulent scrub communities have been determined present at the Project site. The Project site is not located within the Coachella Valley Fringe-Toed Lizard Fee Area.

The CVMSHCP (Section 9: Species Accounts and Conservation Measures), the Coachella Valley Fringe-Toed Lizard Habitat Conservation Plan, and the San Gorgonio

Wind Resource Study all consider wind energy development to be compatible with species conservation, providing that appropriate mitigation measures are implemented. Copies of the Coachella Valley Fringe-Toed Lizard Habitat Conservation Plan and the San Gorgonio Wind Resource Study are available for review at the City Planning Department office. The CVMSHCP may be viewed on the internet at the following address: www.cvmshcp.org. With the incorporation of the mitigation measures pertaining to biological resources described in Section 10, the Project is compatible with the CVMSHCP.

E. Cultural Resources

A project may significantly impact Cultural Resources if it will: (a) cause a substantial adverse change in the significance of a historical resource as defined in §15064.5; (b) cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5; (c) directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or (d) disturb any human remains, including those interred outside of formal cemeteries.

According to the Historical/Archaeological Resources Survey Report prepared by CRM TECH, dated September 29, 2005, no known historical resources exist within or adjacent to the Project site; therefore, the Project as currently proposed will cause no substantial adverse change to any known historical or archaeological resources. No further cultural resources investigation is recommended for the Project. If buried cultural materials are discovered during earthmoving operations associated with the Project, all work in that area will be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds. The Agua Caliente Band of Cahuilla Indians Tribal Historic Preservation Office (THPO) indicates that the Project area is on lands included within the Tribal Traditional Use Area and that there is always a possibility of encountering buried cultural resources during construction-related excavations. Mitigation measures intended to reduce potential impacts to historical and archaeological resources to a level of insignificance are listed below and are described in detail in Section 10.

- An approved Tribal Cultural Resource Monitor shall be present during any survey and/or any ground-disturbing activities. Should buried cultural deposits

be encountered, the Monitor may request that destructive construction halt and the Monitor shall notify a Qualified (Secretary of the Interior's Standards and Guidelines) Archaeologist to investigate and, if necessary, prepare a mitigation plan for submission to the State Historic Preservation Officer, the Agua Caliente Tribal Historic Preservation Office, and the Morongo Band of Mission Indians.

- If buried cultural materials are discovered during any earth-moving operation associated with the Project, all work in that area should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds. The archaeologist shall be empowered to temporarily stop or redirect grading activities to allow removal of abundant or large artifacts. The archaeologist shall also be required to curate specimens in a repository with permanent retrievable storage and submit a written report to the Planning Director for review and approval prior to occupancy of the first building on the site.

- Once artifact analysis is completed, a final written report detailing the results of all research procedures and interpretation of the site shall be submitted to the Development Director for review and approval prior to occupancy of the first building on the site.

- If human remains are encountered at the Project site during construction, the County Coroner will be notified immediately, and all construction activities will be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

According to the Paleontological Sensitivity Study prepared by CRM TECH, dated September 29, 2005, the Project's potential impact on paleontological resources is determined to be high. Surface geology in the Project area has been previously identified as **Tph**, **Qc**, and **Qt**. **Tph**, known as the Painted Hills Formation, is described as a "sandy well rounded conglomerate". **Qc**, known as the Cabazon Fanglomerate, is described as a "sandy ill-sorted light-brown conglomerate". **Qt** is described as terrace deposits of late Pleistocene age. Although the rock conditions are not the best for the preservation of vertebrate fossil remains, the rocks date to both the early and late Pleistocene Epoch, and there may be gravelly sand lenses within the conglomerates

where fossil remains may be preserved. Therefore, significant nonrenewable fossil remains may be encountered during construction. Mitigation measures intended to reduce potential impacts to paleontological resources to a level of insignificance are listed below and are described in detail in Section 10.

- A qualified paleontologist shall review the Project construction plans and shall create a plan for periodic monitoring in order to determine the presence or absence of older Pleistocene-age sediments that may contain fossils. If earth-moving activities reach potentially fossilliferous sediments and/or exceed 10 feet in depth, then continuous monitoring for paleontological resources, along with a program to mitigate impacts to those resources, will be implemented. The monitor should be prepared to quickly salvage fossils as they are unearthed to avoid construction delays.

- If buried paleontological materials are discovered during any earth-moving operations associated with the Project, all work in that area will be halted or diverted until a qualified paleontological monitor can evaluate the nature and significance of the finds. The paleontological monitor will be empowered to temporarily stop or redirect grading activities to allow removal of abundant or large artifacts. The paleontological monitor shall also be required to curate specimens in a repository with permanent retrievable storage and submit a written report and inventory to the Development Director for review and approval prior to occupancy of the first building on the site. The report should include a discussion of the significance of all recovered specimens. The report and inventory, when submitted to the Development Director, would signify completion of the Program to mitigate impacts to paleontologic resources.

F. Geology and Soils

A project will have a significant impact upon Geology and Soils issues if it will: (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, (ii) strong seismic ground shaking, (iii) seismic-related ground failure, including liquefaction, or (iv) landslides; (b) if it will result in substantial soil erosion or the loss of topsoil; (c) if

it will 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; (d) if it will be located on expansive soil, creating substantial risks to life or property; or (e) if it will have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for disposal of wastewater.

According to the Update to Geotechnical Engineering Report, dated November 10, 2000, prepared by Earth Systems Southwest (ESSW), the Project site is not located within a currently delineated California Alquist-Priolo Earthquake Fault Zone; therefore, the potential for active fault rupture at the Project site is low and is therefore considered less than significant.

The nearest known seismic source is the San Andreas Fault (southern), which is classified as a Type A fault (moment magnitude ≥7.0 and slip rate ≥5) and is less than two kilometers (<1.2 miles) from the Project site (Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada, Division of Mines and Geology, 1998); therefore, strong ground motion resulting from earthquake activity may impact the site during the anticipated life of the Project. Additionally, the City of Desert Hot Springs Comprehensive General Plan (2000) indicates that the site is highly susceptible to being impacted by rock falls and seismically-induced landsliding. To reduce potential impacts relating to geology and soils to a level of insignificance, the Project will adhere to the mitigation measures listed below (described in detail in Section 10), and the recommendations described in the ESSW report; see Section 10 and Appendix E.

Secondary hazards related to ground shaking include soil liquefaction, ground deformation, subsidence, tsunamis, and seiches. The Project site is far inland, so the hazard from tsunamis is nonexistent. No water storage reservoir, dam, or levee is located in the Project vicinity, thus the potential hazard of seiches is insignificant, and flood hazards to the site from catastrophic reservoir, dam, or levee failure are also insignificant. Previous soils studies indicate that, of secondary seismic hazards such as surface rupture, liquefaction, settlement, or seismically-triggered rockslides, only seismically-triggered rockslides might affect the site. However, it was noted that these slides would be very local in nature, and that actual run out of the boulders down the slope faces would

probably be on the order of less than 5 feet. Therefore, potential impacts would be less than significant.

- As recommended in the Update to Geotechnical Engineering Report (2000) by Earth Systems Southwest, additional geologic and geotechnical studies will be performed prior to commencement of construction, which are to include additional soil borings to a depth of 40 feet or refusal along the alignment of the turbines. At least three soil borings will be performed to evaluate the soil conditions to support the wind turbines. The additional studies will also include an analysis of Project wind turbine foundation compliance with the current Uniform Building Code.

- The minimum seismic design of the Project will comply with the current edition of the Uniform Building Code for non-building structures.

- Site development shall be in conformance with all recommendations as specified in the Update to Geotechnical Engineering Report (2000) by Earth Systems Southwest.

G. Hazards and Hazardous Materials

A project may cause significant Hazards and Hazardous Materials impacts if it will: (a) create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials; (b) create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; (c) emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; (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 create a significant hazard to the public or the environment; (e) result in a safety hazard for people residing or working in a project area located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport, public use airport; or private airstrip; (f) result in a safety hazard for people residing or working in a project area located within the vicinity of a

private airstrip; (g) impair implementation of or physically interfere with an adopted emergency response plan or adopted emergency evacuation plan; or (h) expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Used lubricants are the only hazardous waste associated with the Project. Used lubricants are currently generated by the existing WECS 20 Wind Park, and will continue to be generated at the site upon implementation of the Project. The lubricant (gearbox oil) that is replaced during maintenance is a controlled hazardous waste. When the gearbox oil is changed, it is taken from the gearboxes and stored onsite in metal containers until a used oil recycler comes to the site to remove the oil for processing offsite. Approximately 200 gallons of gearbox oil is stored on the Project site in four 55-gallon above-ground drums, and is removed from the site approximately twice per year by a waste oil recycling company. No hazardous waste is, or will be, disposed of or burned at the Project site. The Project site is not located within one-quarter mile of an existing or proposed school and is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Concerns have been raised regarding the possibility of oil dripping down from the turbines in the WECS 20 Wind Park. A records search performed in October 2006 by the Hazardous Materials Management Division of the Riverside County Department of Environmental Health yielded results of no reports found of complaints or violations pertaining to hazardous materials at the Project site. The existing WECS 20 turbines are equipped with oil pans in order to prevent any oil from reaching the underlying soil in the event of a leak. The eight proposed GE wind turbines will also be equipped with oil pans or other oil containment devices to catch any oil in the unlikely event of a leak. EUI employees routinely check for leaks and spills, and any leaks or spills found are immediately remedied.

The use and management of the lubricants is regulated by the County of Riverside Department of Environmental Health, who has issued a Hazardous Materials Management Permit to EUI (Facility Number 89040). Additionally, a permanent California EPA ID number (CAL 000237812) has been assigned to the WECS 20 Wind Park by the California Department of Toxic Substances Control. The WECS 20 Wind

Park operates in compliance with these permits and will continue to comply with these permits upon implementation of the Project.

The City Fire Department has identified that the Project site is located within a high fire area. The Project consists of the construction, operation, and maintenance of eight wind turbines that are in the vicinity of residences intermixed with wildlands. Project implementation may expose people or structures to a significant risk involving wildland fires. A records search dated October 4, 2006, performed by the Riverside County Fire Department, yielded results of no fire hazard or vegetation growth violations at the Project site for 2004-2005. However, in order to reduce potential impacts resulting from fire hazards to a level of insignificance, a number of mitigation measures will be undertaken. The new turbine nacelle covers will have fire retardant applied for containment, and the new turbine rotor blades will be equipped with lightning protection, which will bring to the ground, and then dissipate, the current. The two roads in between the turbines and nearby residences will be maintained by EUI free of vegetation to serve as fire breaks. Additional Fire Department conditions to address potential fire protection impacts are provided below.

In order to avoid potential navigational hazards, the Project will comply with current Federal Aviation Administration (FAA) standards, which are published in the FAA report, Obstruction Lighting Standards for Wind Turbine Farms (DOT/FAA/AR-TN05/50), dated November 2005. Pursuant to these standards, one red light will be mounted on top of the northernmost wind turbine in the Project, and one red light will be mounted on top of the southernmost wind turbine in the Project. These two red lights will be simultaneously flashing. The FAA reports that studies suggest that the use of red light emitting diode or rapid discharge style L-864 fixtures are effective in reducing impacts on neighboring communities, as the fixtures' exposure time is minimal, thus creating less of a nuisance than many other types of fixtures. Since the wind turbines will be painted white, daytime lighting is not recommended. Any applicable FAA approvals will be obtained prior to issuance of construction permits.

The mitigation measures listed below will reduce potential impacts relating to hazards and hazardous materials issues to a level of insignificance and are described in detail in Section 10.

- The WECS 20 Wind Park will continue to operate in compliance with permits issued by the County of Riverside Department of Environmental Health and by the California Department of Toxic Substances Control.

- Monitoring of all turbines for oil leakage will be performed on a monthly basis, and monthly reports will be submitted to the City Planning Department.

- Any oil leakage or spills will be reported immediately to the City Planning Department.

- All new turbines will be equipped with oil pans or other oil containment devices in order to catch any oil in the event of a leak.

- All new turbine nacelle covers will have fire retardant applied for containment.

- Turbine rotor blades will be equipped with lightning protection, which will bring to the ground, and then dissipate, the current.

- The two roads in between the turbines and nearby residences shall be maintained by EUI free of vegetation in order to serve as fire breaks.

- The Project will comply with all Fire Department requirements and conditions.

- The following areas will be cleared of vegetation and maintained by EUI as a fire/fuel break for as long as the turbines are in operation:

    - Thirty (30) feet around the periphery of the Project. Access roads that completely surround the Project may satisfy this requirement, if approved by the Fire Department.

- Ten (10)-radius feet around all transformers and wind turbine towers.

- Thirty (30) feet around all buildings.

- All buildings or equipment enclosures of substantial size containing control panels, switching equipment, or transmission equipment, and no regular human occupancy, shall be equipped with an automatic fire extinguishing system. Plans for such systems must be submitted to the Fire Department for review or approval.

- No permit shall be issued for the construction or placing of any structure onsite for the purpose of habitation or human occupancy without first establishing fire protection requirements as a condition of such permit. This requirement includes the establishment of a minimum fire flow per Division VIII of Riverside County Ordinance 546.

- Service vehicles assigned to regular maintenance or construction at the Project site shall be equipped with a portable fire extinguisher of a 4A40 BC rating. All motor driven equipment shall be equipped with an approved spark arrestor.

- The Project will comply with current FAA standards for structures, and any required FAA permits or approvals shall be obtained prior to construction. The most recent standards are published in the November 2005 report, Obstruction Lighting Standards for Wind Turbine Farms (DOT/FAA/AR-TN05/50). Pursuant to these standards, the Project will have one red light mounted on top of the northernmost wind turbine in the Project, and one red light mounted on top of the southernmost wind turbine in the Project. These two red lights will be utilized only at night, and will be simultaneously flashing. The Project will utilize fixtures that will minimize impacts to neighboring residents, such as red light emitting diode or rapid discharge style L-864 figures. Since the wind turbines will be painted white, daytime lighting is not recommended.

H. Hydrology and Water Quality

A project may have a significant impact on Hydrology and Water Quality if it will: (a) violate any water quality standards or waste discharge requirements; (b) substantially deplete groundwater supplies or interfere substantially with groundwater recharge such there would be a net deficit in aquifer volume or a lowering of the local groundwater table level; (c) substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or offsite; (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 increasing the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; (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; (f) otherwise substantially degrade water quality; (g) place housing within a 100-year flood hazard area; (h) place within a 100-year flood hazard area structures which would impede or redirect flood flows; (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; or (j) expose people or structures to inundation by seiche, tsunami, or mudflow.

The Project does not require significant quantities of water for operations or maintenance, nor will significant quantities of water be discharged on the Project site. As a result, the Project will not violate any water quality standards or cause the depletion of water supplies.

In addition to the construction of eight new wind turbines and the removal of sixteen existing wind turbines, the Project includes the use of onsite unpaved roadways and parking areas (approximately one to two vehicles), the construction of a single-story (40 foot by 100 foot) storage building, and the expansion of an existing outdoor storage area for spare parts for the turbines. Since Project construction will disturb a relatively small area of the Project site, the Project is not anticipated to substantially alter the existing drainage pattern of the area or cause additional erosion or siltation on- or offsite. The Project site is located within Flood Zone C (areas of minimal flooding) according to Flood Insurance Rate Map, Community-Panel Number 060245 0900 D, and impacts related to flooding are not considered significant. There are no levees or dams in the

Project vicinity, so there are no potential impacts resulting from flooding as a result of dame or levee failure. The Project will not expose people or structures to inundation by seiche, tsunami, or mudflow.

Implementation of the Project is anticipated to result in the temporary disturbance of approximately 0.74 acres and the permanent disturbance of 0.61 acres of the Project site. Mitigation measures intended to reduce potential impacts upon hydrology and water quality issues to a level of insignificance are listed below and are described in detail in Section 10.

- A hydrology study, drainage plan, and erosion control plan will be prepared and submitted to the City Engineer for review and approval. The Project will adhere to all recommendations based on the findings of said study and plans, which will be completed prior to issuance of a grading permit.

- For sites greater than 5 acres in size, the Project applicant will obtain coverage under the State Water Resources Control Board's General National Pollutant Discharge Elimination System (NPDES) permit for construction storm water discharges through the Regional Water Quality Control Board (RWQCB), Colorado River Basin Region prior to commencement of construction. A Notice of Intent, a Storm Water Pollution Prevention Plan (SWPPP), and a Monitoring Plan will be prepared as requirements of the NPDES permit. The SWPPP will include Best Management Practices (BMPs) in compliance with the NPDES program requirements.

- The Project applicant will obtain all necessary permits, agreements, and approvals from appropriate agencies (such as the RWQCB and Mission Springs Water District) related to water quality and nuisance water issues.

I. Land Use and Planning

A project may have a significant impact on Land Use and Planning if it will: (a) physically divide an established community; (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; or (c) conflict with any applicable habitat conservation plan or natural community conservation plan.

The Project site is located within the existing WECS 20 Wind Park, which has been in operation continuously since 1985. The City of Desert Hot Springs has designated the Project site I-E, Industrial Energy-Related. The I-E land use designation provides for the developing of energy-producing industries, including wind farms. No specific plans have been adopted for the Project site. The Project site is located within the existing WECS 20 Wind Park, the Project does not include an expansion of the WECS 20 Wind Park boundaries, and, with the exception of the height variance, the Project is consistent with the City of Desert Hot Springs Comprehensive General Plan (2000) and the City of Desert Hot Springs Zoning Ordinance (2000). Therefore, the Project will not have any effect on an established community, and it would any applicable land use plans. There are no habitat conservation plans or natural community conservation plans in effect for the Project site.

J. Mineral Resources

A project may have a significant impact on Mineral Resources if it will: (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; or (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.

The Project will not result in a significant impact upon mineral resources. The City of Desert Hot Springs Comprehensive General Plan (2000) identifies the Project site as within Mineral Resource Zone 3 (MRZ-3), which is defined as areas where the available geologic information indicates that unspecified mineral resources may exist. The significance of said mineral resources is undetermined. Future mineral extraction activities in the Project area, if any, will not be restricted or prevented by implementation of the Project. The Project has no potential to impact the quality or availability of any mineral resources; therefore, no mitigation measures related to mineral resources are required for the Project.

K. Noise

A project may have a significant effect in relation to Noise if it will: (a) expose persons to noise hazards or generation of noise levels in excess of standards established by the City of Desert Hot Springs Comprehensive General Plan exterior Community Noise Equivalent Level, or CNEL, of 65 dB (outside nearest dwelling), interior CNEL of 45 dB (inside nearest dwelling) for residential developments and transient lodging; (b) expose persons to generation of excessive groundborne vibration or groundborne noise levels; (c) result in a substantial permanent or temporary increase in ambient noise levels in the project vicinity above levels existing without the project; (d) create a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project; (e) expose persons residing or working in the project area to excessive noise levels if the project area is within an airport land use plan or within two miles of a public airport; or (f) expose persons residing or working in the Project area to excessive noise levels for a Project within the vicinity of an airport or private airstrip.

The CNEL standard established by the City of Desert Hot Springs Comprehensive General Plan (2000) is a maximum of 65 dB (exterior of nearest dwelling) and 45 dB (inside nearest dwelling) for residential developments and transient lodging. Additionally, the County of Riverside has established a WECS CNEL criterion of maximum 55 dB at each receptor (i.e. habitable dwelling, school, hospital, etc.).

An Acoustical Analysis Report was prepared by Hersh Walker Acoustics, dated May 5, 2004, in order to determine whether the Project would result in any potentially significant noise impacts (see Appendix F). The areas of concern are existing residences southerly and easterly of the Project site. The Acoustical Analysis Report found that, at the two residences nearest the Project site, the Project noise level of the existing turbines combined with the proposed eight 1.5 MW GE turbines was 47 to 48 dB, which is a net increase of approximately 1 dB over the existing noise levels of the WECS 20 Wind Park. The results included an adjustment subtracting background noise from wind in nearby vegetation and structures. The anticipated noise level at the nearest residences, upon implementation of the Project, is safely below the 55 dB requirement. Mitigation measures intended to reduce potential impacts relating to possible future noise issues

(increases) to a level of insignificance are listed below and are described in detail in Section 10.

Short-term noise impacts may occur during the construction phase of the Project. This noise would be related to construction traffic (vehicles) and construction equipment and workers. However, this noise would be temporary, and while it would not be considered substantial, measures have been provided to ensure that noise generated during construction is minimized.

Operational noise associated with Project operations and maintenance will consist of an estimated 25 monthly trips to the Project site to perform routine maintenance activities, such as inspecting the turbines for malfunction and replacing the gear box oil. This minimal amount of activity will not result in significant noise impacts.

- In order to demonstrate that the Project will remain safely below the City CNEL criterion for WECS, acoustical analyses of the Project will be performed quarterly, commencing with construction and continuing until one year after completion of construction, and reports of said analyses will be submitted to the City Planning Department. The applicant shall bear the cost of these analyses. Should any of these analyses indicate that noise levels are above allowed thresholds, steps shall be taken immediately to bring noise levels within acceptable thresholds.

- All construction activities, including the repair and maintenance of construction equipment on the Project site, shall comply with Section 130.03 of the City of Desert Hot Springs Municipal Code.

- Noise-generating construction equipment operated on the Project site shall be equipped with effective noise control devices, (i.e. mufflers, lagging, and/or motor enclosures).

- All equipment shall be properly maintained to assure that no unnecessary noise, due to worn or improperly maintained parts, will be generated.

- Truck deliveries and haul-offs shall only be permitted between the hours of 7:00 a.m. and 5:00 p.m. weekdays and 8:00 a.m. and 5:00 p.m. Saturdays. The haul routes shall be approved by the City Engineer.

L. Population and Housing

A project may have a significant impact on Population and Housing if it will: (a) directly or indirectly induce substantial population growth in an area; (b) displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or (c) displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Since implementation of the Project will create and support only two full-time ongoing employment positions and approximately 40 temporary construction jobs that will be phased out upon completion of Project construction, the Project is not anticipated to result in any significant population growth, either directly or indirectly. The Project does not include housing and has no potential to significantly increase or decrease population, housing, or demand for housing in the project area, as the site currently contains a wind park; therefore, the Project will not result in a significant impact upon population and housing issues, and no mitigation measures related to population and housing are required for the Project.

M. Public Services

A project may have a significant impact on Public Services if it results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities; the 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 fire protection, police protection, schools, parks, or other public facilities.

The Project may result in incremental increases in the demand for fire protection services and police services. The fire station located at the northeast corner of West Drive and Pierson Boulevard, and the police station located just westerly of the fire station, serve

the site. Because the Project does not have the potential to either significantly increase or significantly decrease the Project area's population, the Project will result in little or no impact to schools, parks, or other public facilities, such as libraries and other community facilities. The outdoor storage area will be secured by a controlled-access gate. However, all new projects have some potential to require public services, primarily in the areas of safety and security. Mitigation measures intended to reduce potential impacts to public services to a level of insignificance are listed below and are described in detail in Section 10.

- The Project applicant will submit any and all required impact fees to the City, which may include but are not limited to the fire facilities impact fee, the police facilities impact fee, the general facilities impact fee, and the storm drain impact fee, as part of building permit fees.

N. Recreation

A project may have a significant impact on Recreation if it increases 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, or if the project includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

There are no recreational resources on or adjacent to the Project site. Additionally, implementation of the Project will create and support only two full-time employment positions and approximately 40 temporary construction jobs. The construction jobs will be phased out upon completion of construction of the Project. Due to the limited nature and size of the Project, Project implementation will not result in any significant increase in demand for recreational facilities in the Project area, nor will the Project result in the need for additional or expanded recreational facilities in the area; therefore, the Project will not result in a significant impact upon recreation, and no mitigation measures related to recreation are required for the Project.

O. Transportation and Traffic

A project may be deemed to have a significant effect on Transportation/Traffic if it: (a) causes an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system; (b) exceeds, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways; (c) results 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; (d) substantially increases hazards due to a design feature or incompatible uses; (e) results in inadequate emergency access or parking capacity; or (f) conflicts with adopted policies, plans, or programs supporting alternative transportation.

The proposed access route to the Project site is currently used by operation and maintenance personnel for the existing WECS 20 Wind Park. The Project site will be accessed by exiting from State Route 62 at Dillon Road, continuing westerly to Seeley Street, traveling northerly on Seeley Street to 16th Avenue, continuing westerly on 16th Avenue to Windhaven Road, then traveling northerly on Windhaven Road to EUI's access road, which leads northeasterly to the WECS 20 Wind Park site. The access route to the Project site is shown in Figure 4. An increase in traffic to and from the site during the construction phase of the Project will occur. The current Average Daily Trips (ADT) along the access route has not been established; however, by observation, it appears quite low (well below 7,000 ADT). Therefore, the increase in traffic will have little impact on the ability of the access road system to handle the traffic load, as the volume to capacity ratio on these roads will remain very small. Parking capacity will not be affected by Project traffic, since vehicles used in the construction, operation, and maintenance of the Project will park on private property. Some parking along access roads may occur to allow for the adjustment of delivery loads; however, this will not be the norm, and each occurrence should have little impact on local traffic.

The Project will have no impact on emergency access or access to nearby uses for local residents, and will not impact the local rail traffic (the nearest of which is located approximately 3 miles southerly of the Project site). The Project will not require new or altered road maintenance procedures. The Project will have little or no impact on the transportation capabilities of the community. The Project will adhere to the measures described in the Offsite Road and Traffic Impact Plan prepared for the Project by Krieger

& Stewart (see Appendix G). Mitigation measures intended to reduce potential impacts relating to transportation and traffic issues to a level of insignificance are listed below and are described in detail in Section 10.

- Prior to issuance of grading permits, a traffic plan to minimize traffic flow interference from construction activities shall be submitted for review and approval to the City Engineer.

- Project construction, operation, and maintenance activities will adhere to the recommendations described in the Energy Unlimited, Incorporated WECS 20 Wind Park Revised Permit Application Offsite Road and Traffic Impact Plan, prepared by Krieger & Stewart.

P. Utilities and Service Systems

A project may have a significant impact on Utilities and Service Systems if the project would: (a) exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; (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; (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; (d) not have sufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements; (e) result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments; (f) be served by a landfill without sufficient permitted capacity to accommodate the project's solid waste disposal needs; or (g) not comply with federal, state, and local statutes and regulations related to solid waste.

There are no commercial or residential structures included in the Project, and Project implementation will result in only two full-time ongoing employment positions and approximately forty temporary construction jobs at the Project site; therefore, no sewer and water lines are included in the Project. The applicant will continue to provide

portable toilets and bottled water for employees. Additionally, implementation of the Project will not result in significant areas of impervious surfaces that may result in the need for new or expanded storm water drainage facilities. Some solid waste, such as wood, metal, concrete, etc., will be generated during Project construction, and will be removed from the site by the contractor throughout Project construction. Mitigation measures intended to reduce potential impacts related to utilities and service systems to a level of insignificance are listed below and are described in detail in Section 10.

- All solid waste generated during Project construction will be disposed of in compliance with all State, Federal, and local statutes regulating solid waste (as set forth in City Ordinance No. 2005-14).

6. SIGNIFICANT IRREVERSIBLE CHANGES

The Project does not entail significant irreversible changes to the environment or a significant irretrievable commitment of environmental resources. The proposed wind turbines have a relatively small footprint, and turbine sites from which turbines are removed in the future could be reclaimed as open space or natural habitat.

7. ECONOMIC AND SOCIAL EFFECTS

The Project will result in increased revenues to the City in the form of building fees and property tax revenues. The City Building Department estimates that the City will receive building permit fees of approximately $47,500 from the Project (assuming a Project cost of $8,050,000). The City is also estimated to receive over $6000 in impact fees and over $80,000 in potential benefits from property taxes collected during the first year of the Project. Property tax benefits to the City could potentially total over $1,000,000 over the life of the Project. Additionally, the Project is not likely to require costly services for the City, such as police services, emergency response, etc.

The only social impacts anticipated by the Project are the permanent and temporary employment positions created by the Project. Two full-time employment positions will be created in order to maintain the WECS 20 Wind Park. Approximately forty temporary employment positions will be created in order to construct the Project. The temporary construction positions will be phased out upon completion of the Project.

8. GROWTH-INDUCING IMPACTS

No growth-inducing impacts (individual or cumulative) are anticipated to result from implementation of the Project. The Project consists of the construction, operation, and maintenance of eight wind turbines, the removal of sixteen existing wind turbines, the construction of a single-story storage building, and the expansion of an existing outdoor storage area. The Project does not include any features that have the potential to induce growth in the area. No housing or community facilities are included in, or will be required as a result of, the Project. The Project is anticipated to maintain two full-time employees for the ongoing operation and maintenance of the turbines, as well as approximately forty temporary employees during the construction phase. No aspect of the Project is anticipated to impact the environment by either inducing or hindering growth in the Project area.

9. CUMULATIVE IMPACTS

Cumulative impacts are the overall effects on the environment that could result from implementation of a project in combination with other projects and actions in the region. Such effects can result from actions that are individually minor but collectively significant over time.

A. Aesthetics

The aesthetics analysis determined that the Project may result in significant adverse impacts related to scenic views or other aesthetic resources. However, with the implementation of mitigation measures set forth in this DEIR, these impacts are not significant. This determination largely stems from the existing condition of the Project site, which is an existing wind park with 69 operational wind turbines.

The Project is proposed in order to increase the efficiency of the existing WECS 20 Wind Park. Implementation of the Project will result in a net decrease in the total number of turbines in the WECS 20 Wind Park. The Project will, therefore, not result in cumulative impacts upon Project area aesthetics as a result of implementation of the Project.

B. Agriculture Resources

The Project will not result in the conversion of any agricultural lands to developed uses, nor will it affect any agricultural lands or uses. Therefore, there will be no cumulative impacts on agriculture.

C. Air Quality

Although, as discussed herein, there will be an increase in air pollutant emissions during construction of the project, the impact will be temporary and less than significant. Because the turbines included in the Project will be maintained as part of the existing WECS 20 Wind Park, any incremental increases in air pollutants resulting from the ongoing operation and maintenance of the Project are negligible. Therefore, cumulative impacts upon air quality are less than significant.

D. Biological Resources

Cumulative impacts upon biological resources are less than significant. The Project proposes eight new wind turbines and the removal of sixteen existing wind turbines, resulting in a net decrease in the total number of turbines on the Project site. Upon removal of the sixteen wind turbines, those turbine sites not replaced with one of the eight new turbines will be revegetated with native plant species, and will not be used for wind energy in the future; therefore, the total disturbed surface area will decrease, eventually providing additional habitat. Any increases in impacts over those of the existing wind park are negligible.

E. Cultural Resources

As discussed in Section 5 herein, no known historical or archaeological resources exist at the Project site; however, there is always a possibility of uncovering historical or archaeological resources during ground-disturbing activities. With the incorporation of the Project mitigation measures set forth in Sections 5 and 10 herein, including monitoring by a Tribal Cultural Resource Monitor, the Project will not result in cumulative impacts upon historical or archaeological resources.

Although there are no known paleontological resources located at the Project site, the Paleontological Sensitivity Study prepared for the site by CRM TECH (2005) indicated that the Project's potential to impact paleontological resources is determined to be high, and significant nonrenewable fossil remains may be encountered during construction. With the incorporation of the mitigation measures described in Sections 5 and 10 herein, which include monitoring by a qualified paleontological monitor, the Project will not result in either significant impacts or cumulative impacts upon paleontological resources.

F. Geology and Soils

The Project site is located less than two kilometers (<1.2 miles) from the San Andreas Fault (southern). While the potential for active fault rupture at the Project site is low according to the Update to Geotechnical Engineering Report (2000) prepared by Earth Systems Southwest (ESSW report), the City of Desert Hot Springs Comprehensive

General Plan (2000) indicates that the Project site is highly susceptible to being impacted by rock falls and seismically induced landsliding. To reduce potential impacts relating to geology and soils to a level of insignificance, additional geotechnical studies will be performed prior to Project construction, and site development will be in conformance with all recommendations specified in the ESSW report. For the reasons discussed above, the Project will not result in any cumulative impacts relating to geology and soils.

G. Hazards and Hazardous Materials

Potential hazards and hazardous materials impacts consist of possible site contamination with lubricants used on the turbines during operation, potential fire hazards associated with turbine operation, and navigational hazards associated with structures greater than 200 feet in height. Implementation of the Project mitigation measures set forth in Sections 5 and 10 herein will reduce any potential impacts related to hazards and hazardous materials to a level less than significant.

By appropriate use and management of all lubricants used onsite, as well as equipping turbines with oil pans or other oil containment devices to prevent any oil from coming into contact with the underlying soil in the unlikely event of a leak or spill, the Project will not result in significant impacts involving contamination with lubricants.

In order to prevent possible fires during Project operation, the new turbines will be equipped with lightning protection and fire retardant will be applied for containment. Additionally, roads between the turbines and nearby residences will be maintained by EUI as fire breaks. Therefore, the potential for a fire resulting from turbine operation is reduced to a level less than significant.

Any potential flight hazards will be addressed by the addition of flashing red lights mounted on top of the northernmost and southernmost turbines in the Project, as required by the FAA, thus reducing potential flight hazards to a level of insignificance. For the reasons described above, the Project will not result in potential impacts or potential cumulative impacts related to hazards and hazardous materials.

H. Hydrology and Water Quality

The Project will disturb a total of approximately 1.35 acres of the 160-acre site, and is not expected to substantially alter the existing drainage pattern of the site or area, or cause additional erosion or siltation onsite or offsite. With implementation of the mitigation measures set forth in Sections 5 and 10 herein, the Project will not result in significant adverse impacts or cumulative impacts relating to hydrology and water quality.

I. Land Use and Planning

The Project site is located in the existing WECS 20 Wind Park, and the City of Desert Hot Springs has designated the site I-E, Industrial Energy-Related. The I-E land use designation provides for the developing of energy-producing industries, including wind farms. Therefore, the Project will not result in any potential impacts or potential cumulative impacts upon land use and planning.

J. Mineral Resources

According to the City of Desert Hot Springs General Plan (2000), the Project site is located within Mineral Resource Zone 3, which is defined as areas where the available geologic information indicates that unspecified mineral resources may exist. The significance of any potential mineral resources at the site is undetermined. Therefore, the Project will not cumulatively impact any known mineral resources or mineral resource recovery sites.

K. Noise

Short-term noise impacts may occur during the construction phase of the Project due to construction traffic and construction equipment. Any potential noise impacts resulting from Project construction will be less than significant and short-term, and will not result in cumulative impacts upon the Project area. According to the Acoustical Analysis Report (2004), operational noise has been determined to result in a net increase of only 1 dB over the existing ambient noise level in the area. This is due in part to the fact that the new turbines are quieter and more efficient than the existing older turbines. Further,

potential noise associated with Project operations maintenance will consist of an estimated 25 monthly trips to the site to perform routine maintenance activities. This minimal activity will not result in significant noise impacts. For the reasons discussed above, cumulative impacts related to noise are less than significant.

L. Population and Housing

As the Project will create and support only two full-time ongoing employment positions and approximately forty temporary construction jobs, the Project will not result in an increase or decrease in either the Project area's population or demand for housing; therefore, no cumulative impacts upon population and housing are anticipated.

M. Public Services

All new projects have some potential to require public services, particularly in the areas of safety and security. The Project may result in incremental increases in demand for fire protection services and police services; however, EUI will mitigate said possible increases in demand by submitting any and all required impact fees to the City. Therefore, any potential impacts upon public services are rendered neither significant nor cumulatively considerable.

N. Recreation

The Project site is the existing WECS 20 Wind Park, and will create and support only two full-time ongoing employment positions and approximately forty temporary construction jobs. Because of the limited nature and size of the Project, the Project will not result in any significant impacts upon recreation in the area.

O. Transportation and Traffic

An increase in traffic to and from the Project site will occur during the construction phase of the Project; however, the increase in traffic will have little impact on the ability of the access road system to handle the traffic load, as the volume to capacity ratio on these roads will remain very small. To mitigate any potential impacts upon transportation and

traffic by construction traffic, EUI will prepare and comply with a traffic impact plan approved by the City Engineer. Traffic for Project operations maintenance operations consist of approximately 25 monthly trips to the Project site. Due to the minimal nature of the potential impacts upon transportation and traffic discussed above, the Project will not result in cumulatively considerable impacts upon transportation and traffic.

P. Utilities and Service Systems

No sewer lines or waterlines are included in the Project; the applicant will continue to provide portable toilets and bottled water for employees. The Project will not result in significant areas of new impervious surfaces and, therefore, will not result in the need for new or expanded storm drain facilities. Project operation is not anticipated to generate solid waste. Solid waste generated during Project construction will be disposed of in compliance with all state, federal, and local statutes. For the reasons discussed above, the Project will not result in cumulatively considerable impacts upon utilities and service systems.

10. MITIGATION MEASURES PROPOSED TO MINIMIZE SIGNIFICANT EFFECTS

The following abbreviations are used in this section related to each mitigation measure described:

Responsible Person	Timing of Verification	Method of Verification	Sanctions
BO-Building Official	A-Prior to Final Map	A-Ensure Plans Reflect Mitigation Measure	1-Withhold Final Map Issuance
CA-City Attorney	B-Prior to Issuance of Grading Permits	B-Other Agency Permit/Approval	2-Withhold Grading or Building Permit
CE-City Engineer	C-Prior to Issuance of Building Permit	C-Separate Submittal (Reports/Submittal/ Plans)	3-Withhold Certificate of Occupancy
CM-City Manager	D-Throughout Construction	D-Payment of Fees	4-Stop Work Order
FD-Fire Department	E-Prior to Approval of Landscape Plans	E-Contractor Compliance	
PD-Planning Director	F-Ongoing	F-Improvement Completion	
	G-Prior to Occupancy	G-Site Inspection	

The following numbered mitigation measures are intended to reduce to a level of insignificance the potential environmental impacts described in Section 5. Verification requirements for each mitigation measure, such as the responsible person, timing of verification, and method of verification, will be included in the Final Environmental Impact Report.

A. Aesthetics

To mitigate potential impacts upon aesthetics to a level of insignificance, the following mitigation measures will be implemented.

1. The eight wind turbines will be painted white, with a matte or galvanized finish. The storage building will be painted in an earth-tone, such as beige.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

2. All Project grading will comply with the City's regulations in order to minimize adverse impacts to viewsheds.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

3. Upon removal of the 16 Bonus wind turbines, the area where each individual Bonus wind turbine was located shall be remedied. The site shall be evaluated, and any soil contamination shall be removed, structural foundations (cutting to six feet below grade) and all manmade debris shall be removed from the site and the area shall be replanted with plant material native to the Coachella Valley. Monitoring of such activities shall be undertaken by a qualified biological monitor, who shall file a report of findings to the City upon completion of the site remediation as outlined above.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

4. During ongoing operation and maintenance of the Project, only surplus turbine parts too large to be stored in the storage building will be stored in the open storage area. Prior to storing any additional items in the open storage area which are not large turbine parts, a list of said items will be submitted in writing to the City for approval. Decommissioned wind turbines, including inoperable or wrecked machinery, motor vehicles, construction equipment, and construction debris will not be stored onsite.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

5. The outdoor storage area shall be inspected annually by the City..

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

6. No advertising sign or logo shall be placed or painted on any commercial WECS.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

7. No commercial WECS shall be located where the center of the tower is within 1320 feet (0.25 mile of State Route 62).

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

8. All aspects of the Project's development shall adhere to Wind Energy Conversion Systems (WECS) requirements as adopted in Section 159.08.030(2)(J) of the City's Municipal Zoning Ordinance.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

9. All lighting equipment and devices will be shielded or recessed so that direct light and glare are contained within the boundaries of the Project site, away from adjoining properties and public rights-of-way.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

10. Project development shall comply with the City's adopted outdoor lighting standards as specified in Section 159.20.030 of the Desert Hot Springs Municipal Zoning Code.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

11. Lighting plans indicating proposed lighting levels and methods to minimize impact on adjacent properties shall be reviewed and approved by the City prior to installation. Modification, alteration, or addition to any approved lighting shall not be undertaken prior to approval by the City.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

B. Air Quality

To mitigate potential impacts upon air quality to a level of insignificance, the following mitigation measures will be implemented.

12. Prior to commencement of any demolition, grading, or construction activities, the Project applicant will prepare and submit for City Engineering Department review and approval a Fugitive Dust (PM_{10}) Mitigation Plan.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

13. Traffic speeds of no greater than 15 miles per hour will be observed on all unpaved roadways.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

14. All grading operations will be suspended when wind speed (as instantaneous gusts) exceeds 25 miles per hour.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

15. Trucks importing and/or exporting soil or other loose material will be covered and/or watered down prior to entering public streets to minimize potential fugitive dust.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

16. Soil binders will be spread on unpaved roads and parking areas, and/or AQMD-approved soil stabilizers will be applied according to manufacturer's specifications to all inactive construction areas (previously graded areas that remain inactive for 96 hours).

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

17. SCAQMD Rule 403 shall be adhered to, ensuring the clean-up of construction-related dirt on approach routes to the site.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

C. Biological Resources

To mitigate potential environmental impacts upon biological resources to a level of insignificance, the following mitigation measures will be implemented.

Vegetation and Habitats

18. Thirty days prior to commencement of construction, the Project site shall be re-surveyed by a qualified biologist for the presence of sensitive species. Additionally, a qualified biological monitor will be onsite during all construction activities. The biological monitor will have the authority to halt or divert construction activities which may be in violation of the stipulations herein. The biological monitor will file a final report with the City Planning Department at the conclusion of construction.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

19. All construction personnel will participate in a biological awareness training program prior to commencement of construction activities, and a report verifying same will be provided to the City Planning Department.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

20. Upon removal of the 16 Bonus wind turbines, the area where each individual Bonus wind turbine was located shall be remedied. The site shall be evaluated, and any soil contamination shall be removed, structural foundations (cutting to six feet below grade) and all manmade debris shall be removed from the site and the area shall be replanted with plant material native to the Coachella Valley. Monitoring of all such activities shall be undertaken by a qualified biological

monitor, who shall file a report of findings to the City upon completion of the site remediation as outlined above.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

21. All barrel cacti located in areas anticipated to be impacted by the Project will be transplanted into portions of the property that will remain as natural open space. The transplantation sites will, as closely as possible, match the original barrel cacti locations with regards to soils, slope, and aspect.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

22. All turbine sites will be clearly marked prior to grading in order to limit damage to adjacent vegetation. Grading and vegetation removal will be limited to construction areas.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

23. Construction and maintenance traffic will utilize existing roads, and vehicle parking will be limited to existing disturbed areas.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

24. Grading onsite will be limited to construction areas only. All town sites and access road locations will be clearly marked prior to the initiation of any ground-disturbing activity. No construction activities shall occur adjacent to Super Creek. All staging areas shall occur on previously-disturbed areas.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

25. During construction and ongoing maintenance operations, wind farm personnel will be restricted to approved dirt roads only. No unauthorized grading of the site will be permitted.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

26. Applicant will be responsible for controlling and removing all trash and/or windblown debris generated on the site during construction and routine maintenance operations.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

27. All construction personnel will participate in a biological awareness training program prior to commencement of construction activities, and a report verifying same will be provided to the City Planning Department.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

Desert Tortoise

28. In order to ensure that no desert tortoises are harmed and that the tortoises can continue to utilize the Project site during the operation and maintenance phases of the Project, a desert tortoise survey will be performed within 24 hours prior to commencement of construction, and all construction activities will be monitored by a qualified biologist.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

29. No construction activities will occur within 100 feet of desert tortoise. If a desert tortoise is found onsite, construction activities should cease within 100 feet of the animal. The desert tortoise will be allowed to move offsite of its own volition.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

30. No construction activities will occur within 100 feet of desert tortoise burrows. Any burrows located during preconstruction desert tortoise surveys should be fenced with temporary fencing to provide a 100-foot buffer around the burrow. Fences should consist of a non-breachable barrier and support structures.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

31. Construction activities (including parking and laydown areas) will utilize existing access roads and previously-disturbed areas to the maximum extent feasible. Temporary exclusion fencing will be placed around staging areas.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

32. The biological monitor will supervise and approve the construction and placement of desert tortoise exclusion fence around burrows and staging areas. The biological monitor will inspect the temporary fencing at least weekly. Corrective actions will be taken promptly to maintain the integrity of the tortoise barrier. Fencing should be dismantled and removed following Project completion.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

33. The biological monitor will maintain a complete record of all desert tortoise encountered. The record shall include: location, date and time, life history, general condition, and identification numbers.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

34. Any Project-related vehicle or equipment operating on unpaved roads should not exceed a speed limit of 25 miles per hour.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

35. Contractor will be required to keep all vehicles on existing roads. No cross-country travel will be authorized except under emergency situations.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

36 Employees will inspect beneath parked vehicles and equipment prior to traveling. If an employee discovers a tortoise, the employee shall notify the biological monitor.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

37. All trash will be contained in raven- and coyote-proof containers. All trash will be transported offsite on a weekly basis.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

38. No pets or firearms will be allowed within the Project's construction boundaries, or other associated work areas, at any time.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

39. The Project will reduce water usage during construction to the extent possible, such that excess water does not act as an attractant to tortoises.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

40. All construction materials, vehicles, and equipment will be removed from the site upon completion of the Project.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

Burrowing Owl

41. Within 30 days prior to any construction activities, a focused burrowing owl survey will be conducted (using California Department of Fish and Game protocol) on the areas of the Project site anticipated to be disturbed (approximately 1.35 acres), plus a buffer area as recommended by the Project biologist. If ground-disturbing activities are delayed or suspended for more than 30 days after the survey, the site shall be resurveyed. A survey report for the Project shall be prepared and submitted to the California Department of Fish and Game for review and to the City for review and approval.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

42. Any burrowing owl burrows that cannot be avoided shall be mitigated at a 2:1 ratio with artificial burrows located in an adjacent protected area that provides a minimum 0.61 acres of protected habitat. The configuration of the protected habitat shall be approved by the California Department of Fish and Game. If required by the California Department of Fish and Game, the Project applicant shall provide funding for long-term management and monitoring of the protected lands.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

43. If burrowing owls must be moved away from the disturbance areas, passive relocation techniques shall be used and only during the non-breeding season (September 1 to January 31). If impacts to burrowing owls are approved, then a relocation program shall be developed pursuant to California Department of Fish and Game and United States Fish and Wildlife Service review and approval.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

44. Should the Project affect the foraging areas of any owls located adjacent to the Project, then the same mitigation ratio and acreage would also be recommended.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

LeConte's Thrasher and Loggerhead Shrike

45. Applicant will avoid impacts to washes and wash vegetation.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

46. All proposed development will incorporate the maximum amount of existing onsite natural open space and native vegetation into the Project and landscaping.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

47. Applicant will salvage desirable desert plant species that would be destroyed by Project implementation, for use in landscaped areas.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

48. Applicant shall provide to all employees an educational brochure that describes the sensitive nature of indigenous plants, animals, and ecosystems. A copy of said educational brochure shall be submitted to the City for approval prior to issuance of any building permits.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

49. Prior to grading, the applicant shall develop a plan to reduce the impact of night lighting on open space and/or mitigation areas adjacent to the Project site.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

Coachella Valley Round-Tailed Ground Squirrel

50. Within 30 days prior to construction, a preconstruction survey for Coachella Valley round-tailed ground squirrel will be conducted on the areas of the Project site anticipated to be disturbed (approximately 1.35 acres), plus a buffer area as recommended by the Project biologist. If ground-disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site shall be resurveyed. A survey report for the Project shall be prepared and submitted to the California Department of Fish and Game for review and to the City for review and approval.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

51. If found on the Project site, any squirrels must be moved away from the disturbance areas and a relocation program shall be developed pursuant to California Department of Fish and Game review and approval.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

52. Applicant will avoid impacts to washes and wash vegetation.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

53. All proposed development will incorporate the maximum amount of existing onsite natural open space and native vegetation into the Project and landscaping.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

54. Applicant will provide to all employees an educational brochure that describes the sensitive nature of indigenous plants, animals, and ecosystems. A copy of said educational brochure shall be submitted to the City for approval prior to issuance of any building permits.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

55. Prior to grading, the applicant must develop a plan to reduce the impact of night lighting on open space and/or mitigation areas adjacent to the Project site.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

D. Cultural Resources

To mitigate potential impacts upon cultural and paleontological resources to a level of insignificance, the following mitigation measures will be implemented.

56. An approved Tribal Cultural Resource Monitor shall be present during any survey and/or any ground-disturbing activities. Should buried cultural deposits be encountered, the Monitor may request that destructive construction halt and the Monitor shall notify a Qualified (Secretary of the Interior's Standards and Guidelines) Archaeologist to investigate and, if necessary, prepare a mitigation plan for submission to the State Historic Preservation Officer, the Agua Caliente Tribal Historic Preservation Office, and the Morongo Band of Mission Indians.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

57. If buried cultural materials are discovered during any earth-moving operation associated with the Project, all work in that area should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds. The archaeologist shall be empowered to temporarily stop or redirect grading activities to allow removal of abundant or large artifacts. The archaeologist shall also be required to curate specimens in a repository with permanent retrievable storage and submit a written report to the Planning Director for review and approval prior to occupancy of the first building on the site.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

58. Once artifact analysis is completed, a final written report detailing the results of all research procedures and interpretation of the site shall be submitted to the

Development Director for review and approval prior to occupancy of the first building on the site.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

59. A qualified paleontologist shall review the Project construction plans and shall create a plan for periodic monitoring in order to determine the presence or absence of older Pleistocene-age sediments that may contain fossils. If earth-moving activities reach potentially fossilliferous sediments and/or exceed 10 feet in depth, then continuous monitoring for paleontological resources, along with a program to mitigate impacts to those resources, will be implemented. The monitor should be prepared to quickly salvage fossils as they are unearthed to avoid construction delays.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

60. If buried paleontological materials are discovered during any earth-moving operations associated with the Project, all work in that area will be halted or diverted until a qualified paleontological monitor can evaluate the nature and significance of the finds. The paleontological monitor will be empowered to temporarily stop or redirect grading activities to allow removal of abundant or large artifacts. The paleontological monitor shall also be required to curate specimens in a repository with permanent retrievable storage and submit a written report and inventory to the Development Director for review and approval prior to occupancy of the first building on the site. The report should include a discussion of the significance of all recovered specimens. The report and inventory, when submitted to the Development Director, would signify completion of the Program to mitigate impacts to paleontologic resources.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

61. If human remains are encountered at the Project site during construction, the County Coroner will be notified immediately, and all construction activities will

be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

E. Geology and Soils

To mitigate potential impacts related to geology and soils to a level of insignificance, the following mitigation measures will be implemented.

62. As recommended in the Update to Geotechnical Engineering Report (2000) by Earth Systems Southwest, additional geologic and geotechnical studies will be performed prior to commencement of construction, which are to include additional soil borings to a depth of 40 feet or refusal along the alignment of the turbines. At least three soil borings will be performed to evaluate the soil conditions to support the wind turbines. The additional studies will also include an analysis of Project wind turbine compliance with the current Uniform Building Code.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

63. The minimum seismic design of the Project will comply with the current edition of the Uniform Building Code for non-building structures.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

64. Site development shall be in conformance with all recommendations as specified in the Update to Geotechnical Engineering Report (2000) by Earth Systems Southwest.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

F. Hazards and Hazardous Materials

To mitigate potential impacts relating to hazards and hazardous materials to a level of insignificance, the following mitigation measures will be implemented.

65. The WECS 20 Wind Park will continue to operate in compliance with permits issued by the County of Riverside Department of Environmental Health and by the California Department of Toxic Substances Control.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

66. Monitoring of all turbines for oil leakage will be performed on a monthly basis, and monthly reports will be submitted to the City Planning Department.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

67. Any oil leakage or spills will be reported immediately to the City Planning Department.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

68. All new turbines will be equipped with oil pans or other oil containment devices in order to catch any oil in the event of a leak.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

69. All new turbine nacelle covers will have fire retardant applied for containment.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

70. Turbine rotor blades will be equipped with lightning protection, which will bring to the ground, and then dissipate, the current.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

71. The two roads in between the turbines and nearby residences shall be maintained by EUI free of vegetation in order to serve as fire breaks.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

72. The Project will comply with all Fire Department requirements and conditions.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

73. The following areas will be cleared of vegetation and maintained by EUI as a fire/fuel break for as long as the turbines are in operation:

- Thirty (30) feet around the periphery of the Project. Access roads that completely surround the Project may satisfy this requirement, if approved by the fire department.
- Ten (10)-radius feet around all transformers and wind turbine towers.
- Thirty (30) feet around all buildings.
- All buildings or equipment enclosures of substantial size containing control panels, switching equipment, or transmission equipment, and no regular human occupancy, shall be equipped with an automatic fire extinguishing system. Plans for such systems must be submitted to the Fire Department for review or approval.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

74. No permit shall be issued for the construction or placing of any structure onsite for the purpose of habitation or human occupancy without first establishing fire protection requirements as a condition of such permit. This requirement includes the establishment of a minimum fire flow per Division VIII of Riverside County Ordinance 546.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

75. Service vehicles assigned to regular maintenance or construction at the Project site shall be equipped with a portable fire extinguisher of a 4A40 BC rating. All motor driven equipment shall be equipped with an approved spark arrestor.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

76. The Project will comply with current FAA standards for structures, and any required FAA permits or approvals shall be obtained prior to construction. The most recent standards are published in the November 2005 report, Obstruction Lighting Standards for Wind Turbine Farms (DOT/FAA/AR-TN05/50). Pursuant to these standards, the Project will have one red light mounted on top of the northernmost wind turbine in the Project, and one red light mounted on top of the southernmost wind turbine in the Project. These two red lights will be utilized only at night, and will be simultaneously flashing. The Project will utilize fixtures that will minimize impacts to neighboring residents, such as red light emitting diode or rapid discharge style L-864 fixtures. Since the wind turbines will be painted white, daytime lighting is not recommended.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

G. Hydrology and Water Quality

To mitigate potential impacts relating to hydrology and water quality issues to a level of insignificance, the following mitigation measures will be implemented.

77. A hydrology study, drainage plan, and erosion control plan will be prepared and submitted to the City Engineer for review and approval. The Project will adhere to all recommendations based on the findings of said study and plans, which will be completed prior to issuance of a grading permit.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

78. For sites greater than 5 acres in size, the Project applicant will obtain coverage under the State Water Resources Control Board's General National Pollutant

Discharge Elimination System (NPDES) permit for construction storm water discharges through the Regional Water Quality Control Board (RWQCB), Colorado River Basin Region prior to commencement of construction. A Notice of Intent, a Storm Water Pollution Prevention Plan (SWPPP), and a Monitoring Plan will be prepared as requirements of the NPDES permit. The SWPPP will include Best Management Practices (BMPs) in compliance with the NPDES program requirements.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

79. The Project applicant will obtain all necessary permits, agreements, and approvals from appropriate agencies (such as the RWQCB and Mission Springs Water District) related to water quality and nuisance water issues.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

H. Noise

To mitigate potential impacts resulting from noise to a level of insignificance, the following mitigation measures will be implemented.

80. In order to demonstrate that the Project will remain safely below the City CNEL criterion for WECS, acoustical analyses of the Project will be performed quarterly, commencing with construction and continuing until one year after completion, and reports of said analyses will be submitted to the City Planning Department. The applicant shall bear the cost of these analyses. Should any of these analyses indicate that noise levels are above allowed thresholds, steps shall be taken immediately to bring noise levels within acceptable thresholds.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

81. All construction activities, including the repair and maintenance of construction equipment on the Project site, shall comply with Section 130.03 of the City of Desert Hot Springs Municipal Code.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

82. Noise-generating construction equipment operated on the Project site shall be equipped with effective noise control devices (i.e. mufflers, lagging, and/or motor enclosures).

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

83. All equipment shall be properly maintained to assure that no unnecessary noise, due to worn or improperly maintained parts, will be generated.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

84. Truck deliveries and haul-offs shall only be permitted between the hours of 7:00 a.m. and 5:00 p.m. weekdays and 8:00 a.m. and 5:00 p.m. Saturdays. The haul routes shall be approved by the City Engineer.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

I. Public Services

To mitigate potential impacts upon public services to a level of insignificance, the following mitigation measures will be implemented.

85. The Project applicant will submit any and all required impact fees to the City, which may include but are not limited to the fire facilities impact fee, the police facilities impact fee, the general facilities impact fee, and the storm drain impact fee, as part of building permit fees.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

J. Transportation and Traffic

To mitigate potential impacts upon transportation and traffic to a level of insignificance, the following mitigation measures will be implemented.

86. Prior to issuance of grading permits, a traffic plan to minimize traffic flow interference from construction activities shall be submitted for review and approval to the City Engineer.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

87. Project construction, operation, and maintenance activities will adhere to the recommendations described in the Energy Unlimited, Incorporated WECS 20 Wind Park Revised Permit Application Offsite Road and Traffic Impact Plan, prepared by Krieger & Stewart.

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

K. Utilities and Service Systems

To mitigate potential impacts upon utilities and service systems to a level of insignificance, the following mitigation measures will be implemented.

88. All solid waste generated during Project construction will be disposed of in compliance with all State, Federal, and local statutes regulating solid waste (as set forth in City Ordinance No. 2005-14).

Responsible Person	Timing of Verification	Method of Verification	Sanction(s)	Verified (Date/Initials)

11. PROJECT ALTERNATIVES

A. Alternative Locations

The Project site is the existing WECS 20 Wind Park. Constructing the wind turbines on an alternative site would not avoid or substantially lessen the environmental impacts of the Project, as the proposed Project site is located within an existing wind park. The Project site has been previously disturbed, and it is currently developed and operating as an established wind park. Constructing the project on an alternative site would likely result in greater environmental impacts, such as disturbing previously-undisturbed land, and adding turbines to an area with no existing turbines. There is currently no alternative site containing existing turbines available to develop the Project, and there are no less sensitive locations in the City or vicinity. Therefore, no feasible alternative locations exist for the Project.

B. Reduced Number of Wind Turbines

The Project includes the construction, operation, and maintenance of eight 1.5 MW wind turbines and the removal of sixteen 65 kW wind turbines in order to increase the efficiency of the WECS 20 Wind Park. The number and size of the wind turbines proposed for installation were selected in order to maximize use of the wind energy resource available at the Project site. By reducing the eight-turbine configuration to a configuration with fewer turbines, Project construction would become commercially impractical. A configuration of fewer turbines would not only compromise Project financing, but would provide little or no corresponding reduction in construction, visual, noise, or other environmental impacts created by the Project. If the number of wind turbines were to be reduced, the same north-south row of wind turbines would be constructed with the spacing between turbines adjusted for fewer turbines, making little or no difference in environmental impacts as a result of such a reduction; therefore, this alternative is not feasible.

C. Reduced Size of Wind Turbines

The Project includes the construction, operation, and maintenance of eight 1.5 MW wind turbines and the removal of sixteen 65 kW wind turbines in order to increase the efficiency of the WECS 20 Wind Park. The number and size of the wind turbines proposed for installation were selected in order to maximize use of the wind energy resource available at the Project site. The 1.5 MW wind turbines are a current industry standard, and the proposed Project is within the context of a highly competitive energy market in which wind project developers competitively bid against each other in order to win the right to sell power to large-scale utility customers. Since megawatt-sized wind turbines are the only current market-competitive technology in the industry, substituting smaller, non-cost-competitive wind turbines would not only compromise Project financing, but would also fail to maximize the value of the wind energy resource available at the Project site. Reducing the size of the wind turbines would result in little or no reduction in the anticipated environmental effects of the Project; therefore, this alternative is not feasible.

D. No Project Alternative

The Project site is the existing WECS 20 Wind Park. For the No Project alternative, the 8 GE 1.5 MW wind turbines would not be constructed, the 16 existing Bonus 65 kW wind turbines would not be removed from the Project site, the single-story storage building (40 foot by 100 foot) would not be constructed, and the existing outdoor storage area would not be expanded. The existing WECS 20 Wind Park would continue to operate as it is currently, the efficiency of the wind park would not be improved, and millions of additional renewable, non-polluting kilowatt-hours from the Project site would be lost in perpetuity. The existing WECS 20 permit is scheduled to expire in 2015.

12. SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

No unavoidable significant environmental impacts are anticipated. All significant impacts anticipated by the Project will be mitigated to a level of insignificance as described in Section 10.

13. PUBLIC INVOLVEMENT AND AGENCY COORDINATION

A. Public Involvement

An Environmental Assessment (EA) was prepared for the Project in 2005 by the City (see Appendix A). The EA, along with a Notice of Preparation (NOP) of an Environmental Impact Report, was circulated by the City on October 21, 2005. The EA and NOP were submitted to the Governor's Office of Planning and Research, State Clearinghouse (SCH) and distributed directly to a number of public and private agencies, firms, and individuals, along with an announcement for a scoping meeting to be held on November 14, 2005 at 8:00 AM:

A scoping meeting was held at the City's office located at 65950 Pierson Boulevard, Desert Hot Springs CA 92240, on November 14, 2005 at 8:00 AM. Attendees present were the Project applicant, applicant's engineer, and a City representative.

Written Comments on the proposed scope of the DEIR were received from the following agencies (see Appendix I):

- California Energy Commission
- Coachella Valley Water District
- Morongo Band of Mission Indians
- South Coast Air Quality Management District
- Southern California Association of Governments
- Sunline Transit Agency

B. Agency Coordination

The City is the Lead Agency for the Project, as it is the public agency with the primary responsibility for preparing CEQA documents and for approving the Project. Since the City is responsible for the Project, it must comply with the requirements of CEQA and the CEQA Guidelines issued by the State of California. There are no other agencies from which approval is required in order to implement the Project.

The Project applicant, EUI, has applied with the City for Variance No. 05-04, Conditional Use Permit No. 09-04, Development Permit No. 24-04, and Design Review No. 22-04, of which approvals are required in order to implement the Project.

14. ORGANIZATIONS AND PERSONS CONSULTED

The following individuals were consulted during the preparation of this document:

- Hong Bin, Earth Systems Southwest
- Suzanne Cauffiel, Riverside County Department of Environmental Health
- Wayne Fowler, Riverside County Local Agency Formation Commission (LAFCO)
- Jeaneen Gardner, Riverside County Fire Department
- Larry Grafton and Patty Nevins, City of Desert Hot Springs
- Allan Henderson, Patrick & Henderson
- Mike Hogan, CRM TECH
- Larry LaPré, District Wildlife Biologist, California Desert District, Bureau of Land Management
- Wes Speake, AMEC Earth and Environmental
- Bob Toy, City of Desert Hot Springs Building Department

15. REFERENCES AND SOURCES

- Anderson, R. L. *et al*. 2000. Avian Monitoring and Risk Assessment at Tehachapi Pass and San Gorgonio Pass Wind Resource Areas, California: Phase 1 Preliminary Results. In Proceedings of National Avian – Wind Power Planning Meeting III, sponsored by the Avian Subcommittee of the National Wind Coordinating Committee. San Diego, CA.

- Avian Monitoring and Risk Assessment at the San Gorgonio Wind Resource Area, National Renewable Energy Laboratory, 2005

- California Code of Regulations, Title 14, Chapter 3; Guidelines for Implementation of the California Environmental Quality Act; http://ceres.ca.gov/topic/env_law/ceqa/guidelines/index.html

- California Energy Commission, Assessment of Avian Mortality from Collisions and Electrocutions, Staff Report, CEC-700-2005-015, June 2005.

- City of Desert Hot Springs Comprehensive General Plan, Terra Nova Planning & Research, Inc., September 5, 2000

- City of Desert Hot Springs Zoning Ordinance, Terra Nova Planning & Research, Inc. October 3, 2000

- City of Desert Hot Springs Website, www.desert-hot-springs.us

- City of Desert Hot Springs Chamber of Commerce Website, www.deserthotsprings.com

- Coachella Valley Association of Governments Website for the Coachella Valley Multiple Species Habitat Conservation Plan, www.cvmshcp.org

- County of Riverside General Plan, County of Riverside Transportation and Land Management Agency, October 2003

- Development of Obstruction Lighting Standards for Wind Turbine Farms, DOT/FAA/AR-TN05/50, James W. Patterson, Jr., Federal Aviation Administration, November 2005

- Federal Emergency Management Agency (FEMA), Flood Insurance Rate Maps, Riverside County, California (Unincorporated Areas, Community-Panel Number 060245 0900D, Revised November 20, 1996

- Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada, California Department of Conservation, Division of Mines and Geology, 1998

- McCrary, M.D., McKernan, R.L., Landry, R.E., Wagner, W.D., and Schreiber, Ralph, 1983, Nocturnal Avian Migration Assessment of the San Gorgonio Wind Resource Study Area, Spring 1982, prepared for Southern California Edison, Rosemead, CA.

- McCrary, M.D., McKernan, R.L., Wagner, W.D., and Landry, R.E., 1984, Nocturnal Avian Migration Assessment of the San Gorgonio Wind Resource Study Area, Fall 1982, prepared for Southern California Edison, Rosemead, CA.

- McCrary, M.D., McKernan, R.L., and Schreiber, Ralph, 1986, San Gorgonio Wind Resource Study Area: Impacts of Commercial Wind Turbine Generators on Birds, prepared for Southern California Edison, Rosemead, CA.

- San Gorgonio Wind Resource Study Final Environmental Impact Report for County of Riverside and U.S. Bureau of Land Management, Wagstaff and Brady and Robert Odland Associates, July 1982

- San Gorgonio Wind Resource Site Specific Projects Draft Environmental Impact Report for Riverside County, California, Wagstaff and Brady and Robert Odland Associates, November 1982

- South Coast Air Quality Management District Final 2003 Coachella Valley PM_{10} State Implementation Plan, South Coast Air Quality Management District, August 1, 2003

- South Coast Air Quality Management District Final Localized Significance Threshold Methodology, South Coast Air Quality Management District, June 2003

- USGS Topographic Map, Desert Hot Springs, California 7.5 Minute Quadrangle, 1955, Photorevised 1972, Photoinspected 1978

- USGS Topographic Map, Whitewater, California 7.5 Minute Quadrangle, 1955, Photorevised 1972

- Western Regional Climate Center Website, www.wrcc.dri.edu

.

TABLES

TABLE 1

ENERGY UNLIMITED, INCORPORATED
REVISED COMMERCIAL WECS 20 PERMIT PROJECT

ESTIMATED CONSTRUCTION AIR POLLUTANT EMISSIONS
PHASE A(1) - ROAD CONSTRUCTION

Estimated Peak Day Construction Equipment Exhaust Emissions For Construction of Revised Commercial WECS 20 Permit Project(2)							
Equipment Type and Use			**Pollutants (lbs/day)**				
Equipment Type	**Quantity**	**No. of Hours in Operation**	**CO**	**ROC**	**NO_X**	**SO_X**	**PM_{10}**
Dozer	1	8	---	---	---	2.800	1.320
Grader	1	8	1.210	0.310	5.700	0.690	0.490
Water Truck	1	8	14.400	1.520	33.360	3.600	2.080
Fuel/Mechanics Truck	1	8	14.400	1.520	33.360	3.600	2.080
Subtotals			**30.010**	**3.350**	**72.420**	**10.690**	**5.970**
Truck tractor & lowboy for grader and dozer: 50 miles per day	1	---	0.297	0.066	1.947	0.020	0.037
Workers' Vehicles: 50 miles per day	11	---	7.659	0.823	0.819	0.005	0.044
Additional PM_{10} for fugitive dust			---	---	---	---	40.000
TOTAL EMISSIONS (lbs/day)			**37.966**	**4.239**	**75.186**	**10.715**	**46.051**
Construction Threshold (lbs/day)			550	75	100	150	150
Exceed Daily Threshold? (Yes/No)			NO	NO	NO	NO	NO

(1) Refer to Energy Unlimited, Incorporated WECS 20 Wind Park Revised Permit Application Offsite Road and Traffic Impact Plan prepared by Krieger & Stewart (Appendix G) for a description of construction phases.

(2) Offroad mobile equipment emissions are based on emission factors shown in Table A9-8-A in the South Coast Air Quality Management District CEQA Air Quality Handbook. On-road vehicle emissions are based on Highest (Most Conservative) EMFAC 2002 (Version 2.2, April 23, 2003) Emission Factors for On-Road Heavy Heavy Duty Diesel Trucks and Highest (Most Conservative) EMFAC 2002 (Version 2.2, April 23, 2003) Emission Factors for On-Road Vehicles, provided by SCAQMD on their website located at http://www.aqmd.gov/ceqa/handbook/onroad/onroad.html.

TABLE 2

ENERGY UNLIMITED, INCORPORATED
REVISED COMMERCIAL WECS 20 PERMIT PROJECT

ESTIMATED CONSTRUCTION AIR POLLUTANT EMISSIONS
PHASE B[(1)] - WECS FOUNDATION EXCAVATION AND CONCRETE PLACEMENT

Estimated Peak Day Construction Equipment Exhaust Emissions For Construction of Revised Commercial WECS 20 Permit Project[(2)]							
Equipment Type and Use			**Pollutants (lbs/day)**				
Equipment Type	**Quantity**	**No. of Hours in Operation**	**CO**	**ROC**	**NO_X**	**SO_X**	**PM_{10}**
Water Truck	1	8	14.400	1.520	33.360	3.600	2.080
Fuel/Mechanics Truck	1	8	14.400	1.520	33.360	3.600	2.080
Loader	1	4	2.290	0.920	7.600	0.730	0.680
Backhoe	1	4	2.700	0.600	6.800	0.570	0.560
Concrete Truck	2	4	5.400	1.200	13.600	1.140	1.120
Subtotals			**39.190**	**5.760**	**94.720**	**9.640**	**6.520**
Truck tractor and trailer for loader and backhoe: 50 miles per day	1	---	0.297	0.066	1.947	0.020	0.037
Workers' Vehicles: 50 miles per day	11	---	7.659	0.823	0.819	0.005	0.044
Additional PM_{10} for fugitive dust			---	---	---	---	40.000
TOTAL EMISSIONS (lbs/day)			**47.146**	**6.649**	**97.486**	**9.665**	**46.601**
Construction Threshold (lbs/day)			550	75	100	150	150
Exceed Daily Threshold? (Yes/No)			NO	NO	NO	NO	NO

(1) Refer to Energy Unlimited, Incorporated WECS 20 Wind Park Revised Permit Application Offsite Road and Traffic Impact Plan prepared by Krieger & Stewart (Appendix G) for a description of construction phases.

(2) Offroad mobile equipment emissions are based on emission factors shown in Table A9-8-A in the South Coast Air Quality Management District CEQA Air Quality Handbook. On-road vehicle emissions are based on Highest (Most Conservative) EMFAC 2002 (Version 2.2, April 23, 2003) Emission Factors for On-Road Heavy Heavy Duty Diesel Trucks and Highest (Most Conservative) EMFAC 2002 (Version 2.2, April 23, 2003) Emission Factors for On-Road Vehicles, provided by SCAQMD on their website located at http://www.aqmd.gov/ceqa/handbook/ onroad/onroad.html.

TABLE 3

ENERGY UNLIMITED, INCORPORATED
REVISED COMMERCIAL WECS 20 PERMIT PROJECT

ESTIMATED CONSTRUCTION AIR POLLUTANT EMISSIONS
PHASE C(1) - WECS ERECTION

Estimated Peak Day Construction Equipment Exhaust Emissions For Construction of Revised Commercial WECS 20 Permit Project(2)							
Equipment Type and Use			**Pollutants (lbs/day)**				
Equipment Type	**Quantity**	**No. of Hours in Operation**	**CO**	**ROC**	**NO_X**	**SO_X**	**PM_{10}**
Water Truck	1	8	14.400	1.520	33.360	3.600	2.080
Fuel/Mechanics Truck	1	8	14.400	1.520	33.360	3.600	2.080
Crane	1	8	5.400	1.20	13.600	1.140	1.120
Subtotals			**34.200**	**4.240**	**80.320**	**8.340**	**5.280**
Truck tractor & trailer for hauling WECS: 50 miles per day	1	---	0.297	0.066	1.947	0.020	0.037
Workers' Vehicles: 50 miles per day	11	---	7.659	0.823	0.819	0.005	0.044
Additional PM_{10} for fugitive dust			---	---	---	---	40.000
TOTAL EMISSIONS (lbs/day)			**42.156**	**5.129**	**83.086**	**8.365**	**45.361**
Construction Threshold (lbs/day)			550	75	100	150	150
Exceed Daily Threshold? (Yes/No)			NO	NO	NO	NO	NO

(1) Refer to Energy Unlimited, Incorporated WECS 20 Wind Park Revised Permit Application Offsite Road and Traffic Impact Plan prepared by Krieger & Stewart (Appendix G) for a description of construction phases.

(2) Offroad mobile equipment emissions are based on emission factors shown in Table A9-8-A in the South Coast Air Quality Management District CEQA Air Quality Handbook. On-road vehicle emissions are based on Highest (Most Conservative) EMFAC 2002 (Version 2.2, April 23, 2003) Emission Factors for On-Road Heavy Heavy Duty Diesel Trucks and Highest (Most Conservative) EMFAC 2002 (Version 2.2, April 23, 2003) Emission Factors for On-Road Vehicles, provided by SCAQMD on their website located at http://www.aqmd.gov/ceqa/handbook/ onroad/onroad.html.

TABLE 4

ENERGY UNLIMITED, INCORPORATED
REVISED COMMERCIAL WECS 20 PERMIT PROJECT

ESTIMATED CONSTRUCTION AIR POLLUTANT EMISSIONS
PHASE D(1) - ELECTRICAL CABLE EXCAVATION AND INSTALLATION

Estimated Peak Day Construction Equipment Exhaust Emissions For Construction of Revised Commercial WECS 20 Permit Project(2)							
Equipment Type and Use			**Pollutants (lbs/day)**				
Equipment Type	**Quantity**	**No. of Hours in Operation**	**CO**	**ROC**	**NO_X**	**SO_X**	**PM_{10}**
Water Truck	1	8	14.400	1.520	33.360	3.600	2.080
Fuel/Mechanics Truck	1	8	14.400	1.520	33.360	3.600	2.080
Excavator	1	4	2.700	0.600	6.800	0.570	0.560
Backhoe	1	4	2.700	0.600	6.800	0.570	0.560
Loader	1	4	2.290	0.920	7.600	0.730	0.680
Subtotals			**36.490**	**5.160**	**87.920**	**9.070**	**5.960**
Truck tractor and trailer for hauling backhoe and loader: 50 miles per day	1	---	0.297	0.066	1.947	0.020	0.037
Truck tractor and trailer for hauling electrical cable: 50 miles per day	1	---	0.297	0.066	1.947	0.020	0.037
Workers' Vehicles: 50 miles per day	11	---	7.659	0.823	0.819	0.005	0.044
Additional PM_{10} for fugitive dust							40.000
TOTAL EMISSIONS (lbs/day)			**44.743**	**6.115**	**92.633**	**9.115**	**46.078**
Construction Threshold (lbs/day)			550	75	100	150	150

(1) Refer to Energy Unlimited, Incorporated WECS 20 Wind Park Revised Permit Application Offsite Road and Traffic Impact Plan prepared by Krieger & Stewart (Appendix G) for a description of construction phases.

(2) Offroad mobile equipment emissions are based on emission factors shown in Table A9-8-A in the South Coast Air Quality Management District CEQA Air Quality Handbook. On-road vehicle emissions are based on Highest (Most Conservative) EMFAC 2002 (Version 2.2, April 23, 2003) Emission Factors for On-Road Heavy Heavy Duty Diesel Trucks and Highest (Most Conservative) EMFAC 2002 (Version 2.2, April 23, 2003) Emission Factors for On-Road Vehicles, provided by SCAQMD on their website located at http://www.aqmd.gov/ceqa/handbook/ onroad/onroad.html.

TABLE 5

ENERGY UNLIMITED, INCORPORATED
REVISED COMMERCIAL WECS 20 PERMIT PROJECT

ESTIMATED OPERATION AND MAINTENANCE AIR POLLUTANT EMISSIONS
PHASE E[(1)] - OPERATION AND MAINTENANCE

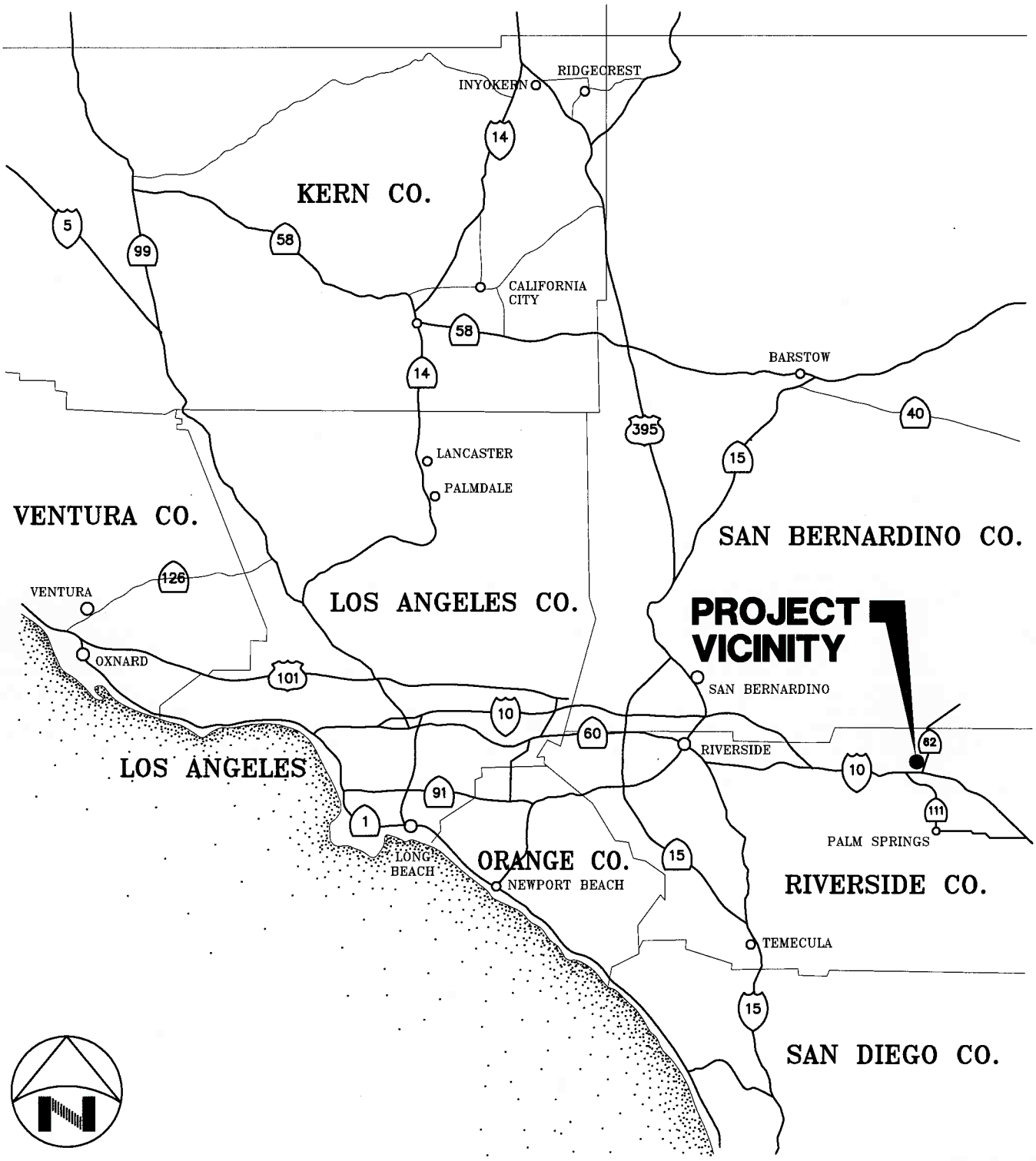
Estimated Peak Day Operation and Maintenance Equipment Exhaust Emissions For Construction of Revised Commercial WECS 20 Permit Project[(2)]

Equipment Type and Use			Pollutants (lbs/day)				
Equipment Type	**Quantity**	**No. of Hours in Operation**	**CO**	**ROC**	**NO_X**	**SO_X**	**PM_{10}**
Crane for Maintenance	1	8	5.400	1.200	13.600	1.140	1.120
Pickup Truck	1	8	14.400	1.520	33.360	3.600	2.080
Subtotals			**19.800**	**2.720**	**46.960**	**4.740**	**3.200**
Pickup Truck: 50 miles per day	1	---	0.696	0.075	0.075	0.001	0.004
Additional PM_{10} for fugitive dust							40.000
TOTAL EMISSIONS (lbs/day)			**20.496**	**2.795**	**47.035**	**4.741**	**43.204**
Operation Threshold (lbs/day)			550	75	100	150	150
Exceed Daily Threshold? (Yes/No)			NO	NO	NO	NO	NO

(1) Refer to Energy Unlimited, Incorporated WECS 20 Wind Park Revised Permit Application Offsite Road and Traffic Impact Plan prepared by Krieger & Stewart (Appendix G) for a description of construction phases.

(2) Offroad mobile equipment emissions are based on emission factors shown in Table A9-8-A in the South Coast Air Quality Management District CEQA Air Quality Handbook. On-road vehicle emissions are based on Highest (Most Conservative) EMFAC 2002 (Version 2.2, April 23, 2003) Emission Factors for On-Road Heavy Heavy Duty Diesel Trucks and Highest (Most Conservative) EMFAC 2002 (Version 2.2, April 23, 2003) Emission Factors for On-Road Vehicles, provided by SCAQMD on their website located at http://www.aqmd.gov/ceqa/handbook/ onroad/onroad.html.

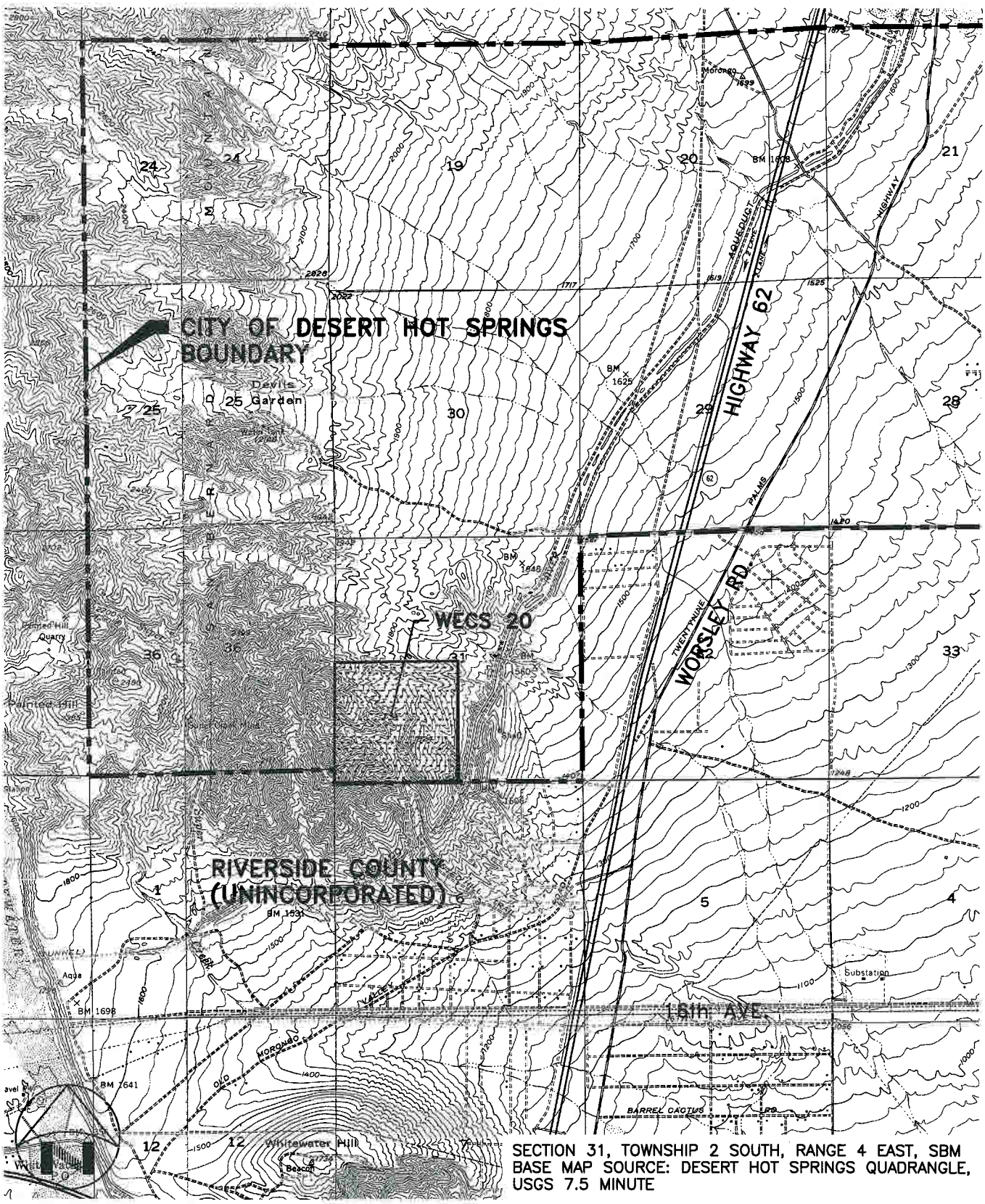
FIGURES



KRIEGER & STEWART INCORPORATED 3602 University Ave. • Riverside, CA. 92501 • 951-684-6900	ENERGY UNLIMITED, INCORPORATED REVISED WECS 20 VICINITY MAP	FIGURE 1 OF 6

SCALE: N.T.S. DATE: 7/17/06 DRAWN BY: EM CHECKED BY: VEM W.O.: 554-9

554\9\FIGURES\9F1.DWG



SECTION 31, TOWNSHIP 2 SOUTH, RANGE 4 EAST, SBM
BASE MAP SOURCE: DESERT HOT SPRINGS QUADRANGLE, USGS 7.5 MINUTE

554\9\FIGURES\9F2.DWG

KRIEGER & STEWART INCORPORATED
3602 University Ave. • Riverside, CA. 92501 • 951-684-6900

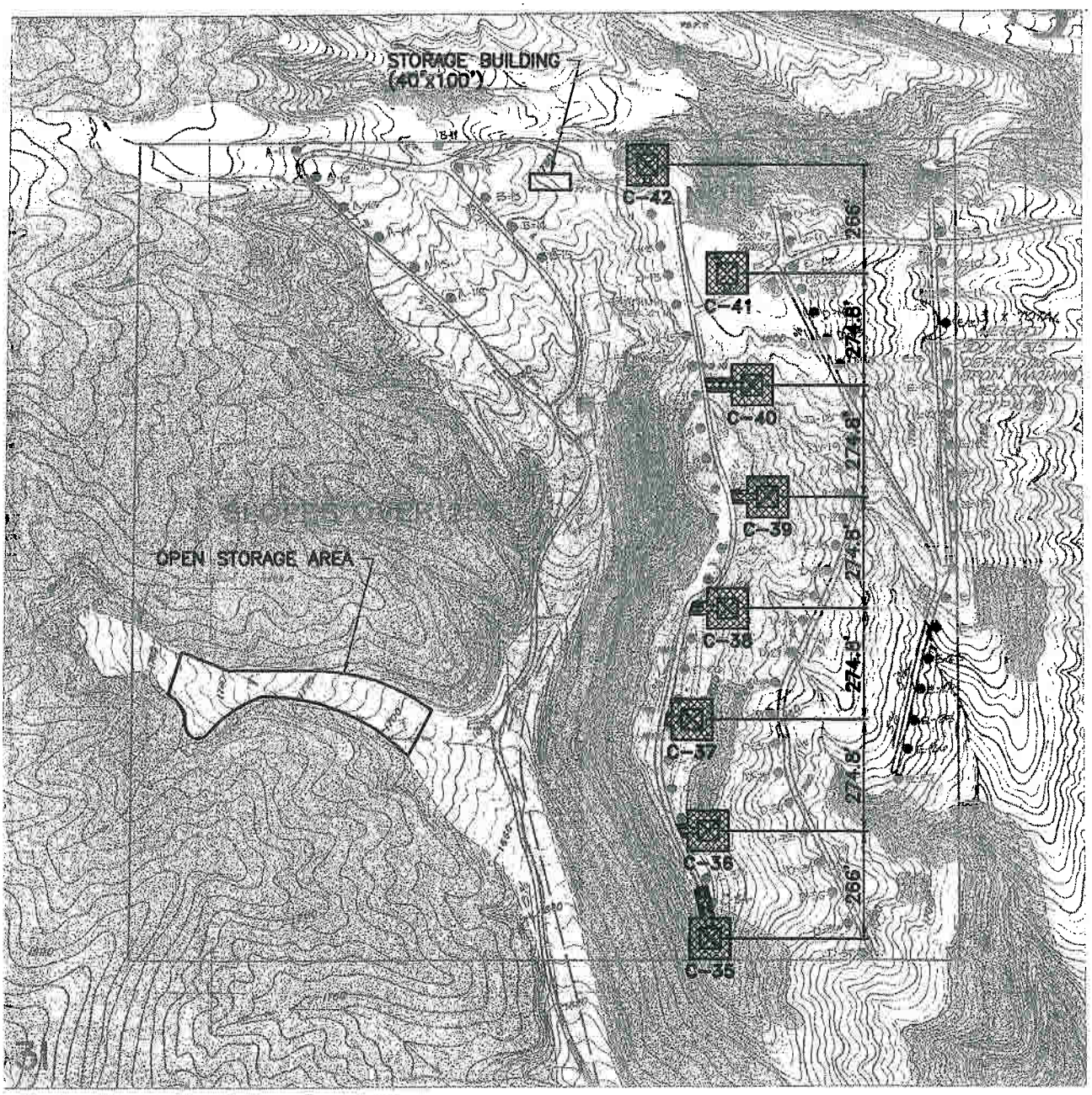
ENERGY UNLIMITED, INCORPORATED

REVISED WECS 20

LOCATION MAP

FIGURE 2 OF 6

SCALE: 1"=3000' DATE: 7/17/06 DRAWN BY: EM CHECKED BY: VEM W.O.: 554-9



KRIEGER & STEWART INCORPORATED

3602 University Ave. • Riverside, CA. 92501 • 951-684-6900

ENERGY UNLIMITED, INCORPORATED

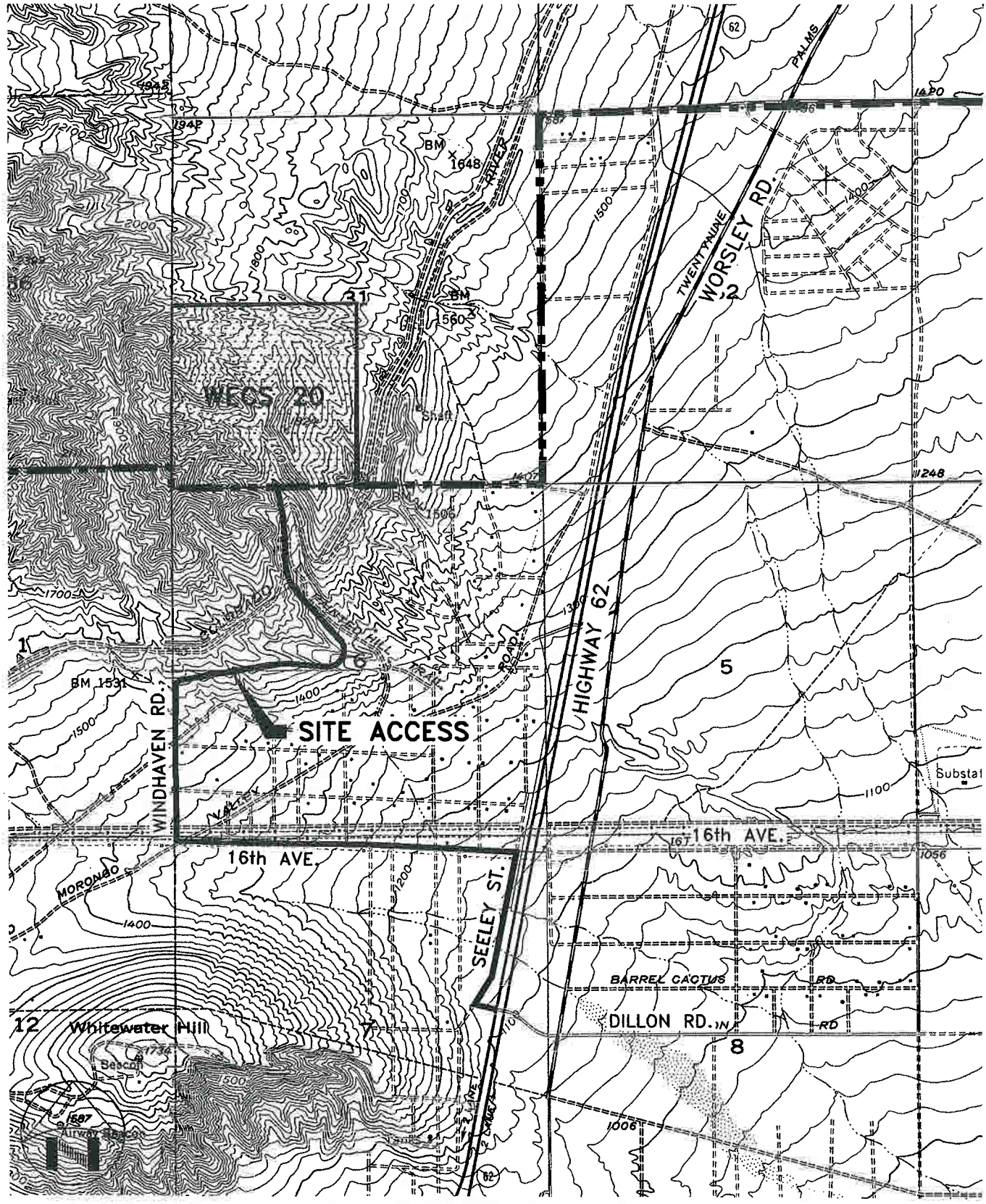
REVISED WECS 20

WIND TURBINE SITES LOCATION MAP

FIGURE 3 OF 6

SCALE: 1"=400' DATE: 7/17/06 DRAWN BY: EM CHECKED BY: VEM W.O.: 554-9

554\9\FIGURES\9F3.DWG



KRIEGER & STEWART INCORPORATED

3602 University Ave. • Riverside, CA. 92501 • 951-684-6900

ENERGY UNLIMITED, INCORPORATED

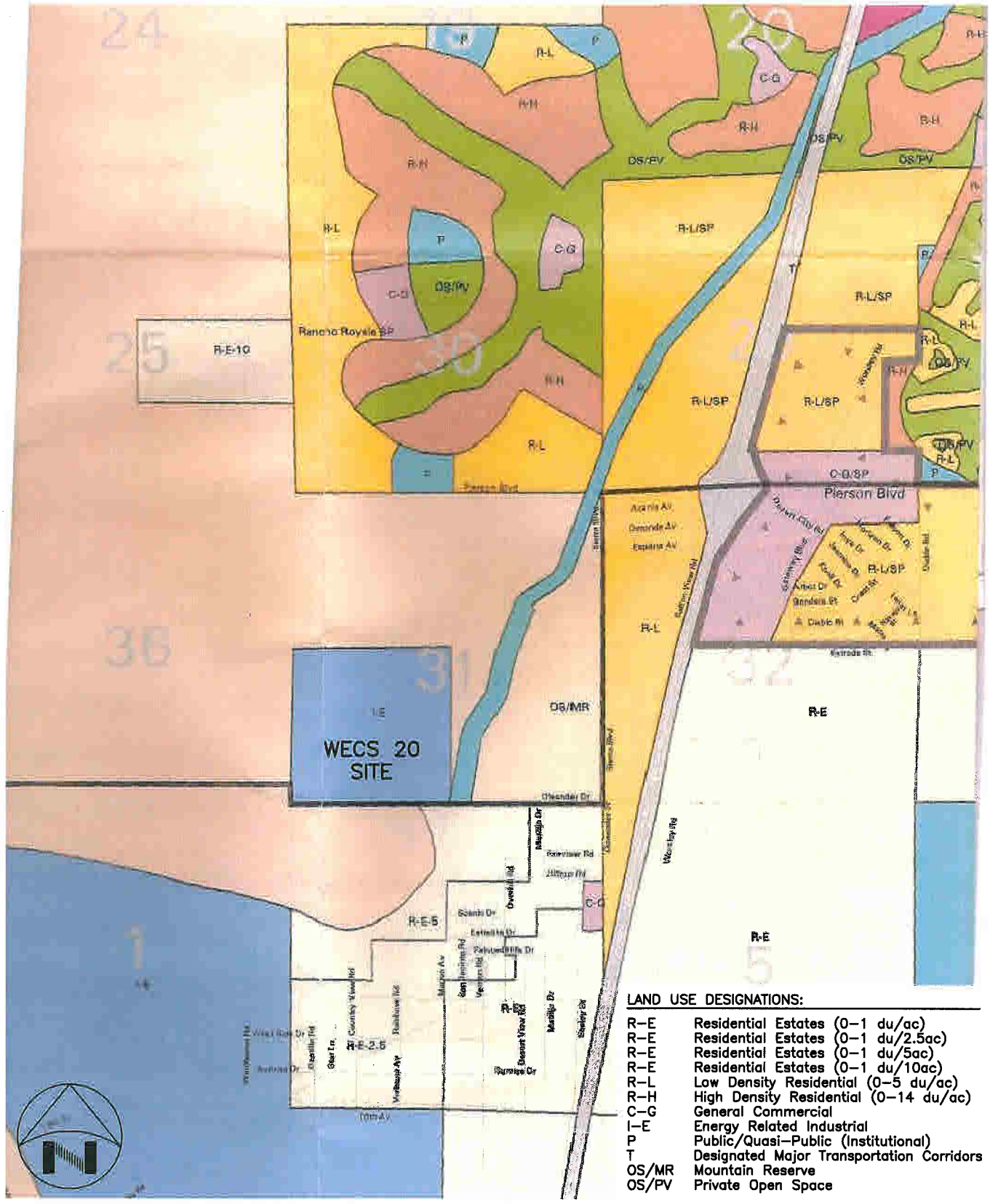
REVISED WECS 20

SITE ACCESS MAP

FIGURE 4 OF 6

SCALE: 1"=2000' DATE: 7/17/06 DRAWN BY: TMW CHECKED BY: VEM W.O.: 554-9

554\9\FIGURES\9F4.DWG



554\9\FIGURES\9F5.DWG

KRIEGER & STEWART INCORPORATED

3602 University Ave. • Riverside, CA. 92501 • 951-684-6900

ENERGY UNLIMITED, INCORPORATED

REVISED WECS 20

SURROUNDING LAND USE DESIGNATIONS

FIGURE 5 OF 6

SCALE: N.T.S. DATE: 7/17/06 DRAWN BY: TMW CHECKED BY: VEM W.O.: 554-9

554\9\FIGURES\9F6.DWG

KRIEGER & STEWART INCORPORATED
3602 University Ave. • Riverside, CA. 92501 • 951-684-6900

ENERGY UNLIMITED, INCORPORATED

REVISED WECS 20

NEAREST RESIDENCES LOCATION MAP

FIGURE 6 OF 6

SCALE: 1"=1400'± DATE: 7/17/06 DRAWN BY: TMW CHECKED BY: VEM W.O.: 554-9