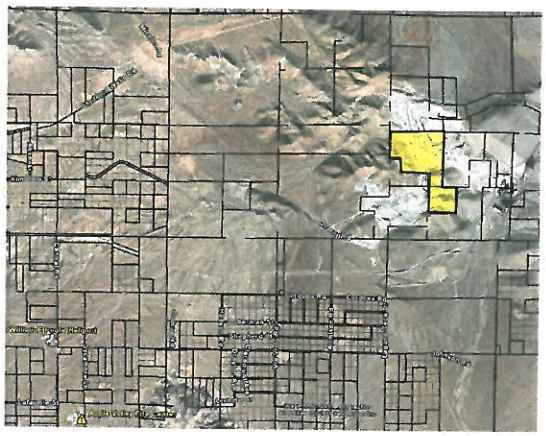
LAND USE SERVICES DEPARTMENT
PLANNING DIVISION
PLANNING COMMISSION STAFF REPORT

HEARING DATE: July 5, 2012 **AGENDA ITEM # 2**

Project Description

APN:	**0463-141-08 & -12**
Applicant:	Foundation Windpower LLC (Cemex)
Community:	Apple Valley / 1st Supervisorial District
Location:	Approximately 3.5 miles northeast of the intersection of Quarry Rd and Central Rd
Project No:	P201100466/CUP
Staff:	Tracy Creason
Rep:	John Pimentel
Proposal:	Conditional Use Permit to install two 397-foot tall wind turbines on two approximately 800-square foot portions of two parcels totaling 145 acres, with approximately 3,900 linear feet of overhead power lines to provide supplemental power to the Cemex Black Mountain Quarry Plant



2 Hearing Notices Sent On: June 8, 2012 Report Prepared By: Tracy Creason
P.C. Field Inspection Date: June 8, 2012 Field Inspected By: Commissioner Coleman

SITE INFORMATION:

Parcel Size: 145 acres
Terrain: Hilly terrain sloping from the north to the south at a grade of approximately 15 percent
Vegetation: Disturbed creosote bush community, containing some Joshua trees and Mojave yuccas

SURROUNDING LAND DESCRIPTION:

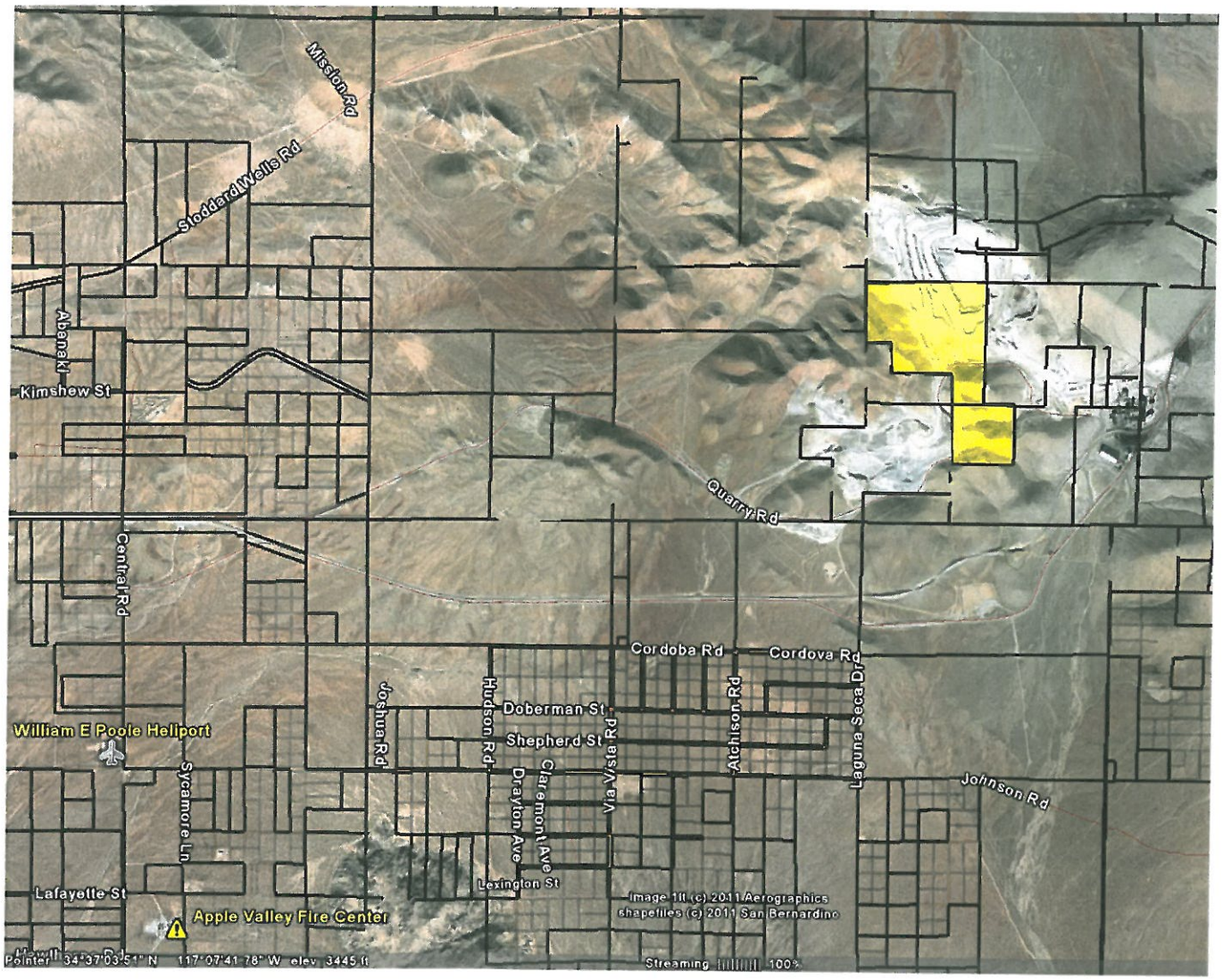
AREA	EXISTING LAND USE	LAND USE ZONING DISTRICT / OVERLAYS
Site	Cemex Black Mountain Quarry	Regional Industrial (IR)
North	Cemex Black Mountain Quarry	Regional Industrial (IR)
South	Cemex Black Mountain Quarry	Regional Industrial (IR)
East	Cemex Black Mountain Quarry	Regional Industrial (IR)
West	Cemex Black Mountain Quarry	Regional Industrial (IR)

	AGENCY	**COMMENT**
City Sphere of Influence:	None	N/A
Water Service:	N/A	Hauling, if needed
Septic Service	N/A	Not required

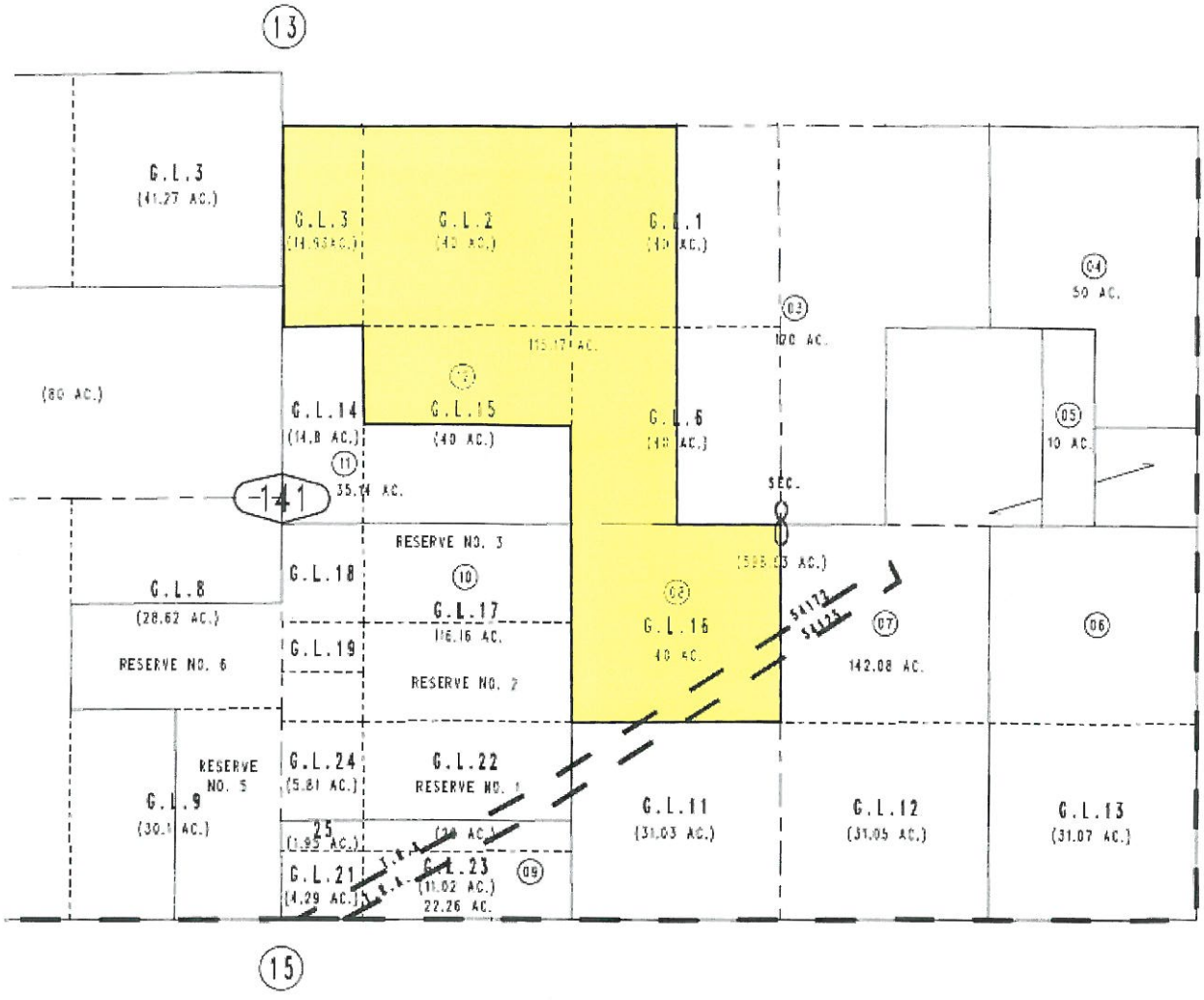
STAFF RECOMMENDATION: That the Planning Commission **APPROVE** the Conditional Use Permit.

In accordance with Section 86.08.010 of the Development Code, this action may be appealed to the Board of Supervisors.

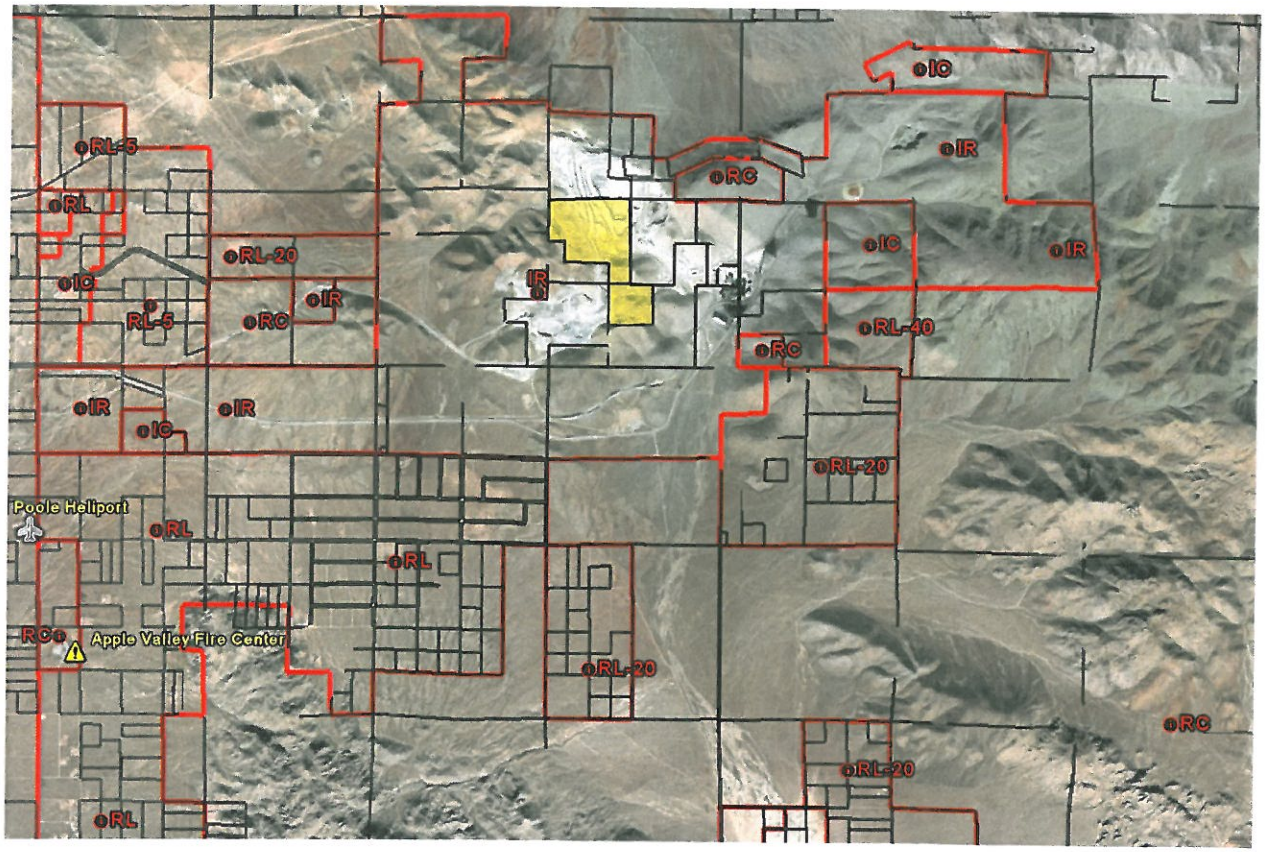
AERIAL MAP


Mission Rd
Stoddard Wells Rd
Abenaki
Kimshew St
Quarry Rd
Central Rd
Cordoba Rd
Cordova Rd
Doberman St
Shepherd St
Atchison Rd
Laguna Seca Dr
Johnson Rd
Via Vista Rd
Hudson Rd
Drayton Ave
Claremont Ave
Lexington St
Sycamore Ln
Lafayette St
William E Poole Heliport
Apple Valley Fire Center
Image 1ll (c) 2011 Aerographics
shapefiles (c) 2011 San Bernardino
Streaming 100%

ASSESSOR'S PARCEL MAP



LAND USE ZONING DISTRICT MAP



SITE PLAN

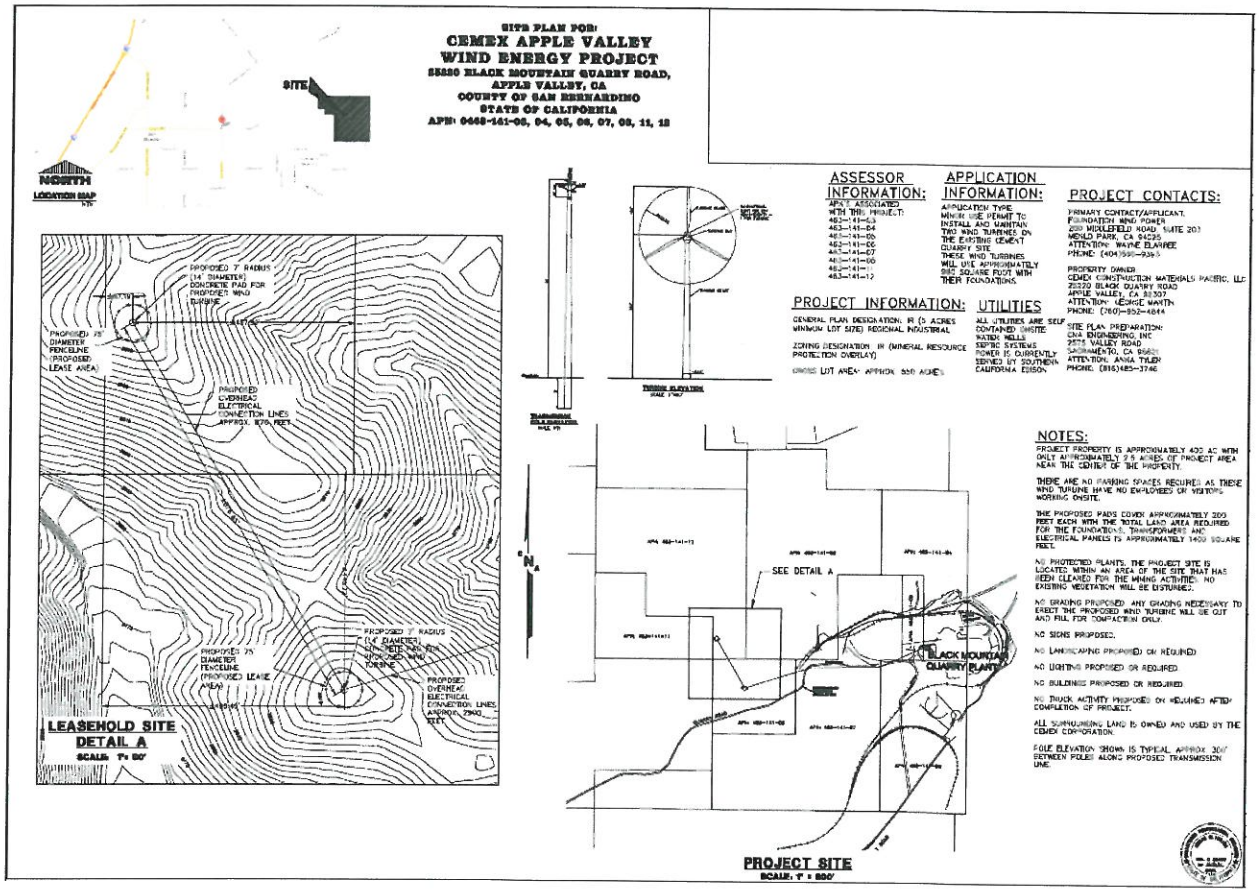
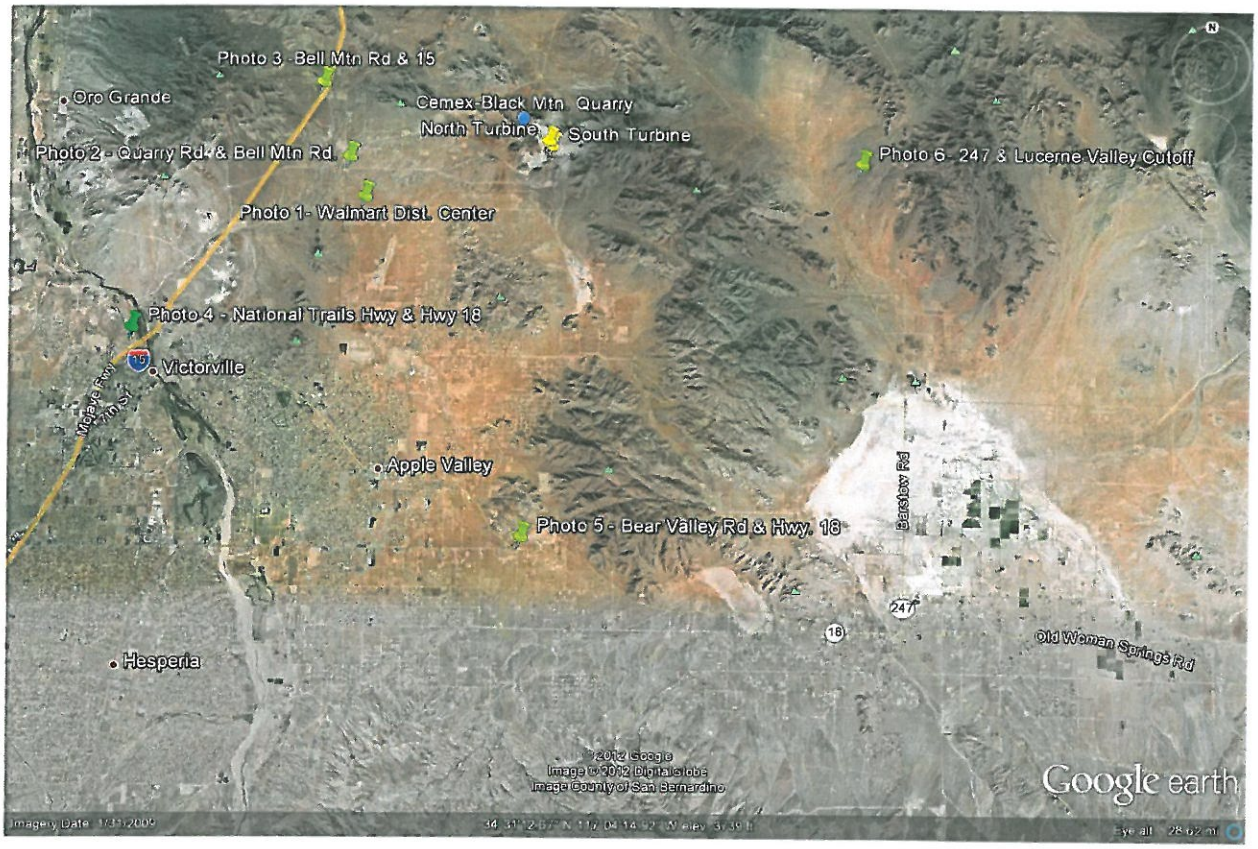

SITE PLAN FOR:
CEMEX APPLE VALLEY
WIND ENERGY PROJECT
55820 BLACK MOUNTAIN QUARRY ROAD,
APPLE VALLEY, CA
COUNTY OF SAN BERNARDINO
STATE OF CALIFORNIA
APN: 0463-141-03, 04, 05, 06, 07, 09, 11, 12
SITE
NORTH
LOCATION MAP
ASSESSOR INFORMATION:
APN'S ASSOCIATED WITH THIS PROJECT:
463-141-03
463-141-04
463-141-05
463-141-06
463-141-07
463-141-09
463-141-11
463-141-12
APPLICATION INFORMATION:
APPLICATION TYPE:
MINOR USE PERMIT TO INSTALL AND MAINTAIN TWO WIND TURBINES ON THE EXISTING CEMENT QUARRY SITE.
THESE WIND TURBINES WILL USE APPROXIMATELY 940 SQUARE FOOT WITH THEIR FOUNDATIONS.
PROJECT CONTACTS:
PRIMARY CONTACT/APPLICANT:
FOUNDATION WIND POWER
200 MIDDLEFIELD ROAD, SUITE 207
MENLO PARK, CA 94025
ATTENTION: WAYNE ELMIRE
PHONE: (404)580-9395
PROPERTY OWNER:
CEMEX CONSTRUCTION MATERIALS PACIFIC, LLC
55220 BLACK QUARRY ROAD
APPLE VALLEY, CA 92307
ATTENTION: GEORGE MARTIN
PHONE: (760)-952-4844
PROJECT INFORMATION:
GENERAL PLAN DESIGNATION: IR (5 ACRES MINIMUM LOT SIZE) REGIONAL INDUSTRIAL
ZONING DESIGNATION: IR (MINERAL RESOURCE PROTECTION OVERLAY)
GROSS LOT AREA: APPROX. 550 ACRES
UTILITIES
ALL UTILITIES ARE SELF CONTAINED ONSITE
WATER: WELLS
SEPTIC SYSTEMS
POWER IS CURRENTLY SERVED BY SOUTHERN CALIFORNIA EDISON
SITE PLAN PREPARATION:
CNA ENGINEERING, INC
2575 VALLEY ROAD
SACRAMENTO, CA 95821
ATTENTION: ANNA TYLER
PHONE: (916)485-3746
PROPOSED 7' RADIUS (14' DIAMETER) CONCRETE PAD FOR PROPOSED WIND TURBINE
PROPOSED 75' DIAMETER FENCELINE (PROPOSED) LEASE AREA)
PROPOSED OVERHEAD ELECTRICAL CONNECTION LINES APPROX. 1270 FEET
PROPOSED 7' RADIUS (14' DIAMETER) CONCRETE PAD FOR PROPOSED WIND TURBINE
PROPOSED 75' DIAMETER FENCELINE (PROPOSED) LEASE AREA)
PROPOSED OVERHEAD ELECTRICAL CONNECTION LINES APPROX. 2900 FEET
LEASEHOLD SITE
DETAIL A
SCALE: 1" = 80'
TRANSMISSION POLE ELEVATION
SCALE: 1"=40'
TURBINE ELEVATION
SCALE: 1"=40'
SEE DETAIL A
BLACK MOUNTAIN QUARRY PLANT
PROJECT SITE
SCALE: 1" = 800'
NOTES:
PROJECT PROPERTY IS APPROXIMATELY 400 AC WITH ONLY APPROXIMATELY 2.5 ACRES OF PROJECT AREA NEAR THE CENTER OF THE PROPERTY.
THERE ARE NO PARKING SPACES REQUIRED AS THERE WIND TURBINE HAVE NO EMPLOYEES OR VISITORS WORKING ONSITE.
THE PROPOSED PADS COVER APPROXIMATELY 200 FEET EACH WITH THE TOTAL LAND AREA REQUIRED FOR THE FOUNDATIONS, TRANSFORMERS AND ELECTRICAL PANELS IS APPROXIMATELY 1400 SQUARE FEET.
NO PROTECTED PLANTS. THE PROJECT SITE IS LOCATED WITHIN AN AREA OF THE SITE THAT HAS BEEN CLEARED FOR THE MINING ACTIVITIES. NO EXISTING VEGETATION WILL BE DISTURBED.
NO GRADING PROPOSED. ANY GRADING NECESSARY TO ERECT THE PROPOSED WIND TURBINE WILL BE CUT AND FILL FOR COMPACTION ONLY.
NO SIGNS PROPOSED.
NO LANDSCAPING PROPOSED OR REQUIRED.
NO LIGHTING PROPOSED OR REQUIRED.
NO BUILDINGS PROPOSED OR REQUIRED.
NO TRUCK ACTIVITY PROPOSED OR REQUIRED AFTER COMPLETION OF PROJECT.
ALL SURROUNDING LAND IS OWNED AND USED BY THE CEMEX CORPORATION.
POLE ELEVATION SHOWN IS TYPICAL. APPROX. 300' BETWEEN POLES ALONG PROPOSED TRANSMISSION LINE.

PHOTO SIMS

INDEX MAP



VIEW 1

FROM WALMART DISTRIBUTION CENTER NEAR INTERSECTION OF DALE EVANS PARKWAY AND JOHNSON ROAD

VIEW 2

FROM INTERSECTION OF QUARRY ROAD AND DALE EVANS PARKWAY

VIEW 3

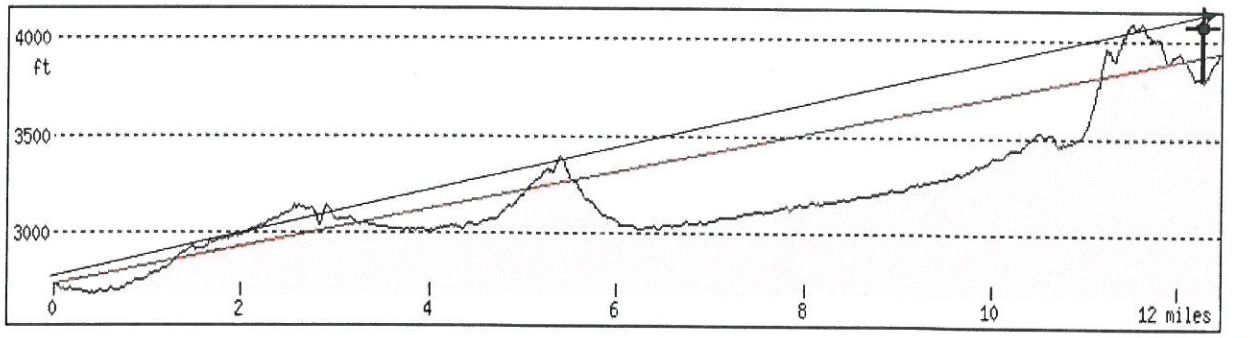
FROM DALE EVANS PARKWAY AND INTERSTATE 15

VIEW 4

FROM NATIONAL TRAILS HIGHWAY AND INTERSTATE 15

Turbine Sight Line:

Sight Line:

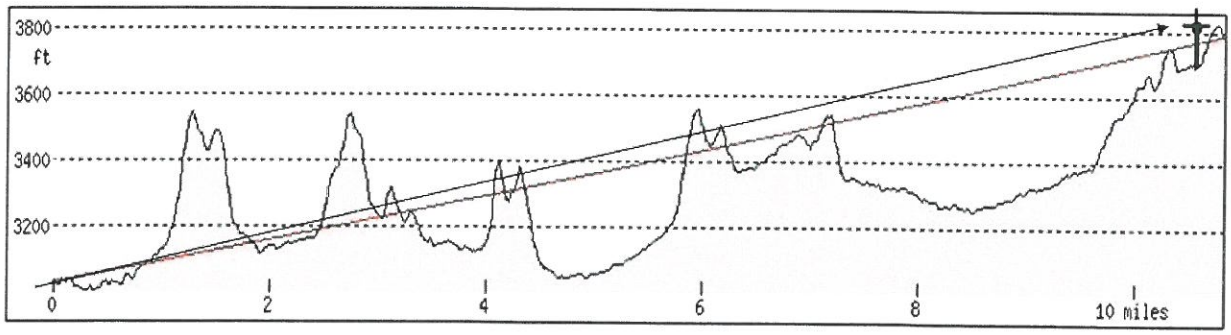


VIEW 5

FROM BEAR VALLEY ROAD AND HIGHWAY 18

Turbine Sight Line:----------

Sight Line:------

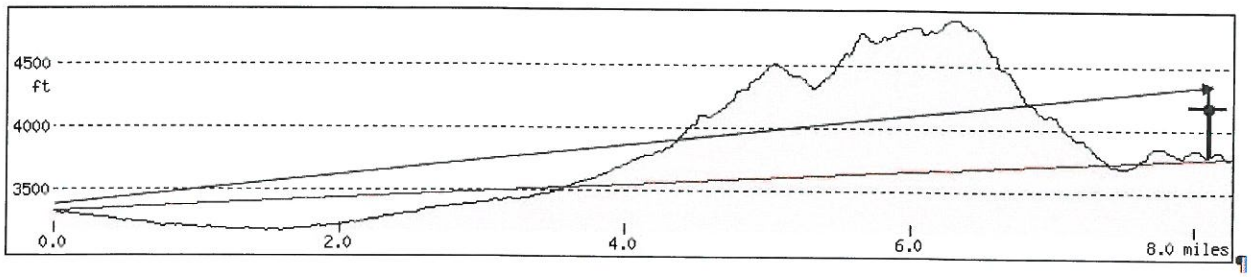


VIEW 6

FROM LUCERNE VALLEY CUTOFF AND HIGHWAY 247

Turbine Sight Line:

Sight Line =



BACKGROUND AND PROJECT DESCRIPTION

This item was scheduled for hearing by the Planning Commission on June 21, 2012, and was continued to July 5, 2012 to allow time for additional analysis of biotic resources on the project site before presenting a recommendation to the Planning Commission.

The proposed Conditional Use Permit will establish two 397-foot tall wind turbines to supplement power at the Cemex Black Mountain Quarry (BMQ) Plant (Project). The wind turbines will supply approximately 4.8 percent of the power consumed by the BMQ Plant. Each turbine will be on an approximate 800-square foot portion of two parcels totaling about 145 acres. The turbines will connect to the BMQ Plant through roughly 3,900 linear feet of overhead lines on 25-foot tall poles spaced approximately 300 feet apart, mainly along an existing unpaved access road which is entirely on Cemex property. Construction of the Project will take place in two phases. Phase 1 consists of site preparation and foundation construction over approximately 10 to 12 working days. Phase 2 consists of tower and turbine construction, electrical connection, and commissioning, which will take approximately two weeks. Upon completion, the Project improvements will be unmanned except for periodic maintenance.

Location and Access: The site is 3.5 miles east of the intersection of Quarry Road and Central Road, the boundary of the Town of Apple Valley (Town), but is not within the sphere of influence of the Town. Quarry Road provides paved access to the BMQ Plant. An existing on-site unpaved road provides access to a point near the turbine locations. The Project site is within almost 550 acres of Cemex-owned property. The nearest off-site residence is approximately three miles from the site.

Environmental setting: The Project site, located on hilly terrain, slopes from the north to the south with elevations ranging from approximately 4240 to 3675 feet above mean sea level. Benches associated with open-pit mining exist north and east of the turbine locations. Creosote bush dominates the vegetation onsite.

ANALYSIS:

Consistency with General Plan Policies: The current zoning for the site is Regional Industrial (IR). Chapter 84.29 of the Development Code entitled "Renewable Energy Generation Facilities" allows renewable energy facilities in the IR zone, subject to a Conditional Use Permit. According to Development Code Section 84.29.030, "wind generator machine … overall height shall not exceed 500 feet." This Project site meets requirements for establishment of a renewable energy facility in the IR district.

The Project is unique in that it is a utility grade system supplying supplemental power to the existing BMQ Plant. Although the Project proponent does not presently intend to attach to the electrical grid or otherwise sell electricity generated by the Project, such options are available if circumstances at the BMQ Plant change at some point in the future.

The County General Plan establishes goals for renewable energy for the County. Conservation Element Policy CO 4.12 states that the County shall promote siting of

renewable energy resources. Conservation Element Goal CO 8 aims to minimize energy consumption and promote safe energy extraction, uses, and systems to benefit local, regional, and global environmental goals. Policies under this goal include Policy CO 8.3, which states that the County will assist in efforts to develop alternative energy technologies that have minimum adverse effect on the environment, and explore and promote newer opportunities for the use of alternative energy sources. The proposed Project supports the objectives of these goals and policies.

Renewable Energy Projects: The California Renewable Portfolio Standard (RPS) legislation established in 2002 (Senate Bill 1078), and accelerated in 2006 (Senate Bill 107), requires retail sellers of electricity to obtain 20 percent of their supply of electricity from renewable energy sources by 2010. On April 12, 2011, Governor Brown signed SBX1-2 into law, which increased California's RPS target to 33 percent by December 31, 2020. The proposed Project will assist in efforts to meet the RPS standard and increased demands for electricity. Although the applicant does not plan to sell power to a utility, providing renewable energy to the BMQ Plant will reduce demand on commercial power supplies.

Greenhouse Gas [GHG]: In 2006, the State of California passed the California Global Warming Solutions Act (Assembly Bill 32) which requires the state to reduce emissions of carbon dioxide and other greenhouse gases (GHG) to 1990 emission levels (30% reduction) by 2020. Senate Bill 1368, enacted in 2006, prohibits California electric utilities from constructing power plants or entering into long-term energy purchase contracts with facilities that do not meet the GHG emissions standard. In December 2011, the San Bernardino County Board of Supervisors adopted a Greenhouse Gas Emissions Reduction Plan. The proposed Project will assist in efforts to meet the California GHG emissions legislation and the County GHG Emissions Reduction Plan by providing a renewable energy source that does not generate GHG during operation.

Aesthetics/Visual: The proposed Project has a tall, slender profile. The photographic simulations prepared for the Project show the turbines being visible from surface streets near the site and partially visible along a short stretch of Interstate 15, north and west of the site. The County Development Code regulates glare, outdoor lighting, and night sky protection. The Project will not have a negative effect on visual aesthetics, viewsheds, or night sky views. As mentioned, the location of the two turbines is interior to the boundary of the 550 acres of Cemex-owned property.

Biotic Resources: The vegetation on site is of a Mojavean Desert scrub community dominated by creosote bush scrub. The site is located within the range of the desert tortoise and burrowing owl. Additionally, the site could support Mojave monkeyflower and/or creamy blazing star, sensitive plant species. An initial biotic resources site assessment was completed in January, 2012, followed by protocol surveys for multiple species in June, 2012. No signs of any sensitive species were found on the site. Additionally, the applicant contracted with West Virginia University to use data collected for a Bureau of Land Management Golden Eagle Survey in the Project area. None of the telemetered eagles passed within 1000 meters of the proposed turbine locations. Analysis of the potential impacts of the Project on biotic resources is discussed further under the Environmental Review section.

Noise: Noise generation from construction equipment/vehicle operation will be localized, temporary, and transitory in nature; therefore, no significant impacts are anticipated. Operation of the proposed Project will not generate audible levels of noise or perceptible levels of vibration in the surrounding area. The Preliminary Acoustic Analysis prepared for the Project shows noise levels below those allowed by the County Development Code. Furthermore, the turbines are within 550 acres of Cemex property, which contains the BMQ and Plant. In comparison to the noise and vibration generated by these existing uses, the construction and operation of the turbines is minimal.

Traffic: According to the traffic analysis prepared for the Project, there will be less than ten daily automobile trips for about ten days, approximately 16 truckloads of cement per foundation, and approximately three to five other deliveries at the onset of foundation construction. During the turbine construction and commissioning phase, there will be about 12 truck trips associated with each turbine. Due to the size of the towers and blades, these trips require specially permitted wide load tractor-trailers, which must obtain separate permits from the California Department of Transportation, the California Highway Patrol, and any local jurisdiction through which they travel. Transportation of construction equipment and workers to the site will generate minimal trips during construction. During operation, the Project will be un-manned except for security and maintenance, so the Project will have a minimal impact on local roads and traffic.

Water Usage: During construction, the Project will use minimal water for dust suppression. During operation, the Project will not use any water because maintenance does not include any washing of towers or blades. The applicant intends to truck water in during construction when needed. The Project has minimal impact on water resources.

Public and Agency Comments: In response to the initial Project notice, Staff received input from the Mojave Desert Air Quality Management District (MDAQMD), the California Department of Fish and Game (CDFG), and the U.S. Fish and Wildlife Service (FWS). The MDAQMD letter stated that the District supports the development of renewable energy sources, which benefit the environment. CDFG submitted one letter in response to the original Project notice, and another containing comments on the environmental Initial Study/Mitigated Negative Declaration (IS/MND) circulated through the State Clearinghouse. The FWS correspondence stated survey guidelines relative to desert tortoise and recommended a general biological survey. (See Exhibit F.)

Staff sent a Project notice to the Town, although the site is north of and outside their sphere of influence. The Town did not comment.

ENVIRONMENTAL REVIEW:

Staff prepared an IS/MND for the Project pursuant to County Guidelines under Ordinance 3040 and Section 15063 of the California Environmental Quality Act (CEQA) Guidelines. The IS/MND was circulated through the State Clearinghouse, and a Notice of Availability/Notice of Intent to adopt the IS/MND was mailed to surrounding property owners on April 9, 2012. Staff received comments from CDFG pertaining to biotic resource issues. Additional site surveys have been completed by expert biologists and an addendum to the biotic resources report has been prepared in response to the

CDFG comments. The report addendum confirms the conclusions of the IS/MND, and augments the IS/MND with substitute mitigation and avoidance measures that have been incorporated in the conditions of approval, pursuant to Section 15074.1 of the CEQA Guidelines, including a design modification reducing the overall height of the turbines from 397 feet to 340 feet.

The Initial Study concludes that the proposed use with mitigation and avoidance measures will not have a significant effect on the environment. The Conditions of Approval include all mitigation and avoidance measures, and confirmation of completion on the Condition Compliance Release Forms will constitute the Mitigation Monitoring and Reporting Program for this Project.

CONCLUSION:

The proposed Project is consistent with the GHG emissions goals and standards of the State of California and the County's GHG Emissions Reduction Plan. The proposed Project is consistent with County goals and policies regarding renewable energy, and will provide a sustainable and cost-saving power source for an important mineral resource extraction operation. Therefore, Staff recommends approval of the Project.

RECOMENDATION:

That the Planning Commission:

1) **ADOPT** the Mitigated Negative Declaration, based on a finding that the Initial Study has been completed in compliance with CEQA, and that that it has been reviewed and considered prior to approving the Project, and that the Initial Study/Mitigated Negative Declaration reflects the independent judgment of the Planning Commission;

2) **APPROVE** a Conditional Use Permit to install two 340-foot tall wind turbines on two approximately 800-square foot portions of two parcels totaling 145 acres with approximately 3,900 linear feet of overhead power lines to provide supplemental power to the Cemex Black Mountain Quarry Plant, based on the findings attached to the staff report, and subject to the recommended conditions of approval; and

3) **FILE** a Notice of Determination.

ATTACHMENTS:

Exhibit A: Findings
Exhibit B: Conditions of Approval
Exhibit C: Initial Study
Exhibit D: Biotic Resource Reports
Exhibit E: Golden Eagle
Exhibit F: Correspondence

EXHIBIT A

FINDINGS

FINDINGS: Conditional Use Permit for Two 340-foot tall Wind Turbines

1. The site for the proposed use is adequate in terms of shape and size to accommodate the proposed use and all setbacks and other required features pertaining to the application. The two parcels totaling approximately 145-acres are more than adequate to accommodate the anticipated 1600-square foot disturbance associated with the two turbines, and the roughly 3900 linear feet of overhead lines that constitute the project. The sites are able to accommodate the proposed turbines and all ancillary facilities associated with the project with proper setbacks and access.

2. The site for the proposed use has adequate access, which means that the site design incorporates appropriate street and highway characteristics to serve the proposed use. The locations of the turbines are interior to approximately 550 acres of Cemex-owned properties. Quarry Road provides paved access to the Black Mountain Quarry (BMQ) Plant. An existing unpaved road provides access to a point near the turbine locations. The Department of Public Works (DPW) required no road improvements for this project.

3. The proposed use will not have a substantial adverse effect on abutting properties or the allowed use of the abutting properties, which means that the use as designed and conditioned will not generate excessive noise, traffic, vibration, lighting, glare, or other disturbance that would affect adjacent properties. The design of the turbines is required to operate in accordance with the performance standards of the County Development Code relating to noise, lighting, glare, and vibration. The project will generate minimal traffic and the use will not substantially interfere with the present or future ability to use solar energy systems as the slim profile turbines cast minimal shadows.

4. The proposed use and manner of development are consistent with the goals, maps, policies, and standards of the General Plan and any applicable community or specific plan, as this projects specifically supports the following General Plan Goals/Policies:

    - *Conservation Element Policy CO 4.12*, which states that the County shall promote siting or use of renewable energy sources; and
    - *Conservation Element Goal CO 8,* which aims to minimize energy consumption and promote safe energy extraction, uses and systems to benefit local regional and global environmental goals. Specifically, Policy CO 8.3, states that the County will assist in efforts to develop alternative energy technologies that have minimum adverse effect on the environment, and explore and promote newer opportunities for the use of alternative energy sources.

5. There is supporting infrastructure, existing or available, consistent with the intensity of the development to accommodate the proposed wind turbines without significantly lowering service levels. The existing paved and unpaved roadways are sufficient to

provide for the transportation needs of this project. As part of the project, the applicant proposes to install approximately 3900 linear feet of overhead transmission lines from the turbines to the BMQ Plant, to provide supporting infrastructure.

6. The conditions stated in the approval are deemed reasonable and necessary to protect the overall public health, safety and general welfare, because they require adequate onsite design features and access for emergency equipment.

7. The design of the site has considered the potential for the use of solar energy systems and passive or natural heating and cooling opportunities, as the project is a renewable energy generating facility.

8. There is no substantial evidence that the project will have a significant effect on the environment, as determined and substantiated in the Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the project. In response to comments received from California Department of Fish and Game (CDFG) pertaining to biotic resource issues, the Applicant-hired biologists completed additional site surveys. An addendum to the original Biological Assessment has been prepared in response to the CDFG comments. The report addendum confirms the conclusions of the IS/MND with substitute mitigation and avoidance measures. Pursuant to Section 15074.1 of the CEQA Guidelines, Staff incorporated these substitute mitigation and avoidance measures, including a design modification reducing the overall height of the turbines from 397 feet to 340 feet, in the conditions of approval. The Mitigated Negative Declaration reflects the County's independent judgment.

EXHIBIT B

CONDITIONS OF APPROVAL

CONDITIONS OF APPROVAL

GENERAL REQUIREMENTS

Conditions of Operation and Procedure

LAND USE SERVICES – Planning Division (760) 995-8140

1. Project Approval Description. This Conditional Use Permit (CUP) project is approved to be constructed and operated in compliance with the San Bernardino County Code (SBCC), California Building Codes (CBC), the following conditions of approval, the approved site plan, and all other required and approved reports and displays (e.g. elevations). This CUP project is approved to install two 340-foot tall wind turbines on two approximately 800-square foot portions of two parcels totaling about 145 acres with roughly 3900 linear feet of overhead lines to provide supplemental power to the Cemex Black Mountain Quarry (BMQ) Plant.

   The developer shall provide a copy of the approved conditions and the site plan to every current and future project tenant, lessee, and property owner to facilitate compliance with these conditions of approval and continuous use requirements for the Project Site with APN: 0463-141-08 & -12 and Project Number: P201100466.

2. Project Location. The project site in an unincorporated area of the County of San Bernardino (County) approximately 3.5 miles northeast of the intersection of Central Road and Quarry Road. The project site is in the First Supervisorial District.

3. Zoning Standards/IR. The project site is located in the Desert Region within the Regional Industrial (IR) Land Use Zoning District. IR Development Standards are listed in SBCC section 82.06.060. The following standards apply to the project:

   - Setback Where Adjacent Parcels Contain 40 Acres or More: A minimum wind generator setback of one and one-half times the overall machine height (measured from grade to the top of the structure, including the uppermost extension of any blades) or 500 feet, whichever is less, shall be maintained from all exterior project boundaries.

4. Facility Design. The facility design shall incorporate the following guidelines:
   - The applicant and the wind generator machines shall comply with all applicable Federal Aviation Administration (FAA) requirements and the State Aeronautics Act (Public Utilities Code Section 21001 et seq.).
   - The applicant shall light the wind generator machines in compliance with FAA regulations.
   - The applicant shall design the wind generator machines in a manner to protect special-status species and avian and bat species, including the following:
     - The design shall discourage the use of the site by raptors by including landscaping and ground conditions that are unattractive to raptors;

- The design and siting of these turbines shall avoid the placement on or immediately adjacent to the upwind side of ridge crests;
- The design may include other design features to minimize impacts to bats and birds; and
- An avian and bat management plan shall be required for all projects to address unanticipated significant adverse impacts on the population of avian and bat species or with any other migratory corridor.

5. Revisions. Any proposed change to the approved use/activity on the site (e.g. from wind facility to other uses); or any increase in the developed area of the site or any expansion or modification to the approved facilities, including changes to structures, building locations, elevations, signs, parking allocation, landscaping, lighting, allowable number of occupants, (clients and/or employees); or a proposed change in the conditions of approval, including operational restrictions from those shown either on the approved site plan and/or in the conditions of approval shall require that an additional land use application (e.g. Revision to an approved Action) be approved by the County. The developer shall prepare, submit with fees, and obtain approval of the application prior to implementing any such revision or modification. (SBCC §86.06.070)

6. Continuous Effect/Revocation. All of the conditions of approval applied to this project shall be effective continuously throughout the operative life of the project for all approved structures and approved land uses/activities. Failure of the property owner or developer to comply with any or all of the conditions at any time may result in a public hearing and possible revocation of the approved land use, provided adequate notice, time, and opportunity is provided to the property owner, developer, or other interested party to correct the non-complying situation.

7. Developer Defined. The term "developer" as used in these conditions of approval for this project and for any development of this project site, includes all of the following: the applicant, the property owner, and any lessee, tenant or sub-tenant, operator and/or any other agent or other interested party of the subject project and/or project site and/or any heir or any other successor in interest in the project site or project land use by sale or by lease of all or of a portion of the project site or project land uses and/or any other right given to conduct any land use in any or all of the project structures or any area on the project site.

8. Indemnification. In compliance with SBCC §81.01.070, the developer shall agree to defend, indemnify, and hold harmless the County or its "indemnities" (herein collectively the County's elected officials, appointed officials [including Planning Commissioners], Zoning Administrator, agents, officers, employees, volunteers, advisory agencies or committees, appeal boards or legislative body) from any claim, action, or proceeding against the County or its indemnitees to attack, set aside, void, or annul an approval of the County by an indemnitee concerning the map or permit or any other action relating to or arising out of County approval, including the acts,

errors, or omissions of any person and for any costs or expenses incurred by the indemnitees on account of any claim, except where such indemnification is prohibited by law. In the alternative, the developer may agree to relinquish such approval.

Any condition of approval imposed in compliance with the County Development Code or County General Plan shall include a requirement that the County acts reasonably to promptly notify the developer of any claim, action, or proceeding and that the County cooperates fully in the defense. The developer shall reimburse the County and its indemnitees for all expenses resulting from such actions, including any court costs and attorney's fees, which the County or its indemnitees may be required by a court to pay as a result of such action.

At its sole discretion, the County may participate at its own expense in the defense of any such action, but such participation shall not relieve the developer of their obligations under this condition to reimburse the County or its indemnitees for all such expenses.

This indemnification provision shall apply regardless of the existence or degree of fault of indemnitees. The developer's indemnification obligation applies to the indemnitee's "passive" negligence but does not apply to the indemnitee's "sole" or "active" negligence or "willful misconduct" within the meaning of Civil Code Section 2782.

9. Local Labor. *The developer shall give preference to and employ San Bernardino County residents as much as practicable during construction and operation of the facility.*

10. Development Impact Fees. Additional fees may be required prior to issuance of development permits. Fees shall be paid as specified in adopted fee ordinances.

11. Project Account. The Job Costing System (JCS) account number is P201100466. This is an actual cost project with a deposit account to which hourly charges are assessed by various county agency staff (e.g. Land Use Services, Public Works, and County Counsel). Upon notice, the developer shall deposit additional funds to maintain or return the account to a positive balance. The developer is responsible for all expenses charged to this account. Processing of the project shall cease, if it is determined that the account has a negative balance and that an additional deposit has not been made in a timely manner. A minimum balance of $1,000.00 shall be in the project account at the time of project approval and the initiation of the Condition Compliance Review. Sufficient funds shall remain in the account to cover all estimated charges that may be made during each compliance review. All fees required for processing shall be paid in full prior to final inspection, occupancy, and/or operation of each approved use in each approved structure or land use activity area. There shall be sufficient funds ($500.00 minimum) remaining in the account to

properly fund file closure and any other required post-occupancy compliance review and inspection requirements (e.g. landscape performance).

12. Expiration/CUP. This project permit approval shall expire and become void if it is not exercised within three years of the effective date of this approval, unless an extension of time is approved. The permit is deemed exercised when either:
    - The permittee has commenced actual construction or alteration under a validly issued Building Permit or
    - The permittee has substantially commenced the approved land use or activity on the project site, for those portions of the project not requiring a Building Permit. (SBCC 86.06.060)

    Occupancy of completed structures and operation of the approved exercised land use remains valid continuously for the life of the project and the approval runs with the land, unless one of the following occurs:
    - Construction permits for all or part of the project are not issued or the construction permits expire before the structure is completed and the final inspection is approved.
    - The land use is determined by the County to be abandoned or non-conforming.
    - The land use is determined to be not operating in compliance with these conditions of approval, the County Code, or other applicable laws, ordinances, or regulations. In these cases, the land use may be subject to a revocation hearing and possible termination.

    PLEASE NOTE: This will be the ONLY notice given of the expiration date. The developer is responsible for initiation of any Extension of Time application.

13. Extension of Time/CUP. Extensions of time to the expiration date (listed above or as otherwise extended) may be granted in increments each not to exceed an additional three years beyond the current expiration date. An application to request consideration of an extension of time may be filed with the appropriate fees no less than 30 days before the expiration date. Extensions of time may be granted based on a review of the application, which includes a justification of the delay in construction and a plan of action for completion. The granting of such an extension request is a discretionary action that may be subject to additional or revised conditions of approval or site plan modifications. (SBCC §86.06.060)

14. Condition Compliance. In order to obtain construction permits for grading, building, final inspection and/or tenant occupancy for each approved building, the developer shall process a Condition Compliance Release Form (CCRF) for each respective building and/or phase of the development through County Planning in accordance with the directions stated in the Approval letter. County Planning shall release their holds on each phase of development by providing to County Building and Safety the following:
    - Grading Permits – a copy of the signed CCRF for grading/land disturbance and two "red" stamped and signed approved copies of the grading plans.

- Building Permits – a copy of the signed CCRF for building permits and three "red" stamped and signed approved copies of the final approved site plan.
- Final Inspection – a copy of the signed CCRF for final inspection of each respective building, after an on-site compliance inspection by County Planning.

15. Additional Permits. The property owner, developer, and land use operator are all responsible to ascertain and comply with all laws, ordinances, regulations, and any other requirements of Federal, State, County, and Local agencies as are applicable to the development and operation of the approved land use and project site. These include:
    a) FEDERAL: U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service
    b) STATE: California Department of Fish and Game, Mojave Desert Air Quality Management District, Lahontan Regional Water Quality Control Board, California Energy Commission
    c) COUNTY: Land Use Services – Planning / Building and Safety / Code Enforcement, Environmental Health Services, and Public Works
    d) LOCAL: Apple Valley Fire District

16. Continuous Maintenance. The project property owner shall continually maintain the property so that it is visually attractive and not dangerous to the health, safety, and general welfare of both on-site users (e.g. employees) and surrounding properties. The developer shall ensure that all facets of the development are regularly inspected, maintained and that any defects are timely repaired. The elements to be maintained, include but are not limited to:
    - Annual maintenance and repair inspections shall be conducted for all structures, fencing/walls, driveways, and signs to assure proper structural, electrical, and mechanical safety.
    - Graffiti and debris shall be removed immediately with weekly maintenance.
    - Dust control measures shall be maintained on any undeveloped areas where landscaping has not been provided.
    - Erosion control measures shall be maintained to reduce water runoff, siltation, and promote slope stability.
    - Signage. All on-site signs, including posted area signs (e.g. "No Trespassing") shall be maintained in a clean readable condition at all times and all graffiti and vandalism shall be removed and repaired on a regular basis. Signs on the site shall be of the size and general location as shown on the approved site plan or subsequently a County-approved sign plan.
    - Fire Lanes. All markings required by the Fire Department, including "No Parking" designations and "Fire Lane" designations shall be clearly defined and shall be maintained in good condition at all times.

17. Performance Standards. The approved land uses shall operate in compliance with the general performance standards listed in the SBCC Chapter 83.01, regarding air quality, electrical disturbance, fire hazards (storage of flammable or other hazardous materials), heat, noise, vibration, and the disposal of liquid waste. In addition to

these, none of the following shall be perceptible without instruments at any point outside the project boundaries at adjoining property lines:

- Odors: No offensive or objectionable odor.
- Emissions: No emission of dirt, dust, fly ash and other forms of particulate matter.
- Smoke: No smoke of a greater density than that described in No. 2 on the Ringelmann Chart, as published currently by the United States Bureau of Mines, shall be emitted from any project source.
- Radiation: No dangerous amount of radioactive emissions.
- Toxic Gases: No emission of toxic, noxious or corrosive fumes of gases.
- Glare: No intense glare that is not effectively screened from view at any point outside the project boundary.

18. Lighting. Any lighting shall be maintained so that all lights are operating properly for safety purposes and shall not project onto adjoining properties or roadways. Lighting shall adhere to San Bernardino County Desert and Mountain night light regulations.

19. Clear Sight Triangle. Adequate visibility for vehicular and pedestrian traffic shall be provided at clear sight triangles at all 90-degree angle intersections of public rights-of-way and private driveways. All signs, structures, and landscaping located within any clear sight triangle shall comply with the height and location requirements specified by County Development Code (SBCC 83.02.030) or as otherwise required by County Traffic.

20. **AQ – Construction Mitigation. Developer shall submit written verification that all construction contracts and sub-contracts for the project contain provisions that require adherence to the following standards to reduce impacts to air quality: During construction, each contractor and subcontractor shall implement the following, whenever feasible:**
    - **Approved Dust Control Plan (DCP) submitted with the Grading Plans.**
    - **Provide documentation prior to beginning construction demonstrating that the project proponents will comply with all MDAQMD regulations.**
    - **Suspend use of all construction equipment operations during second stage smog alerts. For daily forecast, call (800) 367-4710 (San Bernardino and Riverside counties).**
    - **Trucks/equipment shall not be left idling on site for periods in excess of five minutes.**
    - **Provide temporary traffic control during all phases of construction.**
    - **Provide on-site food service for construction workers.**
    - **Use reformulated low-sulfur diesel fuel in equipment and use low-NOx engines, alternative fuels, and electrification. Apply 4-6 degree injection timing retard to diesel IC engines. Use catalytic converters on gasoline-powered equipment.**
    - **Minimize concurrent use of equipment through equipment phasing.**
    - **Substitute electric and gasoline-powered equipment for diesel-powered**

equipment.

- **Onsite electrical power hook-ups shall be provided for electric construction tools to eliminate the need for diesel-powered electronic generators.**
- **Maintain construction equipment engines in good order to reduce emissions. The developer shall have each contractor certify that all construction equipment is properly serviced and maintained in good operating condition.**
- **Install storm water control systems to prevent mud deposition onto paved areas.**
- **Contractors shall use low sulfur fuel for stationary construction equipment as required by AQMD Rules 431.1 and 431.2 to reduce the release of undesirable emissions.**

21. Noise. The following noise attenuation measures shall be implemented:
    - Exterior construction activities shall be limited between 7 a.m. and 7 p.m. There shall be no exterior construction activities on Sundays or National Holidays.
    - Muffling of construction equipment shall be per manufacturer's specifications.
    - All stationary construction and operations equipment shall be placed in a manner so that emitted noise is directed away from sensitive receptors nearest the project site.

LAND USE SERVICES – Code Enforcement (760) 995-8140

22. Enforcement. If any County enforcement activities are required to enforce compliance with the conditions of approval, the property owner shall be charged for such enforcement activities in accordance with the County Code Schedule of Fees.

23. Weed Abatement. In conjunction with required permits (i.e., CDFG Incidental Take Permit), the applicant shall comply with San Bernardino County Desert Area Fire Hazard Abatement regulations [SBCC§ 23.031-23.043] and periodically clear the site of all non-complying vegetation. This includes removal of all Russian thistle (tumbleweeds).

LAND USE SERVICES – Building and Safety (760) 995-8140

24. Drainage Courses. Natural drainage courses/easements shall not be occupied or obstructed unless specific approval from the Land Development Division – Drainage Section is provided.

LAND USE SERVICES – Environmental Health Services [DEHS] (909) 387-4666

25. Water. If applicant makes any changes to the proposed Project operation that would require the site to obtain water and/or sanitary facilities, the project will have to be revised and conditioned by the DEHS.

PUBLIC WORKS – Land Development – Drainage (909) 387-8145

26. Infrequent Flood Hazards. The site may be subject to infrequent flood hazards by reasons of overflow, erosion and debris deposition in the event of a major storm.

27. FEMA Flood Zone. The project is located within Flood Zone D according to FEMA Panel Number 5200 H & 5875 H dated 08/28/2008. Flood hazards are undetermined in this area, but are possible.

28. Tributary Drainage. Adequate provisions should be made to intercept and conduct the tributary off-site/on-site drainage flows around and through the site in a manner that will not adversely affect adjacent or downstream properties.

29. Natural Drainage. The natural drainage courses traversing the site shall not be occupied or obstructed.

30. Additional Drainage Requirements. In addition to drainage requirements stated herein, other on-site and/or off-site improvements may be required that cannot be determined from tentative plans at this time and would have to be reviewed after more complete improvement plans and profiles have been submitted to this office.

PRIOR TO ISSUANCE OF GRADING PERMITS OR LAND DISTURBING ACTIVITY,
The Following Shall Be Completed

LAND USE SERVICES – Building and Safety (760) 995-8140

31. Tree Removal Plan. A preconstruction inspection, tree removal plan and permit in compliance with the County's Plant Protection and Management Ordinance shall be approved prior to any land disturbance and/or removal of any trees or plants.

32. Grading Plans. If grading exceeds 50 cubic yards, applicant shall submit grading plans to Building and Safety for review and approval prior to grading and/or land disturbance.

33. NPDES Permit. A National Pollutant Discharge Elimination System (NPDES) permit – Notice of Intent (NOI) is required on all grading of one acre or more prior to issuance of a grading/construction permit. Contact the Regional Water Quality Control Board (RWQCB), Lahontan Region, for specifics.

34. RWQCB Permit. Prior to permit issuance, CONSTRUCTION projects involving one or more acres must be accompanied by a copy of the Regional Board permit letter with the WDID#. Construction activity includes clearing, grading, or excavation that results in the disturbance of at least one acre of land total.

LAND USE SERVICES – Planning (760) 995-8140

35. **BIO – Desert Tortoise (DT). The applicant will complete a pre-construction survey to ensure the project affected area does not include any DT or DT burrows. If DT are present and cannot be avoided during construction, or excluded from the project site using approved methods, the Applicant will consult a qualified biologist and USFWS to determine the appropriate action or wait until the animal moves to safety on its own.**

36. **BIO – DT. The applicant shall implement a Worker Environmental Training Program lead by a qualified biologist that emphasizes project BMP's and DT avoidance measures.**

37. **BIO – DT. The applicant shall prohibit all handling of DT by non-authorized biologists and maintain records of any and all DT encountered during project activities (information recorded will include for each DT: the locations and dates of observations; general condition and health; location moved from and location moved to; and diagnostic markings). A USFWS-approved desert tortoise handler will be available if animals need to be relocated from the construction area.**

38. **BIO – DT. The applicant shall require inspection by all workers underneath each on-site parked vehicle prior to moving it.**

39. **BIO – DT. The applicant shall implement a litter control program to reduce the attractiveness of the project site to common ravens and other desert tortoise predators. Trash will be promptly placed in containers that will be removed from the work site on a regular basis.**

40. **BIO – Sensitive Plant. In the project area where there is this ground disturbance from excavation or vegetation clearing, the applicant shall ensure that the top 6 inches of top soil will be stockpiled to be re-spread after construction. This will allow further protection of the potential existing seed bank.**

41. **BIO – Nesting Birds. If construction takes place during bird nesting season (February 1 to August 31), the applicant shall contract with a biological monitor to perform a pre-construction survey within 72 hours of any on-site activities to determine if there are any active nests within the project area. If active nests occur, the biologist will establish 200-foot buffers around the nests, within which no construction activity will occur until he confirms the young have fledged. The biologist will provide a copy of the survey to County Planning.**

42. **BIO – Burrowing Owl (BUOW). Due to the potential for BUOW to be present along the project alignment, a pre-construction survey for BUOW shall be conducted to determine presence or absence. The survey will include all suitable habitats within the project site. The surveys will be conducted from two hours before sunset to one hour after or from one hour before to two hours after sunrise. If BUOW and their burrows are present and cannot be avoided during construction, construction plans will be modified to avoid disturbance. If in the opinion of a certified biologist the construction plans cannot be modified to avoid disturbance, then CDFG will be consulted to determine the appropriate action.**

43. **BIO – BUOW. If BUOW or their burrows are present and will not be directly impacted, then a 300-foot buffer shall be established around the active burrow and no construction activities shall occur within the buffer without the approval of a qualified biologist to review and observe the construction until the young have fledged and the burrow is determined to be inactive.**

44. **BIO – BUOW. BUOW avoidance measures shall be taught to the construction team during the Worker Environmental Training, prior to construction.**

45. **BIO – Golden Eagle (GOEA) [Habitat Avoidance Through Site Selection]. In selecting the current site, the Applicant has already incorporated the most significant project modification possible, which is selecting a site which avoids the primary nesting and foraging area for the GOEA. In developing the project options, the Applicant considered and rejected sites that were recommended to the site owner by a different wind project developer which were located on the ridgelines of the Black Mountain Range. While these locations contain a significantly more robust wind resource, they are close by to the now documented locations of several GOEA. The Applicant instead selected a location much lower down the mountain on two small hills immediately adjacent to significant mechanical, human and vehicular traffic. As evidenced in the West Virginia University study this siting decision will dramatically reduce the potential for collision with GOEA.**

46. **BIO – GOEA [Habitat Avoidance Through Equipment Selection]. The applicant is proposing to use wind equipment which utilizes a monopole structure and a modern 3 blade General Electric 1.5 megawatt wind turbine. This equipment selection results in a structure which provides no perching areas for raptors or other birds which is a commonly understood problem with older and smaller wind equipment in the region which utilized lattice tower structures. Additionally, modern wind equipment with sophisticated gear ratios results in a blade motion whose maximum rotational velocity is approximately 20 RPMs. This results in a blade which is clearly visible to the human eye even when moving at its maximum speed. While studies have not been able to quantify the exact benefit to avian species, Common Sense would conclude this**

method and speed of blade motion increases the ability for birds to see and therefore to avoid the obstacle.

The Applicant originally proposed structures that stand 397 feet tall at the tip of the blade when at its highest point with a blade radius of 135 feet. While the aforementioned factors all indicate the risk of collision is statistically insignificant, the Applicant has agreed to use equipment that is lower in its height from ground level and which has shorter blade. Reducing the total height of the structure any amount will obviously reduce the potential for collision with GOEA. By using equipment whose maximum height is only 340 feet from ground level the applicant reduces the total height by approximately 15 percent and thereby further reduces the potential for collision. Likewise, by agreeing to utilize a shorter blade whose length is 126 feet the wind swept area of the facility is reduced approximately 13 percent.

47. **BIO – GOEA [Pre-Construction Survey]. Prior to construction, a qualified biologist will conduct a survey to determine the presence/absence of GOEA within 0.25 miles from the project site. In addition, the biologist will document any potential nesting or perching locations for eagles within 0.25 miles from the project site. All potential perching or nesting sites will be discussed with the USFWS to determine the appropriate steps to minimize and avoid a possible injury or mortality to GOEA.**

48. **BIO – GOEA [Other Habitat Avoidance Measures]. The Applicant will consult with a qualified biologist to incorporate design recommendations in the USFWS guidelines for both the construction and operation of the turbines. These measures may include hand cutting vegetation to ground level leaving the topsoil intact, to minimize prey population, promptly removing carrion, avoiding perch areas on the tower, and making all lighting consistent with the FAA requirements while also at minimum intensity and minimum number of flashes per minute.**

49. **BIO – GOEA [Construction and Operation Minimization Measures]. The Applicant shall:**
    - **limit proposed work to existing disturbed areas, when possible**
    - **contain and remove all trash from the site on a daily basis, during construction**
    - **implement a litter control program to reduce site attractiveness to migratory birds and eagles in which all trash is promptly removed from the site and placed in containers to be disposed at an authorized landfill during the turbine operations**

50. **BIO – GOEA [Anti-Perching Controls]. The Applicant shall construct all overhead transmission lines with raptor guards / anti-perching devices.**

51. **CUL – Archaeological Monitor. Because of the potential for buried resources most likely associated with the Silver Mountain/Oro Grande Mining District, the applicant shall contract with an archaeological monitor. The monitor shall be on-site during any ground disturbing activities. If ground disturbing activities uncover any artifacts, the archaeologist will assess the find, determine its significance, and make recommendations. The applicant must comply with such recommendations. The applicant must submit verification of compliance to County Planning and the County Museum prior to ground disturbance.**

52. California Endangered Species Act (CESA) Permit Fees. AB X1 13 and its accompanying legislation SB 16 require the CDFG to collect fees for eligible renewable energy projects for which an ITP or a consistency determination (CD) is requested pursuant to the CESA. For eligible renewable energy projects producing less than 50 megawatts, the ITP fee is $25,000. Should an ITP or CD be required, the applicant shall provide verification of compliance to the County prior to any land disturbance.

53. Noxious Weeds. Applicant shall follow recommended Best Management Practices during construction and operation to prevent the spread and propagation of noxious weeds. Provide verification of compliance to County Planning.

PUBLIC WORKS – Surveyor (909) 387-8149

54. In instances where the monuments of record cannot be located and the boundary must be determined for construction purposes, a Record of Survey shall be filed in the following instances:
    - Legal descriptions or construction staking based upon field survey of the boundary or building setbacks
    - Monuments set to mark the property lines
    - Pursuant to applicable sections of the Business and Professions Code

PUBLIC WORKS – Land Development – Drainage (909) 387-8145

55. Drainage Facility Design. A Registered Civil Engineer shall investigate and design adequate drainage facilities to intercept and conduct the off-site and on-site drainage flows around and through the site in a manner that will not adversely affect adjacent or downstream properties.

56. FEMA Flood Zone. The project site is located within Flood Zone D according to FEMA Panel Number 5200 H & 5875 H dated 8/28/2008. Flood hazards are undetermined in this area, but are possible. The requirements may change based on the recommendations of a drainage study accepted by the Land Development Division and the most current Flood Map prior to issuance of grading permit.

57. Natural Drainage. The natural drainage courses traversing the site shall not be occupied or obstructed.

58. CDFG. California Department of Fish and Game must be notified if the drainage course of any streambed on this property is to be altered or encroached upon. Provide confirmation of compliance to Public Works.

PUBLIC WORKS – Solid Waste (909) 386-8701

59. C&D Plan – Part 1. The developer shall prepare, submit, and obtain approval from Solid Waste Management Division (SWMD) of a "Construction/Demolition Debris and Solid Waste Management Recycling Plan (C&D Plan), Part I". The C&D Plan shall list the types and volumes of solid waste materials expected to be generated from grading and construction. The Plan shall include options to divert from landfill disposal materials for reuse or recycling by a minimum of 50 percent of total volume. The $165.00 minimum fee is required at the time of filing, payable to the County of San Bernardino, by personal or cashier check, or money order.

    Upon completion of construction, the developer shall complete SWMD's C&D Plan Part 2". This summary shall provide documentation of diversion of materials including but not limited to receipts or letters from diversion facilities or certification regarding reuse of materials on site.

PRIOR TO ISSUANCE OF BUILDING PERMITS,
The Following Shall Be Completed

PUBLIC WORKS – Land Development – Traffic (909) 387-8186

60. Oversize Loads. A permit is required from the Department of Public Works for any oversized loads traveling on the County Maintained Roadways.

LAND USE SERVICES – Building and Safety (760) 995-8140

61. Erosion Control Devices. Prior to issuance of building permits, erosion control devices must be installed at all perimeter openings and slopes. No sediment is to leave the job site.

62. Site Drainage/Runoff. All runoff must be held to pre-development levels [SBCC §82.13.080].

63. Building Plans. Any building, sign, or structure to be constructed or located on site will require professionally prepared plans approved by the Building and Safety Division.

64. Fence/Wall Plans. Submit plans and obtain permits for all fences greater than six feet in height and for any walls required by the Planning Division.

LAND USE SERVICES – Planning (760) 995-8140

65. Decommissioning Requirements. In accordance with SBCC 84.29.060, Decommissioning Requirements, the Developer shall submit a Closure Plan to the Planning Division for review and approval. The Decommissioning Plan shall satisfy the following requirements:
    a) Closure Plan. Following the operational life of the project, the project owner shall perform site closure activities to meet federal, state, and local requirements for the rehabilitation and re-vegetation of the project Site after decommissioning. The applicant shall prepare a Closure, Re-vegetation, and Rehabilitation Plan and submit to the Planning Division for review and approval prior to building permit issuance. Under this plan, all aboveground structures and facilities shall be removed to a depth of three feet below grade, and removed off-site for recycling or disposal. Concrete, piping, and other materials existing below three feet in depth may be left in place. Areas that had been graded shall be restored to original contours unless it can be shown that there is a community benefit for the grading to remain as altered. Succulent plant species native to the area shall be salvaged prior to construction, transplanted into windrows, and maintained for later transplanting following decommissioning. Shrubs and other plant species shall be re-vegetated by the collection of seeds and re-seeding following decommissioning.
    b) Closure Compliance. Following the operational life of the project, the developer shall perform site closure activities in accordance with the approved closure plan to meet federal, state, and local requirements for the rehabilitation and re-vegetation of the project site after decommissioning. Project decommissioning shall be performed in accordance with all other plans, permits, and mitigation measures that would assure the project conforms to applicable requirements and would avoid significant adverse impacts. These plans shall include the following as applicable:
        - Water Quality Management Plan
        - Erosion and Sediment Control Plan
        - Drainage Report
        - Notice of Intent and Stormwater Pollution Prevention Plan
        - Air Quality Permits
        - Biological Resources Report
        - Incidental Take Permit, Section 2081 of the Fish and Game Code
        - Cultural Records Report
    c) Abandoned Site. If the wind turbines are not operational for twelve consecutive months, the County shall deem them abandoned. The applicant shall remove the wind turbines within 60 days from the date a written notice of the declaration of abandonment by the County is sent to the developer. Within this 60-day period, the developer may provide the Land Use Services Director with a written request to modify this condition at a public hearing before the Planning Commission requesting an extension of time for an additional twelve months. In no case shall

the Planning Commission authorize an extension of time beyond two years from the date the wind turbines were deemed abandoned without requiring financial assurances to guarantee the removal of the turbines, and that portion of the support structure lying above the natural grade level, in the form of a corporate surety bond, irrevocable letter of credit, or an irrevocable certificate of deposit wherein the County is named as the sole beneficiary. In no case shall a wind turbine, which has been deemed abandoned, be permitted to remain in place for more than 48 months from the date the turbines were first deemed abandoned.

d) Environmental Site Assessment. The County may require a Phase 1 Environmental Site Assessment be performed at the end of decommissioning to verify site conditions.

PRIOR TO FINAL INSPECTION OR OCCUPANCY,
The Following Shall Be Completed

COUNTY FIRE DEPARTMENT – Hazardous Materials Division (909) 386-8401

66. Emergency/Contingency Plan. Prior to occupancy, the operator must update the Business Emergency/Contingency Plan. For information, contact the Office of the Fire Marshal, Hazardous Materials Division at (909) 386-8401.

PUBLIC WORKS – Solid Waste (909) 386-8701

67. C&D Plan – Part 2. The developer shall complete SWMD's C&D Plan Part 2". This summary shall provide documentation of diversion of materials including but not limited to receipts or letters from diversion facilities or certification reuse of materials on site. The C&D Plan – Part 2 shall provide evidence to the satisfaction of County Solid Waste that demonstrates that the project has diverted from landfill disposal materials for reuse or recycling by a minimum of 50 percent of total volume of all construction waste.

    This summary shall provide documentation of diversion of materials including but not limited to receipts or letters documenting material types and weights from diversion facilities or certification reuse of materials on site.

LAND USE SERVICES – Building and Safety (760) 995-8140

68. Final Occupancy. Prior to occupancy, all Planning Division requirements and sign-offs shall be completed.

LAND USE SERVICES – Planning (760) 995-8140

69. **BIO – GOEA [Post Construction Monitoring Program]. The applicant shall prepare and implement a post-construction bird mortality monitoring program whose focus is to determine whether estimated perceived risk associated with**

the project was accurate. The monitoring program shall be conducted on a monthly basis by a qualified biologist for two years during breeding seasons. A qualified biologist shall also train onsite personnel to conduct mortality monitoring with specific instructions and procedures to notify a certified biologist if they observe any bird carcasses within a 300-foot radius of the project site.

If actual operations indicate the probability of harming or killing an eagle is significant as demonstrated by actual GOEA kills, then the Applicant shall develop additional mitigation and avoidance measures to decrease the risk of taking a Golden Eagle, and may be required by USFWS to apply for a take permit. The Applicant has agreed to pursue a take permit if actual experience, or a more comprehensive analysis of the data available through the WVU study, indicates a significant risk exists.

70. CCRF/Occupancy. Prior to occupancy/use, all Condition Compliance Release Forms (CCRF) shall be completed to the satisfaction of County Planning with appropriate authorizing signatures from each affected agency.

71. Install On-site Improvements. All required on-site improvements shall be installed.

72. Fees Paid. Prior to final inspection by Building and Safety Division and/or issuance of a Certificate of Conditional Use by the Planning Division, applicant shall pay in full all fees required under actual cost job number P201100466.

END OF CONDITIONS

EXHIBIT C

INITIAL STUDY

SAN BERNARDINO COUNTY
INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

This form and the descriptive information, in the application package constitute the contents of Initial Study pursuant to County Guidelines (Ord.3040) and State CEQA Guidelines (Section 15063).

PROJECT LABEL:

APN:	**0463-141-08 & -12**
APPLICANT:	Foundation Windpower, LLC
COMMUNITY:	Apple Valley
LOCATION:	Approximately 3.5 miles northeast of the intersection of Central Rd & Quarry Rd
PROJECT NO:	P201100466
STAFF:	Tracy Creason
REP('S):	SAA
PROPOSAL:	Conditional Use Permit to install two 397 ft tall wind turbines on an approximately 1600-square foot portion of two parcels totaling about 145 acres with roughly 3900 linear feet of overhead lines to provide supplemental power to the CEMEX Black Mountain Quarry Plant

USGS Quad:	Stoddard Well; Fairview Valley
T, R, Section:	**T6N R2W Sec. 8 NW¼**
Thomas Bros.:	4118; F-H 5 & 6
Planning Area:	Desert Region
Zoning:	IR
Overlays:	Biological Resources; Cultural Resources

PROJECT CONTACT INFORMATION:

Lead agency: County of San Bernardino
Land Use Services - Planning
15900 Smoke Tree St.
Hesperia, CA 92345

Contact person: *TRACY CREASON*, Senior Planner
Phone No: (760) 995-8140 ***Fax No:*** (760) 995-8167
E-mail: tcreason@lusd.sbcounty.gov

Project Sponsor: John Pimentel – Foundation Windpower, LLC
200 Middlefield Rd., Suite 203
Menlo Park, CA 94025
(650) 269-8933
John.Pimentel@Foundationwindpower.com

PROJECT DESCRIPTION:

Foundation Windpower (Applicant) proposes to install two 397-foot tall wind turbines to supplement power at the CEMEX Black Mountain Quarry Plant. The Applicant would install the turbines on an approximately 1600-square foot portion of two parcels totaling about 145 acres. The system would include roughly 3900 linear feet of overhead lines from the turbines to the plant, proposed on 25-foot tall poles placed approximately every 300 feet mainly along an existing unpaved access road on CEMEX property. The project site is north and east of the Town of Apple Valley approximately 3.5 miles northeast of the intersection of Central Road and Quarry Road in unincorporated San Bernardino County. The project is in the First Supervisorial District. The Land Use Zoning designation for the site is IR (Regional Industrial). No hazard overlays regulate the site.

ENVIRONMENTAL/EXISTING SITE CONDITIONS:

The project site is within the Mojave Desert and is on hilly terrain, with elevations on-site ranging from 3,775 to 3,925 feet above mean sea level. The site of the proposed project lies within the Mojave Desert region, characterized by mountain ranges, broad alluvial fans, terraces, and playas.

The two parcels upon which the wind turbines are proposed are part of the almost 550 acres of property owned and used by CEMEX. According to the *Biological Assessment* prepared by BioResource Consultants, Inc., "the project site supports suitable habitat for the burrowing owl, desert tortoise, Mojave monkeyflower, and creamy blazing star. In addition, the site supports suitable habitat that provides potential roosting and nesting sites for birds protected by the CDFG [California Department of Fish and Game] and the MBTA [Migratory Bird Treaty Act]." The Assessment went on to conclude that with implementation of project avoidance and minimization measures, potential direct and indirect impacts would be less than significant.

AREA	EXISTING LAND USE	ZONING/OVERLAY DISTRICTS
Site	CEMEX Black Mountain Quarry	IR – Regional Industrial
North	CEMEX Black Mountain Quarry	IR – Regional Industrial
South	CEMEX Black Mountain Quarry	IR – Regional Industrial
East	CEMEX Black Mountain Quarry	IR – Regional Industrial
West	CEMEX Black Mountain Quarry	IR – Regional Industrial

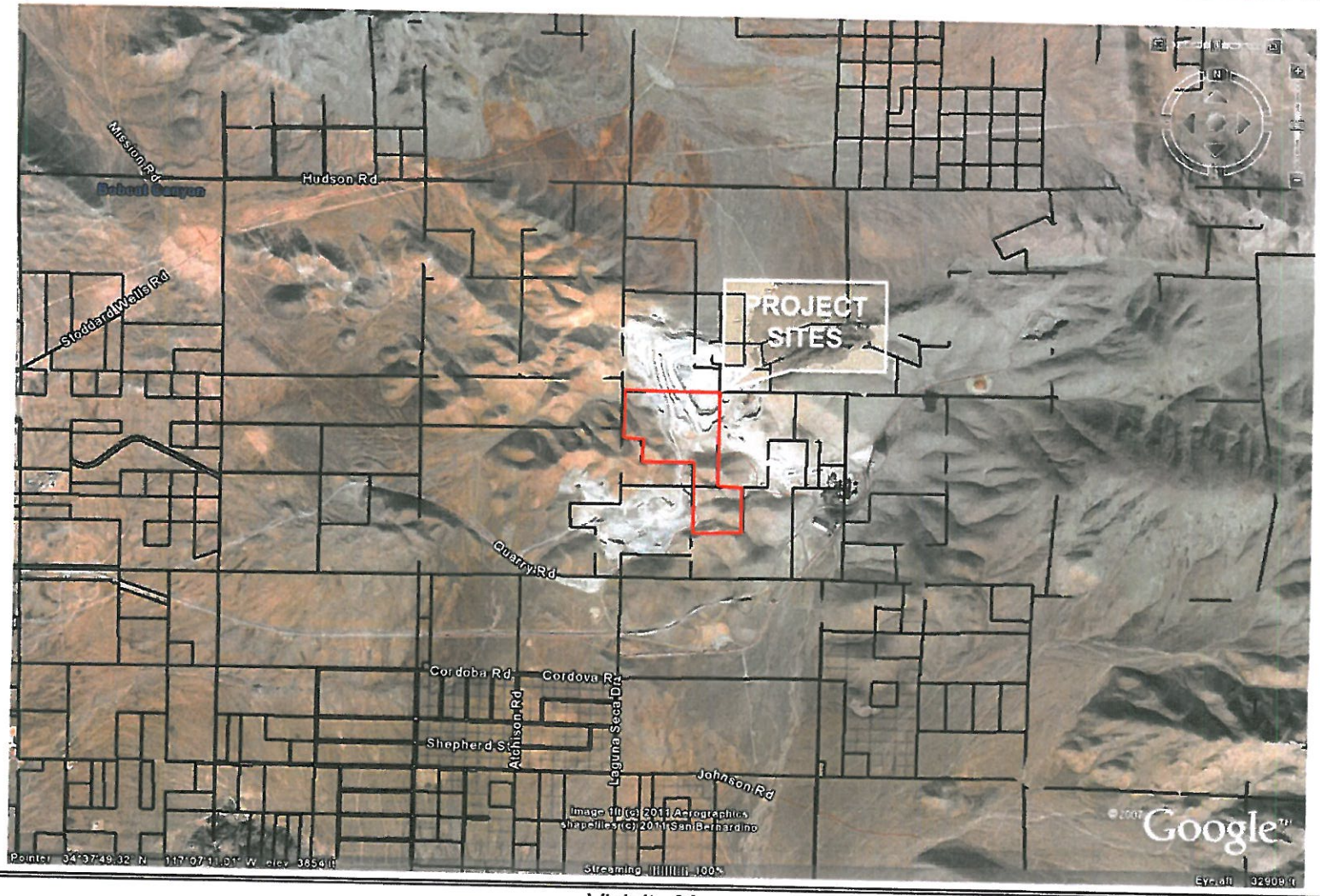
PROJECT SUMMARY:

The proposed project is for the development of two 397-foot tall wind turbines to supplement power to the CEMEX Black Mountain Quarry Plant. Each turbine will include a pier-type foundation, approximately 15-feet in diameter and 30-feet deep. Foundation Windpower estimates that each footprint will total approximately 800-square feet. Approximately 3900 linear feet of overhead wire will connect the wind turbine transformers to the existing substation at the CEMEX Plant. Twenty-five foot tall poles, spaced approximately every 300 feet, will carry these lines to the substation. The majority of the overhead lines will follow an existing access road. The project will require new access roads to the bases of the wind turbines from those existing.

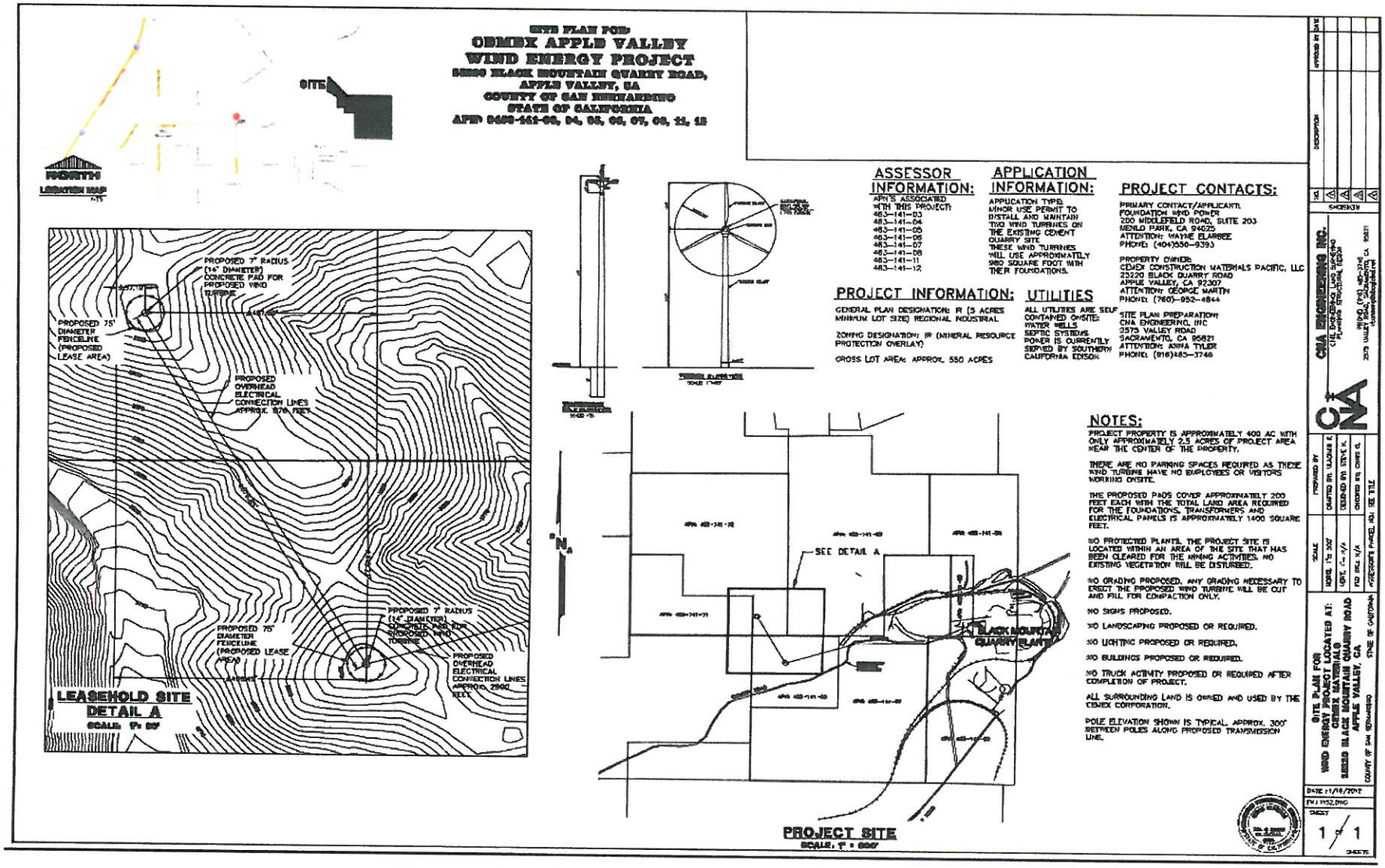
Construction of the project will take place in two phases: 1) site preparation and foundation construction, and 2) tower and turbine erection, electrical connection and commissioning. Phase 1 will occur over approximately ten to 12 working days. Phase 2 will begin between two and six months after the completion of Phase 1, depending upon the numerous factors. Phase 2 will occur over another two-week construction period. After construction, routine maintenance will occur periodically.

Other public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement.):

Federal: U.S. Army Corps of Engineers, U.S. Fish and Wildlife
State of California: Fish and Game, Caltrans, Regional Water Quality Control Board (Lahontan Region), Mojave Desert Air Quality Management District
County of San Bernardino: Land Use Services – Code Enforcement, Building and Safety; Public Health – Environmental Health Services; Public Works – Land Development, Solid Waste, Traffic; and
Local: Apple Valley Fire



Vicinity Map
Google Maps 2007


SITE PLAN FOR:
CEMEX APPLE VALLEY
WIND ENERGY PROJECT
22220 BLACK MOUNTAIN QUARRY ROAD,
APPLE VALLEY, CA
COUNTY OF SAN BERNARDINO
STATE OF CALIFORNIA
APN: 0463-141-08, 04, 05, 06, 07, 08, 11, 12
SITE
NORTH
LOCATION MAP
ASSESSOR INFORMATION:
APN'S ASSOCIATED WITH THIS PROJECT:
463-141-03
463-141-04
463-141-05
463-141-06
463-141-07
463-141-08
463-141-11
463-141-12
APPLICATION INFORMATION:
APPLICATION TYPE:
MINOR USE PERMIT TO INSTALL AND MAINTAIN TWO WIND TURBINES ON THE EXISTING CEMENT QUARRY SITE.
THESE WIND TURBINES WILL USE APPROXIMATELY 980 SQUARE FOOT WITH THEIR FOUNDATIONS.
PROJECT CONTACTS:
PRIMARY CONTACT/APPLICANT:
FOUNDATION WIND POWER
200 MIDDLEFIELD ROAD, SUITE 203
MENLO PARK, CA 94025
ATTENTION: WAYNE ELARBEE
PHONE: (404)556-9393
PROPERTY OWNER:
CEMEX CONSTRUCTION MATERIALS PACIFIC, LLC
22220 BLACK QUARRY ROAD
APPLE VALLEY, CA 92307
ATTENTION: GEORGE MARTIN
PHONE: (760)-952-4844
PROJECT INFORMATION:
GENERAL PLAN DESIGNATION: IR (5 ACRES MINIMUM LOT SIZE) REGIONAL INDUSTRIAL
ZONING DESIGNATION: IR (MINERAL RESOURCE PROTECTION OVERLAY)
GROSS LOT AREA: APPROX. 550 ACRES
UTILITIES
ALL UTILITIES ARE SELF CONTAINED ON-SITE:
WATER WELLS
SEPTIC SYSTEMS
POWER IS CURRENTLY SERVED BY SOUTHERN CALIFORNIA EDISON
SITE PLAN PREPARATION:
CNA ENGINEERING, INC
2575 VALLEY ROAD
SACRAMENTO, CA 95821
ATTENTION: ASHA TYLER
PHONE: (916)485-3746
PROPOSED 7' RADIUS (14' DIAMETER) CONCRETE PAD FOR PROPOSED WIND TURBINE
PROPOSED 75' DIAMETER FENCELINE (PROPOSED LEASE AREA)
PROPOSED OVERHEAD ELECTRICAL CONNECTION LINES APPROX. 826 FEET
LEASEHOLD SITE
DETAIL A
SCALE: 1" = 80'
SEE DETAIL A
PROJECT SITE
SCALE: 1" = 600'
NOTES:
PROJECT PROPERTY IS APPROXIMATELY 400 AC WITH ONLY APPROXIMATELY 2.5 ACRES OF PROJECT AREA NEAR THE CENTER OF THE PROPERTY.
THERE ARE NO PARKING SPACES REQUIRED AS THESE WIND TURBINE HAVE NO EMPLOYEES OR VISITORS WORKING ONSITE.
THE PROPOSED PADS COVER APPROXIMATELY 200 FEET EACH WITH THE TOTAL LAND AREA REQUIRED FOR THE FOUNDATIONS, TRANSFORMERS AND ELECTRICAL PANELS IS APPROXIMATELY 1400 SQUARE FEET.
NO PROTECTED PLANTS. THE PROJECT SITE IS LOCATED WITHIN AN AREA OF THE SITE THAT HAS BEEN CLEARED FOR THE MINING ACTIVITIES. NO EXISTING VEGETATION WILL BE DISTURBED.
NO GRADING PROPOSED. ANY GRADING NECESSARY TO ERECT THE PROPOSED WIND TURBINE WILL BE CUT AND FILL FOR COMPACTION ONLY.
NO SIGNS PROPOSED.
NO LANDSCAPING PROPOSED OR REQUIRED.
NO LIGHTING PROPOSED OR REQUIRED.
NO BUILDINGS PROPOSED OR REQUIRED.
NO TRUCK ACTIVITY PROPOSED OR REQUIRED AFTER COMPLETION OF PROJECT.
ALL SURROUNDING LAND IS OWNED AND USED BY THE CEMEX CORPORATION.
POLE ELEVATION SHOWN IS TYPICAL, APPROX. 300' BETWEEN POLES ALONG PROPOSED TRANSMISSION LINE.
CNA ENGINEERING, INC
SITE PLAN FOR WIND ENERGY PROJECT LOCATED AT: CEMEX PROJECT LOCATED AT 22220 BLACK MOUNTAIN QUARRY ROAD APPLE VALLEY, CA.
COUNTY OF SAN BERNARDINO STATE OF CALIFORNIA
DATE: 1/16/2012
SHEET 1 OF 1

SITE PLAN

EVALUATION FORMAT

County Staff prepared this initial study in compliance with the California Environmental Quality Act (CEQA) Guidelines. This format of the study is as follows. Staff evaluated the project based upon its effect on 18 major categories of environmental factors. Staff reviewed each factor by responding to a series of questions regarding the impact of the project on each element of the overall factor. The Initial Study Checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. Staff categorized the effect of the project into one of the following four categories of possible determinations:

Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact

Staff then provided substantiation to justify each determination. One of the four following conclusions summarizes of the analysis for each of the major environmental factors. These respectively are:

1. Significant adverse impacts have been identified or anticipated. An Environmental Impact Report (EIR) is required to evaluate these impacts, which are (Listing the impacts requiring analysis within the EIR).
2. Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measures are: (List mitigation measures)
3. No significant adverse impacts are identified or anticipated and no mitigation measures are required. (Optional mitigation may be added by stating: "As a precautionary measure to further reduce any potential for impacts, the following requirement shall apply"):
4. No impacts are identified or anticipated and no mitigation measures are required.

At the end of the analysis the required mitigation measures are restated and categorized as being either self- monitoring or as requiring a Mitigation Monitoring and Reporting Program.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology /Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality
☐ Land Use/ Planning	☐ Mineral Resources	☐ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☐ Transportation/Traffic	☐ Utilities / Service Systems	☐ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the following finding is made:

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

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

☐ The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

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

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

Signature (prepared by): Tracy Creason, Project Planner — Date: 5 APR 2012

Signature: Heidi Duron, Supervising Planner — Date: 4/6/2012

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

SUBSTANTIATION (Check ☐ if project is located within the view-shed of any Scenic Route listed in the General Plan):

I a) **Less than Significant Impact**. The proposed project is not visible from many areas easily accessible to the public, is situated on hilly terrain behind natural berms and ridges, and is in an area with few viewers. The applicant provided photo simulations of the proposed towers from six different locations: 1) the Wal-Mart Distribution Center near the intersection of Dale Evans Parkway and Johnson Road, 2) the intersection of Bell Mountain Road and Quarry Road, 3) the intersection of Bell Mountain Road and Interstate 15, 4) the intersection of National Trails Highway and Interstate 15, 5) the intersection of Bear Valley Road and Highway 18, and 6) the intersection of State Highway 247 and Lucerne Valley Cutoff. Of the six locations, the towers would be partially visible from the first three and unseen from the last three. The visual change potential of the proposed project is minimal. The development would alter the existing desert area but would conform to the existing adjacent CEMEX facilities. As a result, the scenic integrity of the areas surrounding this parcel would be affected slightly from its current state but would not be significantly impacted.

I b) **Less than Significant Impact**. The project would not substantially damage scenic resources or historic buildings associated with a state-designated scenic highway. A scenic highway is designated officially as a state scenic highway when the local jurisdiction adopts a scenic corridor protection program, applies for the California Department of Transportation for scenic highway approval, and receives notification from Caltrans that the highway has been designated as an official scenic highway. In the general area, Interstate 15, State Highway 18, and State Highway 247 are scenic routes. These scenic routes are 6 miles northwest, 10.2 miles south, and 8.7 miles east, respectively. The proposed towers would not be visible from either of the State Highways or from Interstate 15 to the south. The proposed towers and turbines would be partially visible from Interstate 15 to the northwest of the project site. The proposed project will not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway, because there are no trees, rock outcroppings, or historic buildings on the

project site.

I c) **Less than Significant Impact**. As mentioned above, the proposed project will be partially visible from one scenic route, Interstate 15 to the northwest of the site. It will not substantially degrade the existing visual character or quality of the site and its surroundings. The current visual character of the site includes desert wilderness, hills, ridges, and the existing CEMEX plant facilities and quarries.

I d) **Less than Significant Impact**. The project would not be a new source of glare with the potential to adversely impact daytime views of the desert. However, because of the proposed tower height, they would include FAA-required warning lights. The project is also required to comply with San Bernardino County Ordinance No. 3900 that regulates glare, outdoor lighting, and night sky protection in the desert region. Therefore, the proposed facility would not have a significant impact on daytime or nighttime views in the area.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
II. AGRICULTURE AND FOREST RESOURCES - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forestland or conversion of forestland to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use?	☐	☐	☐	☒

SUBSTANTIATION (Check ☐ if project is located in the Important Farmlands Overlay):

II a-e) **No Impact**. The proposed project will not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. The proposed project is located in an area designated "other" land on the maps prepared pursuant to the Farmland Mapping and Monitoring Program due to the area

being used for long-term mining activities. Zoning on the adjacent properties is IR (Regional Industrial), while zoning on nearby properties includes RC (Resource Conservation), IC (Community Industrial), RL, RL-5, RL-20, and RL-40 (Rural Living, 2.5-acre, 5-acre, 20-acre, and 40-acre minimum parcel sizes). The Town of Apple Valley is approximately 3.2 miles west of the project site. The proposed project site is in the high desert of Southern California, an area of extreme high and low temperatures, extremely low humidity, and water scarcity and will have no impact on forest resources.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
III. AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
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 (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

SUBSTANTIATION (Discuss conformity with the Mojave Desert Air Quality Management Plan (MDAQMP), if applicable):

III a) **Less than Significant Impact.** The Project site is located within the MDAQMP. The MDAQMD adopted the Mojave Desert Planning Area-Federal Particulate Matter Attainment Plan (Plan) in 1995 and the Ozone Attainment Plan in 2004. SESPE Consulting, Inc. prepared an Air Quality, Climate Change, and Noise Impact Assessment for the proposed project. The Air Quality Impact Analysis estimated emissions from construction and operation of the turbines as well as greenhouse gas (GHG) emissions offsets from the alternate energy generation. The project would not exceed any of the air quality thresholds associated with construction. The project would not exceed any operational air quality thresholds and in fact would result in a carbon dioxide equivalent benefit. Information found on the EPA website (http://www.epa.gov/egrid) supports this conclusion. In the WECC California subregion, which includes the sites associated with this proposal, the annual total output emission rate for greenhouse gases (GHGs) are:

681.01 pounds per MWh [Megawatt (10^6) hour] of CO_2 (Carbon Dioxide)
28.29 pounds per GWh [Gigawatt (10^9) hour] of CH_4 (Methane)
6.23 pounds per GWh of N_2O (Nitrous oxide)

According to the EPA, these emission rates are useful in estimating GHG emissions from electricity use. The two wind turbines proposed through this project will produce an estimated 8000 Megawatt hours of electricity in an average year, resulting in reductions in the emission rate of the GHGs listed above.

III b) **Less than Significant Impact with Mitigation Incorporated.** The project would contribute criteria pollutants in the area during the short-term project construction period. None of the activities associated with the proposed project would create a substantial permanent increase in the emissions of criteria pollutants that would be cumulatively considerable. The project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation, because the proposed use(s) do not exceed established thresholds of concern as established by the District. The MDAQMD provided a response to the project notice indicating their support for "the development of renewable energy sources", stating, "such development is expected to produce cumulative and regional environmental benefits." The MDAQMD had no recommendations or other comments. Because the United States Environmental Protection Agency and the California Air Resources Board have designated portions of the MDAQMD as being in non-attainment for Ozone and Particulate Matter emissions, the project proponent must comply with the County's general conditions and standards as well as project specific design and construction features to reduce any potential impacts.

III c) **Less than Significant Impact.** Routine maintenance and repairs of the turbines would have no impact on the emissions of criteria pollutants that would be cumulatively considerable. The traffic analysis prepared for the proposed project indicates, "for the 20 years following construction, there will be approximately 20 car trips annually related to Operations and Maintenance." After construction, the amount of air pollutants are expected to be reduced considerably as wind energy production systems do not generate emissions that would cause reduction of air quality or produce objectionable odors.

III d) **No Impact.** The MDAQMD defines sensitive receptors as residences, schools, daycare centers, playgrounds, and medical facilities. There are widespread residences in the area, the closest being approximately 2.8 miles away. In addition, electricity generation via the use of wind turbine systems does not generate chemical emissions that would negatively contribute to air quality. Furthermore, the County's general conditions and standards as well as project-specific design and construction features incorporated into the proposed project such as dust suppression techniques per MDAQMD's Rule 403 would reduce any potential impacts from the project. No significant adverse impacts are identified or anticipated and no additional mitigation measures are required.

III e) **No Impact.** Electricity generation via the use of wind turbine systems does not generate chemical emissions that would negatively contribute to air quality or produce objectionable odors. Potential odor generation associated with the proposed project would be limited to construction sources such as diesel exhaust and dust. No significant odor impacts related to project implementation are anticipated due to the nature and short-term extent of potential sources, as well as the intervening distance to sensitive receptors. Therefore, the operation of the project would have a less than significant impact associated with the creation of objectionable odors affecting a substantial number of people.

Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as conditions of project approval to reduce these impacts to a level below significant.

Mitigation Measure

AQ – Construction Mitigation. Developer shall submit written verification that all construction contracts and sub-contracts for the project contain provisions that require adherence to the following standards to reduce impacts to air quality: During construction, each contractor and subcontractor shall implement the following, whenever feasible:

- **Approved Dust Control Plan (DCP) submitted with the Grading Plans.**
- **Provide documentation prior to beginning construction demonstrating that the project proponents will comply with all MDAQMD regulations.**
- **Suspend use of all construction equipment operations during second stage smog alerts. For daily forecast, call (800) 367-4710 (San Bernardino and Riverside counties).**
- **Trucks/equipment shall not be left idling on site for periods in excess of ten minutes.**
- **Provide temporary traffic control during all phases of construction.**
- **Provide on-site food service for construction workers.**
- **Use reformulated low-sulfur diesel fuel in equipment and use low-NOx engines, alternative fuels and electrification. Apply 4-6 degree injection timing retard to diesel IC engines. Use catalytic converters on gasoline-powered equipment.**
- **Minimize concurrent use of equipment through equipment phasing.**
- **Substitute electric and gasoline-powered equipment for diesel-powered equipment.**
- **Onsite electrical power hook-ups shall be provided for electric construction tools to eliminate the need for diesel-powered electronic generators.**
- **Maintain construction equipment engines in good order to reduce emissions. The developer shall have each contractor certify that all construction equipment is properly serviced and maintained in good operating condition.**
- **Install storm water control systems to prevent mud deposition onto paved areas.**
- **Contractors shall use low sulfur fuel for stationary construction equipment as required by AQMD Rules 431.1 and 431.2 to reduce the release of undesirable emissions.**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
IV. BIOLOGICAL RESOURCES - Would the project:				
a) Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc...) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
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, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
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?	☐	☐	☒	☐

SUBSTANTIATION (Check if project is located in the Biological Resources Overlay or contains habitat for any species listed in the California Natural Diversity Database ☒):

IV a) **Less Than Significant with Mitigation Incorporated.** According to the *Biological Assessment* prepared by BioResource Consultants, Inc., "the project site supports suitable habitat for the burrowing owl, desert tortoise, Mojave monkeyflower, and creamy blazing star. In addition, the site supports suitable habitat that provides potential roosting and nesting sites for birds protected by the CDFG and the MBTA." The Assessment went on to conclude that with implementation of project avoidance and minimization measures, potential direct and indirect impacts would be less than significant. These avoidance and

minimization measures are below under mitigation measures and will be part of the conditions of approval. Furthermore, area-wide eagle surveys are underway. Analysis of collected data will determine whether an eagle take permit is warranted. If necessary, the applicant will seek an eagle take permit from the US Fish and Wildlife Service. The applicant must submit verification of compliance from USFWS to County Planning prior to operation of the turbines.

IV b) **No Impact.** This project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or US Fish and Wildlife Service. The project sites, which are part of the CEMEX Black Mountain Quarry and Plant, contain previous disturbance from activities associated with those uses. The *Biological Assessment* found no wetlands or waterways on site or in the vicinity; hence, no riparian habitat.

IV c) **No Impact.** This project will not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means, because the project is not within an identified protected wetland. As a condition of project approval, the project proponent must comply with the Statewide National Pollutant Discharge Elimination System (NPDES) General Permit for discharges of storm water associated with construction activity. If the project disturbs one acre or more of land, including construction staging areas, County Building and Safety will require a Construction General Permit in compliance with the State Water Resources Control Board requirements.

IV d) **No Impact.** This project will not 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. The biological assessment identified no distinct wildlife corridors or nursery sites within or near the project site.

IV e) **Less Than Significant Impact.** This project will not conflict with any local policies or ordinances protecting biological resources. The general area contains uses associated with the Black Mountain Quarry and the CEMEX plant. As identified within the *Biological Assessment,* the site contains protected plant species. Adherence with the avoidance and minimization measures recommended in the *Biological Assessment* and included as conditions of approval will reduce any potential impact to a level less than significant.

IV f) **Less Than Significant Impact.** This project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, because no such plan has been adopted in the area of the project site. The site is within the proposed boundary of the West Mojave Plan, which covers 9.3 million acres in the western portion of the Mojave Desert. This interagency habitat conservation plan remains under review.

Possible significant adverse impacts have been identified and the following mitigation measures are required as conditions of project approval to reduce these impacts to a level below significant:

Mitigation Measures

BIO – Desert Tortoise. If construction occurs between March 15 and November 1, the applicant will contract with a qualified biologist to conduct a pre-construction survey for desert tortoise. If recommended by the biologist, a biological monitor will be on site during construction. The biologist will provide a copy of the survey to County Planning, the CDFG, and USFWS.

BIO – Sensitive Plant. The applicant shall contract with a qualified biologist and/or botanist to perform a sensitive plant species pre-construction survey during the appropriate season. The Mojave monkeyflower flowers from April to June, while the creamy blazing star blooms from March to May. If the biologist finds any sensitive plants, he will delineate and record the area and establish a 'no entry' zone to reduce impact. The biologist will provide a copy of the survey to County Planning.

BIO – Nesting Birds. If construction takes place during bird nesting season (February 1 to August 31), the applicant shall contract with a biological monitor to perform a pre-construction survey within 72 hours of any on-site activities to determine if there are any active nests within the project area. If active nests occur, the biologist will establish 200-foot buffers around the nests, within which no construction activity will occur until he confirms the young have fledged. The biologist will provide a copy of the survey to County Planning.

BIO – Burrowing Owl. The applicant shall contract with a qualified biologist to conduct a 30-day pre-construction survey for burrowing owl. If found on site, as compensation for the direct loss of burrowing owl nesting and foraging habitat, the project proponent shall mitigate as required by CDFG. If found on site but not directly impacted, the biologist shall establish a 300-foot buffer around the active burrow, within which no construction activities will occur until the young have fledged and the biologist determines that the burrow is inactive. The biologist shall provide a copy of the survey to County Planning and CDFG.

BIO – Eagles. The applicant shall complete the analysis of the eagle survey data to determine the risk of the proposed project on eagles within the area. Analysis of collected data will determine whether an eagle take permit is warranted. If necessary, the applicant will seek an eagle take permit from the US Fish and Wildlife Service. The applicant must submit verification of compliance from USFWS to County Planning prior to operation of the turbines.

V. **CULTURAL RESOURCES** - Would the project	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

SUBSTANTIATION (Check if the project is located in the Cultural ☐ or Paleontologic ☐ Resources overlays or cite results of cultural resource review):

V a) **Less Than Significant Impact with Mitigation.** The Archaeological Information Center of the County Museum conducted a historical resources record search at the applicant's request. The search found at least two possible historic structure and/or archaeological site locations in the area. Because of the potential for buried resources most likely associated with the Silver Mountain/Oro Grande Mining District, the applicant shall contract with an archaeological monitor. The monitor shall be on-site during any ground disturbing activities. If ground disturbing activities uncover any artifacts, the archaeologist will assess the find, determine its significance, and make recommendations. The applicant must comply with such recommendations, which would reduce any potential impacts to a level less than significant. The archaeologist must submit his report to the County Museum and to County Planning.

V b) **Less Than Significant Impact with Mitigation.** As mentioned in V a), the site may contain buried resources associated with the Silver Mountain/Oro Grande Mining District. Adherence with the mitigation measure described above and listed below will reduce any potential impacts to a level less than significant.

V c) **Less Than Significant Impact.** This project will not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, because no such resources have been identified on the site.

V d) **Less Than Significant Impact.** This project will not disturb any human remains, including those interred outside of formal cemeteries, because records identify no such burials grounds on this project site. If during construction of this project, the developer discovers any human remains he must contact the County Coroner, County Museum for determination of appropriate mitigation measures, and a Native American representative, if the remains are determined to be of Native American origin.

Possible significant adverse impacts have been identified and the following mitigation measures are required as conditions of project approval to reduce these impacts to a level below significant:

Mitigation Measure

CUL – Archaeological Monitor. Because of the potential for buried resources most likely associated with the Silver Mountain/Oro Grande Mining District, the applicant shall contract with an archaeological monitor. The monitor shall be on-site during any ground disturbing activities. If ground disturbing activities uncover any artifacts, the archaeologist will assess the find, determine its significance, and make recommendations. The applicant must comply with such recommendations.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
VI. GEOLOGY AND SOILS - Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map Issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the California Building Code (2001) creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

SUBSTANTIATION (Check ☐ if project is located in the Geologic Hazards Overlay District):

VI a) **Less Than Significant Impact.** (i-iv) The entire San Bernardino County area is particularly susceptible to strong ground shaking and other geologic hazards. However, the proposed project site is not located within an Alquist-Priolo Special Studies Zone, meaning that the site is not within 500 feet of major active faults, nor is the site within 200 to 300 feet of a trough created by minor faults. The nearest fault zone is the Helendale-South Lockhart fault zone, Helendale section, which is approximately 0.95 miles southwest

of the southernmost wind turbine. With adherence to the California Building Code and the incorporation of applicable measures into project design and construction, potential project impacts associated with strong seismic ground shaking would be less than significant. The County Building and Safety Geologist will review and approve the project, and impose appropriate seismic standards.

VI b) **Less Than Significant Impact.** No substantial grading or vegetation removal would occur for the installation of the proposed project. The applicant estimates the overall ground disturbance for two turbines, the access road extension, and the power poles to be 1.6 acres. The use of the existing access road and the retention of the vegetation onsite would maintain associated erosion at a minor level. County Building and Safety will require the applicant to submit erosion control plans for review, approval, and implementation.

VI c) **Less Than Significant Impact.** Neither the USGS nor the County identify the project site as being located on a geologic unit or on soil that has been identified as being unstable or having the potential to result in on or off site landslide, lateral spreading, subsidence, liquefaction, or collapse. Potential project impacts associated with landslides or liquefaction would be less than significant.

VI d) **Less Than Significant Impact.** The County Building and Safety Geologist has not identified the project site to be located in an area that has the potential for expansive soils. As a standard condition of approval, the project applicant will submit a soils report to the County Building and Safety Geologist for review and approval.

VI e) **No Impact.** When implemented, the proposed project will be an unmanned facility that will not use septic tanks or alternative wastewater disposal systems; therefore, no impacts are anticipated.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
VII	**GREENHOUSE GAS EMISSIONS** - Would the project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b)	Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

SUBSTANTIATION:

VII a, b) **Less than Significant Impact.** As discussed in Section III of this document, the proposed project's primary contribution to air emissions is attributable to construction activities. Project construction shall result in GHG emissions from the following construction related sources: (1) construction equipment emissions and (2) emissions from construction workers personal vehicles traveling to and from the construction site. Construction-related GHG emissions vary depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of personnel.

The Air Quality Impact Analysis prepared by SESPE Consulting, Inc. determined that air quality impacts associated with construction do not near let alone exceed the established thresholds. Furthermore, the analysis of operational air quality impacts determined that the proposed project would result in a net benefit.

On December 6, 2011, the San Bernardino County Board of Supervisors adopted the County Greenhouse Gas (GHG) Emissions Reduction Plan. Although once built and operational this project will provide a "clean" source of energy that will not contribute to GHG emissions, the project must adhere to the Air Quality mitigation measures contained in section III of this document and the standard requirements of the GHG Emissions Reduction Plan.

GHGs and criteria pollutants would realize co-beneficial emissions reduction from the implementation of mitigation measures discussed in Section III, Air Quality, in this document. Furthermore, the construction of this project would result in "green" electric power generation that would otherwise be produced at a traditional fossil fuel burning plant, which generate considerably more GHG emissions. For these reasons, it is unlikely that this project would impede the state's ability to meet the reduction targets of AB32.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS - Would the project:				
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 it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

SUBSTANTIATION

VIII a) **Less Than Significant Impact.** The project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Implementation of the proposed project would not entail the routine transport, use, or disposal of hazardous materials, with the potential exception of short-term construction-related substances such as fuels, lubricants, adhesives, and solvents. The potential risk associated with the accidental discharge during use and storage of such construction-related hazardous materials during project construction is considered low because the handling of any such materials would be addressed through the implementation of Best Management Practices (BMPs) pursuant to the intent of the NPDES General Construction Permit. Operation of the proposed project would not require the use or storage of significant quantities of hazardous substances; therefore, no substantial potential for accidental explosion or major releases of hazardous substances is expected. Furthermore, standard operating procedures would prevent the use of these materials from causing a significant hazard to the public or environment.

VIII b) **Less Than Significant Impact.** The project will not 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. Any proposed use or construction activity that might use hazardous materials is subject to permit and inspection by the Hazardous Materials Division of the County Fire Department.

VIII c) **Less Than Significant Impact.** There are no existing or proposed schools within ¼ mile of the proposed project site. The nearest school, Rancho Verde Elementary School, is located approximately 8.5 mile southwest of the project site in the Town of Apple Valley. Additionally, operation and maintenance of the project would not produce hazardous emissions.

VIII d) **Less Than Significant Impact.** The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The proposed project will not create a significant hazard to the public or the environment. No impacts related to this topic will occur due to implementation of the proposed project and, therefore, no mitigation measures are required.

VIII e) **Less Than Significant Impact.** The project site is not within the vicinity or approach/departure flight path of a public airport. The nearest public airport, Apple Valley County Airport, is approximately 5.5 miles southwest of the project site.

VIII f) **Less Than Significant Impact.** The project site is not within the vicinity or approach/departure flight path of a private airstrip. The nearest private airstrip, Holiday Ranch Airport, is approximately 4.5 miles southeast of the project site.

VIII g) **No Impact.** Activities associated with the proposed project would not impede existing emergency response plans for the project site and/or other land uses in the project vicinity. All vehicles and stationary equipment would be staged off public roads and would not block emergency access routes. Accordingly, implementation of the proposed project will not

impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

VIII h) **Less Than Significant Impact.** The project will not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. The proposed project includes installation of non-combustible turbine towers, blades, and nacelles. Other than an external source, the only risk of onsite wildfire ignition is due to electrical malfunctions resulting from poor installation. As long as the project proponent installs the electrical equipment properly and follows all state and county safety codes, the risk of onsite ignition is minimal.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
IX. HYDROLOGY AND WATER QUALITY - Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level, which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☒	☐
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 as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structure that 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?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

SUBSTANTIATION

IX a, b, e, f) **Less than Significant Impact.** Potential water quality impacts from the proposed project are associated with short-term (construction-related) erosion/sedimentation and hazardous material use/discharge. Through conformance with applicable elements of the required NPDES Construction Permit, the applicant would avoid or reduce potential erosion/sedimentation and hazardous materials impacts below a level of significance. During construction, the applicant would truck water in from the adjacent CEMEX property if needed for dust suppression. Any water used would be absorbed into the soils onsite. Nearly all of the ground within the proposed project area would remain pervious, so water percolation and groundwater recharge would not be significantly impacted by the implementation of the project.

IX c, d) **Less than Significant Impact.** The project will not substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site. The footprint of the wind turbines and the associated power poles is small. The proposed project includes approximately 1600 square feet of impervious surfaces that could divert any drainage pattern. Adherence with the County Public Works Best Management Practices (BMPs) is a standard condition of approval.

IX g, h) **No Impact.** The proposed project would not create or result in housing within a 100-year flood hazard area or result in the placement within a 100-year flood hazard area, any structures which would impede or redirect flood flows. Furthermore, Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, Panel Numbers 5200 H and 5875 H, indicate that the proposed project area is within Zone D – an Undetermined Risk Area.

IX i) **No Impact.** The project will not expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding because of the failure of a levee or dam. The project site is not within any identified path of a potential inundation flow that might result in the event of a dam or levee failure or that might occur from a river, stream, lake, or sheet flow situation.

IX j) **No Impact.** Inundation by seiche, tsunami, or mudflow will not impact the project, because the project site is not adjacent to any body of water that has the potential of seiche or tsunami nor is the project site in the path of any potential mudflow.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
X. LAND USE AND PLANNING - Would the project:				
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?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

SUBSTANTIATION

X a) **No Impact.** The project will not physically divide an established community, because there are no established communities present in the project area. There are approximately 550 acres of CEMEX-owned properties, including the project sites, in the immediate area. The Town of Apple Valley boundary exists approximately 3.5 miles west of the site.

X b) **Less Than Significant Impact.** The current General Plan land use designation for the proposed project area is Regional Industrial (IR), which allows development of electrical power generation facilities with a Conditional Use Permit (CUP). The proposed project site contains the Biotic Resources (BR) overlay, with potential for desert tortoise, burrowing owl, and two sensitive plant species in the area. As required by the BR overlay, the applicant submitted a Biological Assessment with the project application that identifies all biotic resources located on and adjacent to the site. The report concluded that, with appropriate avoidance, minimization, and mitigation measures, the existence of the biotic resources did not constitute an incompatible land use with the proposed project.

X c) **No Impact.** The project will not conflict with any applicable habitat conservation plan or natural community conservation plan, because there is no habitat conservation plan or natural community conservation plan within the area surrounding the project site. No habitat conservation lands are required to be purchased as mitigation for the proposed project.

No significant adverse impacts are identified or anticipated and no mitigation measures are required

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XI. MINERAL RESOURCES - Would the project:				
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

SUBSTANTIATION (Check ☐ if project is located within the Mineral Resource Zone Overlay):

XI a, b) **No Impact.** The project will not result in the loss or availability of a known mineral resource that would be of value to the region and the residents of the state. The purpose of the proposed wind turbines is to supplement the power used by the CEMEX plant at the Black Mountain Quarry site with an alternate, greener energy source. The quarry and plant operations will continue after installation of the wind turbines.

No significant adverse impacts are identified or anticipated and no mitigation measures are required

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

SUBSTANTIATION (Check if the project is located in the Noise Hazard Overlay District ☐ or is subject to severe noise levels according to the General Plan Noise Element ☐):

XII a-d) **Less Than Significant Impact.** The *Preliminary Acoustic Analysis* prepared for the project shows that the noise produced by the wind turbines is less than that allowed by the County Development Code. The nearest off-site sensitive receptor is approximately 3 miles from the wind turbines. This, coupled with the fact that the proposed project is adjacent to and surrounded by 550 acres of CEMEX land, which currently contains the Black Mountain Quarry and Plant, will result in limited noise impact. In comparison to the noise and vibration generated from these uses, the construction noise associated with the proposed wind turbine project would be minimal. Regardless, construction activities will comply with the noise and vibration standards of the San Bernardino County Development Code. Noise generation from construction equipment/vehicle operation would be localized, temporary, and transitory in nature.

Operation of the proposed wind turbine project would not generate audible levels of noise or perceptible levels of vibration in the surrounding area. On-site noises would be limited to the motors that rotate the blades, the blade movement, and maintenance activities. Further, the project would not include any dwellings or other development, nor would it have the potential to generate any additional vehicle trips after completion of construction.

XII e, f) **No Impact.** The project is not located within an airport land use plan area or within 2 miles of a public/public use airport or a private airstrip. The nearest public airport, Apple Valley County Airport, is approximately 5.5 miles southwest of the project site. The nearest private airstrip, Holiday Ranch Airport, is approximately 4.5 miles southeast of the project site.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

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

SUBSTANTIATION

XIII a-c) **No Impact.** The project is located in an industrial area of the high desert area of San Bernardino County. The workers needed for construction and operation of the project are from the local employment base. The proposed wind turbines, although classified as infrastructure, will supplement power to the CEMEX Black Mountain Quarry plant only. They will serve no other uses and will not induce growth. There are no residential structures on the 550 acres of CEMEX-owned properties. Therefore, displacement of housing or people will not occur. No associated impacts are anticipated to occur from the proposed project

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XIV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire Protection?	☐	☐	☒	☐
Police Protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other Public Facilities?	☐	☐	☐	☒

SUBSTANTIATION

XIV a) **Fire – Less than Significant Impact.** The Apple Valley Fire Protection District provides fire coverage for the project sites. The project would not result in the need for additional fire protection services. Any development, along with the associated human activity, in previously undeveloped areas increases the potential of the occurrence of wildfires. Project construction would implement comprehensive safety measures that comply with federal, state, and local worker safety and fire protection codes and regulations for the proposed project that would minimize the occurrences of fire due to project activities during construction and for the life of the project. Because of the low probability and short-term nature of potential fire protection needs during construction, the proposed project would not result in associated significant impacts.

Police Protection – Less than Significant Impact. The San Bernardino County Sheriff's Department serves the proposed project area and other unincorporated portions of the County. The Apple Valley Sheriff's Station is located approximately 9 miles to the southwest of the project site. Due to the large expanse that the station covers, deputies regularly assist and are assisted by the California Highway Patrol, Victorville Police Department, and the BLM Rangers. The proposed project would not impact service ratios, response times, or other performance objectives related to police protection. The project's short-term service requirements would not result in increases in the level of public service offered, or affect these agencies' response times. As mentioned previously within this document, the location of the wind turbines is within 550 acres of CEMEX-owned property, which contains a perimeter fence.

Schools – No Impact. Long-term operation of the proposed facilities would place no demand on school services because it would not involve the construction of facilities that require such services (e.g., residences) and would not involve the introduction of a temporary or permanent human population into this area.

Parks – No Impact. Long-term operation of the proposed facilities would place no demand on parks because it would not involve the construction of facilities that require such services (e.g., residences) and would not involve the introduction of a temporary or permanent human population into this area.

Other Public Facilities – No Impact. The proposed project would not result in the introduction and/or an increase in new residential homes and the proposed project would not involve the introduction of a temporary or permanent human population into this area. Based on these factors, the proposed project would not result in any long-term impacts to other public facilities.

No significant adverse impacts are identified or anticipated and no mitigation measures are required

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XV. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

SUBSTANTIATION

XV a, b) **No Impact.** The proposed wind turbine project would construct no new residences or recreational facilities. It would not induce population growth in adjacent areas and would not increase the use of recreational facilities in surrounding neighborhoods.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

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

SUBSTANTIATION

XVI a, b) **Less Than Significant Impact.** The project will not create significant traffic impacts to the surrounding roadway circulation system per the thresholds of significance specified by the San Bernardino County Congestion Management Plan (CMP). Forecasts of traffic conditions on roadway segments and intersections during the life of the project anticipate maintenance at a level of service (LOS) of C or better, as required by the County General Plan. Furthermore, the proposed project is not expected to exceed any applicable level of service, individually or cumulatively, based on the incremental level and short-term duration of project-related traffic. The Traffic Analysis prepared for the proposed project states that "there will be less than 10 daily automobile trips for approximately 10 days … approximately 16 truckloads of cement … per foundation … approximately 3 – 5 other deliveries … at the beginning of the [foundation] construction phase." During the turbine erection, electrical connection, and commissioning phase, the Traffic Analysis states "there will be approximately 12 truck trips related to the delivery of each turbine." Due to the size of the towers and blades, these trips require specially permitted wide load tractor-trailers, which obtain permits through the California Department of Transportation

and the California Highway Patrol in order to manage their exact route. Furthermore, local jurisdictions oversee and issue permit for use of any road used for turbine transport. As part of the tower erection phase, a large erecting crane and smaller supporting crane will arrive in approximately 10 truck trips, electrical equipment will arrive in 3 – 5 truck trips, transmission wires and wood poles will arrive on another 3 – 5 truck trips, and approximately 10 daily automobile trips will transport workers for about 10 days.

XVI c) **No Impact.** The proposed project would not affect air traffic patterns. The operation of the proposed project is not dependent upon air transport related material, labor, or services. Therefore, it would not result in increases to air traffic levels.

XVI d) **No Impact.** The proposed project will not introduce design features, such as sharp curves or dangerous intersections within the vicinity of the project site. There are no incompatible uses proposed by the project that would impact surrounding land uses.

XVI e) **No Impact**. The proposed project will have adequate emergency access for both fire and medical emergency vehicles. The anticipated low operational traffic volume will not impede emergency response times.

XVI f) **No Impact.** Construction of the proposed project would not contribute to the loss of parking capacity near the project as the sites will provide adequate parking areas for future activities, such as deliveries, maintenance, and repairs.

XVI g) **No Impact.** The public transit provider within the area is the Victor Valley Transit Authority, which provides bus service to the cities of Adelanto, Apple Valley, Hesperia, and Victorville, as well as portions of San Bernardino County. Therefore, the project would not conflict with adopted policies, plans, or programs supporting alternative transportation.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS - Would the project:				
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) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

SUBSTANTIATION

XVII a) **No Impact**. The proposed project does not involve the construction of facilities that would generate sewage; therefore, it would not exceed applicable wastewater treatment requirements. The proposed project's water discharge does not require treatment or permitting according to the regulations of the Lahontan RWQCB.

XVII b) **No Impact.** The project will not require new water or wastewater treatment facilities or expansion of existing facilities. Use of trucked water during construction for dust suppression would be minimal. Periodic maintenance does not include any washing of towers or blades.

XVII c) **No Impact**. The proposed project would not require the construction or expansion of storm water drainage facilities. The insubstantial quantity of discharged water generated on the site would be absorbed into the soils. On-site soil types drain well and are suitable

for most types of development. Accordingly, implementation of the proposed project would result in no impacts.

XVII d) **No Impact**. Use of trucked water during construction for dust suppression would be minimal. Generation of wind power requires no water. Accordingly, implementation of the proposed project would result in no impacts.

XVII e) **No Impact**. The proposed project would not require or result in the construction of new wastewater treatment facilities or the expansion of existing wastewater treatment facilities. Implementation of the proposed project would result in no impacts.

XVII f, g) **Less than Significant Impact**. The proposed project will be two unmanned wind turbine power generators, generating no process waste and only small quantities of solid waste during construction requiring disposal. The project must comply with federal, state, and local statutes and regulations related to solid waste disposal.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

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

SUBSTANTIATION

XVIII a) **Less than Significant Impact with Mitigation.** Mitigation Measures have been included to address potential impacts to Air Quality, Biological Resources, and Cultural Resources. However, implementation of the proposed project would not degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife populations to drop below self sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. Adherence with the avoidance, minimization, and mitigation measures discussed within this Initial Study will reduce any impacts to levels less than significant.

XVIII b) **Less than Significant Impact.** Cumulative impacts are defined as two or more individual affects that, when considered together, are considerable or that compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the development when added to the impacts of other closely related past, present, and reasonably foreseeable or probable future developments. Cumulative impacts can result from individually minor, but collectively significant, developments taking place over a period. The *CEQA Guidelines*, Section 15130 (a) and (b), states:

> *(a) Cumulative impacts shall be discussed when the project's incremental effect is cumulatively considerable.*
>
> *(b) The discussion of cumulative impacts shall reflect the severity of the impacts and*

their likelihood of occurrence, but the discussion need not provide as great detail as is provided of the effects attributable to the project. The discussion should be guided by the standards of practicality and reasonableness.

Construction of the CEMEX plant facilities and the quarry near the project site occurred after completing appropriate environmental reviews. These reviews included mitigation measures to reduce all environmental impacts to less than significant levels.

The project will use small portions of two parcels totaling approximately 145 acres for a green-energy-producing facility to provide supplemental power to the existing CEMEX Black Mountain Quarry Plant. This cleaner energy source will replace energy produced with fossil fuels, but not increase residential, commercial, or industrial development. Based on this, the project will not have impacts that are individually limited, but cumulatively considerable. The facility will be unmanned upon completion of construction. Trips generated by periodic maintenance workers will be minimal in comparison to the overall traffic in the area. Compliance with the conditions of approval issued for the proposed development will further assure that the potential for cumulative impacts will remain below the level of significant. All existing services and infrastructure will adequately serve the project.

XVIII c) **Less than Significant Impact.** The incorporation of design measures, County of San Bernardino policies, standards, and guidelines would ensure that there would be no substantial adverse effects on human beings, either directly or indirectly. Impacts of the proposed project would be less than significant.

XVIII. MITIGATION MEASURES

(Any mitigation measures, which are not "self-monitoring," shall have a Mitigation Monitoring and Reporting Program prepared and adopted at time of project approval)

CONDITION COMPLIANCE RELEASE FORM (CCRF) MITIGATION MEASURES: (Condition compliance will be verified by existing procedure)

AQ – Construction Mitigation. **Developer shall submit written verification that all construction contracts and sub-contracts for the project contain provisions that require adherence to the following standards to reduce impacts to air quality: During construction, each contractor and subcontractor shall implement the following, whenever feasible:**

- **Approved Dust Control Plan (DCP) submitted with the Grading Plans.**
- **Provide documentation prior to beginning construction demonstrating that the project proponents will comply with all MDAQMD regulations.**
- **Suspend use of all construction equipment operations during second stage smog alerts. For daily forecast, call (800) 367-4710 (San Bernardino and Riverside counties).**
- **Trucks/equipment shall not be left idling on site for periods in excess of ten minutes.**
- **Provide temporary traffic control during all phases of construction.**
- **Provide on-site food service for construction workers.**
- **Use reformulated low-sulfur diesel fuel in equipment and use low-NOx engines, alternative fuels, and electrification. Apply 4-6 degree injection timing retard to diesel IC engines. Use catalytic converters on gasoline-powered equipment.**
- **Minimize concurrent use of equipment through equipment phasing.**
- **Substitute electric and gasoline-powered equipment for diesel-powered equipment.**
- **Onsite electrical power hook-ups shall be provided for electric construction tools to eliminate the need for diesel-powered electronic generators.**
- **Maintain construction equipment engines in good order to reduce emissions. The developer shall have each contractor certify that all construction equipment is properly serviced and maintained in good operating condition.**
- **Install storm water control systems to prevent mud deposition onto paved areas.**
- **Contractors shall use low sulfur fuel for stationary construction equipment as required by AQMD Rules 431.1 and 431.2 to reduce the release of undesirable emissions.**

BIO – Desert Tortoise. **If construction occurs between March 15 and November 1, the applicant will contract with a qualified biologist to conduct a pre-construction survey for desert tortoise. If recommended by the biologist, a biological monitor will be on site during construction. The biologist will provide a copy of the survey to County Planning, the CDFG, and USFWS.**

BIO – Sensitive Plant. **The applicant shall contract with a qualified biologist and/or botanist to perform a sensitive plant species pre-construction survey during the appropriate season. The Mojave monkeyflower flowers from April to June, while the creamy blazing star blooms from March to May. If the biologist finds any sensitive plants, he will delineate and record the area and establish a 'no entry' zone to reduce impact. The biologist will provide a copy of the survey to County Planning.**

BIO – Nesting Birds. **If construction takes place during bird nesting season (February 1 to August 31), the applicant shall contract with a biological monitor to perform a pre-construction survey within 72 hours of any on-site activities to determine if there are any active nests within the project area. If active nests occur, the biologist will establish 200-foot buffers around the nests, within which no construction activity will occur until he confirms the young have fledged. The biologist will provide a copy of the survey to County Planning.**

BIO – Burrowing Owl. **The applicant shall contract with a qualified biologist to conduct a 30-day pre-construction survey for burrowing owl. If found on site, as compensation for the direct loss of burrowing owl nesting and foraging habitat, the project proponent shall mitigate as required by CDFG. If found on site but not directly impacted, the biologist shall establish a 300-foot buffer around the active burrow, within which no construction activities will occur until the young have fledged and the biologist determines that the burrow is inactive. The biologist shall provide a copy of the survey to County Planning and CDFG.**

BIO – Eagles. **The applicant shall complete the analysis of the eagle survey data to determine the risk of the proposed project on eagles within the area. Analysis of collected data will determine whether an eagle take permit is warranted. If necessary, the applicant will seek an eagle take permit from the US Fish and Wildlife Service. The applicant must submit verification of compliance from USFWS to County Planning prior to operation of the turbines.**

CUL – Archaeological Monitor. **Because of the potential for buried resources most likely associated with the Silver Mountain/Oro Grande Mining District, the applicant shall contract with an archaeological monitor. The monitor shall be on-site during any ground disturbing activities. If ground disturbing activities uncover any artifacts, the archaeologist will assess the find, determine its significance, and make recommendations. The applicant must comply with such recommendations.**

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PROJECT-SPECIFIC RESOURCES

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Foundation Windpower, *Traffic Analysis for Foundation Windpower Project at Cemex Black Mountain Quarry 2 Anchor Type Foundations,* undated

Hauck, Kevin, Foundation Windpower, *Preliminary Acoustic Analysis, Cemex Black Mountain Quarry Wind Project, Victorville* [sic], *CA,* Updated 1/16/2011 [sic]

SESPE Consulting, Inc., *Air Quality, Climate Change and Noise Impact Assessments, CEMEX Black Mountain Quarry Wind Energy Generation Supplement Project Memorandum,* January 17, 2012

U.S. Environmental Protection Agency website, http://www.epa.gov/egrid

U.S. Fish and Wildlife Service, Amedee Brickey, Deputy Chief, Migratory Birds, Pacific Southwest Region, miscellaneous email correspondence; miscellaneous telephone conversations

EXHIBIT D

BIOTIC RESOURCE REPORTS

BIORESOURCE CONSULTANTS, INC.

P.O. Box 1539 310 East Matilija Street Ojai, CA 93024-1539 805.646.9006 x17 Steve@BioRC.com

Memorandum

To: John Pimentel, Foundation Windpower

From: Brian Holly, Senior Ecologist, BRC

Date: June 25, 2012

Re: Addendum to the Black Mountain Quarry Road Wind Project Biological Assessment (January 2012) pursuant to California Department of Fish and Game (CDFG) and The County of San Bernardino request for additional Biological Surveys for the Foundation Windpower, LLC – Cemex Black Mountain; Proposed Installation of Two 397-Foot-Tall Wind Turbines, Mitigated Negative Declaration (SCH No. 2012041031)

This memo serves as an addendum to the Black Mountain Quarry Road Wind Project Biological Assessment (January 2012) (BA) prepared by BioResource Consultants, Inc. (BRC) for CEMEX Construction Materials Pacific, LLC. The addendum is being prepared in support of the project Mitigated Negative Declaration (SCH No. 2012041031) pursuant to a letter dated May 10, 2012 from CDFG and the County of San Bernardino's request for additional biological surveys for the Foundation Windpower, LLC – CEMEX Black Mountain Quarry Road Wind Project.

Project Description

CEMEX is working with Foundation Windpower to install utility grade wind turbines on its 150 + acre property within the permitted quarry north of Apple Valley, CA, (APN: 0463-141-12-0000 & 0463-141-08-0000) (**Figure 1**). The project will produce an estimated 8000 Megawatt hours of electricity in an average year, enough to power 820 average American homes. The wind turbines themselves consist of a three-bladed wind turbine on a tubular steel tower with a hub height of approximately 80 meters tall (~262 feet). The rotor radius is 41.25 meters (~135 feet). The system will include two wind turbine generators, transformers, switchgear and metering panels. The foundations and structural systems will be designed to meet California Building Code (CBC) for seismic zone compliance. The preliminary project footprint of each wind turbine foundation will be approximately 800 sq ft (.018 acres). Approximately 3,800 linear feet of overhead wires will be required to connect the wind turbine transformers to the existing substation at CEMEX. These lines will be carried overhead by poles placed approximately every 300 feet and will not exceed 25 feet in height. This will allow safe and regular passage of all trucks and other vehicles regularly on the site. An access road that is approximately 1,300 linear feet will be constructed from existing roads on the site to the base of the turbine (**Figure 2**).

Figure 1 Vicinity of Project Site

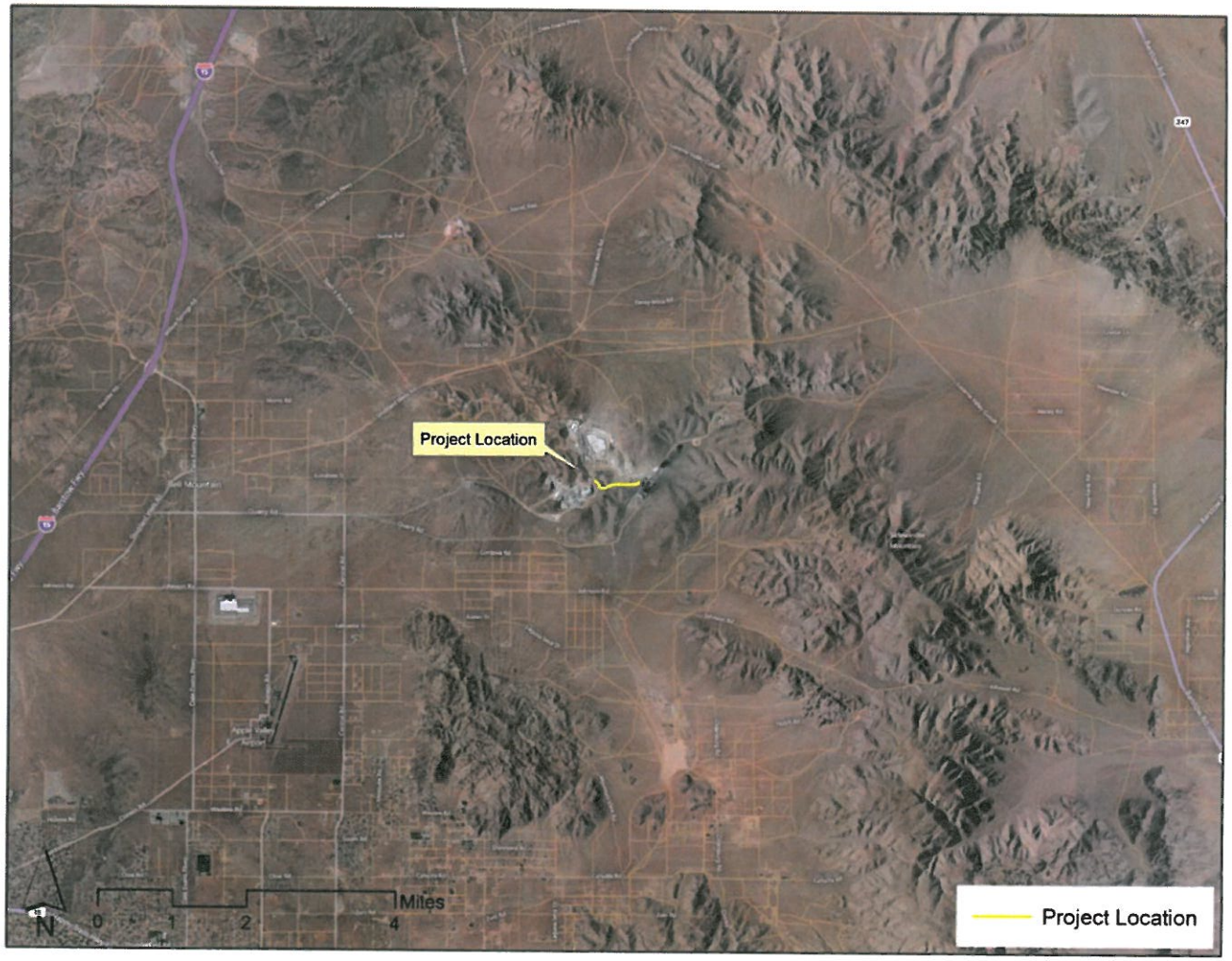
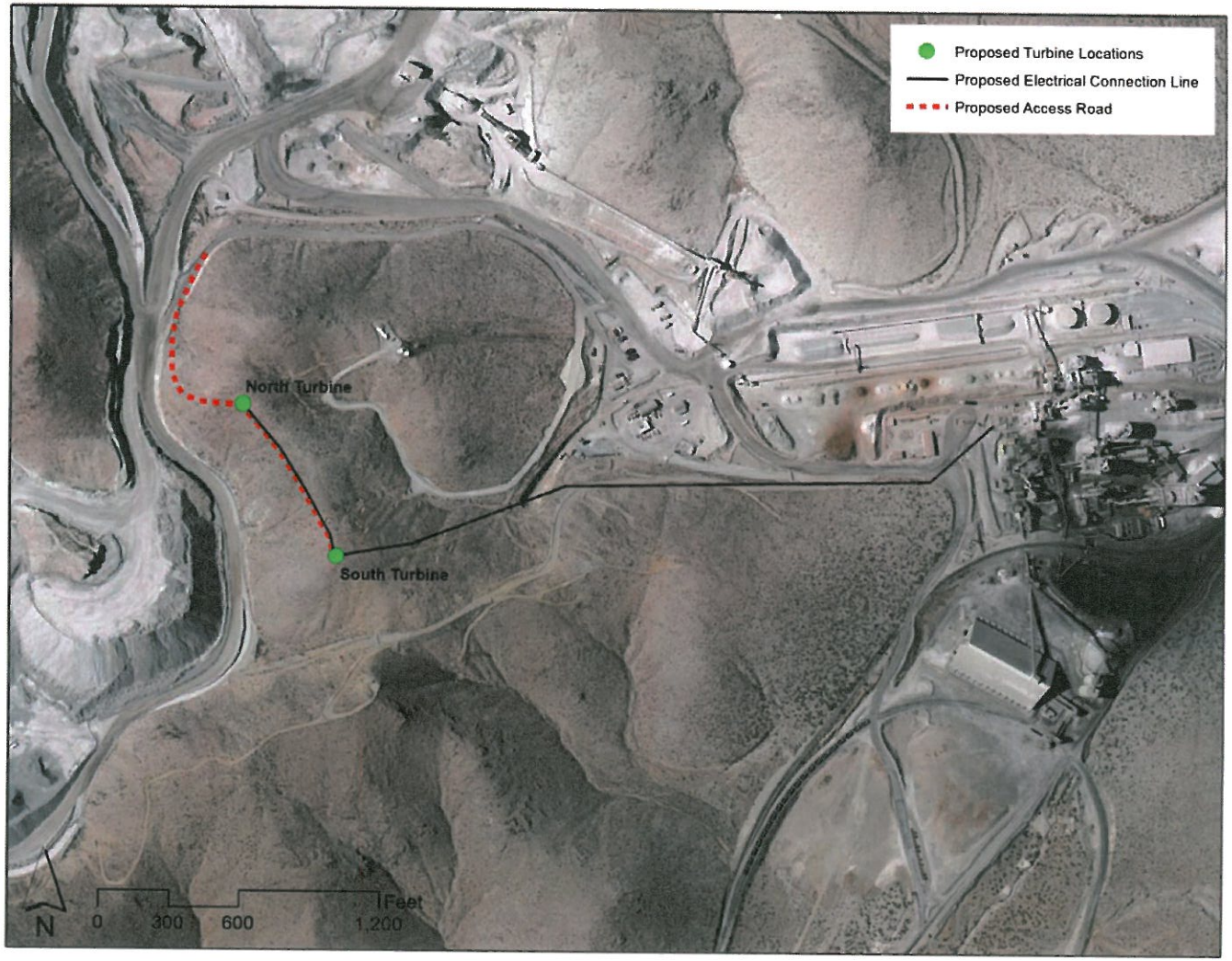


Figure 2 Project Location and Project Elements



Existing Biological Conditions

The project site is located at 25220 Black Mountain Quarry Road Apple Valley, California approximately 12.7 miles northeast of the city of Victorville and 11 miles northeast of the Town of Apple Valley. The project site is located on the top of two hills, with a proposed access road on the north slope of the peak and the proposed pole line on the east slope. The vegetation at the project site is composed of Mojavean Desert scrub communities in rocky soil. The dominant plant community within the project site is Creosote Bush Scrub. Vegetation at the site is sparse and scattered along the hillsides within the project site. Dominant species include creosote bush (*Larrea tridentata*), and burrobush (*Ambrosia dumosa*) near the turbine sites, proposed road and along most of the proposed pole line. Closer to the plant, to the east, along the proposed pole line and existing quarry roads, dominant vegetation consists of creosote bush, burrobush, Joshua tree (*Yucca brevifolia*) and Mojave yucca (*Yucca schidigera*).

Study Methods

Pre- Survey

Prior to conducting the additional surveys, BRC performed an updated database search to obtain a list of special-status resources in the region. Information on sensitive wildlife and plants and sensitive habitats was obtained from the California Natural Diversity Database RareFind 3.1.0 (CNDDB; CDFG 2010) for the Apple Valley North, Turtle Valley, Stoddard Wells, West Ord Mountain, White Horse Mountain, and Fairview Valley US Geological Survey (USGS) 7.5-minute quadrangles, the US Fish and Wildlife Service's (USFWS) *List of Threatened and Endangered Species Which May Occur in San Bernardino County, CA*. The CNDDB output includes not only federally-listed and state-listed threatened and endangered plant and animal species known to occur in the selected quadrangles, but species that may have other special distribution or population status (e.g., California Native Plant Society-listed plants, and California Dept. of Fish & Game Species of Special Concern). Other references used to complete this report include *Mammals of California* (Jameson and Peeters 2004), Inventory *of Rare and Endangered Vascular Plants* (CNPS 2010), *The Jepson Manual: Higher Plants of California Second Edition* (Baldwin 2012), *A Flora of Southern California* (Munz 1974), and *A Manual of California Vegetation, Second Edition* (Sawyer and Keeler-Wolf 2009).

Table 1. List of state and federally endangered, threatened, proposed, candidate, and sensitive species from CNDDB search of the Apple Valley North, Turtle Valley, Stoddard Wells, West Ord Mountain, White Horse Mountain, and Fairview Valley 7.5 Minute USGS quadrangles, and the potential for occurrence along the project alignment at the CEMEX Black Mountain Quarry. (Low = no suitable habitat observed, Medium = suitable habitat present, Present = Observed on Site).

Common Name	Scientific name	Listing	Potential to occur at Site
Plants			
desert cymopterus	*Cymopterus deserticola*	1B.2	Low
Barstow woolly sunflower	*Eriophyllum mohavense*	1B.2	Low
creamy blazing star	*Mentzelia tridentata*	1B.3	Low
Mojave monkeyflower	*Mimulus mohavensis*	1B.2	Low
Beaver Dam breadroot	*Pediomelum castoreum*	1B.2	Low
Reptiles			
desert tortoise	*Gopherus agassizii*	FT, ST	Low
Birds			
burrowing owl	*Athene cunicularia*	SSC	Low
prairie falcon	*Falco mexicanus*	SWL	Low
Loggerhead shrike	*Lanius ludovicianus*	SSC	Low
Bendire's thrasher	*Toxostoma bendirei*	SSC	Low
Le Conte's thrasher	*Toxostoma lecontei*	SSC	Low
Mammals			
pallid San Diego pocket mouse	*Chaetodipus fallax pallidus*	SSC	Low
western mastiff bat	*Eumops perotis californicus*	SSC	Low

FE = Federally listed as Endangered
FT = Federal listed as Threatened
FC = Federal candidate for listing under the Endangered Species Act
FD = Federally delisted
FPE = Federally proposed for listing as Endangered
FPT = Federally proposed for listing as Threatened
SC = State proposed for listing
SE = State-listed as Endangered
ST = State-listed as Threatened
SWL= California Department of Fish and Game (CDFG) Watch List Species
SSC = California Department of Fish and Game (CDFG) Species of Special Concern
SFP = California Department of Fish and Game (CDFG) Fully Protected Species
SR = State Rare
California Native Plant Society System:
1A = Presumed extinct in California
1B = Rare or Endangered in California and elsewhere
2 = Rare or Endangered in California, more common elsewhere
3 = Plants for which we need more information - Review list
4 = Plants of limited distribution - Watch list
.1 = Seriously endangered in California (over 80% of occurrences threatened)
.2 = Fairly endangered in California (20-80% occurrences threatened)
.3 = Not very endangered in California (<20% of occurrences threatened or no current threats known)

Desert Tortoise

BRC qualified biologists Sara Termondt and Matt Schaap, with special training and experience with DT, visited the site on June 19, 2012. A walking survey within the project area with an emphasis at the proposed turbine locations, proposed road alignments and proposed electrical connection line was conducted and was traversed using 10' transects consistent with CDFG and USFWS protocol methods allowing for full coverage of all impacted areas in the project site.

Mojave Ground Squirrel

BRC qualified biologist Bill Vanherweg, with special training and experience with MGS, conducted visual surveys to determine MGS activity and habitat quality per the MGS survey guidelines during the week of June 18, 2012. A walking survey within the project area with an emphasis at the proposed turbine locations, proposed road alignments and proposed electrical connection line was conducted pursuant to the MGS Protocol Guidelines.

Botanical Surveys - Mojave Monkeyflower (Mimulus mohavensis) & Creamy Blazing Star (Mentzelia tridentata)

BioResource Consultants Inc. botanist Stephen Jones, familiar with the natural resources and special-status plant species of the region, conducted a rare plant survey on June 19, 2012 with an emphasis on Mojave monkey flower (*Mimulus mohavensis*) and creamy blazing star (*Mentzelia tridentata*) as suggested by CDFG. The purpose of the survey was to determine the presence of suitable habitat for or individual special-status plants at the project site. The survey was conducted in accordance with the California Native Plant Society Botanical Survey Guidelines. The surveys were conducted within the blooming period of Mojave monkey flower but outside the blooming period for creamy blazing star. A walking survey within the project area with an emphasis at the proposed turbine locations, proposed road alignments and proposed electrical connection line. The area was thoroughly traversed allowing for full coverage of all plant communities in the project site to be characterized. All plants encountered were identified to the species level and nomenclature was according to *The Jepson Manual: Higher Plants of California Second Edition* (Baldwin 2012).

Burrowing Owls

BRC qualified ornithologists Sara Termondt and Matt Schaap, with special training and experience with BUOW, visited the site on June 19, 2012. The BRC biologists used the standard methods for BUOW surveys as outlined in *Burrowing Owl Survey Protocol and Mitigation Guidelines* (Burrowing Owl Consortium 1993). These guidelines apply a tiered survey approach (i.e., Phases I-IV).

Golden Eagle

Based on recommendations from USFWS and CDFG the Applicant conducted a detailed analysis tracking the movement of three Golden Eagles tagged with cellular radio transponders. The radio transponders transmitted the exact location of the birds every 15 minutes for four months, January through April of 2012. These cellular radio signals also included several transmissions which recorded the birds' position every 30 seconds for a 24 hour period in order to track the typical flight patterns of the tagged birds. The birds were nesting in nearby mountains and were the most likely individuals to come into contact with the project site. The Golden Eagle Flight Pattern Analysis was conducted by the West Virginia University.

Bat Species

BRC qualified biologists Sara Termondt and Matt Schaap, with special training and experience with bat species, conducted presence/absence surveys for bat species using *Anabat SD2 CF* bat detection equipment. Even though no sensitive or protected bat species have been recorded in any database for the project location, if a sensitive or protected bat species is observed during the surveys, the appropriate resource management agency is to be consulted and further mitigation measures will be implemented. The anabat equipment was set up along the ridge between the north and south proposed turbine locations. The anabat equipment was programmed to record all bats in the vicinity of the turbines from 1800 to 0600 from the evening of June 19, 2012 to the morning of June 22, 2012.

Lake Streambed Alteration Agreement

Stephen Jones of BRC, a qualified wetland scientist, conducted delineation on June 19, 2012 using the routine onsite determination method described in the *U.S. Army Corps of Engineers Wetland Delineation Manual (1987*) and in accordance with the methods identified in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual Arid West Region (Version 2.0) (2010)*. The boundaries of non-tidal, non-wetland water were delineated at the ordinary high water mark (OHWM) as defined in 33 Code of Federal Regulations (CDR) 328.3 and in accordance with *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the U.S., A Delineation Manual (August 2008)*. The boundaries of State Waters subject to regulation by the CDFG were delineated using agency-issued guidance under the California Fish and Game Code (FGC), related CDFG materials, and standard practices by CDFG personnel. CDFG jurisdiction was delineated by measuring the outer boundaries of the greater of either the top of bank measurement (bankfull width) or the extent of associated riparian or wetland vegetation.

Survey Results

Desert Tortoise

Technically, the project is in the range of the desert tortoise (DT); the project site is described in the project BA as heavily disturbed with multiple roads, evidence of grading, and materials being dumped in the vicinity of old buildings and utility structures. The site is located between an active open pit limestone quarry that is approximately 3,800 feet wide, the cement manufacturing plant, and an excess materials dumping site that is approximately 2,400 feet wide. The area immediately next to the plant, adjacent to the proposed pole line, is devoid of all vegetation. The turbine locations are at the top of a 20' to 25' berm. The steep incline of the berm reduces the ability of tortoises to migrate to the project site.

During the desert tortoise survey a total of 3 mammal burrows were observed at the following locations.

- 489835 – 3830991
- 489789 – 3831158
- 489747 – 3831197

A walking survey within the project area with an emphasis at the proposed turbine locations, proposed road alignments and proposed electrical connection line was conducted and was traversed using 10' transects consistent with CDFG and USFWS protocol methods allowing for full coverage of all impacted areas in the project site. The DT surveys of the project area failed to yield any evidence of desert tortoise (i.e. tortoise carcass, burrows or scat) within the project area. Therefore desert tortoise is not expected to occur at the project site.

As previously documented in the Response to California Department of Fish and Game Comments for the Foundation Windpower, LLC – CEMEX Black Mountain; Proposed Installation of Two 397-Foot-Tall Wind Turbines, Mitigated Negative Declaration (SCH No. 2012041031) memorandum dated June 6, 2012, Ray Bransfield of United States Fish and Wildlife Service (USFWS) commented on the BA on January 6, 2012. After Mr. Bransfield visited the site in early December of 2011, he concluded that protocol-level surveys for desert tortoise would not be necessary, but that a reconnaissance-level survey to determine presence of DT or burrows would be appropriate. Mr. Bransfield also concluded that DT was probably absent from the site.

Based on the survey of January 17, 2012 and the current survey of June 19, 2012, the lack of suitable habitat at the project site, the active mining operations surrounding the turbine locations and comments from the USFWS, it is our determination that DT are not expected to occur and will not be impacted by the project. Therefore, an incidental take permit is not necessary nor are additional mitigation and avoidance measures required.

The Applicant has already agreed to the following Avoidance and Minimization Measures and will incorporate these measures into the Conditional Use Permit.

- Complete a pre-construction survey to ensure the project affected area does not include any DT or DT burrows. If DT are present and cannot be avoided during construction, or excluded from the project site using approved methods, the Applicant will consult a qualified biologist and USFWS to determine the appropriate action or wait until the animal moves to safety on its own.

- Implement a Worker Environmental Training Program lead by a qualified biologist that emphasizes project BMP's and DT avoidance measures.

- Prohibit all handling of DT by non-authorized biologists and maintain records of any and all DT encountered during project activities (information recorded will include for each DT: the locations and dates of observations; general condition and health; location moved from and location moved to; and diagnostic markings). A USFWS-approved desert tortoise handler will be available if animals need to be relocated from the construction area.

- Require inspection by all workers underneath each on-site parked vehicle prior to moving it.

- Implement a litter control program to reduce the attractiveness of the project site to common ravens and other desert tortoise predators. Trash will be promptly placed in containers that will be removed from the work site on a regular basis.

Mohave Ground Squirrel

A walking survey within the project area with an emphasis at the proposed turbine locations, proposed road alignments and proposed electrical connection line was conducted pursuant to the MGS Protocol Guidelines. Based on the surveys conducted by Bill Vanherweg, the project site is not suitable habitat for the Mojave ground squirrel with rocky gravelly soils not suitable for burrowing. No observations of squirrels, or sign were observed and Mojave ground squirrels are not expected and will not be impacted by the project. Therefore, no additional surveys including trapping are necessary and an incidental take permit is not required.

Botanical Surveys - Mojave Monkeyflower (Mimulus mohavensis) & Creamy Blazing Star (Mentzelia tridentata))

On June 19, 2012 a walking survey within the project area with an emphasis at the proposed turbine locations, proposed road alignments and proposed electrical connection line and was traversed allowing for full coverage of all plant communities in the project site to be characterized.

The survey was conducted in accordance with the California Native Plant Society Botanical Survey Guidelines. Neither Mojave monkeyflower nor creamy blazing star was observed during the June 19, 2012 survey.

Table 2. Plant Species observed

Scientific name	Common Name
Ambrosia dumosa	Burrow bush
Amsinckia tessellata	Fiddleneck
Brassica nigra	Black mustard
Bromus rubens	Red brome
Bromus tectorum	Ripgut brome
Descuraninia pinnata	Tansy mustard
Echinocactus englemannii	Calico cactus
Echinocactus polycephalus	Cottontop cactus
Ephedera californica	Mormon tea
Ericemaria nauseosus	Rabbitbrush
Eriogonum fasciculatum	California buckwheat
Eriogonum inflatum	Desert trumpet
Erodium cicutarium	Storksbill
Filago depressa	Filago
Hymenoclea salsola	Cheese bush
Larrea tridentata	Creosote bush
Lycium cooperi	Cooper's box thorn
Malacothrix glabrata	Malacothrix
Melica imperfecta	Melic grass
Mirablis californica	California four-o-clock
Opuntia basilaris	Beavertail cactus
Opintia ramosissima	Cholla
Salsola tragus	Russian thistle
Schismus barbatus	Mediterranean grass
Yucca breviflora	Joshua tree
Yucca schidigera	Mojave yucca

Mojave monkey flower is found on granitic soils on gravelly banks of desert washes in sandy openings between Creosote (*Larrea tridentata*) in creosote bush scrub. The closest known location observed in 2005 was within sidewinder Valley near Quarry Road (approximately 2 miles from the project site) within a creosote dominated desert shrub land with compacted rocky fine soils.

The project area lacks desert washes and while the soils are granitic (lithic rock outcrops derived from residuum weathered from granite) the plant community lacks dominant creosote and is a desert scrub dominated by burrow bush (*Ambrosia dumosa*), cheese bush (*Hymenoclea salsola*), and California buckwheat (*Eriogonum fasciculatum*). The soil is characterized as cobbly to stony and lacks sandy conditions. No plants of this genus were observed and the surveys were conducted during the blooming period (April thru June) for this species.

Therefore, Mojave monkey flower is not expected to occur and will not be affected by the project. Therefore, mitigation and avoidance measures are not required.

Creamy blazing star is found in Mojavean Desert Scrub on rocky gravelly soils. This species was not observed nor were plants of this genus. There are no known records for the occurrence of this species in the project area or vicinity (CNDDB – BIOS). While the survey was conducted outside the blooming period March through May the species is known to bloom later than May. The soils of the area are granitic with a surface layer of rocks/gravel and provides suitable habitat for this species. The project is dominated by Mojave Desert scrub dominated by burrow bush, cheese bush and California buckwheat.

While this species was not observed and there are no known records of the species within 5 miles of the project site there is still a low potential for its occurrence. If construction occurs during the blooming period, a pre-construction survey should be conducted to determine the presence or absence of the species. However, the projected construction schedule is for the late-summer or early-fall of 2012 (August-October). There is a low probability of this species occurring during the fall construction time frame because this species will be dormant. During construction, soil from excavation will not be removed from the site and the potential seed bank for the species will still be on site. The project will have a small disturbance footprint within suitable habitat for the creamy blazing star. In addition, creamy blazing star is a CNPS 1B.3 listed species, rare or endangered in California and elsewhere but not very endangered in California with less than 20% of occurrences threatened or no current threats known. Therefore, potential impacts to this species will be minimal and should not affect the overall distribution and viability of this species. However, to further ensure minimal impacts to the species in the project area the applicant will implement the following mitigation measure:

- In the project area where there is this ground disturbance from excavation or vegetation clearing the top 6 inches of top soil will be stockpiled to be re-spread after construction. Allowing further protection of the potential existing seed bank.

No additional mitigation and avoidance measures are required.

Burrowing Owl

As previously documented in the BA mammal burrows and holes in old manmade structures found onsite and in the surrounding area provide suitable burrow sites for burrowing owls.

The June 19, 2012 BUOW survey was conducting pursuant to the standard methods for BUOW surveys as outlined in *Burrowing Owl Survey Protocol and Mitigation Guidelines* (Burrowing Owl Consortium 1993). These guidelines apply a tiered survey approach (i.e., Phases I-IV).

During the June 19, 2012 burrowing owl survey a total of 3 mammal burrows were observed at the following locations.

- 489835 – 3830991
- 489789 – 3831158

- 489747 – 3831197

No evidence of burrowing owls (i.e. white wash, feathers or pellets) was observed at any of the burrows observed on the project site. Each burrow was monitored for approximately 30 minutes from 1800 to 1830 to ensure that the burrows were not being used by burrowing owls. Based on the January 17, 2012 and June 19, 2012 surveys, the lack of BUOW sign or individual birds and level of disturbance and ongoing human activity at the project site, BUOW are not expected to occur and will not be impacted by the project. Therefore, an incidental take permit is not necessary nor is any additional mitigation and avoidance measures.

However, to fully avoid potential impacts to burrowing owls, the Applicant has already agreed to implement the following avoidance and minimization measures.

- Due to the potential for BUOW to be present along the project alignment, a pre-construction survey for BUOW shall be conducted to determine presence or absence. The survey will include all suitable habitats within the project site. The surveys will be conducted from two hours before sunset to one hour after or from one hour before to two hours after sunrise. If BUOW and their burrows are present and cannot be avoided during construction, construction plans will be modified to avoid disturbance. If in the opinion of a certified biologist the construction plans cannot be modified to avoid disturbance, then CDFG will be consulted to determine the appropriate action.
- If BUOW or their burrows are present and will not be directly impacted, then a 300-foot buffer shall be established around the active burrow and no construction activities shall occur within the buffer without the approval of a qualified biologist to review and observe the construction until the young have fledged and the burrow is determined to be inactive.
- BUOW avoidance measures shall be taught to the construction team during the Worker Environmental Training, prior to construction.

Golden Eagle

Based on recommendations from USFWS and CDFG the Applicant conducted a detailed analysis involving tagging three Golden Eagles with cellular radio transponders which transmitted the exact location of the birds every 15 minutes for four months January through April of 2012. These cellular radio signals also included several transmissions which recorded the birds' position every 30 seconds for a 24 hour period in order to track the typical flight patterns of the tagged birds. The birds were nesting in the mountains adjacent to the project site and were the most likely individuals in the area to come into contact with the project site. The Golden Eagle Flight Pattern Analysis was conducted by the West Virginia University.

The West Virginia University study resulted in 10,000 to 22,000 data point measurements per tagged bird. In the entire study period there was not a single data point within 1 kilometer of the project site, and less than 1% of the data points were within 2 kilometers of the project site. Refer to attached West Virginia University Golden Eagle Movement and Behavior near the CEMEX Black Mountain Wind Study.

The West Virginia University biologist concluded that if there are any impacts to golden eagles they are expected to be low. The project has a small scale of only 2 operating units which will be operating approximately 65% of the time given the wind resource at the site. Also, the blades on the turbines move relatively slowly at 20 RPMs making the turbine blades visible to any migratory bird species.

BRC completed an independent analysis of the facts and data included in the MVU study and based on this level of risk, we recommend the following monitoring and avoidance measures for consideration by USFWS.

Mitigation – Avoidance and Minimization Measures

The following mitigation avoidance and minimization measures are recommended to reduce potential impacts to GOEA from the proposed project activities.

- Mitigation Measure 1: Habitat Avoidance Through Site Selection

  In selecting the current site the Applicant has already incorporated the most significant project modification possible, which is selecting a site which avoids the primary nesting and foraging area for the GOEA. In developing the project options the Applicant considered and rejected sites that were recommended to the site owner by a different wind project developer which were located on the ridgelines of the Black Mountain Range. While these locations contain a significantly more robust wind resource, they are close by to the now documented locations of several GOEA. The Applicant instead selected a location much lower down the mountain on two small hills immediately adjacent to significant mechanical, human and vehicular traffic. As evidenced in the West Virginia University study this siting decision will dramatically reduce the potential for collision with GOEA.

- Mitigation Measure 2: Habitat Avoidance Through Equipment Selection

  The applicant is proposing to use wind equipment which utilizes a monopole structure and a modern 3 blade General Electric 1.5 megawatt wind turbine. This equipment selection results in a structure which provides no perching areas for raptors or other birds which is a commonly understood problem with older and smaller wind equipment in the region which utilized lattice tower structures. Additionally, modern wind equipment with sophisticated gear ratios results in a blade motion whose maximum rotational velocity is approximately 20 RPMs. This results in a blade which is clearly visible to the human eye even when moving at its maximum speed. While studies have not been able to quantify the exact benefit to avian species, Common Sense would conclude this method and speed of blade motion increases the ability for birds to see and therefore to avoid the obstacle.

  The Applicant is has proposed a structure which stands 397' tall at the tip of the blade when at its highest point with a blade radius of 135'. While the aforementioned factors all indicate the risk of collision is statistically insignificant, the Applicant has agreed to use equipment that is lower in its height from ground level and which has shorter blade.

Reducing the total height of the structure any amount will obviously reduce the potential for collision with GOEA. By using equipment whose maximum height is only 340' from ground level the applicant reduces the total height by ~15% and thereby further reduce the potential for collision. Likewise, by agreeing to utilize a shorter blade whose length is 126' the wind swept area of the facility is reduced ~13%.

- Mitigation Measure 3: Pre-Construction Survey

  Prior to construction, a qualified biologist will conduct a survey to determine the presence/absence of GOEA within 0.25 miles from the project site. In addition, the biologist will document any potential nesting or perching locations for eagles within .025 miles from the project site. All potential perching or nesting sites will be discussed with the USFWS to determine the appropriate steps to minimize and avoid a possible injury or mortality to GOEA.

- Mitigation Measure 4: Other Habitat Avoidance Measures

  Foundation Windpower (Applicant) will consult with a qualified biologist to incorporate design recommendations in the USFWS guidelines for both the construction and operation of the turbines. These measures may include hand cutting vegetation to ground level leaving the topsoil intact, to minimize prey population, promptly removing carrion, avoiding perch areas on the tower, and making all lighting consistent with the FAA requirements while also at minimum intensity and minimum number of flashes per minute.

- Mitigation Measure 5: Construction and Operation Minimization Measures

  1. Limit proposed work to existing disturbed areas, when possible.
  2. During construction contain and remove all trash from the site on a daily basis.
  3. During the turbine operations implement a litter control program to reduce site attractiveness to migratory birds and eagles in which all trash is promptly removed from the site and placed in containers to be disposed at an authorized landfill.

- Mitigation Measure 6: Anti-Perching Controls

  All overhead transmission lines shall be constructed with raptor guards/ anti-perching devices.

- Mitigation Measure 7: Post Construction Monitoring Program

  The applicant shall prepare and implement a post-construction bird mortality monitoring program whose focus is to determine whether estimated perceived risk associated with the project was accurate. The monitoring program shall be conducted on a monthly basis by a qualified biologist for two years during breeding seasons. A qualified biologist shall also train onsite personnel to conduct mortality monitoring with specific instructions and procedures to notify a certified biologist if any bird carcasses are observed within a 300' radius of the project site.

If actual operations indicate the probability of harming or killing an eagle is significant as demonstrated by actual GOEA kills, then the Applicant, Foundation Windpower, shall develop additional mitigation and avoidance measures to decrease the risk of taking a Golden Eagle, and may be required by USFWS to apply for a take permit.
The Applicant has agreed to pursue a take permit if actual experience, or a more comprehensive analysis of the data available through the WVU study, indicates a significant risk exists.

Bat Species

BRC conducted presence/absence surveys for bat species using *Anabat SD2 CF* bat detection equipment. The Anabat equipment was setup along the ridge between the north and south proposed turbine locations. The Anabat equipment was programmed to record all bats in the vicinity of the turbines form 1800 to 0600 from the evening of June 19, 2012 to the morning of June 22, 2012. Preliminary data indicates no bat activity at the project site. Additional data will being collected and analyzed during the week June 25, 2012 before a determination can be made on the presence or absence of bat species.

If sensitive or protected bat species are detected, the appropriate resource management agency is to be consulted and further mitigation measures will be implemented.

Lake Streambed Alteration Agreement

No areas meeting the three mandatory delineation criteria (hydrophytic vegetation, hydric sols, and hydrology) were present at the project site. In addition, no drainages or channels that would be characterized (ordinary high water mark, scour, bed and bank) as State Waters or Waters of the U.S. are present on site. Therefore, the project will not impact wetlands, State Waters or Waters of the U.S. and will not require permitting pursuant to Section 404 of the Clean Water Act under the jurisdiction of the Army Corps of Engineers or California Department of Fish and Game Code 1602 Streambed Alteration Agreement under the jurisdiction of the California Department of Fish and Game.

We believe this addendum to the Biological Assessment sufficiently embodies the biological resource surveys requested by the CDFG and County, but please contact me if additional information or clarification regarding our Biological Assessment is required.

Sincerely,

Stephen Jones
Senior Botanist

cc: Brian E Holly, Senior Project Manager/ Senior Ecologist

Attachments:
BRC Black Mountain Quarry Road Wind Project Biological Assessment
BRC Golden Eagle Flight Pattern Data Analysis for the Proposed CEMEX Black Mountain Wind Energy Project
West Virginia University Golden Eagle Movement and Behavior near the CEMEX Black Mountain Wind

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Black Mountain Quarry Road Wind Project

Biological Assessment

CEMEX Construction Materials Pacific, LLC
25220 Black Mountain Quarry Road, Apple Valley, CA 92307

On-Site Wind Energy Supplement

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January 2012

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1.0 EXECUTIVE SUMMARY

CEMEX is working with Foundation Windpower to install utility grade wind turbines on its 150+ acre property within the permitted quarry near Apple Valley, CA, (APN: 0463-141-12-0000 & 0463-141-08-0000). The project will produce an estimated 8000 Megawatt hours of electricity in an average year, enough to power 820 average American homes. The wind turbines themselves consist of a three-bladed wind turbine on a tubular steel tower with a hub height of approximately 80 meters tall. The rotor diameter is 82.5 meters and the rotor radius is half that amount. The system will include two wind turbine generators, transformers, switchgear and metering panels. The foundations and structural systems will be designed to meet California Building Code (CBC) for seismic zone compliance. The preliminary project footprint of each wind turbine foundation will be approximately 800 sq ft (.018 acres). Approximately 3,800 feet of overhead wires will be required to connect the wind turbine transformers to the existing substation at CEMEX. These lines will be carried overhead by poles placed approximately every 300 feet and will not exceed 25 feet in height. This will allow safe and regular passage of all trucks and other vehicles regularly on the site. An access road will be constructed from existing roads on the site to the base of the turbine.

BioResource Consultants, Inc. (BRC) performed site visits to map the vegetation, inventory the flora, and fauna, assess the habitat suitability for potential special-status species, map any sensitive biological resources on-site and record observations of plant and wildlife species.

No federally or state listed endangered, threatened, or rare animal or plant species were observed within the survey area. However, the project site supports suitable habitat for the burrowing owl (*Athene cunicularia*), desert tortoise (*Gopherus agassizii*), Mojave monkeyflower (*Mimulus mohavensis*) and creamy blazing star (*Mentzelia tridentata*). In addition, the site supports suitable habitat that provides potential roosting and nesting sites for birds protected by the CDFG and the MBTA.

Potential Direct and indirect impacts to burrowing owls and desert tortoises would be considered less than significant with the implementation of the project avoidance and minimization measures. Potential impacts to Mojave monkeyflower, and creamy blazing star would be considered less than significant with the implementation of the project avoidance and minimization measures. Potential direct impacts to protected birds would be considered less than significant. With the implementation of project avoidance and minimization measures potential indirect impacts to protected nesting birds would be considered less than significant.

2.0 INTRODUCTION

CEMEX is working with Foundation Windpower to install utility grade wind turbines on its 150+ acre property within the permitted quarry near Apple Valley, CA, (APN: 0463-141-12-0000 & 0463-141-08-0000). The project will improve CEMEX's overall energy efficiency by supplementing its existing electricity delivered through the grid by Southern California Edison (SCE) with an onsite, emission-free renewable energy source. Wind power is 100% renewable and produces no greenhouse gases during operation. In fact, this project will reduce approximately 4,769 tons per year of CO2 generation from traditional electricity generation sources. The project will produce an estimated 8000 Megawatt hours of electricity in an average year, enough to power 820 average American homes.[1]

On site renewable energy also stabilizes energy costs for CEMEX's Apple Valley, CA facility. This makes CEMEX's cost of production more reliable and thereby helps retain jobs in the region. In addition, the facility will be better prepared to comply with future environmental requirements related to carbon emissions.

Currently, CEMEX employs approximately 150 full time Californians at the quarry site. This wind turbine will help keep the facility operating and these jobs in San Bernardino, County.

The power output of a wind turbine is a direct function of wind speed. The meteorological conditions at the CEMEX site are favorable to wind energy generation: the overall wind resource is strong, particularly during summer afternoon hours. Summer afternoon hours are defined by SCE as "peak" electrical demand hours, and as such, purchasing energy from the grid during those hours is the most expensive and has the greatest greenhouse gas impact.

2.1 PROJECT DESCRIPTION

On behalf of CEMEX, Foundation Windpower will construct and operate two UL certified 1.6 XLE General Electric wind turbines on the CEMEX' property located at 25220 Black Mountain Quarry Road, Apple Valley California. The wind turbines will be the first alternative energy system on the property and will improve energy efficiency, reduce carbon emissions caused by the plant, and provide a 100% renewable source of electricity to operate the quarry.

The wind turbine will be designed in accordance with Federal Aviation Administration (FAA) requirements for obstructions to navigable airspace. It will be painted bright white and include lighting in accordance with FAA requirements. The wind turbines themselves consist of a three-bladed wind turbine on a tubular steel tower with a hub height of approximately 80 meters tall. The rotor diameter is 82.5 meters and the rotor radius is half that amount. The system will include two wind turbine generators, transformers, switchgear and metering panels. The foundations and structural systems will be designed to meet California Building Code (CBC) for seismic zone compliance. The preliminary project footprint of each wind turbine foundation will be approximately 800 sq ft (.018 acres).

Approximately 3,800 feet of overhead wires will be required to connect the wind turbine transformers to the existing substation at CEMEX. These lines will be carried overhead by poles placed approximately every 300 feet and will not exceed 25 feet in height. This will allow safe and regular passage of all trucks and other vehicles regularly on the site. An access road will be constructed from existing roads on the site to the base of the turbine. If required, any existing onsite perimeter fencing may be removed and replaced to accommodate access of the crane and turbine component delivery.

3.0 STUDY METHODS

Prior to visiting the site to evaluate potential biological sensitivities, BioResource Consultants, Inc. (BRC) performed a database search to obtain a list of special-status resources in the region. Information on sensitive wildlife and plants and sensitive habitats was obtained from the California Natural Diversity Database RareFind 3.1.0 (CNDDB; CDFG 2010) for the Apple Valley North, Turtle Valley, Stoddard Well, West Ord Mountain, White Horse Mountain, and Fairview Valley US Geological Survey (USGS) 7.5-minute quadrangle, the US Fish and Wildlife Service's (USFWS) *List of Threatened and Endangered Species Which May Occur in San Bernardino County, CA*. The CNDDB output includes not only federally-listed and state-listed threatened and endangered plant and animal species known to occur in the selected quadrangles, but species that may have other special distribution or population status (e.g., California Native Plant Society-listed plants, and California Dept. of Fish & Game Species of Special Concern).

The pre-site visit database search provided a basis for identifying and addressing the appropriate sensitive resources that are known to occur or have the potential to occur in the region of the proposed project. These CNDDB-listed and USFWS-listed sensitive resources are shown in Appendix B, along with a description of the likelihood of occurrence at the project site. Species that could possibly occur at the project site are discussed further in Section 4.5. Other references used to complete this report include *Mammals of California* (Jameson and Peeters 2004), Inventory *of Rare and Endangered Vascular Plants* (CNPS 2010), *The Jepson Manual: Higher Plants of California* (Hickman 1993), *A Flora of Southern California* (Munz 1974), A *Flora of the Santa Barbara Region, California, Second Edition* (Smith1998), and *A Manual of California Vegetation, Second Edition* (Sawyer and Keeler-Wolf 2009).

Patrick Martin, a qualified BRC biologist familiar with the special-status resources of the region, conducted a reconnaissance-level biological survey on January 17, 2012. The purpose of the field survey was to determine the likelihood of occurrence of any special-status species based on the presence/absence of suitable habitat and other natural history elements that might predict their occurrence. However, due to project timelines, the survey was not conducted during the appropriate floristic window for identifying all plants that could occur in the project area.

4.0 ENVIRONMENTAL SETTING

4.1 EXISTING BIOLOGICAL CONDITIONS

The project site is located at 25220 Black Mountain Quarry Road Apple Valley, California approximately 12.7 miles northeast of the city of Victorville and 11 miles northeast of the city of Apple Valley. The project site is located on the top of two peaks, with a proposed access road on the north slope of the peak and the proposed pole line on the east slope. The site is previously disturbed with several old roads and old utility structures with re-established native vegetation. Appendix C presents representative photographs of the project area.

4.2 VEGETATION

The vegetation at the project site is composed of a Mojavean Desert scrub communities in rocky soil. The dominant plant community within the project site is Creosote Bush Scrub. Vegetation at the site is sparse and scattered along the hillsides within the project site. Dominant species include creosote bush (*Larrea tridentata*), and burrobush (*Ambrosia dumosa*) near the turbine sites, proposed road and along most of the proposed pole line. Closer to the plant, to the east, along the proposed pole line and existing quarry roads, dominant vegetation consists of creosote bush, burrobush, Joshua tree (*Yucca brevifolia*) and Mojave yucca (*Yucca schidigera*). A complete list of plant species identified at the site is provided in Appendix D.

4.3 GENERAL WILDLIFE

A list of wildlife species detected during the site visit is provided in Appendix E, and includes a variety of birds known to be commonly associated with the dominant plant communities of the area. Active wood rat (*Neotoma lepida*) dens were found scattered throughout the proposed project site. A large mammal burrow with mammal scat was identified between the two proposed turbine sites. This burrow and the surrounding area provides suitable habitat for both desert tortoise and burrowing owl, although no sign of either of these species were observed. Other pallets or partial burrows were observed along the project alignment. No reptiles or amphibians were detected during the site survey, however suitable habitat for many reptile species was observed.

4.4 WETLANDS AND WATERS

There were no wetlands or water ways detected onsite or in the vicinity during the site visit.

4.5 SPECIAL STATUS SPECIES

A search of the CNDDB (Apple Valley North, Turtle Valley, Stoddard Well, West Ord Mountain, White Horse Mountain, and Fairview Valley 7.5 Minute USGS quadrangles), the US Fish and Wildlife Service's *Federally Listed Threatened & Endangered Species Which May Occur in San Bernardino County, CA* within the general region of the project (Appendix A). **Figure 3** shows the closest known locations of special-status species.

Although no special status species were detected during the site survey, conducted on January 17, 2012, there is suitable habitat for burrowing owl, desert tortoise, Mojave monkeyflower (*Mimulus mohavensis*) and creamy blazing star.

Desert tortoise (*Gopherus agassizii*). Status: Federally Threatened, State Threatened. In California, desert tortoise occurs primarily in the creosote, shadscale, and Joshua tree/Mohave yucca series of Mojave Desert scrub and the lower Colorado River valley subdivision of Sonoran desert scrub. Soils must be friable enough for digging of burrows, but firm enough so that burrows do not collapse. There are no records for desert tortoise within 4 miles of the project site. Suitable habitat for desert tortoise is present in the form of friable soils for digging burrows, existing mammal burrows and the site is within the known range of this species. Although no desert tortoise or sign were detected during the reconnaissance level survey, suitable habitat also appears to be present in adjacent lands to the south of the proposed project area, which was beyond the scope of this survey.

Burrowing owl (*Athene cunicularia*). Status: State Species of Special Concern. Burrowing owls can be found in grasslands, rangelands, agricultural areas, deserts, or any other dry, open areas with low vegetation. Burrowing owls are protected under the Migratory Bird Treaty Act. CNDDB records show that burrowing owls occur in the vicinity of the project area and suitable habitat does exist at the Project site. Mammal burrows and holes in old manmade structures found onsite and in the surrounding area provide suitable burrow sites for burrowing owls. However, no burrowing owls or evidence of their presence were observed during the survey.

Mojave Monkeyflower (*Mimulus mohavensis*). Status: CNPS List 1B.2. Mojave monkeyflower is a California endemic annual herb, dicot, usually found in Joshua tree woodland and Mojavean desert scrub. It flowers from April to June. This species is usually found on dry, sandy or rocky soils, most often in washes at elevations between 600 and 1175 meters. Threats to known populations of this species include mining, vehicles, development, solar and wind energy projects. Reconnaissance surveys did not detect any Mojave monkeyflower, however there is a recent CNDDB record for this species approximately 1 mile southwest of the proposed project site.

Creamy Blazing Star (*Mentzelia tridentata*) Status: CNPS List 1B.3. Creamy blazing star is an annual herb that occurs in Mojavean scrub in rocky, sandy and gravelly soils at elevations from 2,300 to 3,800 feet (CNPS 2009). It blooms from March to May. Suitable habitat for creamy blazing star is present at the proposed project site; however there are no records within 5 miles of the site.

4.6 MIGRATORY BIRDS

A list of birds observed on site is included in Appendix E, for wildlife species detected during the site visit. Suitable nesting habitat is present at the project site for multiple bird species including species observed during the reconnaissance level survey, such as cactus wren (*Campylorynchus brunnicapillus*) and chukar (*Alectoris chukar*).

Although the vegetation at the site is low, there are several spans of utility poles, and buildings associated with quarry that provide suitable nesting and perching sites for raptors and other birds, although no nests were observed at the project site. Birds and nests that could potentially occur on site area protected under the Migratory Bird Treaty Act (MBTA).

This law protects most North American bird species, including birds, active nests, eggs, and nestlings, from incidental take without a special circumstance permit. Activities that cause nest abandonment are also considered non-permitted take. The MBTA covers native game and non-game species, including both sensitive and more common taxa, but does not protect non-native species (e.g., European starling, rock dove, house sparrow). Inactive nests of native species are not protected, and these may be removed during the non-nesting season. Nesting birds could occur in the project area due to the presence of native vegetation which could support nesting birds.

5.0 PROJECT IMPACTS

The objective of this analysis is to provide decision-makers with pertinent information to consider in providing protection for threatened, endangered, proposed, and sensitive plant and wildlife species. The effects or impacts of the proposed project to threatened, endangered, proposed, and sensitive wildlife species and their habitats are presented in the context of existing resource conditions within the project area. Factors considered in this analysis include: the proximity of proposed project to the analyzed species' suitable habitat, the extent of the geographic area where disturbance may occur, the timing of proposed project in relationship to species' life history information, the effects of the proposed project on habitat, the duration of the proposed project, and the projected intensity and severity of any anticipated disturbance.

5.1 DIRECT AND INDIRECT IMPACTS

Direct impacts to vegetation, general wildlife species will result from the removal of habitat features such as boulders, large shrubs and associated understory vegetation within the proposed project. Impacts to vegetation include crushing of plants, loss of seeds in the soil, loss of potential seed set if flowers are destroyed, loss of aboveground portions of the plant, and/or loss of underground portions (rhizomes, bulbs, tubers, etc.) of the plant. These types of losses can cause, or may lead to, mortality. Construction activities could result in the mortality of small animal species from potential vegetation removal. Noise from construction activities could have an indirect effect on nesting birds and small animals in the project area resulting in their displacement to adjacent similar habitat.

Table 1 Plant Community Acreage and Impact Acreage

Plant Community or Habitat	Total Acreage per Community	Impact Acreage
Existing Road	7.939	0.238
Creosote Bush Scrub	43.654	1.353
Creosote and Yucca Scrub	3.038	0
Disturbed (graded areas and facilities)	7.607	0
Total Impacts	62.238	1.591

5.2 SPECIAL STATUS SPECIES

PLANTS: MOJAVE MONKEYFLOWER AND CREAMY BLAZING STAR

Direct Effects: Direct effects of the proposed project include potential of removal or crushing of individual or populations of these species during construction and the loss of existing habitat.

***Indirect Effects*:** Indirect effects of the proposed project include the temporary loss of existing or potential habitat and increased competition from invasive species after ground disturbance. These effects have potential to reduce population size and potential habitat.
Effects Determination: Implementation of the proposed project with the proposed minimization and avoidance measures will reduce potential impacts to less than significant levels for Mojave monkeyflower and creamy blazing star.

REPTILES: DESERT TORTOISE

***Direct Effects*:** It is possible that individual desert tortoises or burrows could be crushed by the removal of vegetation, equipment, vehicles, or pedestrians during project construction. The short duration needed for project construction, less than one month in total, will reduce the likelihood of potential impacts.

Indirect Effects: Noise and vibration associated with project construction could result in temporary displacement of individual tortoises. Turbine noise level and overall operations are not expected to increase significantly above the ongoing facility operation levels. Therefore, if tortoises have been present prior to project implementation they have habituated to existing facility conditions. In addition, trash and other human activities may attract tortoise predators such as ravens.

Effects Determination: Implementation of the proposed project with the proposed minimization and avoidance measures will reduce potential impacts to less than significant levels for the desert tortoise.

BIRDS: BURROWING OWL

Direct Effects: There is the potential that individual owls or burrows could be crushed by the removal of vegetation, equipment, vehicles, or pedestrians during project construction. The short duration needed for project construction will reduce the likelihood of potential impacts. Disturbances from temporary perch sites could increase due to noise or other activities.

Indirect Effects: Noise and vibration associated with project construction could result in temporary displacement of individual owls. Turbine noise level and overall operations are not expected to increase significantly above the ongoing facility operation levels. Therefore, if owls have been present prior to project implementation they have habituated to existing facility conditions. In addition, increased human activity in the project area could attract the attention of nest predators such as ravens.

Effects Determination: Implementation of the proposed project with the proposed minimization and avoidance measures will reduce potential impacts to less than significant levels for the burrowing owl.

5.3 MIGRATORY BIRDS

MIGRATORY BIRDS:

Direct Effects: There is the small potential for bird strikes from the operation of the proposed turbines. However, potential strikes and bird mortality area expected to be very low since this project consists of only two wind turbines with a significantly lower ground disturbing impact and bird collision risk (small footprint and spatial extent) than larger installations in the 50 to 100 turbine range. Potential bird mortality will be less than significant as a result of the project. Disturbances from temporary perch sites could increase due to noise or other activities during turbine installation. In extreme situations, heavy disturbances could cause nest abandonment, however, during the site analysis no nests were detected in the construction impacted area.

Indirect Effects: Noise and vibration associated with project construction could result in temporary displacement of individual nesting birds or nest abandonment. Turbine noise level and overall operations are not expected to increase significantly above the ongoing facility operation levels. Therefore, if birds have been present prior to project implementation they have habituated to existing facility conditions. In addition, increased human activity in the project area could attract the attention of nest predators such as ravens.

Effects Determination: Implementation of the proposed project with the proposed minimization and avoidance measures will reduce potential impacts to less than significant levels for the burrowing owl.

6.0 AVOIDANCE AND MINIMIZATION MEASURES

The following avoidance and minimization measures will be implemented during construction and operation of the turbines:

General Construction and Turbine Operation Avoidance and Minimization Measures

- Limit proposed work to existing disturbed areas when possible. The area of disturbance should be confined to the smallest practical areas, considering topography, placement of poles, location of burrows (if any are located) or vegetation, public health and safety, and other limiting factors.

- Avoid special habitat features, such as larger creosote bushes and woodrat dens.

- All trash should be removed from the jobsite daily and all construction debris will be removed at the end of the job.

- Where possible, motor vehicle access will be limited to maintained roads and designated routes.

- Obey a speed limit of 15 miles per hour when driving while within the project area, along-the-right of way maintenance roads and on routes designated for limited use.

- During turbine operations a litter control program should be implemented to reduce the attractiveness of the project site to common ravens and other raptors. desert tortoise predators. All trash will be promptly placed in containers that will be removed from the work site on a regular basis for disposal at an authorized landfill.

To avoid impacts to sensitive wildlife and plants, the following avoidance measures will be taken:

- Require all project employees, whether CEMEX employees or contract employees, to participate in a desert tortoise education program consisting of a video and/or presentation by a qualified biologist. Wallet-sized cards with appropriate tortoise information and contact telephone numbers will also be provided.

- To the extent possible, construction activities should be scheduled when desert tortoises are least active (November 1–March 15).

- To avoid impacts to the federally-listed desert tortoise during construction activities, a pre-construction survey or monitoring by a qualified biologist may be required, depending upon the time of year proposed for construction.

- If desert tortoise and their burrows are present and cannot be avoided during construction or excluded from the project site using approved methods, the United States Fish and Wildlife Service and the California Department of Fish and Game will be consulted to determine the appropriate action to proceed with project implementation.

- Prohibit all handling of desert tortoise by non-authorized biologists.

- Maintenance by the qualified biologist of records of all desert tortoise encountered during project activities (information recorded will include for each desert tortoise: the locations and dates of observations; general condition and health; location moved from and location moved to; and diagnostic markings).

- Inspection by all workers underneath each on-site, parked vehicle prior to moving it. If a desert tortoise is located, the authorized biologist will remove the animal to a safe place, or wait until the animal moves to safety on its own.

- Implementation of a litter control program to reduce the attractiveness of the project site to common ravens and other desert tortoise predators. All trash will be promptly place in containers that will be removed from the work site on a regular basis for disposal at an authorized landfill.

- To avoid impacts to sensitive plant species, a qualified biologist will perform a pre-construction botanical survey at the project site during the appropriate floristic season for the Mojave monkeyflower and creamy blazing star. Any sensitive plants found in the project area will be recorded, and 'no entry' zones will be established by the biologist around the plants so that impact to the plants is minimized by construction. If plants cannot be avoided the top 6 inches of topsoil will be removed and saved to be re-spread after construction.

- If construction takes place during bird nesting season February 1 to August 31 a biological monitor should perform a Pre-Construction Survey of the project site to determine if there are any active nests within the project area within 72 hours of the initiation of project activities. If active nests are found, and if it is physically possible, a 200 foot buffer will be established around the active nest and no construction activities will occur within the buffer without the approval of a qualified biologist to review and observe the construction until the young have fledged.

- Raptor guards/anti perching devices will be installed on the proposed overhead Transmission line.

- Due to the potential for burrowing owls to be present along the project alignment, it is recommended that a pre-construction survey for burrowing owls be conducted to determine presence or absence. The survey will include all suitable habitats within the project site. The surveys will be conducted from two hours before sunset to one hour after or from one hour before to two hours after sunrise. Surveys will be conducted during weather that is conducive to observing owls outside their burrows. Avoid surveys during heavy rain, high winds (> 20 mph), or dense fog. If burrowing owls and their burrows are present and cannot be avoided during construction the California Department of Fish and Game will be consulted to determine the appropriate action for re-location. If burrowing owls or there area active burrows present and will not be directly impacted, then a 300 foot buffer will be established around the active burrow and no construction activities will occur within the buffer without the approval of a qualified biologist to review and observe the construction until the young have fledged and the burrow is determined to be inactive.

7.0 REFERENCES

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Hickman, J. C. (ed.). 1993. *The Jepson Manual, Higher Plants of California.* University of California Press, Berkeley and Los Angeles, CA.

Jameson, E.W, Jr. and H.J. Peeters. 2004. *Mammals of California.* University of California Press, Berkeley, CA.

Munz, P.A. 1974. *A Flora of Southern California.* University of California Press, Berkeley and Los Angeles, CA.

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Stebbins, Robert C. 2003. *A Field Guide to Western Reptiles and Amphibians.* 3rd Edition. Houghton Mifflin Company.

APPENDIX A: MAPS AND FIGURES

Figure 1. Vicinity of proposed project site.

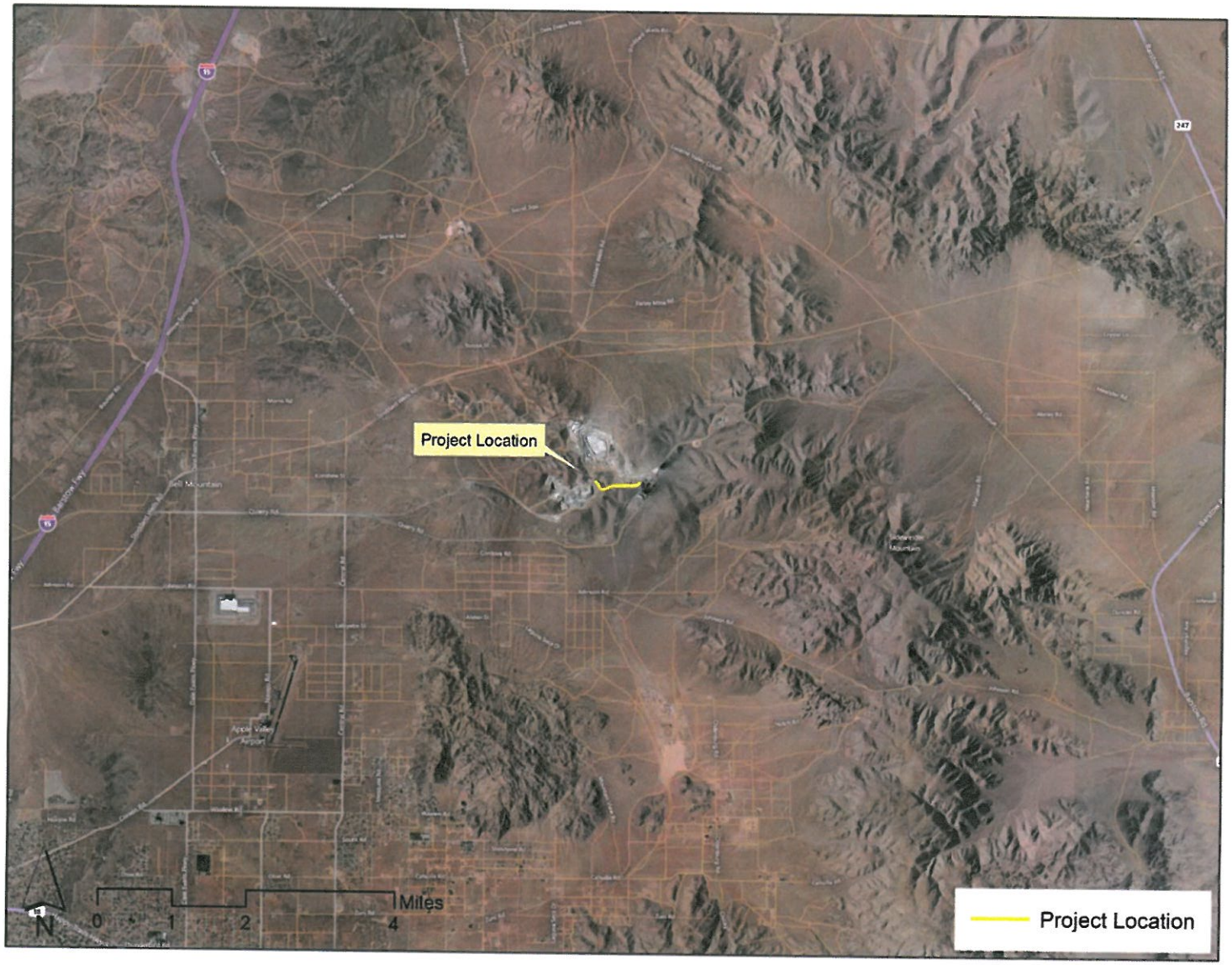


Figure 2. Proposed project location.

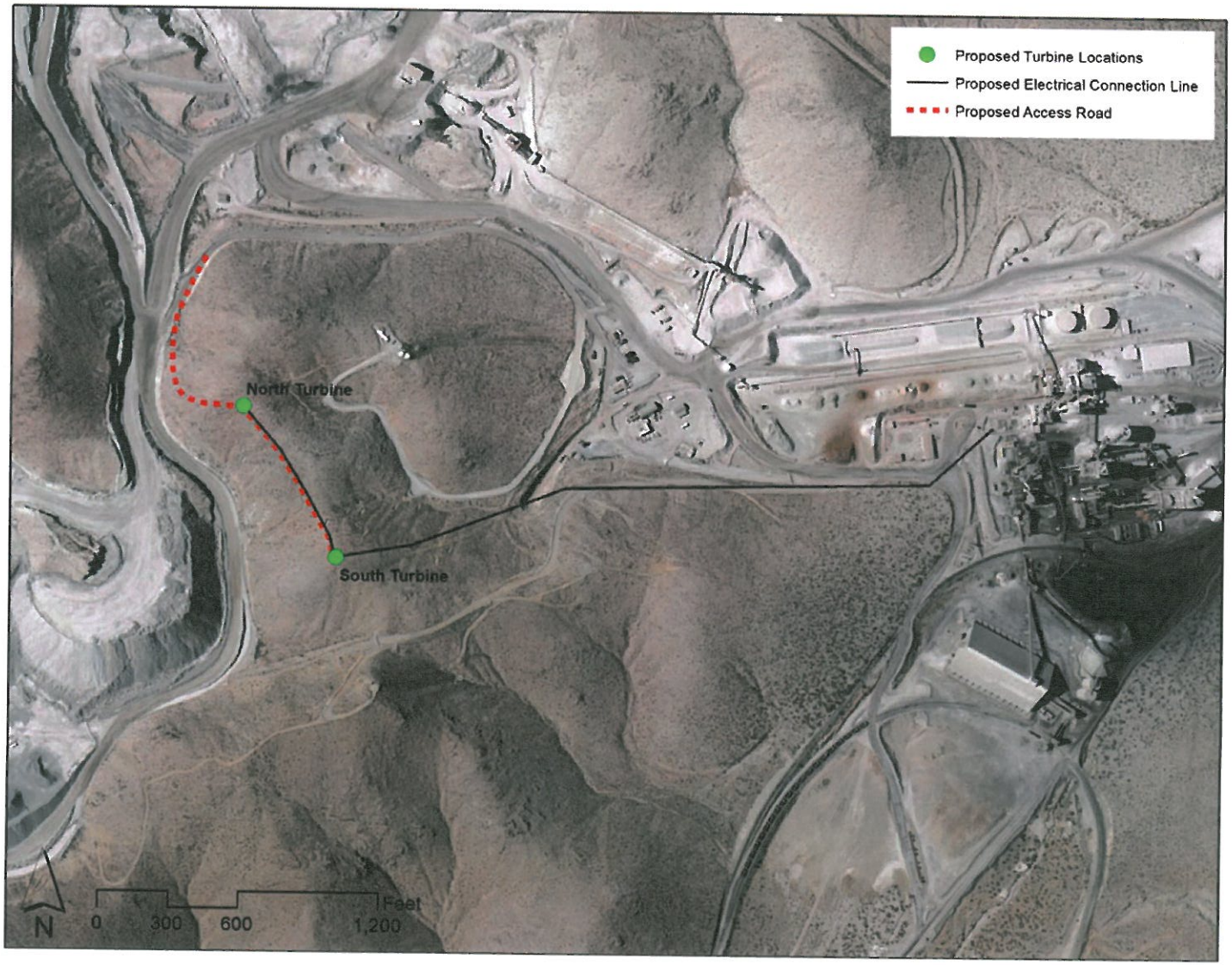


Figure 3. Closest known locations of special-status species in the project area.

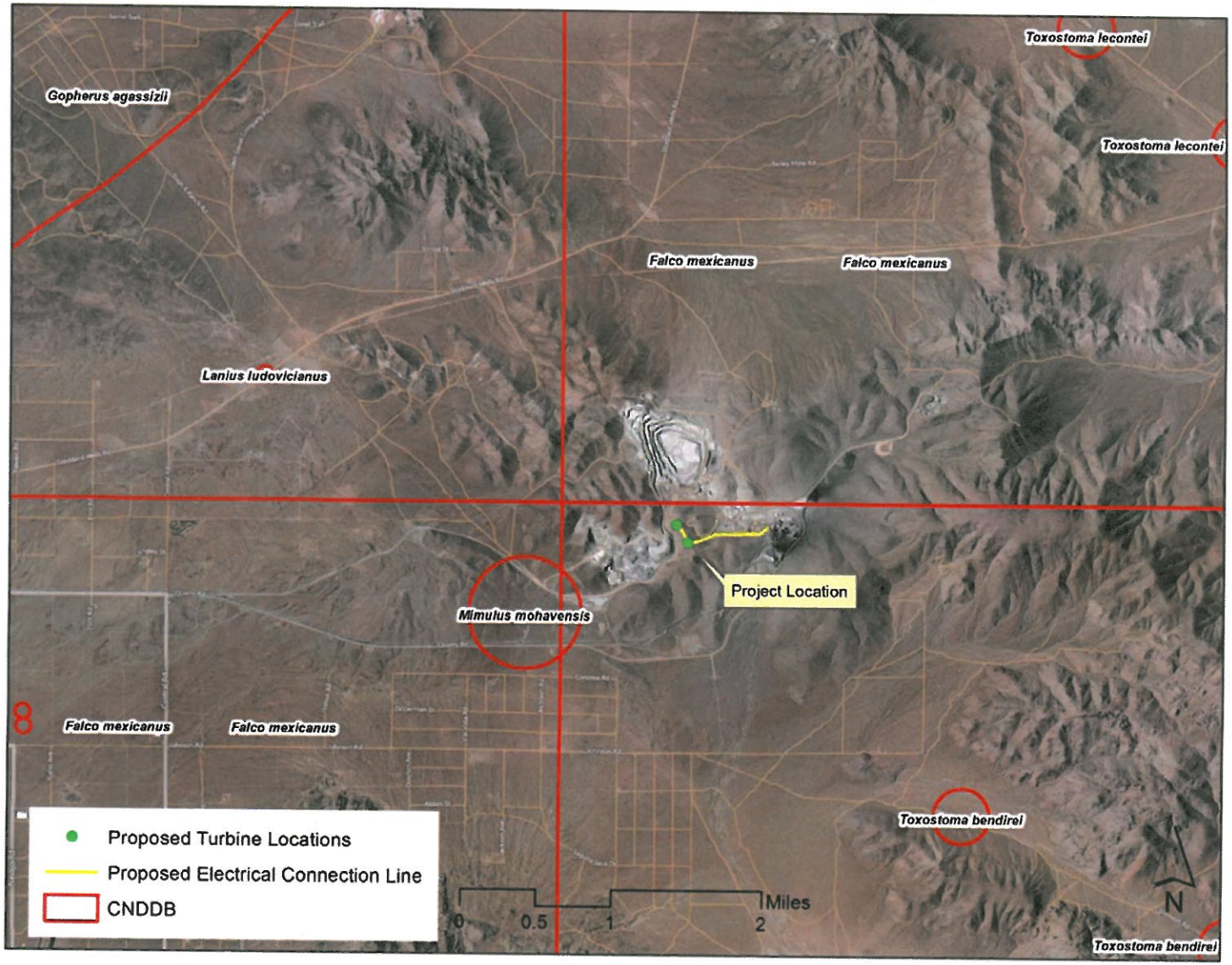
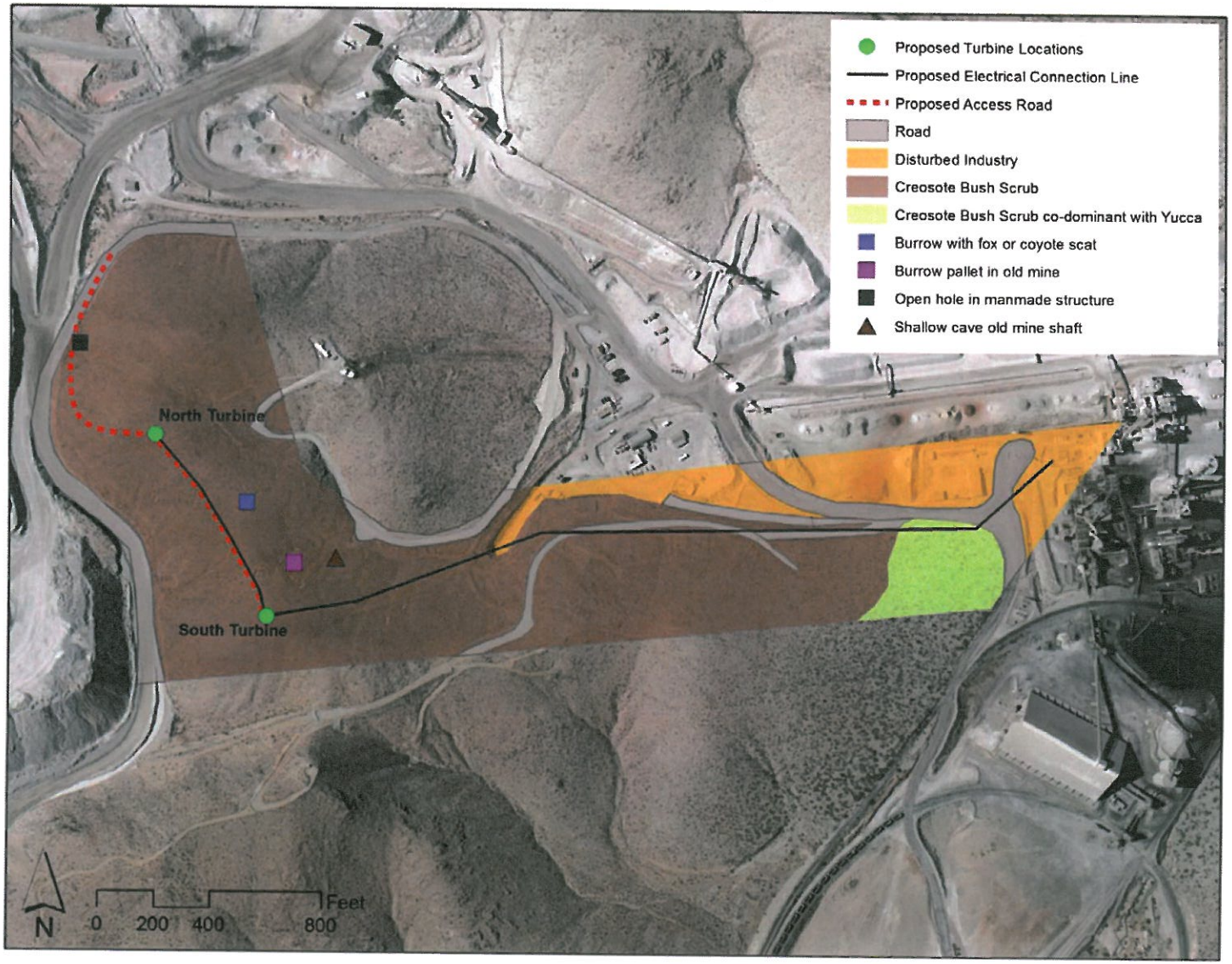


Figure 4. Project Site, Sensitive Resources and Vegetation Communities.



APPENDIX B: SENSITIVE SPECIES TABLE

List of state and federally endangered, threatened, proposed, candidate, and sensitive species from CNDDB search of the Apple Valley North, Turtle Valley, Stoddard Well, West Ord Mountain, White Horse Mountain, and Fairview Valley 7.5 Minute USGS quadrangles, and the potential for occurrence along the project alignment at the CEMEX Black Mountain Quarry near Victorville, CA. (Low = no suitable habitat observed, Medium = suitable habitat present, Present = Observed on Site).

Common Name	Scientific name	Listing	Potential to occur at Poles
Plants			
desert cymopterus	*Cymopterus deserticola*	1B.2	Low
Barstow woolly sunflower	*Eriophyllum mohavense*	1B.2	Low
creamy blazing star	*Mentzelia tridentata*	1B.3	Medium
Mojave monkeyflower	*Mimulus mohavensis*	1B.2	Medium
Beaver Dam breadroot	*Pediomelum castoreum*	1B.2	Low
Reptiles			
desert tortoise	*Gopherus agassizii*	FT, ST	Medium
Birds			
burrowing owl	*Athene cunicularia*	SSC	Medium
prairie falcon	*Falco mexicanus*	SWL	Low
Loggerhead shrike	*Lanius ludovicianus*	SSC	Low
Bendire's thrasher	*Toxostoma bendirei*	SSC	Low
Le Conte's thrasher	*Toxostoma lecontei*	SSC	Low
Mammals			
pallid San Diego pocket mouse	*Chaetodipus fallax pallidus*	SSC	Low
western mastiff bat	*Eumops perotis californicus*	SSC	Low

FE = Federally listed as Endangered
FT = Federal listed as Threatened
FC = Federal candidate for listing under the Endangered Species Act
FD = Federally delisted
FPE = Federally proposed for listing as Endangered
FPT = Federally proposed for listing as Threatened
SC = State proposed for listing
SE = State-listed as Endangered
ST = State-listed as Threatened
SWL= California Department of Fish and Game (CDFG) Watch List Species
SSC = California Department of Fish and Game (CDFG) Species of Special Concern
SFP = California Department of Fish and Game (CDFG) Fully Protected Species
SR = State Rare
California Native Plant Society System:
1A = Presumed extinct in California
1B = Rare or Endangered in California and elsewhere
2 = Rare or Endangered in California, more common elsewhere
3 = Plants for which we need more information - Review list
4 = Plants of limited distribution - Watch list
.1 = Seriously endangered in California (over 80% of occurrences threatened)
.2 = Fairly endangered in California (20-80% occurrences threatened)
.3 = Not very endangered in California (<20% of occurrences threatened or no current threats known)

APPENDIX C: PHOTOGRAPHIC LOG

Photo 1. View facing west towards the proposed turbine power line locations.

Photo 2. View facing east towards the Black Mountain Plant where the proposed power line will be located.

Photo 3. View from proposed North Turbine site looking south towards proposed South Turbine Site.

Photo 4. View of Turbine South location looking northeast.

Photo 5. View of large mammal burrow between proposed turbine locations.

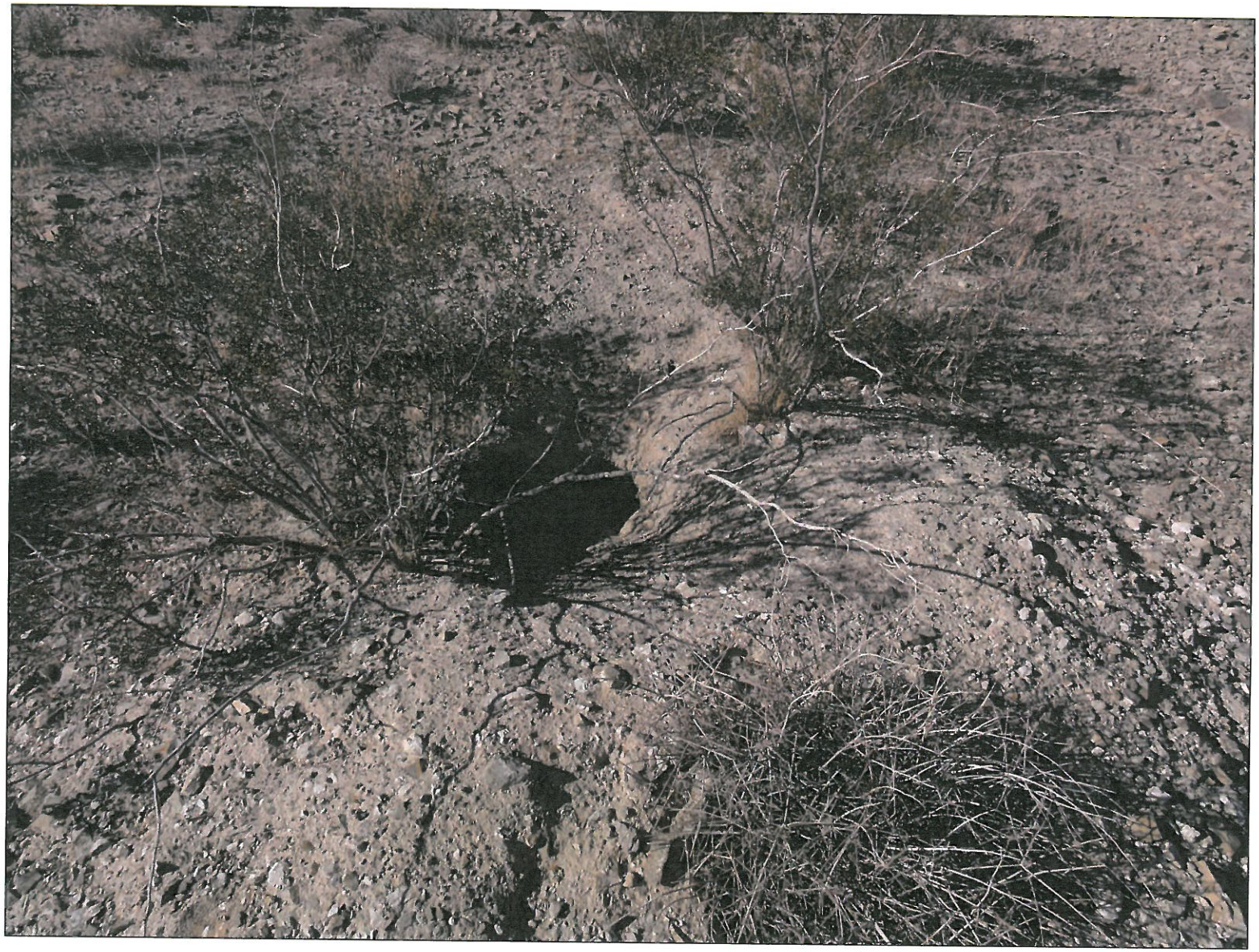


Photo 6. View looking southwest with manmade structure and open pit near proposed road location.

APPENDIX D: PLANT SPECIES OBSERVED

Common name	*Scientific name*	Family
Plants		
Burrobush	*Ambrosia dumosa*	Asteraceae
Brome	*Bromus* sp.	Poaceae
Cholla	*Cylindropuntia* sp.	Cactaceae
Calico Cactus	*Echinocereus englemannii*	Cactaceae
Cottontop Cactus	*Echinocactus polycephalus*	Cactaceae
Brittlebush	*Encelia farinosa*	Asteraceae
Ephedra	*Ephedra* sp.	Ephedraceae
California Buckwheat	*Eriogonum fasciculatum*	Polygonaceae
Desert Trumpet	*Eriogonum inflatum*	Polygonaceae
Cheesebush	*Hymenoclea salsola*	Asteraceae
Winter Fat	*Krascheninnikovia lanata*	Chenopodiaceae
Creosote Bush	*Larrea tridentata*	Zygophyllaceae
Cooper's Box Thorn	*Lycium cooperi*	Solanaceae
Melica Grass	*Melica* sp.	Poaceae
Beavertail Cactus	*Opuntia basilaris*	Cactaceae
Schismus	*Schismus* sp.	Poaceae
Joshua Tree	*Yucca brevifolia*	Agavaceae
Mojave Yucca	*Yucca schidigera*	Agavaceae

APPENDIX E: WILDLIFE SPECIES OBSERVED

Common Name	*Scientific Name*
Birds	
Chukar	*Alectoris chukar*
Red-tailed Hawk	*Buteo jamaicensis*
Cactus Wren	*Campylorynchus brunnicapillus*
House Finch	*Carpodacus mexicanus*
Turkey Vulture	*Cathartes aura*
Common Raven	*Corvus corax*
Mammals	
White-tailed Antelope Ground Squirel	*Ammospermophilus leucurus*
Desert Wood Rat	*Neotoma lepida*

APPENDIX F: PATRICK MARTIN RESUME

PATRICK MARTIN
WILDLIFE BIOLOGIST

EDUCATION

Bachelor's of Science in Ecology and Evolution with a minor study in Earth Sciences from the University of California at Santa Cruz.

CERTIFICATES and CONFERENCES

Desert Tortoise Handling Workshop 2007

Desert Tortoise Symposium 2008

California Red-Legged Frog Workshop 2010

California Tiger Salamander Workshop 2011

Western Pond Turtle Workshop 2011

EMPLOYMENT

Biologist, BioResource Consultants (BRC), Inc. (2009 to present).
Duties: Perform several tasks that include the development of biological assessments and evaluations, project monitoring, surveys for nesting birds and other sensitive natural resources, data collection, data entry, literature review and editing. Routinely track western pond turtles using radio telemetry in the Santa Clara River (over 120 hours). Regularly train new staff for both field and office duties. Routinely conduct surveys in Inyo, Kern, Los Angeles, Orange, Mono, Riverside, San Bernardino, Santa Barbara, Tulare, and Ventura Counties. Monitored efforts on the Tehachapi Renewable Transmission Project (TRTP) Segments 1-3. Currently supporting TRTP Segments 6 and 11 as a BRC Task Manager.

Wildlife Biologist, CH2M Hill from 2007 to 2009.
Conducted surveys at Edwards Air Force Base (EAFB), for special-status species (desert tortoise, Mojave ground squirrel, and burrowing owl) and nesting birds; monitored construction sites; renewed permits for base operations; tracked desert tortoise with radio telemetry for the Desert Tortoise Head Start Program; created technical documents; Natural Cultural Resources Subcommittee meeting recorder; provided educational wildlife briefings for EAFB personnel and other contractors; monitored Off-Road Vehicle areas on EAFB; EAFB Desert Tortoise Adoption Program manager; wildlife management. Completed 330-hours of desert tortoise survey experience in the Western Mojave under the direction of Mr. Mark Bratton and Ms. Amber Bruno.

Zoo Keeper, Santa Barbara Zoological Gardens from 2005 to 2007.
Maintained and enhanced the reptile and amphibian collection in the Herpetology Department, provided public presentations to zoo patrons and supervised volunteers and interns. The Santa Barbara Zoo also worked in a collaborative partnership with Forest Service biologist (Ms. Valerie Hubbartt) in the field conducting surveys involving threatened and endangered species (California red-legged frog and arroyo toad). Observed California red-legged frog adults and egg masses in the Los Padres National Forest with Ms. Hubbartt during the 2006 and 2007 season. Participated in nest monitoring for California condor with the United States Fish and Wildlife Service.

QUALIFICATIONS

Broad range of experience as a biologist performing surveys for sensitive biological resources in remote locations throughout southern and central California. Extensive experience with GPS devices and associated software, 4-wheel drive vehicles and ATVs, as well as radio telemetry equipment. Adept at identifying reptiles, amphibians, birds, mammals and plants in the field. Skilled with Microsoft Office and completes detailed biological assessments and other documents on a regular basis.

PUBLICATIONS

2008 Foster, C.D., and Martin, P. Caudal Movements in Western Fence Lizards (*Sceloporus occidentalis*) Prior to Attempted Prey Capture. Western North American Naturalist 68(2): 257-259.

2007 Foster, C.D., Martin, P., and Stackpoole, S. Natural History notes: *Sceloporus occidentalis* (Western Fence Lizard). Prey. Herpetological Review 38 (1): 83.

2007 Foster, C.D., Traverse, J., Martin, P., Varsik, A. and Sandhaus, E. Anuran conservation through collaborations: Santa Barbara Zoo teams up with U.S. Forest Service. Herpetological Review 38 (2): 141-142.

AFFILIATIONS

Member of North American Field Herping Association (NAFHA) and regularly participate with conservation efforts associated with Tejon Ranch and the Tejon Ranch Conservancy.

EXHIBIT E

GOLDEN EAGLE

GOLDEN EAGLE MOVEMENT AND BEHAVIOR NEAR THE CEMEX BLACK MOUNTAIN WIND PROJECT

a report by

Todd Katzner
Adam Duerr

West Virginia University

produced for

Foundation Windpower, LLC

Summary
Our research team conducted an analysis of flight behavior of golden eagle movements near the Cemex Black Mountain Wind Project proposed for implementation at the Cemex Cement Plant at Black Mountain. Our goal was to understand the level of potential risk that eagles may face from development of a small industrial-scale wind plant in the built environment at the site. The wind project consists of two turbines located in the center of three developed industrial points with a high level of mechanical and human activity: the Cemex clinker plant (a large industrial facility), the Cemex limestone mine, and the Cemex spare material pile.

The data set we considered included GPS-GSM telemetry data from the 5 eagles within 10 miles of this facility collected from approximately mid-January to the end of May. Data from all eagles telemetered were considered; those reported here are all data from birds that passed within 2000m (2 km) of the proposed turbines. Two telemetered golden eagles had home ranges that abutted the valley where the Cemex site is located. One additional eagle made an apparently exploratory movement through these territories and within 3000m of the plant. For each bird we measured not only location but also altitude above ground level (AGL). Data points were collected by GPS and transmitted over the GSM (mobile phone) network and downloaded from a server into mapping software.

At no time did any of our telemetered eagles pass within 1000m (1 km) of the proposed turbine facilities. Of the 10,000 - 22,000 data points collected per bird, between 0.5% and 1.1% of data points were within 3000m of the wind turbines. Golden eagle flight altitudes ranged from 0 to 1090m AGL. When eagles crossed open areas similar to that where the turbines are to be located, their flight altitude was generally well above the rotor swept zone (~120m in this case). Tracks of eagle movement (collected at 30-second intervals) indicate avoidance of the general area of the cement plant and the proposed wind turbine site.

Based on the data collected to date and our understanding of golden eagle movements and behavior, at this site and in general, we expect that this project will pose minimal, if any, risk to the golden eagles in this area. Behavior of eagles is expected to vary through an annual cycle, as birds initiate, engage in and complete the breeding cycle. We have no reason to believe that adult territorial birds will change their avoidance response to the developed site. Likewise, subadults (eagles >1 year old) should also avoid the site. Dispersing juveniles (<1 year old) engage in more atypical behaviors but are also unlikely to be drawn to a heavily impacted environment such as that at the cement factory.

Background

Golden eagle (*Aquila chrysaetos*) populations in North America are declining. In California, golden eagles are listed as a species of concern by numerous state and federal agencies. California's golden eagles face a variety of threats. In particular, development of renewable energy is a rapidly emerging and important concern that has the potential to impact eagles at all stages of their life history. There is a known history of golden eagle conflict with California wind energy plants, primarily through direct mortality from collisions.

West Virginia University is conducting research on movements of golden eagles in the BLM's California Desert District. Broadly speaking, our research addresses research questions related to habitat use and home range and to population dynamics. We address these questions with GPS-GSM telemetry, standard GIS analyses, nest visits and non-invasive genetic monitoring. Our telemetry system collects GPS data at 15-minute intervals for 9 consecutive days and on the 10th day collects GPS data at 30-second intervals. Barring hardware failure, telemetry units should last for several years with this duty cycle. The field component of our research was initiated in winter 2012 and will continue for several years hereafter.

Foundation Windpower is building a small (2-turbine) industrial wind energy facility at the heavily developed Cemex Black Mountain Quarry facility in San Bernardino County, CA. The two turbines will have a rotor swept zone from 38.7 – 121.3m above the ground and will be located near the valley floor, ensuring that the entire turbine is below the height of the major ridgelines in the area. Foundation Windpower predicts that the turbines will be operating (blades spinning) ~65% of daylight hours; maximum revolutions per minute of the turbine will be ~20.

Foundation Windpower requested that WVU evaluate eagle movements in the region of their facility, to understand potential risk to golden eagles from the turbines they proposed to erect. Specifically, we were given the following tasks:

1. Show data points from eagles within 2000m buffer of the turbines using 15 minute interval data collected to date for each of the three eagles under study.

2. Show all routes within 2000m buffer using 30 second interval data collected to date for the three eagles under study.

3. Show any instances of eagles within 100 meters (radial from the turbine center point) at elevations below 121.3m AGL (the tip of turbine at its highest point).

4. Review and comment on the wind data to be provided by Foundation Windpower on the direction and speed of wind on a seasonal basis.

5. Provide preliminary observations regarding the appropriate level of mitigation required to ensure the two Foundation Windpower turbines meet the recommended no-net loss standard.

6. Provide preliminary observations on factors which should be considered to adjust the impact model proposed in the USF&WS eagle guidelines to adjust the potential for take given the turbine locations in the lower elevations of the built environment near the quarry and cement plant.

Methods

Telemetry studies are essential to addressing research questions tied to home range, habitat use, dispersal and causes of mortality. The newest, highest quality and most cost-effective way to track wildlife is use of GPS-GSM telemetry systems. GSM is a mobile phone communications standard (the acronym stands for "Global System for Mobile Communications").

The telemetry units we deployed were manufactured by Cellular Tracking Technologies, LLC (CTT). These units have a repeating 10-day cycle for duty collection. For nine consecutive days they collect GPS data at 15-minute intervals when eagles are perched or in typical flight behavior. On the 10th day they collect GPS data at 30-second intervals when eagles are moving. The goal of this approach is to learn not only where eagles go in their travels, but also exactly what they are doing within the confines of specific areas of high interest. The technology to accomplish this goal is not commercially available and our team exclusively has regular access to this high-frequency data collection capability.

Trapping for eagles occurred in January, February and May 2012. Once data were collected from telemetry units, they were downloaded from a secure server and imported into a GIS (ArcGIS, ESRI, Redlands, CA). Locations of the proposed turbines were provided by Foundation Windpower. We buffered those locations by 3000m and in this report only show GPS data points within that buffer. We also highlight 1000m and 2000m buffers around these turbines and show which eagle data points occurred within those distances from the turbines.

Data points were also color coded to show their altitude (above ground level; AGL), relative to the rotor swept zone (points below the RSZ were coded blue, points above the RSZ were coded green and points within the RSZ were coded black). AGL is calculated by subtracting altitude above sea level (calculated by the GPS) from ground elevations in the USGS National Elevation Dataset (Sioux Falls, SD: Earth Science Information Center) at the GPS location recorded by the GPS. Because we filter out GPS locations with high (>10) horizontal dilution of precision (HDOP) and because HDOP is tightly correlated to vertical dilution of precision (VDOP), errors in AGL calculations are expected to be < 30m (manufacturer's GPS error is <3m; true measured error for any particular data point = GPS error * HDOP/VDOP of the data point in question).

Results

We have telemetered 5 eagles nesting within a 10-mile radius of the proposed Foundation Windpower facility. Four of these, including the two holding territories immediately adjacent to the site, were captured in January or February, the fifth in May. Of these five birds, three came within 3000m of the two turbines. These included the bird holding a territory immediately to the north of the proposed site and the bird holding a territory immediately to the south of the proposed site. In addition, one bird from a neighboring nearby territory took a one-day incursion through its neighbor's territories and then returned to its territory. This incursion included movements between 1000-2000m of the proposed turbine site.

The three eagles telemetered that moved through the area in question were unit ID 4387 (immediately to the north, capture date 17 Jan 2012), unit ID 6993 (immediately to the south, capture date 13 Jan 2012; unit catastrophically malfunctioned 17 April 2012) and unit ID 5277 (to the east, capture date 31 Jan 2012, wandered through the area on 27 April 2012).

Between capture (in January) and 31 May 2012, all eagles stayed >1000m from the proposed turbine site (Figs 1,2, 3). The majority of the fifteen minute data from the two immediately adjacent birds were farther than 3000m from the proposed facility but a relatively small number of data points were between 1000 and 2000m of the proposed site (Fig 1). For eagle #4387, we collected 22,156 data points and of these, 244 (1.1%) were within 3000m of the turbines. For eagle #5277, 55 of 10,732 locations (0.5%) were within 3000m and for eagle #6993 = 80 of 12,620 locations (0.6%) were within 3000m. These data points were collected over 20 days in the period from January to April. Likewise, the 30-second data we collected, from 3 birds each with 1-3 days of data, indicated that none came within 1000m of the proposed turbine sites (Fig. 2).

Finally, flight altitude of the birds was highly varied (Fig 3). However, the majority of the time that birds were over open areas similar to the areas where the turbines were located, they were flying above 121.3m. Altitude of birds flying between 1000-2000m from the proposed turbines was also variable. The bird to the south of the facility generally flew above turbine height when this distance from the site. The bird to the north generally flew below turbine height. The differences in the flight behavior of these two birds likely reflects differences in the topography to the north and south of the facility.

Interpretation

Golden eagles in the Granite Mountains area, near the Black Mountain Cemex Plant spent little or no time over the built environment of this industrial facility. Given the heavy level of human activity, this is not surprising. This lack of use of the facility was independent of weather and topography – eagles always stayed away from the site.

Flight altitude of eagles is largely determined by topography, weather (mostly updraft air currents) and behavior. When birds are hunting they are likely changing altitude regularly (searching from above, capturing prey close to the ground). In this area hunting behavior is unlikely to occur in the industrial zone. Our observations suggest that when eagles cross the open valley floor (as did eagle 5277), they mainly fly high above the ground in a directional manner, probably using thermals to generate lift. Flight over ridges and slopes is likely to be lower in altitude and using orographic (deflected) air currents, as well as the occasional thermal.

Our data suggest that there is minimal likelihood of eagles interacting with the proposed turbines. When eagles do use areas of similar topography, they are likely to be flying high above the rotor swept area of the proposed turbines. Furthermore, because of the extensive industrial development at the site, the eagles are likely to avoid the site altogether, and at all flight altitudes. It is worth noting that we will continue to monitor behavior of the eagles we have telemetered and if eagle behavior changes substantially as the breeding cycle moves through its stages, we will let the company know so they can take appropriate mitigation steps.

Foundation Windpower has proposed a number of mitigation measures to understand and monitor risk. These include (1) preconstruction surveys (of which this report is a part); (2) habitat avoidance measures; (3) construction and operation minimization measures; (4) anti-perching controls and (5) post-construction monitoring. Since eagles generally stay away from the proposed facility, our general assessment is that items #1-3 should be effective in further minimizing risk to eagles from this facility. Item #4 may be the most important step they can take here – many birds are killed by electrocution and since the power lines extend away from the turbine locations, eagles and other raptors may be more

likely to interact with transmission lines. We also encourage continued post-construction monitoring as is proposed.

Conclusions

We monitored with GPS-GSM telemetry, 5 individual golden eagles based at territories within 10 miles of the proposed Foundation Windpower project at the Cemex Black Mountain Plant. Of these, three birds came within 3000m of the proposed facility. Of the over 45,000 data points collected from these three eagles during this four month period, less than 0.9% were within 3000m of the proposed facility. None of these birds ever passed within 1000m of the facility and none went anywhere near the industrial plant at the center of this facility. Our telemetry data suggest little risk to eagles from development of this small-scale facility at this site.

Fig 1. GPS locations collected at 15-minute intervals from CTT-1100 GPS-GSM telemetry units on eagles immediately to the north and south of the proposed Foundation Windpower project. All data points within 3000m are shown. Locations are color coded by eagle.

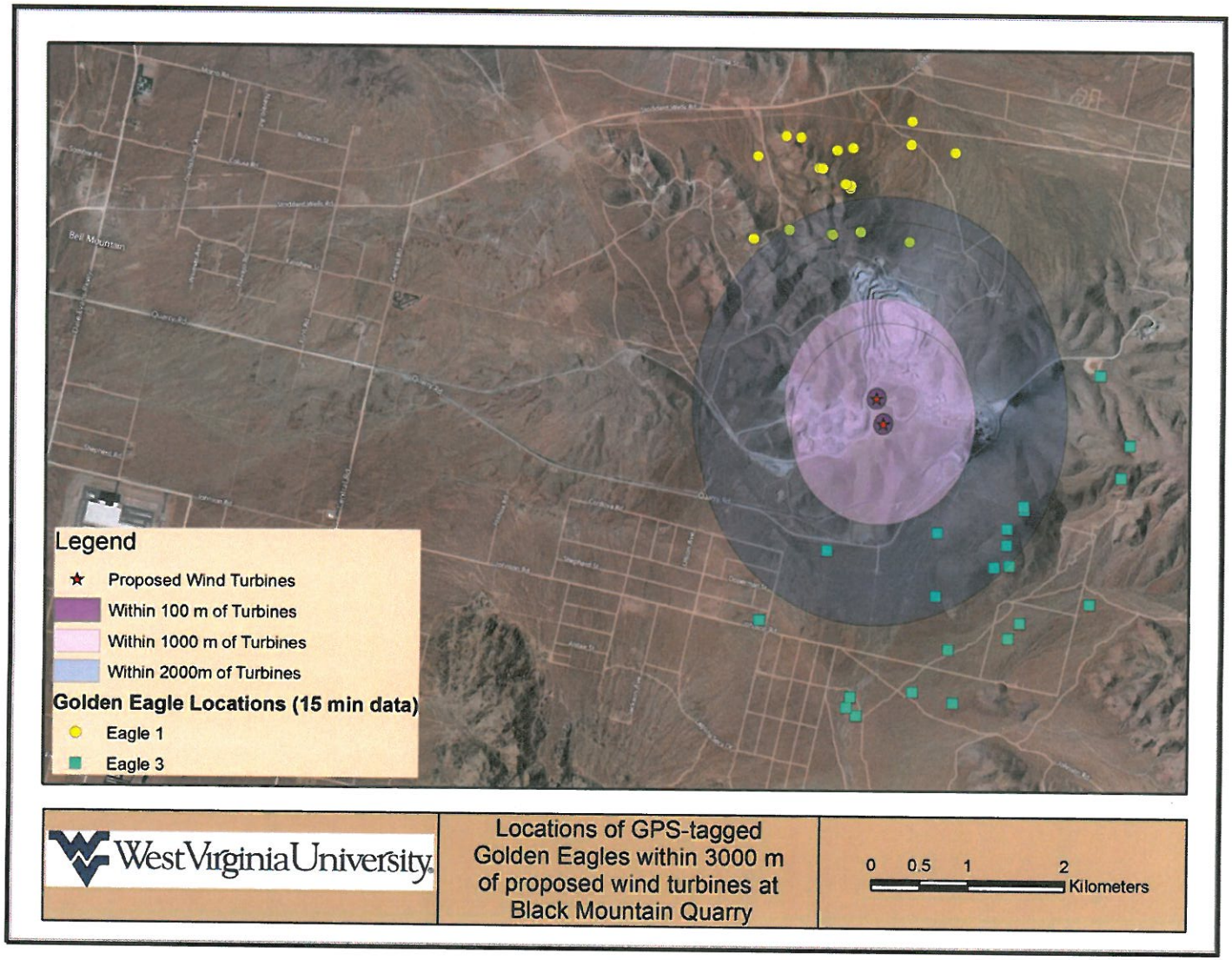


Fig 2. GPS locations collected at 30-second intervals from CTT-1100 GPS-GSM telemetry units on eagles immediately to the north, south and east of the proposed Foundation Windpower project. All data points within 3000m are shown. Locations are color coded by eagle and by day. Data points are connected by lines to show the actual flight path the bird took.

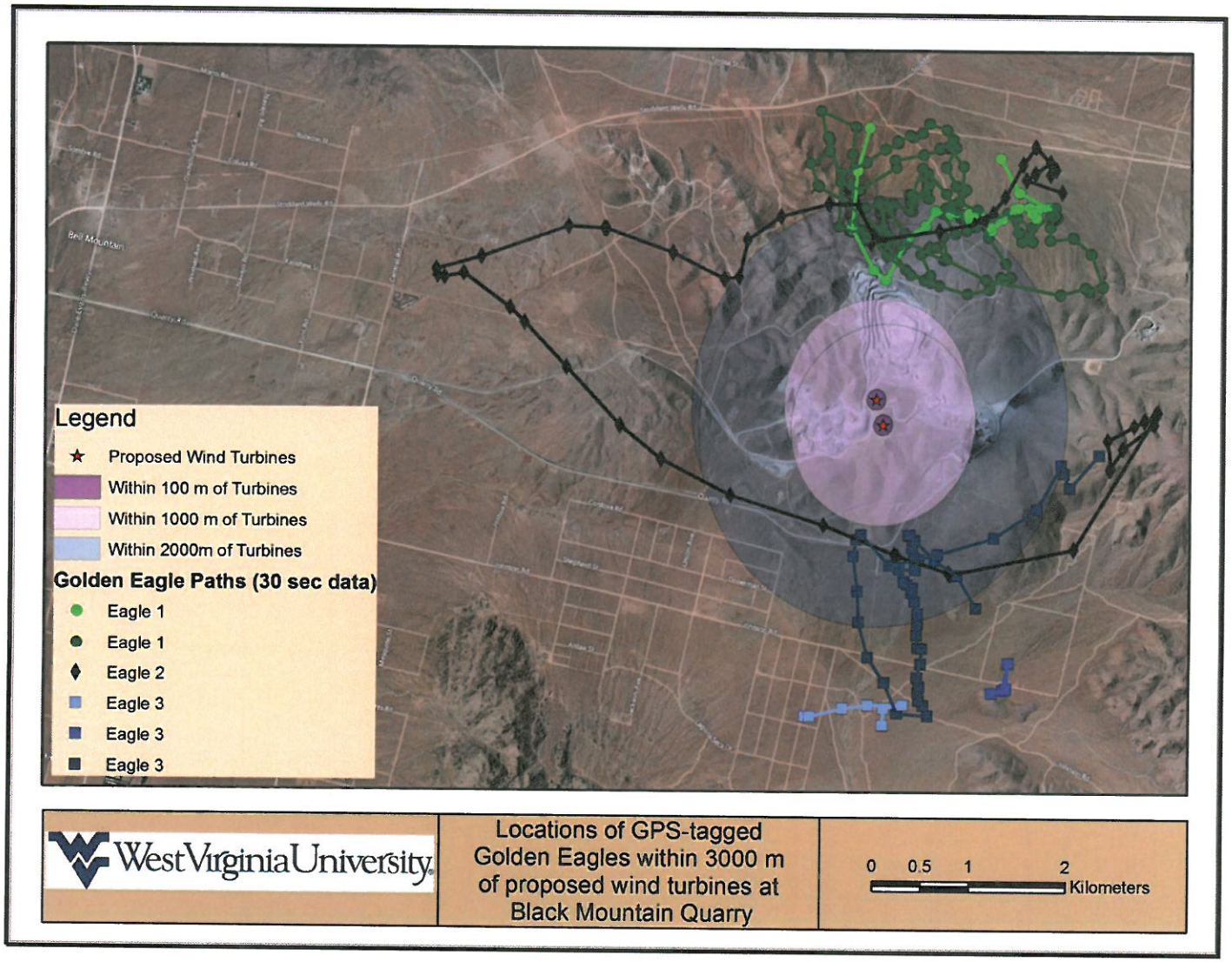
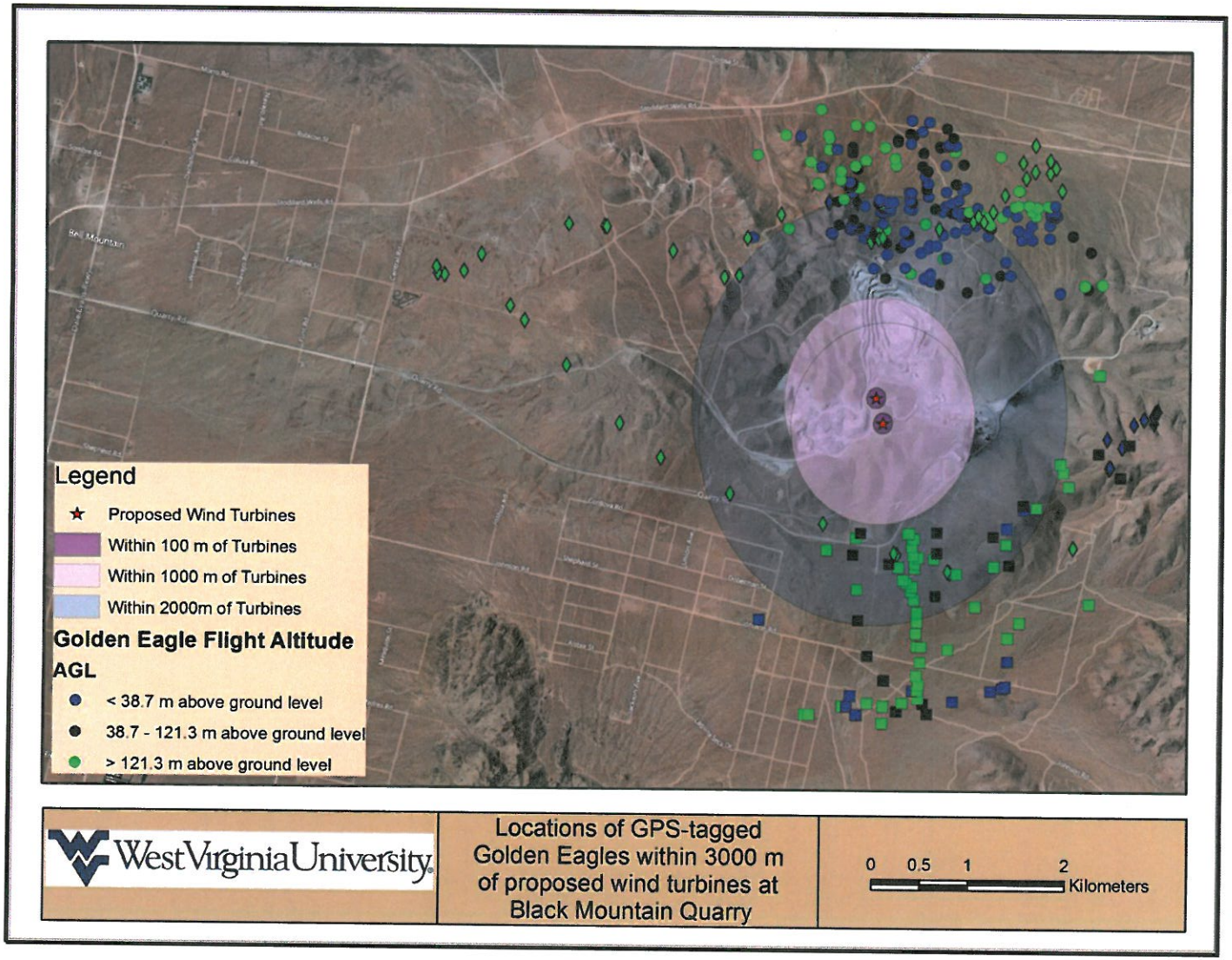


Fig 3. Altitude above ground level (AGL) of GPS locations collected at 15-minute and 30-second intervals from CTT-1100 GPS-GSM telemetry units on eagles immediately to the north, south and east of the proposed Foundation Windpower project. All data points within 3000m are shown. Locations are color coded by AGL and shapes of dots are consistent for each bird.



BIORESOURCE CONSULTANTS, INC.
P.O. Box 1539 310 East Matilija Street Ojai, CA 93024-1539 805.646.9006 x15 Brian@BioRC.com

Memorandum

To: Todd Katzner

From: Brian Holly, Senior Project Manager/Ecologist

Date: June 1, 2012

Re: Golden Eagle Flight Pattern Data Analysis for the Proposed Cemex Black Mountain Wind Energy Project

This memo summarizes a preliminary analysis of Golden Eagle (GOEA) flight patterns near two proposed wind turbines at the Cemex Black Mountain Quarry facility near Victorville, California. As part of a larger study for the Bureau of Land Management (BLM), West Virginia Research Corporation analyzed flight patterns for three telemetered GOEA in order to evaluate the potential risk associated with the Cemex Black Mountain Wind Project.

Study Methods

The data collected includes approximately 120 days of GOEA tracking information which recorded locations and flight patterns January through April 2012 from the three eagles in closest proximity to the Cemex Black Mountain Quarry plant.

The dots on each map within the concentric circles represent each time that any of the three eagles passed through the area.

Figure 1 shows data points by eagle within a 2000m and 1000m buffer of the turbines using 15 minute data collected to date for each eagle.

Figure 2 shows all routes within 2000m and 1000m buffer using 30 second interval data collected to date.

Figure 3 shows any instances of eagles within 1000 meters (radial from the turbine) at elevations below 400 feet AGL.

Figure 4 shows data points by eagle within a 2000m and 1000m buffer of the turbines using both 15 minute and 30 second interval data collected to date for each eagle.

Analysis

From the data points contained in these maps we are able to make the following observations:

- At a 1,000 meter radius from the project site (over 3/5 of a mile), there is no activity from the three Golden Eagles during the 120 day period.

- Eagles are active approximately 40 to 50 percent of the time within a range of 2,000 meters from the turbine locations.

- The decrease in frequency for entering the 1,000 meter buffer versus the 2,000 meter buffer is 100% for both the 15 minute and 30 second data points.

- The total amount of time that any of the eagles are within either of the two buffers is a relatively small percentage in relation to the total flight time for all three eagles combined.

- The third map shows that the three GOEA have never been below 400 feet in elevation and within 100 meters of the turbine locations.

The GOEA occur in the area and are most active from 2,000 meters or farther from the turbine locations at altitudes equal to, or above 400 feet and never below that altitude. The eagles have not been closer than 1,000 meters to the proposed turbine locations. The data suggests that the eagles do not utilize the project area for forging due to the disturbed conditions and ongoing operations resulting in a limited prey base at the project site. The eagles appear to be utilizing higher quality foraging habitat in the region outside of the project site.

Based on the analysis above, and considering the project is a small-scale two turbine equipment installation, impacts to golden eagles are expected to be low. In addition, the turbines will be operating 65% of the time given the wind resource at the site and the blades on the turbines move relatively slow at 20 RPMs potential.

Based on this level of risk, we suggest the following monitoring and avoidance measures for consideration by USFWS.

Mitigation – Avoidance and Minimization Measures

The following mitigation avoidance and minimization measures are recommended to reduce potential impacts to GOEA from the proposed project activities.

- **Mitigation Measure 1: Pre-Construction Survey**

  Prior to construction, a qualified biologist will conduct a survey to determine the presence/absence of GOEA within 0.25 miles from the project site. In addition, the biologist will document any potential nesting or perching locations for eagles within .025 miles from the project site. All potential perching or nesting sites will be discussed with the USFWS to determine the appropriate steps to minimize and avoid a possible injury or mortality to GOEA.

- **Mitigation Measure 2: Habitat Avoidance Measures**

  Foundation Windpower (Applicant) will consult with a qualified biologist to incorporate siting and design recommendations in the USFWS guidelines for both the construction and operation of the turbines. These measures may include removing ground cover to minimize prey population, promptly removing carrion, avoiding perch areas on the tower, and making all lighting consistent with the FAA requirements while also at minimum intensity and minimum number of flashes per minute.

- **Mitigation Measure 3: Construction and Operation Minimization Measures**

  1. Limit proposed work to existing disturbed areas, when possible.
  2. During construction contain and remove all trash from the site on a daily basis.
  3. During the turbine operations implement a litter control program to reduce site attractiveness to migratory birds and eagles in which all trash is promptly removed from the site and placed in containers to be disposed at an authorized landfill.

- **Mitigation Measure 4: Anti-Perching Controls**

  All overhead transmission lines will be constructed will raptor guards/ anti-perching devices.

- **Mitigation Measure 5: Post Construction Monitoring Program**

  Applicant should prepare and implement a post-construction bird mortality monitoring program whose focus is to determine whether estimated perceived risk associated with the project was accurate. The monitoring program will be on a monthly basis and will be conducted by a qualified biologist for two years during breeding seasons. A qualified biologist could also train onsite personnel to conduct mortality monitoring.

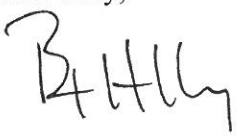
If the probability of harming or killing an eagle is significant, then the applicant, Foundation Windpower, will be required to develop additional mitigation and avoidance measures to decrease the risk of taking a Golden Eagle, and may be required by USFWS to apply for a take permit. The Applicant has agreed to pursue a take permit if actual experience, or a more comprehensive analysis of the data, indicates a significant risk exists.

Summary

If it is determined that the probability of harming or killing GOEA is significant as a result of the proposed project, the Applicant will be required to develop additional mitigation and avoidance measures to decrease the risk of taking a GOEA, and may be required by USFWS to apply for a take permit. The Applicant has agreed to pursue a take permit if actual experience, or a more comprehensive analysis of the data, indicates that a significant risk exists.

Please contact me if additional information or clarification is required regarding our preliminary assessment of these data.

Sincerely,



Brian E. Holly
Senior Project Manager/Ecologist

cc: Carl G. Thelander, President/CEO

Figure 1. 15 min. map showing locations of GPS-tagged GOEA within 3000 m of two proposed wind turbines at the Cemex Black Mountain Quarry.

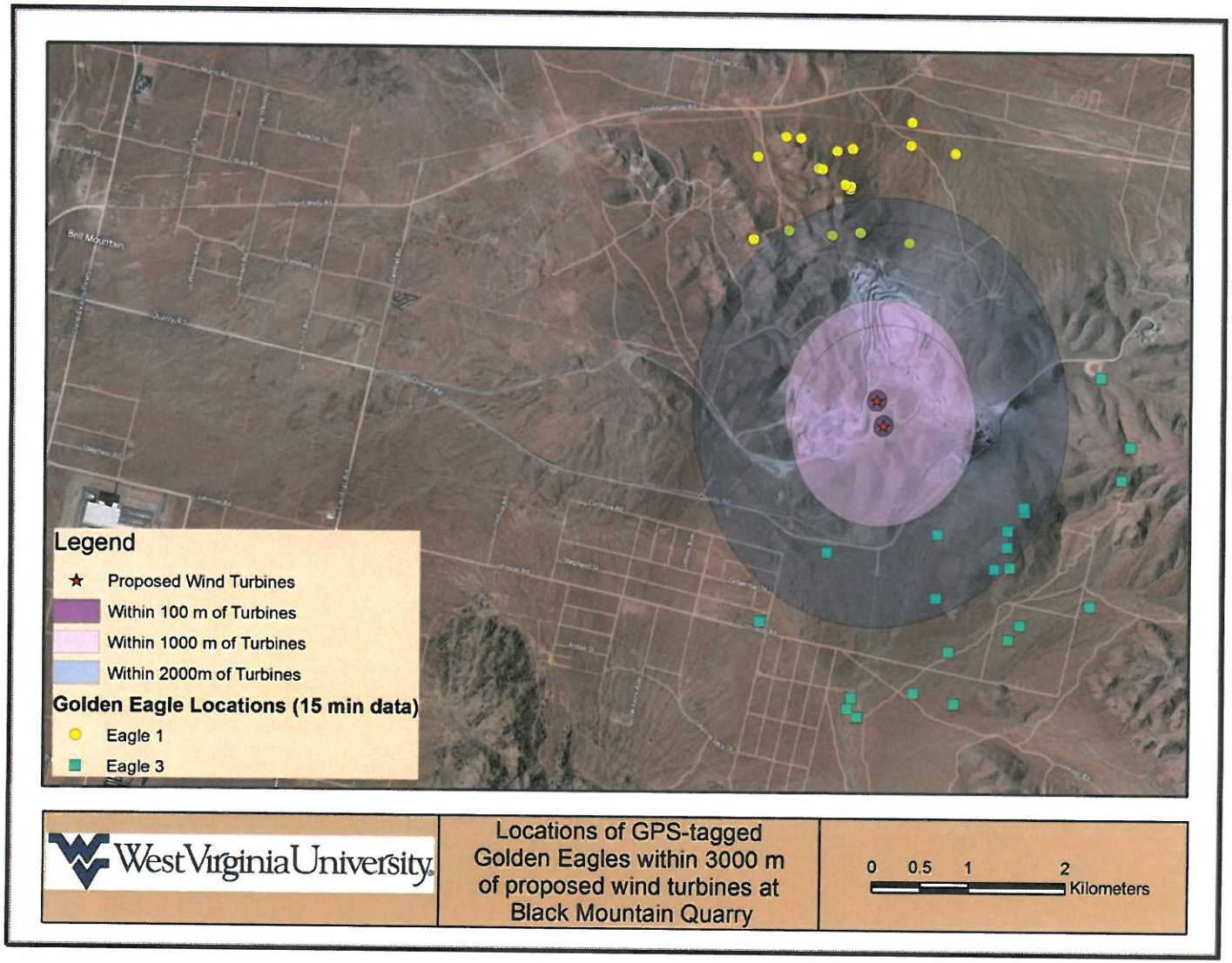


Figure 2. 30 second interval map showing locations of GPS-tagged GOEA within 3000 m of two proposed wind turbines at the Cemex Black Mountain Quarry.

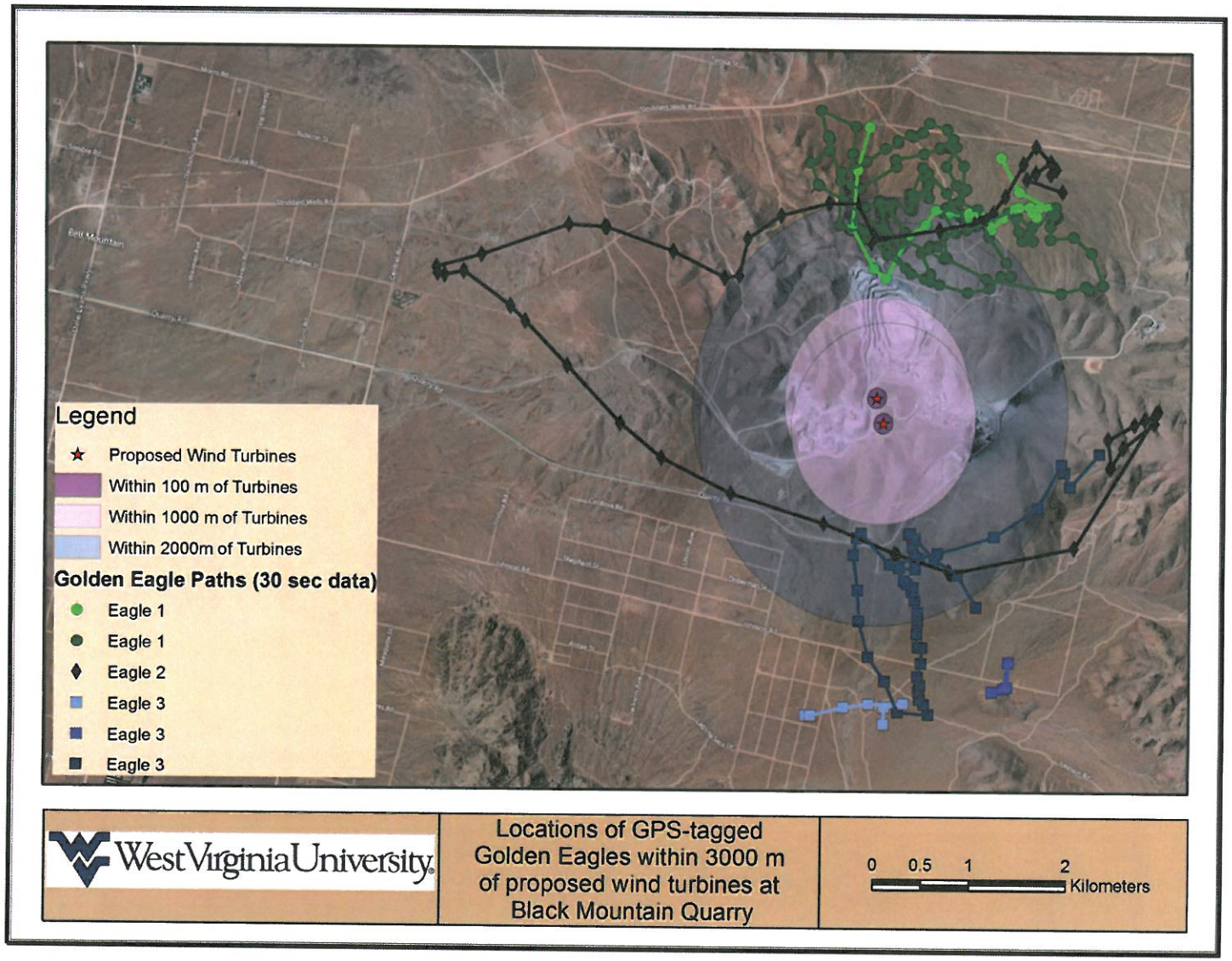


Figure 3. GOEA occurrence within 1000 meters (radial from the turbine) at elevations below 400 feet above ground level (AGL).

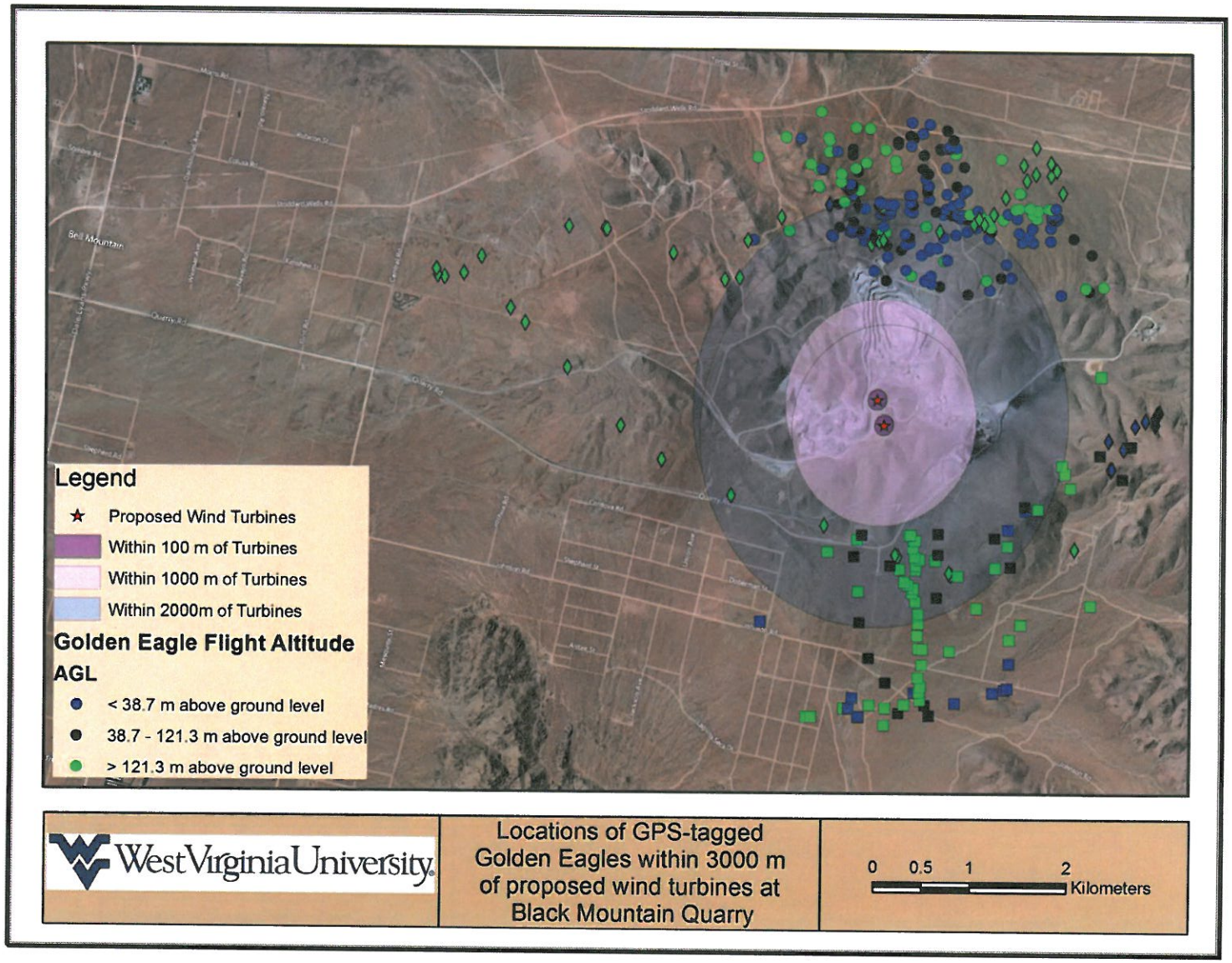


Figure 4. Data points by eagle within a 2000m and 1000m buffer of the turbines using both 15 minute and 30 second interval data collected to date for each GOEA.

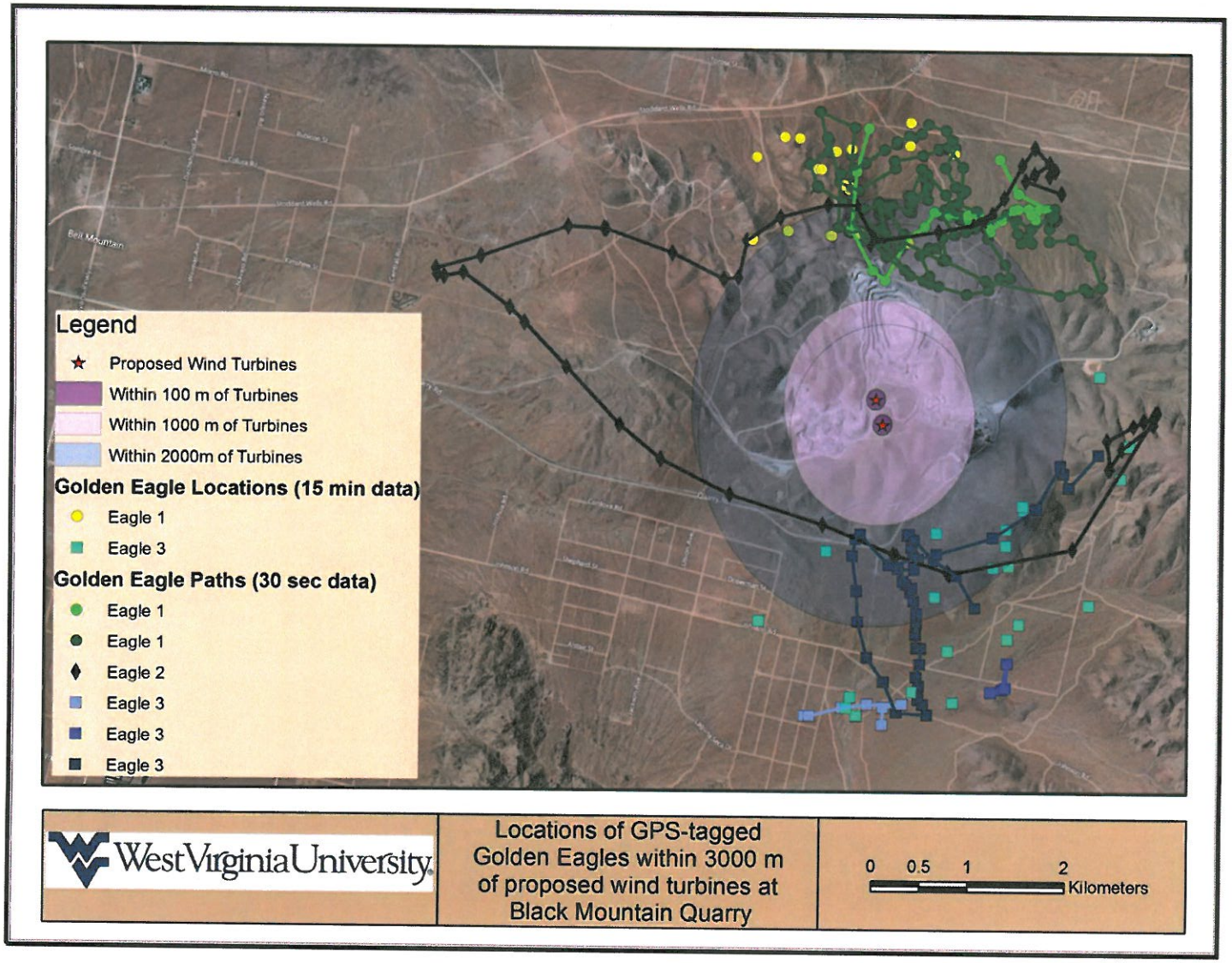


EXHIBIT F

CORRESPONDENCE

State of California -The Natural Resources Agency
DEPARTMENT OF F I AND GAME
Inland Deserts Region (IDR)
407 West Line Street, Suite 1
Bishop, CA 93512
http://www.dfg.ca.gov

EDMUND G. BROWN JR. Governor
Ch n H. Bonham, Director

January 9, 2012

Ms. Tracy Creason, Planner
San Bernardino County, Land Use Services Department, Planning Division
15900 Smoke Tree Street,
Hesperia, CA 92345

Subject: CEMEX Construction Materials Pacific, LLC

Dear Ms. Creason:

The Department of Fish and Game (Department) has reviewed the Conditional Use Permit (CUP) for the CEMEX Construction Materials Pacific, LLC On-Site Wind Energy Generation Supplement, hereinafter referred to as "Project". The Department appreciates this opportunity to comment on the above-referenced project, relative to impacts to biological resources.

The Department is a Trustee Agency pursuant to the California Environmental Quality Act (CEQA). A Trustee Agency has jurisdiction over certain resources held in trust for the people of California. Trustee agencies are generally required to be notified of CEQA documents relevant to their jurisdiction, whether or not these agencies have actual permitting authority or approval power over aspects of the underlying project (CEQA Guidelines, Section 15386). As the trustee agency for fish and wildlife resources, the Department provides requisite biological expertise to review and comment upon CEQA documents, and makes recommendations regarding those resources held in trust for the people of California.

The Department may also assume the role of Responsible Agency. A Responsible Agency is an agency other than the lead agency that has a legal responsibility for carrying out or approving a project. A Responsible Agency actively participates in the Lead Agency's CEQA process, reviews the Lead Agency's CEQA document and uses that document when making a decision on the project. The Responsible Agency must rely on the Lead Agency's environmental document to prepare and issue its own findings regarding the project (CEQA Guidelines, Sections 15096 and 15381). The Department most often becomes a responsible agency when a 1600 Streambed Alteration Agreement or a 2081(b) California Endangered Species Act Incidental Take Permit is needed for a project. The Department relies on the environmental document prepared by the Lead Agency to make a finding and decide whether or not to issue the permit or agreement. It is important that the Lead Agency's CEQA document to consider the Department's responsible agency requirements. For example, CEQA requires the Department to include additional feasible alternatives or

feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment (CEQA Guidelines, section 15096 (g) (2). In rare cases, the Department as Responsible Agency may be required to assume the role of the Lead Agency under certain conditions (CEQA Guidelines, section 15052).

Pursuant to California Fish and Game Code section 711.4, the Department collects a filing fee for all projects subject to CEQA. These filing fees are collected to defray the costs of managing and protecting fish and wildlife resources including, but not limited to, consulting with public agencies, reviewing environmental documents, recommending mitigation measures, and developing monitoring programs. Project applicants need not pay a filing fee in cases where a project will have no effect on fish and wildlife, as determined by the Department, or where their project is statutorily or categorically exempt from CEQA.

The proposed project is for construction and operating of two 397 feet tall wind turbines on a portion of two parcels totaling approximately 145 acres with approximately 3000 linear feet or overhead lines to provide supplemental power to the CEMEX Black Mountain Quarry Plant.

To enable Department staff to adequately review and comment on the proposed project, we recommend the following information be included in the CEQA document, as applicable:

1. A complete assessment of the flora and fauna within and adjacent to the project area should be conducted, with particular emphasis upon identifying special status species including rare, threatened, and endangered species. This assessment should also address locally unique species, rare natural communities, and wetlands. The assessment area should be large enough to encompass areas potentially subject to both direct and indirect project affects.

    a. The CEQA document should include survey methods, dates, and results; and should list all plant and animal species detected within the project study area. Special emphasis should be directed toward describing the status of rare, threatened, and endangered species in all areas potentially affected by the project. All necessary biological surveys should be conducted in advance of CEQA document circulation, and should not be deferred until after project approval.

    b. Rare, threatened, and endangered species to be addressed should include all those which meet the CEQA definition (see CEQA Guidelines, § 15380).

c. Species of Special Concern (SSC) status applies to animals generally not listed under the federal Endangered Species Act or the California Endangered Species Act, but which nonetheless are declining at a rate that could result in listing, or historically occurred in low numbers and known threats to their persistence currently exist. SSCs should be considered during the environmental review process.

d. A thorough assessment of rare plants and rare natural communities, following the Department's November 2009 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (Attachment 1).

e. A detailed vegetation map should be prepared, preferably overlaid on an aerial photograph. The map should be of sufficient resolution to depict the locations of the project site's major vegetation communities, and view project impacts relative to each community type. The vegetation classification system used to name the polygons should be described.

f. A complete assessment of rare, threatened, and endangered invertebrate, fish, wildlife, reptile, and amphibian species should be presented in the CEQA document. Seasonal variations in use of the project area should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with the Department and the U.S. Fish and Wildlife Service.

g. The Department's California Natural Diversity Data Base (CNDDB) should be searched to obtain current information on previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code. In order to provide an adequate assessment of special-status species potentially occurring within the project vicinity, the search area for CNDDB occurrences should include all U.S.G.S 7.5-minute topographic quadrangles with project activities, and all adjoining 7.5-minute topographic quadrangles. The CEQA document should discuss how and when the CNDDB search was conducted, including the names of each quadrangle queried.

2. A thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts, should be included.

   a. The CEQA document should present clear thresholds of significance to be used by the Lead Agency in its determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect.

   b. CEQA Guidelines, § 15125(a), direct that knowledge of the regional setting is critical to an assessment of environmental impacts and that special emphasis should be placed on resources that are rare or unique to the region.

   c. Impacts associated with initial project implementation as well as long-term operation and maintenance of a project should be addressed in the CEQA document.

   d. In evaluating the significance of the environmental effect of a project, the Lead Agency should consider direct physical changes in the environment which may be caused by the project and reasonably foreseeable indirect physical changes in the environment which may be caused by the project. Expected impacts should be quantified (e.g., acres, linear feet, number of individuals taken, volume or rate of water extracted, etc. to the extent feasible).

   e. Project impacts should be analyzed relative to their effects on off-site habitats. Specifically, this may include public lands, open space, downstream aquatic habitats, areas of groundwater depletion, or any other natural habitat that could be affected by the project.

   f. Impacts to and maintenance of wildlife corridor/movement areas and other key seasonal use areas should be fully evaluated and provided.

   g. A discussion of impacts associated with increased lighting, noise, human activity, changes in drainage patterns, changes in water volume, velocity, quantity, and quality, soil erosion, and/or sedimentation in streams and water courses on or near the project site, with mitigation measures proposed to alleviate such impacts should be included. Special considerations applicable to linear projects include ground disturbance that may facilitate infestations by exotic and invasive species over a great distance.

h. A cumulative effects analysis should be developed as described under CEQA Guidelines, § 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts to similar plant communities and wildlife habitats.

3. A range of project alternatives should be analyzed to ensure that the full spectrum of alternatives to the proposed project are fully considered and evaluated. Alternatives which avoid or otherwise minimize impacts to sensitive biological resources should be identified.

   a. If the project will result in any impacts described under the Mandatory Findings of Significance (CEQA Guidelines, § 15065) the impacts must be analyzed in depth in the CEQA document, and the Lead Agency is required to make detailed findings on the feasibility of alternatives or mitigation measures to substantially lessen or avoid the significant effects on the environment. When mitigation measures or project changes are found to be feasible, the project should be changed to substantially lessen or avoid the significant effects.

4. Mitigation measures for adverse project-related impacts to sensitive plants, animals, and habitats should be thoroughly discussed. Mitigation measures should first emphasize avoidance and reduction of project impacts. For unavoidable impacts, the feasibility of on-site habitat restoration or enhancement should be discussed. If on-site mitigation is not feasible, off-site mitigation through habitat creation, enhancement, acquisition and preservation in perpetuity should be addressed.

   a. The Department generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species. Studies have shown that these efforts are experimental in nature and largely unsuccessful.

   b. Areas reserved as mitigation for project impacts should be legally protected from future direct and indirect impacts. Potential issues to be considered include limitation of access, conservation easements, monitoring and management programs, water pollution, and fire.

   c. Plans for restoration and revegetation should be prepared by persons with expertise in southern California ecosystems and native plant revegetation techniques. Each plan should include,

at a minimum: (a) the location of the mitigation site; (b) the plant species to be used, container sizes, and/or seeding rates; (c) a schematic depicting the mitigation area; (d) planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for long-term conservation of the mitigation site.

5. Take of species of plants or animals listed as endangered or threatened under the California Endangered Species Act (CESA) is unlawful unless authorized by the Department. However, a CESA 2081(b) Incidental Take Permit may authorize incidental take during project construction or over the life of the project. The CEQA document must state whether the project would result in any amount of incidental take[1] of any CESA-listed species. CESA Permits are issued to conserve, protect, enhance, and restore State-listed threatened or endangered species and their habitats. Early consultation is encouraged, as significant modification to a project and mitigation measures may be required in order to obtain a CESA Permit.

The Department's issuance of a CESA Permit for a project that is subject to CEQA will require CEQA compliance actions by the Department as a Responsible Agency. The Department as a responsible agency under CEQA will consider the Lead Agency's Negative Declaration or Environmental Impact Report for the project. The Department may require additional mitigation measures for the issuance of a CESA Permit unless the project CEQA document addresses all project impacts to listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of a CESA Permit.

To expedite the CESA permitting process, the Department recommends that the CEQA document address the following CESA Permit requirements:

a. The impacts of the authorized take are minimized and fully mitigated;
b. The measures required to minimize and fully mitigate the impacts of the authorized take and: (1) are roughly proportional in extent to the impact of the taking on the species; (2) maintain the applicant's objectives to the greatest extent possible, and (3) are capable of successful implementation;

[1] Even a single individual.

c. Adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with and the effectiveness of the measures; and
d. Issuance of the permit will not jeopardize the continued existence of a State-listed species.

6. The Department has responsibility for wetland and riparian habitats. It is the policy of the Department to strongly discourage development in wetlands or conversion of wetlands to uplands. We oppose any development or conversion which would result in a reduction of wetland acreage or wetland habitat values, unless, at a minimum, project mitigation assures there will be "no net loss" of either wetland habitat values or acreage. The CEQA document should demonstrate that the project will not result in a net loss of wetland habitat values or acreage.

a. If the project site has the potential to support aquatic, riparian, or wetland habitat, a jurisdictional delineation of lakes, streams, and associated riparian habitats potentially affected by the project should be provided for agency and public review. This report should include a jurisdictional delineation that includes wetlands identification pursuant to the U. S. Fish and Wildlife Service wetland definition[2] as adopted by the Department[3]. Please note that some wetland and riparian habitats subject to the Department's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers. The jurisdictional delineation should also include mapping of ephemeral, intermittent, and perennial stream courses potentially impacted by the project. In addition to federally protected wetlands, the Department considers impacts to wetlands (as defined by the Department) potentially significant.

b. The project may require a Lake or Streambed Alteration Agreement, pursuant to Section 1600 et seq. of the Fish and Game Code, with the applicant prior to the applicant's commencement of any activity that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank (which may include associated riparian resources) of a river, stream or lake, or use material from a streambed. The Department's issuance of a Lake or Streambed Alteration

[2] Cowardin, Lewis M., et al. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service.

[3] California Fish and Game Commission Policies: Wetlands Resources Policy; Wetland Definition, Mitigation Strategies, and Habitat Value Assessment Strategy; Amended 1994

Agreement for a project that is subject to CEQA will require CEQA compliance actions by the Department as a responsible agency. The Department as a responsible agency under CEQA may consider the local jurisdiction's (lead agency) Negative Declaration or Environmental Impact Report for the project. To minimize additional requirements by the Department pursuant to Section 1600 et seq. and/or under CEQA, the document should fully identify the potential impacts to the lake, stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the agreement.

Thank you for this opportunity to comment. Questions regarding this letter and further coordination on these issues should be directed to Ms. Wendy Campbell, Environmental Scientist, at (760) 872-1171 or by email at WCampbell@dfg.ca.gov.

Sincerely,

Tonya Moore

Tonya Moore
Senior Environmental Scientist

Attachment

cc: Wendy Campbell
CHRON

Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities

State of California
CALIFORNIA NATURAL RESOURCES AGENCY
Department of Fish and Game
November 24, 2009[1]

INTRODUCTION AND PURPOSE

The conservation of special status native plants and their habitats, as well as natural communities, is integral to maintaining biological diversity. The purpose of these protocols is to facilitate a consistent and systematic approach to the survey and assessment of special status native plants and natural communities so that reliable information is produced and the potential of locating a special status plant species or natural community is maximized. They may also help those who prepare and review environmental documents determine when a botanical survey is needed, how field surveys may be conducted, what information to include in a survey report, and what qualifications to consider for surveyors. The protocols may help avoid delays caused when inadequate biological information is provided during the environmental review process; assist lead, trustee and responsible reviewing agencies to make an informed decision regarding the direct, indirect, and cumulative effects of a proposed development, activity, or action on special status native plants and natural communities; meet California Environmental Quality Act (CEQA)[2] requirements for adequate disclosure of potential impacts; and conserve public trust resources.

DEPARTMENT OF FISH AND GAME TRUSTEE AND RESPONSIBLE AGENCY MISSION

The mission of the Department of Fish and Game (DFG) is to manage California's diverse wildlife and native plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. DFG has jurisdiction over the conservation, protection, and management of wildlife, native plants, and habitat necessary to maintain biologically sustainable populations (Fish and Game Code §1802). DFG, as trustee agency under CEQA §15386, provides expertise in reviewing and commenting on environmental documents and makes protocols regarding potential negative impacts to those resources held in trust for the people of California.

Certain species are in danger of extinction because their habitats have been severely reduced in acreage, are threatened with destruction or adverse modification, or because of a combination of these and other factors. The California Endangered Species Act (CESA) provides additional protections for such species, including take prohibitions (Fish and Game Code §2050 et seq.). As a responsible agency, DFG has the authority to issue permits for the take of species listed under CESA if the take is incidental to an otherwise lawful activity; DFG has determined that the impacts of the take have been minimized and fully mitigated; and, the take would not jeopardize the continued existence of the species (Fish and Game Code §2081). Surveys are one of the preliminary steps to detect a listed or special status plant species or natural community that may be impacted significantly by a project.

DEFINITIONS

Botanical surveys provide information used to determine the potential environmental effects of proposed projects on all special status plants and natural communities as required by law (i.e., CEQA, CESA, and Federal Endangered Species Act (ESA)). Some key terms in this document appear in **bold** font for assistance in use of the document.

For the purposes of this document, **special status plants** include all plant species that meet one or more of the following criteria[3]:

---

1 This document replaces the DFG document entitled "Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened and Endangered Plants and Natural Communities."

2 http://ceres.ca.gov/ceqa

3 Adapted from the East Alameda County Conservation Strategy available at http://www.fws.gov/sacramento/EACCS/Documents/080331_Species_Evaluation_EACCS.pdf

- Listed or proposed for listing as threatened or endangered under ESA or candidates for possible future listing as threatened or endangered under the ESA (50 CFR §17.12).

- Listed[4] or candidates for listing by the State of California as threatened or endangered under CESA (Fish and Game Code §2050 *et seq.*). A species, subspecies, or variety of plant is endangered when the prospects of its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, over-exploitation, predation, competition, disease, or other factors (Fish and Game Code §2062). A plant is threatened when it is likely to become endangered in the foreseeable future in the absence of special protection and management measures (Fish and Game Code §2067).

- Listed as rare under the California Native Plant Protection Act (Fish and Game Code §1900 *et seq.*). A plant is rare when, although not presently threatened with extinction, the species, subspecies, or variety is found in such small numbers throughout its range that it may be endangered if its environment worsens (Fish and Game Code §1901).

- Meet the definition of rare or endangered under CEQA §15380(b) and (d). Species that may meet the definition of rare or endangered include the following:

  - Species considered by the California Native Plant Society (CNPS) to be "rare, threatened or endangered in California" (Lists 1A, 1B and 2);

  - Species that may warrant consideration on the basis of local significance or recent biological information[5];

  - Some species included on the California Natural Diversity Database's (CNDDB) *Special Plants, Bryophytes, and Lichens List* (California Department of Fish and Game 2008)[6].

- Considered a **locally significant species**, that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (CEQA §15125 (c)) or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). Examples include a species at the outer limits of its known range or a species occurring on an uncommon soil type.

Special status natural communities are communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. These communities may or may not contain special status species or their habitat. The most current version of the Department's *List of California Terrestrial Natural Communities*[7] indicates which natural communities are of special status given the current state of the California classification.

Most types of wetlands and riparian communities are considered special status natural communities due to their limited distribution in California. These natural communities often contain special status plants such as those described above. These protocols may be used in conjunction with protocols formulated by other agencies, for example, those developed by the U.S. Army Corps of Engineers to delineate jurisdictional wetlands[8] or by the U.S. Fish and Wildlife Service to survey for the presence of special status plants[9].

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4 Refer to current online published lists available at: [illegible]

5 In general, CNPS List 3 plants (plants about which more information is needed) and List 4 plants (plants of limited distribution) may not warrant consideration under CEQA §15380. These plants may be included on special status plant lists such as those developed by counties where they would be addressed under CEQA §15380. List 3 plants may be analyzed under CEQA §15380 if sufficient information is available to assess potential impacts to such plants. Factors such as regional rarity vs. statewide rarity should be considered in determining whether cumulative impacts to a List 4 plant are significant even if individual project impacts are not. List 3 and 4 plants are also included in the California Natural Diversity Database's (CNDDB) *Special Plants, Bryophytes, and Lichens List*. [Refer to the current online published list available at: [illegible].] Data on Lists 3 and 4 plants should be submitted to CNDDB. Such data aids in determining or revising priority ranking.

6 Refer to current online published lists available at: [illegible]

7 [illegible] The rare natural communities are asterisked on this list.

8 [illegible]

9 U.S. Fish and Wildlife Service Survey Guidelines available at [illegible]

BOTANICAL SURVEYS

Conduct botanical surveys prior to the commencement of any activities that may modify vegetation, such as clearing, mowing, or ground-breaking activities. It is appropriate to conduct a botanical field survey when:

- Natural (or naturalized) vegetation occurs on the site, and it is unknown if special status plant species or natural communities occur on the site, and the project has the potential for direct or indirect effects on vegetation; or
- Special status plants or natural communities have historically been identified on the project site; or
- Special status plants or natural communities occur on sites with similar physical and biological properties as the project site.

SURVEY OBJECTIVES

Conduct field surveys in a manner which maximizes the likelihood of locating special status plant species or special status natural communities that may be present. Surveys should be floristic in nature, meaning that every plant taxon that occurs on site is identified to the taxonomic level necessary to determine rarity and listing status. "Focused surveys" that are limited to habitats known to support special status species or are restricted to lists of likely potential species are not considered floristic in nature and are not adequate to identify all plant taxa on site to the level necessary to determine rarity and listing status. Include a list of plants and natural communities detected on the site for each botanical survey conducted. More than one field visit may be necessary to adequately capture the floristic diversity of a site. An indication of the prevalence (estimated total numbers, percent cover, density, etc.) of the species and communities on the site is also useful to assess the significance of a particular population.

SURVEY PREPARATION

Before field surveys are conducted, compile relevant botanical information in the general project area to provide a regional context for the investigators. Consult the CNDDB[c] and BIOS[1] for known occurrences of special status plants and natural communities in the project area prior to field surveys. Generally, identify vegetation and habitat types potentially occurring in the project area based on biological and physical properties of the site and surrounding ecoregion[2], unless a larger assessment area is appropriate. Then, develop a list of special status plants with the potential to occur within these vegetation types. This list can serve as a tool for the investigators and facilitate the use of reference sites; however, special status plants on site might not be limited to those on the list. Field surveys and subsequent reporting should be comprehensive and floristic in nature and not restricted to or focused only on this list. Include in the survey report the list of potential special status species and natural communities, and the list of references used to compile the background botanical information for the site.

SURVEY EXTENT

Surveys should be comprehensive over the entire site, including areas that will be directly or indirectly impacted by the project. Adjoining properties should also be surveyed where direct or indirect project effects, such as those from fuel modification or herbicide application, could potentially extend offsite. Pre-project surveys restricted to known CNDDB rare plant locations may not identify all special status plants and communities present and do not provide a sufficient level of information to determine potential impacts.

FIELD SURVEY METHOD

Conduct surveys using systematic field techniques in all habitats of the site to ensure thorough coverage of potential impact areas. The level of effort required per given area and habitat is dependent upon the vegetation and its overall diversity and structural complexity, which determines the distance at which plants can be identified. Conduct surveys by walking over the entire site to ensure thorough coverage, noting all plant taxa

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[c] Available at [illegible]

[1] [illegible]

[2] Ecological Subregions of California, available at [illegible]

observed. The level of effort should be sufficient to provide comprehensive reporting. For example, one person-hour per eight acres per survey date is needed for a comprehensive field survey in grassland with medium diversity and moderate terrain[12], with additional time allocated for species identification.

TIMING AND NUMBER OF VISITS

Conduct surveys in the field at the time of year when species are both evident and identifiable. Usually this is during flowering or fruiting. Space visits throughout the growing season to accurately determine what plants exist on site. Many times this may involve multiple visits to the same site (e.g. in early, mid, and late-season for flowering plants) to capture the floristic diversity at a level necessary to determine if special status plants are present[13]. The timing and number of visits are determined by geographic location, the natural communities present, and the weather patterns of the year(s) in which the surveys are conducted.

REFERENCE SITES

When special status plants are known to occur in the type(s) of habitat present in the project area, observe reference sites (nearby accessible occurrences of the plants) to determine whether those species are identifiable at the time of the survey and to obtain a visual image of the target species, associated habitat, and associated natural community.

USE OF EXISTING SURVEYS

For some sites, floristic inventories or special status plant surveys may already exist. Additional surveys may be necessary for the following reasons:

- Surveys are not current[14]; or
- Surveys were conducted in natural systems that commonly experience year to year fluctuations such as periods of drought or flooding (e.g. vernal pool habitats or riverine systems); or
- Surveys are not comprehensive in nature; or fire history, land use, physical conditions of the site, or climatic conditions have changed since the last survey was conducted[14]; or
- Surveys were conducted in natural systems where special status plants may not be observed if an annual above ground phase is not visible (e.g. flowers from a bulb); or
- Changes in vegetation or species distribution may have occurred since the last survey was conducted, due to habitat alteration, fluctuations in species abundance and/or seed bank dynamics.

NEGATIVE SURVEYS

Adverse conditions may prevent investigators from determining the presence of, or accurately identifying, some species in potential habitat of target species. Disease, drought, predation, or herbivory may preclude the presence or identification of target species in any given year. Discuss such conditions in the report.

The failure to locate a known special status plant occurrence during one field season does not constitute evidence that this plant occurrence no longer exists at this location, particularly if adverse conditions are present. For example, surveys over a number of years may be necessary if the species is an annual plant having a persistent, long-lived seed bank and is known not to germinate every year. Visits to the site in more

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[12] Adapted from U.S. Fish and Wildlife Service kit fox survey guidelines available at www.fws.gov/sacramento/es/documents/kitfox_no_protocol.pdf

[13] U.S. Fish and Wildlife Service Survey Guidelines available at http://www.fws.gov/sacramento/es/protocol.htm

[14] Habitats, such as grasslands or desert plant communities that have annual and short-lived perennial plants as major floristic components may require yearly surveys to accurately document baseline conditions for purposes of impact assessment. In forested areas, however, surveys at intervals of five years may adequately represent current conditions. For forested areas, refer to "Guidelines for Conservation of Sensitive Plant Resources Within the Timber Harvest Review Process and During Timber Harvesting Operations", available at https://r1.dfg.ca.gov/portal/Portals/12/THPBotanicalGuidelinesJuly2005.pdf

[15] U.S. Fish and Wildlife Service Survey Guidelines available at http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/docs/botanicalinventories.pdf

than one year increase the likelihood of detection of a special status plant especially if conditions change. To further substantiate negative findings for a known occurrence, a visit to a nearby reference site may ensure that the timing of the survey was appropriate.

REPORTING AND DATA COLLECTION

Adequate information about special status plants and natural communities present in a project area will enable reviewing agencies and the public to effectively assess potential impacts to special status plants or natural communities[17] and will guide the development of minimization and mitigation measures. The next section describes necessary information to assess impacts. For comprehensive, systematic surveys where no special status species or natural communities were found, reporting and data collection responsibilities for investigators remain as described below, excluding specific occurrence information.

SPECIAL STATUS PLANT OR NATURAL COMMUNITY OBSERVATIONS

Record the following information for locations of each special status plant or natural community detected during a field survey of a project site.

- A detailed map (1:24,000 or larger) showing locations and boundaries of each special status species occurrence or natural community found as related to the proposed project. Mark occurrences and boundaries as accurately as possible. Locations documented by use of global positioning system (GPS) coordinates must include the datum[18] in which they were collected;
- The site-specific characteristics of occurrences, such as associated species, habitat and microhabitat, structure of vegetation, topographic features, soil type, texture, and soil parent material. If the species is associated with a wetland, provide a description of the direction of flow and integrity of surface or subsurface hydrology and adjacent off-site hydrological influences as appropriate;
- The number of individuals in each special status plant population as counted (if population is small) or estimated (if population is large);
- If applicable, information about the percentage of individuals in each life stage such as seedlings vs. reproductive individuals;
- The number of individuals of the species per unit area, identifying areas of relatively high, medium and low density of the species over the project site; and
- Digital images of the target species and representative habitats to support information and descriptions.

FIELD SURVEY FORMS

When a special status plant or natural community is located, complete and submit to the CNDDB a California Native Species (or Community) Field Survey Form[19] or equivalent written report, accompanied by a copy of the relevant portion of a 7.5 minute topographic map with the occurrence mapped. Present locations documented by use of GPS coordinates in map and digital form. Data submitted in digital form must include the datum[20] in which it was collected. If a potentially undescribed special status natural community is found on the site, document it with a Rapid Assessment or Releve form[21] and submit it with the CNDDB form.

VOUCHER COLLECTION

Voucher specimens provide verifiable documentation of species presence and identification as well as a public record of conditions. This information is vital to all conservation efforts. Collection of voucher specimens should

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17 Refer to current online published lists available at: http://www.dfg.ca.gov/biogeodata. For Timber Harvest Plans (THPs) please refer to the "Guidelines for Conservation of Sensitive Plant Resources Within the Timber Harvest Review Process and During Timber Harvesting Operations", available at [illegible]

18 NAD83, NAD27 or WGS84

19 http://www.dfg.ca.gov/biogeodata

20 NAD83, NAD27 or WGS84

21 http://www.dfg.ca.gov/biogeodata/vegcamp/veg_publications_protocols.asp

be conducted in a manner that is consistent with conservation ethics and is in accordance with applicable state and federal permit requirements (e.g. incidental take permit, scientific collection permit). Voucher collections of special status species (or suspected special status species) should be made only when such actions would not jeopardize the continued existence of the population or species.

Deposit voucher specimens with an indexed regional herbarium[22] no later than 60 days after the collections have been made. Digital imagery can be used to supplement plant identification and document habitat. Record all relevant permittee names and permit numbers on specimen labels. A collecting permit is required prior to the collection of State-listed plant species[23].

BOTANICAL SURVEY REPORTS

Include reports of botanical field surveys containing the following information with project environmental documents:

- **Project and site description**
  - A description of the proposed project;
  - A detailed map of the project location and study area that identifies topographic and landscape features and includes a north arrow and bar scale; and
  - A written description of the biological setting, including vegetation[24] and structure of the vegetation; geological and hydrological characteristics; and land use or management history.
- **Detailed description of survey methodology and results**
  - Dates of field surveys (indicating which areas were surveyed on which dates); name of field investigator(s); and total person-hours spent on field surveys;
  - A discussion of how the timing of the surveys affects the comprehensiveness of the survey;
  - A list of potential special status species or natural communities;
  - A description of the area surveyed relative to the project area;
  - References cited, persons contacted, and herbaria visited;
  - Description of reference site(s), if visited, and phenological development of special status plant(s);
  - A list of all taxa occurring on the project site. Identify plants to the taxonomic level necessary to determine whether or not they are a special status species;
  - Any use of existing surveys and a discussion of applicability to this project;
  - A discussion of the potential for a false negative survey;
  - Provide detailed data and maps for all special plants detected. Information specified above under the headings "Special Status Plant or Natural Community Observations," and "Field Survey Forms," should be provided for locations of each special status plant detected.
  - Copies of all California Native Species Field Survey Forms or Natural Community Field Survey Forms should be sent to the CNDDB and included in the environmental document as an Appendix. It is not necessary to submit entire environmental documents to the CNDDB; and,
  - The location of voucher specimens, if collected.

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22 For a complete list of indexed herbaria, see: Holmgren, P., N. Holmgren and L. Barnett. 1990. Index Herbariorum, Part 1: Herbaria of the World. New York Botanic Garden, Bronx, New York. 693 pp. Or: [illegible]

23 Refer to current online published lists available at: [illegible]

24 A vegetation map that uses the National Vegetation Classification System [illegible], for example *A Manual of California Vegetation*, and highlights any special status natural communities. If another vegetation classification system is used, the report should reference the system, provide the reason for its use, and provide a crosswalk to the National Vegetation Classification System.

- **Assessment of potential impacts**
  - A discussion of the significance of special status plant populations in the project area considering nearby populations and total species distribution;
  - A discussion of the significance of special status natural communities in the project area considering nearby occurrences and natural community distribution;
  - A discussion of direct, indirect, and cumulative impacts to the plants and natural communities;
  - A discussion of threats, including those from invasive species, to the plants and natural communities;
  - A discussion of the degree of impact, if any, of the proposed project on unoccupied, potential habitat of the species;
  - A discussion of the immediacy of potential impacts; and,
  - Recommended measures to avoid, minimize, or mitigate impacts.

QUALIFICATIONS

Botanical consultants should possess the following qualifications:

- Knowledge of plant taxonomy and natural community ecology;
- Familiarity with the plants of the area, including special status species;
- Familiarity with natural communities of the area, including special status natural communities;
- Experience conducting floristic field surveys or experience with floristic surveys conducted under the direction of an experienced surveyor;
- Familiarity with the appropriate state and federal statutes related to plants and plant collecting; and,
- Experience with analyzing impacts of development on native plant species and natural communities.

SUGGESTED REFERENCES

Barbour, M., T. Keeler-Wolf, and A. A. Schoenherr (eds.). 2007. Terrestrial vegetation of California (3rd Edition). University of California Press.

Bonham, C.D. 1988. Measurements for terrestrial vegetation. John Wiley and Sons, Inc., New York, NY.

California Native Plant Society. Most recent version. Inventory of rare and endangered plants (online edition). California Native Plant Society, Sacramento, CA. Online URL http://www.cnps.org/inventory

California Natural Diversity Database. Most recent version. Special vascular plants, bryophytes and lichens list. Updated quarterly. Available at www.dfg.ca.gov.

Elzinga, C.L., D.W. Salzer, and J. Willoughby. 1998. Measuring and monitoring plant populations. BLM Technical Reference 1730-1. U.S. Dept. of the Interior, Bureau of Land Management, Denver, Colorado.

Leppig, G. and J.W. White. 2006. Conservation of peripheral plant populations in California. Madroño 53:264-274.

Mueller-Dombois, D. and H. Ellenberg. 1974. Aims and methods of vegetation ecology. John Wiley and Sons, Inc., New York, NY.

U.S. Fish and Wildlife Service. 1996. Guidelines for conducting and reporting botanical inventories for federally listed plants on the Santa Rosa Plain. Sacramento, CA.

U.S. Fish and Wildlife Service. 1996. Guidelines for conducting and reporting botanical inventories for federally listed, proposed and candidate plants. Sacramento, CA.

Van der Maarel, E. 2005. Vegetation Ecology. Blackwell Science Ltd., Malden, MA.

Mojave Desert Air Quality Management District
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 • fax 760.245.2699
Visit our web site: http://www.mdaqmd.ca.gov
Eldon Heaston, Executive Director

January 4, 2012

Tracy Creason, Planner
San Bernardino County Land Use Services
15900 Smoke Tree Street
Hesperia, CA 92345

Subject: P201100466/CUP

Dear Ms. Creason:

The Mojave Desert Air Quality Management District (District) has received Project Notice P201100466/CUP, a conditional use permit to install two 397 foot tall wind turbines on a portion of two parcels totaling approximately 145 acres with approximately 3000 linear feet of overhead lines to provide supplemental power to the Cemex Black Mountain Quarry Plant.

We have reviewed the project and, based on the information available to us at this time, the District has no comments. The District supports the development of renewable energy sources; such development is expected to produce cumulative and regional environmental benefits.

Thank you for the opportunity to review this planning document. If you have any questions regarding this letter, please contact me at (760) 245-1661 x6726.

Sincerely,

Alan J. De Salvio
Supervising Air Quality Engineer

AJD/tw P201100466 CUP Cemex.doc

Creason, Tracy - LUS

From: Ray_Bransfield@fws.gov
Sent: Friday, January 06, 2012 5:10 PM
To: Creason, Tracy - LUS
Cc: John Pimentel; Rahhal, Terri; 'Wayne Elarbee'; Wendy Campbell
Subject: RE: Desert Tortoise

All,
The following is from the FWS's 2010 survey guidelines:
What factors does the Service take into consideration when reviewing the results of surveys that
are conducted outside the active period?
Surveys outside the active period may be appropriate when only presence/absence is necessary or when
the project area is small and only very few tortoises are likely present. We base our determination of whether the results are valid on a whole suite of factors, including but not limited to the type and condition
of habitat, the general location of the survey area, the experience of the surveyors, the time and weather
when the survey was conducted, the nature of the year in which the survey occurred (i.e., if it rained a lot,
desert tortoises are likely to have been active and are more likely to have left evidence of their presence),
how much time surveyors spent at the site, and whether they were conducting a focused survey for tortoises or looking for a suite of biological and/or cultural resources. We consider these factors in combination to determine whether the surveyors were likely to have found whatever evidence that desert
tortoises were present. Depending on the factors that are present during a survey, the results are more or
less likely to represent the true status of the tortoise in that specific area.

Back to me again. If I could copy the decision tree from the guidelines into this email, I would but I can't so I'll just say that it also says "It may be appropriate to conduct the surveys any time during the year" in relation to surveys for small projects.

The bottom line is that the Federal Endangered Species Act says that people cannot take listed animals. Some projects can be implemented in a manner that avoids take. This one, with relatively small amounts of disturbance in fixed locations for the two turbines and in somewhat flexible locations for the powerline, would seem to fit that mold.

In my conversations with Wayne, I suggested that a survey now (conducted by highly qualified individual) would be able to tell us if tortoises are present at all in the area in general and specifically, if they have burrows at the turbine sites. As Wayne indicated, I tend to think that tortoises are probably absent from the site but will not say that conclusively without it having been looked at by someone who knows what they are looking at and for. (As I also mentioned to Wayne, I know of a tortoise that lives under a piece of sheet metal next to a truck repair shop, so sometimes they aren't that picky about their tortoise caves.)

Next Friday is pretty open for me for a call.

State of California -The Natural Resources Agency
DEPARTMENT OF FISH AND GAME
Inland Deserts Region
407 West Line Street
Bishop, California 93514
www.dfg.ca.gov

EDMUND G. BROWN, Jr. Governor
JOHN McCAMMAN, Director

5.10.12 Clear

May 10, 2012

Ms.Tracy Creason
County of San Bernardino-Land Use Services Department
15900 Smoke Tree Street
Hesperia, CA 92345

Subject: Foundation Windpower, LLC – Cemex Black Mountain Quarry, Installation of two 397-foot-tall wind turbines, Mitigated Negative Declaration, State Clearinghouse Number (SCH# 2012041031)

Dear Ms. Creason:

The Department of Fish and Game (Department) has reviewed the Mitigated Negative Declaration (MND) prepared by the San Bernardino County (Lead Agency) for the above referenced project. The project, proposed by Foundation Windpower, LLC (Developer), is for construction and operation of two 397–foot-tall wind turbines on an approximately 1600-square foot portion of two parcels totaling about 145 acres with roughly 3900 linear feet of overhead lines to provide supplemental power to the Cemex Black Mountain Quarry Plant.

The Department is providing comments on the MND as the State agency which has the statutory and common law responsibilities with regard to fish and wildlife resources and habitats. California's fish and wildlife resources, including their habitats, are held in trust for the people of the State by the Department (Fish and Game Code §711.7). The Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitats necessary for biologically sustainable populations of those species (Fish and Game Code §1802). The Department's fish and wildlife management functions are implemented through its administration and enforcement of Fish and Game Code (Fish and Game Code §702). The Department is a trustee agency for fish and wildlife under the California Environmental Quality Act (see CEQA Guidelines, 14 Cal. Code Regs. §15386(a)). The Department is providing these comments in furtherance of these statutory responsibilities, as well as its common law role as trustee for the public's fish and wildlife.

The project is in the range of the desert tortoise (*Gopherus aggassizzi*, DT), which is listed as threatened under the California Endangered Species Act (CESA) and the federal Endangered Species Act (ESA); the Mohave ground squirrel (*Xerospermophilus mohavensis*, MGS), which is listed as threatened under CESA; the mojave monkeyflower (*Mimulus mohavensis*), which is a Species of Special Concern and protected under Fish and Game Code Section 3503.5; the creamy

blazing star (Mentzelia tridentate) which is California Native Plant Society (CNPS) 1B-3 Rare, threaten, or endangered in California; the burrowing owl (*Athene cunicularia*, BUOW), which is a Species of Special Concern and protected under Fish and Game Code Section 3503.5; and the golden eagle (*Aquila chrysaetos*), which is a Fully Protected Species under Fish and Game Code Section 3511.

The Department recommends the Lead Agency require the project developer to conduct botanical surveys and surveys for the species referenced above using established protocols, which includes performing the survey(s) during the times established by each protocol. The MND does not include an analysis of impacts the project might have on any of the biological resources referenced above, nor does it indicate that protocol-level surveys have been done. The Department is available to assist the Lead Agency and the Developer with identifying appropriate survey protocols. The Department also recommends the Biological Assessment (BA) referenced in the MND along with survey datasheets be submitted to the Lead Agency and the Department for review.

Desert tortoise

The MND does not include an analysis of impacts the project might have on the DT. The 2010 United States Fish and Wildlife Service survey protocol for the DT recommends surveys be conducted during the tortoise's most active periods [April through May or September through October when air temperatures are below 40° C (104° F)] and as part of the entire action areas, zone of influence surveys are to be conducted at 200, 400, and 600 meters from the perimeter of the project site.

Mohave ground squirrel

The MGS Survey Guidelines state visual surveys to determine MGS activity and habitat quality shall be undertaken between mid-March and the end of June. Surveys for MGS should follow established survey guidelines. If protocol MGS trapping efforts demonstrate an absence of the species, this inference is considered valid only for one year's time following the final protocol trapping date. If the species is determined or assumed to be present, an Incidental Take Permit (ITP) pursuant to Fish and Game Code § 2080 would be warranted to ensure that the unlawful take of MGS would not occur. Information on recently enacted CESA Permit Fee Requirement is provided below.

Botanical surveys

Mojave monkeyflower & creamy blazing star

The Department recommends that the Lead Agency require the Project Developer to conduct field surveys during the time of year that the species are both evident and identifiable. The Mojave monkeyflower blooms from April to mid-May and the

creamy blazing from April to mid-June. The November 24, 2009 Department of Fish and Game, Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities provides guidance on the best time to conduct surveys, the systematic field techniques to use, and the survey extent that should be covered.

Burrowing owl

The Department recommends the Lead Agency require surveys be performed to protocol at the appropriate times, and the results of which be submitted to the Lead Agency and the Department. The Department recommends the Lead Agency require the Developer to complete surveys for the BUOW consisting of four separate site visits. Nesting Season Surveys should begin as early as February 1 and continue though August 31. Surveys for Winter Residents (non-breeding owls) – should be conducted between December 1 and January 31. Following these surveys, preconstruction BUOW surveys may be warranted. If during the preconstruction survey BUOW are observed, the Department recommends the Lead Agency require BUOW mitigation measures be applied as presented below.

1. As compensation for the direct loss of BUOW nesting and foraging habitat, the project proponent shall mitigate by acquiring and permanently protecting known BUOW nesting and foraging habitat at the following ratio;

   a) Replacement of occupied habitat with occupied habitat at 1.5 times 6.5 acres per pair or single bird;

   b) Replacement of occupied habitat with habitat contiguous with occupied habitat at 2 times 6.5 acres per pair or single bird; and/or

   c) Replacement of occupied habitat with suitable unoccupied habitat at 3 times 6.5 acres per pair or single bird.

2. The project proponent shall establish a non-wasting endowment account for the long-term management of the preservation site for BUOWs. The site shall be managed for the benefit of BUOWs. The preservation site, site management, and endowment shall be approved by the Lead Agency after consultation with the Department.

3. All owls associated with occupied burrows that will be directly impacted (temporarily or permanently) by the project shall be relocated and the following measures shall be implemented to avoid take of owls:

   a) Occupied burrows shall not be disturbed during the nesting season of February 1 through August 31, unless a qualified biologist can verify

through non-invasive methods that either the owls have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent flight.

b) Owls must be relocated by a qualified biologist from any occupied burrows that will be impacted by project activities. Suitable habitat must be available adjacent to or near the disturbance site or artificial burrows will need to be provided nearby. Once the biologist has confirmed that the owls have left the burrow, burrows should be excavated using hand tools and refilled to prevent reoccupation.

c) All relocation shall be approved by the Lead Agency after consultation with the Department. The permitted biologist shall monitor the relocated owls a minimum of three days per week for a minimum of three weeks. A report summarizing the results of the relocation and monitoring shall be submitted to the Lead Agency and the Department within 30 days following completion of the relocation and monitoring of the owls.

4. A Burrowing Owl Mitigation and Monitoring Plan shall be submitted to the Lead Agency and the Department for review and approval prior to relocation of owls. The Burrowing Owl Mitigation and Monitoring Plan shall describe proposed relocation and monitoring plans. The plan shall include the number and location of occupied burrow sites and details on adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation of artificial burrows (numbers, location, and type of burrows) shall also be included in the plan. The Plan shall also describe proposed off-site areas to preserve to compensate for impacts to BUOWs/occupied burrows at the project site as required under Condition 1.

Golden Eagle

The California Natural Diversity Database (CNDDB) shows occurrences of the golden eagle 2.4 miles to 7 miles from the proposed turbine location. The January 2011 U.S. Fish and Wildlife Service Draft Eagle Conservation Plan Guidance states that the survey protocol for the golden eagle is necessary if nesting, roosting, and foraging habitat are contained within the project boundary and exist within 10 miles of the project boundary. The Department recommends the Lead Agency require the project developer to conduct field surveys for the species to determine if the birds reside in the Project area and its vicnity and what, if any, impacts may occur due to placement of turbines in areas frequented by the eagle, including their flight paths. The golden eagle is a Fully Protected Species under Fish and Game Code Section 3511. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation

of the bird species for the protection of livestock. The MND does not include a biological assessment for the golden eagle. The Department cannot perform a full analysis of the potential impacts until the Department receives data from a biological assessment.

Bat Species

An analysis of impacts to bats was not provided, nor does it appear that surveys for bats were conducted. The Department recommends the Lead Agency require the Developer conduct surveys for bats using established survey techniques. The October 2007 California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development will provide the Lead Agency with guidance.

Lake and Streambed Alternation Agreement

The Department has direct authority under Fish and Game Code §1600 *et. seq.* in regard to any proposed activity that would divert, obstruct, or affect the natural flow or change the bed, channel, or bank of any waterway. Departmental jurisdiction under §1600 *et. seq.* may apply to all lands within the 100-year floodplain. Early consultation with the Department is recommended, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources.

Section 1600 *et. seq* of the Fish and Game Code requires the project applicant to notify the Department of any activity that will divert, obstruct or change the natural flow of the bed, channel or bank (which includes associated riparian habitat) or a river, stream or lake, or use material from a streambed prior to the applicant's commencement of the activity. Streams include, but are not limited to, intermittent and ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams and watercourses with subsurface flow. The Department, as a responsible agency under CEQA, may consider the local jurisdiction's (Lead Agency) MND for the project. However, if the MND does not fully identify potential impacts to lakes, streams and associated resources (including, but not limited to, riparian and alluvial fan sage scrub habitat) and thus provide adequate avoidance, mitigation, monitoring and reporting commitments, additional CEQA documentation will be required prior to execution (signing) of the Streambed Alteration Agreement. The Department recommends to avoid delays or repetition of the CEQA process, potential impacts to a lake or stream, as well as avoidance and mitigation measures be discussed within this CEQA document.

Spread of Noxious Weeds

The spread of noxious weeds is a major threat to biological resources in the Mojave Desert, particularly where disturbance has occurred and is ongoing. Non-

native weeds frequently out compete native plants resulting in several synergistic indirect effects: increased fire frequency by providing sufficient fuel to carry fires, especially in the inter-shrub spaces that are mostly devoid of native vegetation (Brown and Minnich 1986[1]; Brooks and Esque 2002[2]) as well as decreased quality and quantity of plant foods available to desert tortoises and other herbivores and thereby affecting their nutritional intake. Construction activities and soil disturbance would aid the transport and dispersal of invasive weed propagules, thereby potentially introducing new species of noxious weeds exacerbating invasions already present in the project vicinity. The Department recommends the Lead Agency require construction vehicles be inspected and washed, monitoring and eradication of any weed invasions, and revegetation of temporarily disturbed areas.

Avoid Spread of Noxious Weeds. The following Best Management Practices are recommended during construction and operation to prevent the spread and propagation of noxious weeds:

a. Limit the size of any vegetation and/or ground disturbance to the absolute minimum and limit ingress and egress to defined routes;

b. Reestablish vegetation as soon as possible on disturbed sites temporarily disturbed areas;

c. Prevent spread of non-native plants via vehicular sources by implementing methods of vehicle cleaning for vehicles coming and going from construction sites. Earth-moving equipment and construction vehicles shall be cleaned within an approved area or commercial facility prior to transport to the construction site. The number of cleaning stations shall be limited and weed control/herbicide application shall be used at the cleaning station(s);

d. Use only certified weed-free straw, hay bales, and seed for erosion control and sediment barrier installations;

e. Invasive non-native species shall not be used in landscaping plans and erosion control; and

CESA Permit Fees

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[1] Brown D.E., and R.A. Minnich. 1986. Fire changes in creosote bush scrub of the Western Sonoran Desert, California. American Midland Naturalist 116:411-422.
[2] Brooks, M.L., and T.C. Esque. 2002. Alien annual plants and wildfire in desert tortoise habitat: status, ecological effects, and management. Chelonian conservation and Biology 4:330-340.

The following information is provided as information to the Lead Agency and the Developer in the event the Developer applies for a CESA ITP related to this project.

The recently enacted bill, AB X1 13 (2011, Perez) and its accompanying legislation, SB 16 (Rubio 2011) became effective on December 9, 2011. AB X1 13 includes a provision to add Section 2099.10 to the Fish and Game Code, which requires the Department to collect fees for eligible renewable energy projects for which an ITP or a consistency determination (CD) is requested pursuant to the CESA.

According to Fish and Game Code Section 2099.10, the Department shall collect a permit application fee according to the schedule presented below from the owner or developer of an "eligible" project that is not subject to the California Energy Commission's certification requirements to support the permitting of eligible projects. "Eligible project" means an eligible renewable energy source per the California Renewables Portfolio Standard Program. This includes solar, wind, geothermal, small hydro, biomass, hydrokinetic and others (see http://www.cpuc.ca.gov/PUC/energy/Renewables/FAQs/01REandRPSeligibility.htm).

According to Fish and Game Code Section 2099.10 (b)(1), the Department is to collect the following:

CDs: $25,000 for projects, regardless of size, that are subject only to Section 2080.1.

ITPs: $25,000 for projects producing less than 50 MW.

$50,000 for projects producing not less than 50 MW and not more than 250 MW.

$75,000 for projects producing more than 250 MW.

Also, pursuant to Fish and Game Code Section 2099.10 (d)(2), the Department shall collect fees in addition to the above amounts, not to exceed $200,000, if the Department determines the permit application fee to be insufficient to pay for its estimated costs of completing the permit work due to the complexity of the project.

Fish and Game Code Section 2099.10 (c) (1) requires the Department to collect fees for ITP applications and CDs submitted between June 30, 2011 and December 9, 2011 that were not deemed complete before December 9, 2011, the effective date of ABX1 13. After this date, fees are due at the time an ITP application or CD request is submitted.

Payments are to be sent to:

Department of Fish Game
Climate Science and Renewable Energy Branch
Renewable Energy Program
1416 9th Street Suite 1341B
Sacramento, California 95814
Attn: CESA Permit Fee

Should you have any questions on the above fee schedule, please contact Staff Services Analyst Vanessa Fontana at (916) 653-3866.

In conclusion, the Department believes the MND is not complete. The Lead Agency's finding that any potentially significant impacts would be mitigated to less than significant levels does not appear supported by information and analyses presented in the document. The Department recommends the Lead Agency revise the MND to include an adequate discussion of all biological resources potentially affected by the entire project action area. To adequately assess the potential project impacts on the environment, including fish, wildlife and botanical resources and their habitats, the Department recommends the Lead Agency require the Developer to complete appropriate protocol surveys for the species addressed in this letter prior to construction, receive and update the BA to include survey data and results, and provide copies of the BA to the Lead Agency and the Department for review. The Department requests the BA to be sent to the Department Environmental Scientist Heather Weiche for review at California Department of Fish and Game, 3602 Inland Empire Blvd Suite C-220 Ontario, CA 91764

Thank you for this opportunity to comment. Please direct any questions about this letter and any requests for further coordination on issues the Department has presented above to Ms. Weiche at (909) 980-8607, or by email at hweiche@dfg.ca.gov.

Sincerely,

Tonya Moore

Tonya Moore
Senior Environmental Scientist

cc: Heather Weiche, Vanessa Fontana
Department of Fish and Game

State Clearinghouse

CHRON

BIORESOURCE CONSULTANTS, INC.
P.O. Box 1539 310 East Matilija Street Ojai, CA 93024-1539 805.646.9006 x15 Brian@BioRC.com

Memorandum

To: John Pimentel and Wayne Elarbee, Foundation Windpower

From: Brian Holly, Senior Ecologist, BRC

Date: June 6, 2012

Re: Response to California Department of Fish and Game Comments for the Foundation Windpower, LLC – Cemex Black Mountain; Proposed Installation of Two 397-Foot-Tall Wind Turbines, Mitigated Negative Declaration (SCH No. 2012041031)

This memo serves as a response to comments regarding a wind generation project proposed Foundation Windpower, LLC (Applicant) with regard to the California Department of Fish and Game (CDFG) comment letter (dated May 10, 2012) for the above referenced project. BioResource Consultants, Inc. (BRC) conducted a Biological Assessment at the proposed project site and prepared a Biological Assessment Report summarizing finding from the initial survey (BA)[1]. The following summary clarifies, or specifically addresses comments that pertain to biological resources and BRC survey results at the site.

Page 2, Desert Tortoise:

While the project is in the range of the desert tortoise (DT), the project site is described in the project BA as heavily disturbed with multiple roads, evidence of grading, and materials being dumped in the vicinity of old buildings and utility structures. The site is located between an active quarry, the plant, and an excess materials dumping site. The area immediately next to the plant, adjacent to the proposed pole line, is devoid of all vegetation. The turbine locations are at the top of a 20' to 25' berm. The steep incline of the berm reduces the ability of tortoises to migrate to the project site.

The Applicant has noted that site personnel have been trained in identifying DT and proper procedures if a DT is encountered. Furthermore, site personnel with long tenures working on environmental compliance and operational issues report having never encountered a DT within or near the general project area. The BA will be revised to document and include this information.

[1] *CEMEX Black Mountain Quarry Wind Generation Project Biological Assessment* (January 2012)

Ray Bransfield of United States Fish and Wildlife Service (USFWS) commented on the BA on January 6, 2012. After Mr. Bransfield visited the site in early December of 2011, he concluded that protocol-level surveys for desert tortoise would not be necessary, but that a reconnaissance-level survey to determine presence of DT or burrows would be appropriate. Mr. Bransfield also concluded that DT was probably absent from the site.[2]

Based on the lack of suitable habitat at the project site, lack of observance of DT and the active mining operations surrounding the turbine locations, it is our determination that the probability of the occurrence of DT is low, and that protocol-level surveys or an incidental take permit are not necessary.

Per comments from USFWS, and BRC's recommendations, the Applicant has agreed to the following Avoidance and Minimization Measures and will incorporate these measures into the Conditional Use Permit.

- A qualified biologist will conduct zone of influence surveys per the 2010 USFWS Survey Protocol for Desert Tortoise. The surveys will be conducted in early June, 2012 and will focus on areas at 200, 400, and 600 meters from the perimeter of the project site.

- Implement a Worker Environmental Training Program lead by a qualified biologist that emphasizes project BMP's and DT avoidance measures.

- If DT are present and cannot be avoided during construction, or excluded from the project site using approved methods, the Applicant will consult a qualified biologist and USFWS to determine the appropriate action or wait until the animal moves to safety on its own.

- Prohibit all handling of DT by non-authorized biologists and maintain records of all DT encountered during project activities (information recorded will include for each DT: the locations and dates of observations; general condition and health; location moved from and location moved to; and diagnostic markings). A USFWS-approved desert tortoise handler will be available if animals need to be relocated from the construction area.

- Require inspection by all workers underneath each on-site parked vehicle prior to moving it.

- Implement a litter control program to reduce the attractiveness of the project site to common ravens and other desert tortoise predators. Trash will be promptly placed in containers that will be removed from the work site on a regular basis.

[2] Wayne Elarbee, pers. comm., June 5, 2012

Page 2, Mohave Ground Squirrel:

CDFG comments that protocol-level surveys, trapping efforts and an Incidental Take Permit for MGS should be required. While suitable habitat exists for Mohave ground squirrel (MGS) and small mammal burrows, the project site is within a disturbed industrial area and no MGS observed during the biological survey. Therefore, the occurrence of this species is unlikely. Although the probability for occurrence is low, the Applicant offers the following Avoidance and Minimization Measures to address MGS potential occurrence:

- A pre-construction survey for MGS will be conducted prior to construction to determine if active burrows are present within the project site or along access routes.
- Mammal burrows within the project area will be marked by a biological monitor, and crews will be instructed to avoid these burrows.
- If any suspected MGS burrows are discovered, the area will be flagged off and construction workers will not be allowed to enter the area. If any suspected burrows are found to be within 100 feet of the work area, work will be halted at the location(s), and CEMEX will contact an MGS specialist to attempt to determine the status of the burrow and the presence/absence of MGS at the worksite (e.g., with an inspection scope or through a trapping regime). If this situation occurs, CDFG will be contacted by CEMEX for further guidance.
- If MGS are found in the project area or along access routes, the turbine construction area will be fenced off by a qualified biologist to create a natural barrier so the species is not impacted from the construction. The fence will be monitored to ensure that Mojave ground squirrels are protected.

Page 2, Mojave Monkeyflower & Creamy Blazing Star:

CDFG recommends specific protocols for surveying various plant species. All the species identified by the CNDDB search have a low potential to occur due to lack of habitat and level of onsite disturbance. While none of the species were observed, and surveys were conducted outside the blooming period for this species, there is the potential for this species to occur. With respect to the limited amount of space that will be disturbed by the project during construction and operation, the limited construction period, and the minimal amount of traffic required during operations, there is a low potential to impact this species.

As the project surveys were conducted outside the blooming period for this species, the Applicant proposes the following avoidance measure:

As noted in the Initial Study, to avoid impacts to sensitive plant species, a qualified biologist will perform a pre-construction botanical at the project site during the appropriate floristic season for the Mojave monkeyflower and creamy blazing star. Any sensitive plants found in the project area will be recorded, and 'no entry' zones will be established by the biologist around the plants

so that the plants are not impacted by construction. If plants cannot be avoided the top 6 inches of topsoil will be removed and saved to be re-spread after construction. The BA will be revised to document and include this information.

Pages 3-4, Burrowing Owl:

BRC did not observe burrowing owl (BUOW) or their sign at the project site. While one burrow onsite may be utilized by burrowing owls, there was no sign, or individual birds observed. Based on the level of disturbance and ongoing human activity at the project site, BUOW are not expected to occur. However, as BUOW occurrence/nesting is still possible, the Applicant will implement the following avoidance and minimization measures:

- All burrows within the project area will be marked by the biological monitor, and crews will be instructed to avoid these burrows.

- Due to the potential for BUOW to be present along the project alignment, it is recommended that a pre-construction survey for BUOW be conducted to determine presence or absence. The survey will include all suitable habitats within the project site. The surveys will be conducted from two hours before sunset to one hour after or from one hour before to two hours after sunrise. If BUOW and their burrows are present and cannot be avoided during construction, CDFG will be consulted to determine the appropriate action.
- If BUOW or their burrows are present and will not be directly impacted, then a 300-foot buffer will be established around the active burrow and no construction activities will occur within the buffer without the approval of a qualified biologist to review and observe the construction until the young have fledged and the burrow is determined to be inactive.
- BUOW avoidance measures will also be taught to the construction team during the Worker Environmental Training, prior to construction.

We believe that protocol-level surveys or an Incidental Take Permit is unnecessary based on biological survey results and the low quality of habitat onsite.

Page 4, Golden Eagle:

The applicant is currently working with the USFWS to determine the potential risk of the project to Golden Eagles (GOEA) that are in close proximity to the project. The following avoidance and minimization measures are recommended to reduce potential impacts to GOEA from the proposed project activities:

Mitigation Measure 1: Pre-Construction Survey
Prior to construction, a qualified biologist will conduct a survey to determine the presence/absence of GOEA within 0.25 miles from the project site. In addition, the biologist will document any potential nesting or perching locations for eagles within .025 miles from the project site. All potential perching or nesting sites will be discussed with the USFWS to determine the appropriate steps to minimize and avoid a possible injury or mortality to GOEA.

Mitigation Measure 2: Habitat Avoidance Measures
The Applicant will consult with a qualified biologist to incorporate siting and design recommendations in the USFWS guidelines for both the construction and operation of the turbines. These measures may include removing ground cover to minimize prey population, promptly removing carrion, avoiding perch areas on the tower, and making all lighting consistent with the FAA requirements while also at minimum intensity and minimum number of flashes per minute.

Mitigation Measure 3: Construction and Operation Minimization Measures

1. Limit proposed work to existing disturbed areas, when possible.
2. During construction contain and remove all trash from the site on a daily basis.
3. During the turbine operations implement a litter control program to reduce site attractiveness to migratory birds and eagles in which all trash is promptly removed from the site and placed in containers to be disposed at an authorized landfill.

Mitigation Measure 4: Anti-Perching Controls
All overhead transmission lines will be constructed will raptor guards/ anti-perching devices.

Mitigation Measure 5: Post Construction Monitoring Program
The Applicant will prepare and implement a post-construction bird mortality monitoring program whose focus is to determine whether estimated perceived risk associated with the project was accurate. The monitoring program will be on a monthly basis and will be conducted by a qualified biologist for two years during GOEA breeding season.

If the probability of harming or killing an eagle is significant, then the Applicant will be required to develop additional mitigation and avoidance measures to decrease the risk of taking a GOEA, and may be required by USFWS to apply for a take permit. The Applicant has agreed to pursue a take permit if actual experience, or a more comprehensive analysis of the data indicates a significant risk exists.

Page 5, Bat Species:

CDFG comments that bat surveys utilizing established survey techniques should be required. The CNDDB and BIOS searches did not identify a single occurrence of a bat species; no sign of bats or individual bats were observed during the biological survey. It should be noted that the reconnaissance-level survey conducted is not sufficient to conclude non-presence of bats. However, the project site is not in a location with topographical features or man-made structures (ridges, peninsulas, etc.) which would provide nesting or roosting sites of significance. Therfore, we conclude that bat species have a low probability of occurrence at the project site.

As bat occurrence is still possible at the proposed project site, the Applicant will implement the following avoidance and minimization measure:

- A qualified biologist will conduct presence/absence surveys for bat species using *Anabat SD2 CF* bat detection equipment. If sensitive or protected bat species are observed during the surveys, the appropriate resource management agency will be consulted and further mitigation measures will be implemented.

Page 5, Lake and Streambed Alteration Agreement:

CDFG comments that a Lake and Streambed Alteration Agreement should be required for the proposed project. However, as stated in the BA, the site is not within or near jurisdictional wetlands or riparian areas. The project site is not within State Waters, Waters of the United States, or wetlands, and therefore is not under the jurisdiction of the Army Corps of Engineers or CDFG pursuant to CDFG Code 1602. Based on our findings, the proposed project is not subject to a Streambed Alteration Agreement.

Page 5 and 6, Spread of Noxious Weeds:

CDFG comments about the potential deleterious impact of noxious weeds and recommends requiring Best Management Practices for the construction and operation of the project. According to the Applicant, the project site is in an industrial location where truck traffic related to the project will be largely on the paved surfaces of the cement plant, or improved, previously graded roads. Very little vehicle traffic is expected off-road. The Applicant offers the following minimization measures to reduce the spread of noxious weeds.

- To ensure that seeds from invasive species are not transported into or out of the project site by construction equipment, all construction equipment will be cleaned before being brought onsite, and washed again prior to leaving the project area.

- Any organic material used during project construction for erosion control, hydroseeding, or re-vegetating disturbed areas, should be free of seeds or vegetative structure of non-native species.

We believe this summary sufficiently addresses the biological resource comments submitted by CDFG, but please contact me if additional information or clarification regarding our Biological Assessment is required. We will update our Biological Assessment to include all of the information summarized in this memo after our additional biological surveys are completed in June, 2012.

Sincerely,

Brian E. Holly
Senior Project Manager;
Senior Biologist/Ecologist

cc: Carl G. Thelander, President/CEO

FOUNDATION WINDPOWER

June 6, 2012

Tracy Creason
County of San Bernardino-Land Use Services Department
15900 Smoke Tree Street
Hesperia, California 92345

Re: Response to California Department of Fish and Game Comments for the Foundation Windpower, LLC – Cemex Black Mountain Installation of two 397' wind turbines, Mitigated Negative Declaration (SCH No. 2012041031)

Dear Ms. Creason:

Thank you for forwarding the California Department of Fish and Game ("CDF&G" or the "Department") letter (the "Letter") dated May 10, 2012. The Letter contains several comments recommending expensive and time consuming surveys or mitigations which we would like to discuss with the Department and the County prior to completing the Conditional Use Permit process.

Foundation Windpower is very sensitive to the concerns raised by CDF&G. Of course we are willing to include almost all the recommended mitigations in our Conditional Use Permit. However, we believe several of the CDF&G recommendations are inappropriate for a project of our limited size (2 wind turbines) and impact (disturbed land in a rock quarry). Foundation Windpower's fundamental strategy is to minimize environmental impacts by placing one or two wind turbines on-site at an existing industrial facility with high energy demand. In fact, the proposed turbine sites at Black Mountain Quarry are located in the center of three significantly disturbed industrial points with a high level of mechanical and human activity: the Cemex clinker plant (a large, loud, active industrial facility which runs 24/7), a massive open-pit limestone mine, and the Cemex spare material pile which occupies a mountainside.

To properly assess the validity of CDF&G comments, we asked our environmental consultants, Bio Resources, Inc. ("BRC") review the Letter. BRC is very familiar with the site. BRC authored the Biological Assessment (BA)[1] used by the County in its Initial Study. The attached memo dated Hune 6, 2012 from Bio Resources, Inc. to Foundation Windpower covers several points raised in the CDF&G Letter and offers some alternative perspectives we are asking the Department and the County to consider in finalizing mitigation requirements for the CUP.

Through the BRC memo Foundation Windpower offers:

[1] *CEMEX Black Mountain Quarry Wind Generation Project Biological Assessment* (January2012)

FOUNDATION WINDPOWER

(1) Several clarifications on comments pertaining to the site, its biological resources and BRC survey results;

(2) Multiple commitments by the Applicant to update the Biological Assessment to incorporate additional study of the issues included raised in the Letter and/or to agree with certain mitigations suggested by CDF&G; and,

(3) A few suggested responses for the County of San Bernardino to consider in responding to the Department.

As you know this project is on a tight timeframe in order to complete construction by this winter. It is important to the Applicant and Cemex that the permitting process progresses expeditiously.

We appreciate the County must comply with the CEQA process and that the County endeavors to be a beneficial steward for the environment. We would expect the County to consider the balance of factors in this project including the significant reduction in greenhouse gas emissions and the economic benefits to the County of continued operations of the Cemex lime mining and cement manufacturing facilities in San Bernardino County.

Please review the attached memo and please contact me to discuss any items in greater detail. We look forward to a positive outcome for the community, the County and Cemex in the near future.

Regards,

John Pimentel
President

cc: Tonya Moore, CDF&G
Heather Weiche, CDF&G
Wendy Campbell, CDF&G