



DATE: September 1, 2010

TO: Jay T. Olivas, Project Planner IV/ Indio
38686 El Cerrito Road
Palm Desert, CA 92211
(760) 863-8277

FROM: Steven D. Hinde, REHS, CIH, *SD*
Senior Industrial; Hygienist / Office of Industrial Hygiene
Riverside County Department of Public Health
P.O. Box 7600, Riverside, CA 92513-7600

PROJECT REVIEWED: Commercial WECS Permit No. 0071S4
EA - Exempt
Project Location: Sec. 3, T3S, R3E Riverside County.



REFERENCE NUMBER: 96761

APPLICANT: Mark Technologies Corporation
Attention: Mark Jones
250 E. 5th Street, Suite 1500
Cincinnati, OH 45202
Phone: (513) 562-1280

ACOUSTICAL CONSULTANT: Channel Islands Acoustics
676 West Highland Drive
Camarillo CA 93010

INFORMATION SUBMITTED: *“Wind Turbine Noise Analysis for WECS #71 Development Additions Using Nordex Type N80/2500 Wind Turbines Alst Mesa, Section 3, R.3 E./ T.3S. Riverside County, California”* dated March 26, 2010 Revised April 7, 2010.

Project blue lines.

CHARACTERISTICS OF PROPOSED TURBINES:

The applicant proposes to install Twenty Seven (27), "Nordex N80 2.5 MW turbines" wind turbines at the site. The turbine characteristics are listed below:

TURBINE CHARACTERISTIC	TURBINE MODEL: N80-2400 kW
Hub Height (meters)	60
Rotor Diameter (meters)	80
kW output	2500 kW
Pure Tone Output	No
Effective A-weighted Sound Power Level (SPL) at Varying Wind Speeds (meters per second, or "m/s")	102.5 dB @ 6 m/s
	103.5 dB @ 8 m/s
	104.0 dB @ 10 m/s
	105.0 dB @ 12 m/s

FINDINGS:

1. The Nordex N80 2.5 MW turbines complies with the County's design requirements of "in accordance with good engineering practices".
2. The consultant applied the correct acoustical modeling methodology pursuant to the requirements of Riverside County Ordinance 348, sec. 18.41 (resolution # 99-404).
3. An AirPhoto USA Residential Map 2 miles of the project site verified that the information presented in the acoustical report regarding site lay-out and sensitive receiver location was accurate.
4. Anticipated noise levels: *At nearest residence:* Existing and proposed turbine worst-case (wind speed of 12 m/s) noise at nearest resident: less than **45 dB(A)**; *At project property line boundary:* The 55 dB (A) noise contour lies within the project's property line boundary.

CONCLUSIONS:

WEC 71S4, using the Nordex N80 2.5 MW turbines, will be in compliance with Riverside County Riverside Ordinance 348, sec. 18.41 governing wind turbine noise.



THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Office of the General Manager

Colorado River Aqueduct
Sta. 9710+00 to 9760+00
Substr. Job No. 2001-94-004

June 30, 2010

Mr. Mike G. Jones
Mark Technologies Corporation
Suite 1500
250 East Fifth Street
Cincinnati, Ohio 45202

Revised Commercial WECS Permit No. 71

We received your grading plans (Sheets 1 through 14 of 14) on June 17, 2010, regarding the Commercial WECS Permit No. 71 installation of turbine generators and grading in the Whitewater area of Riverside County.

Metropolitan has no objections to the proposed revised permit, which includes grading and installation of wind turbine generators within our 250-foot-wide fee property in this area, as shown on Sheets 1, 5, 9 and 11 of 14 of your revised plans. The project proponent, the Tenderland Power Company/Mark Technologies Corporation, has an existing 30-year wind energy lease (RL 1899) over a portion of our property for the installation of wind turbine generators. This lease was granted by Metropolitan in 2001 and does not expire until April 30, 2031.

We are returning prints of Sheets 1, 5, 9 and 11 of 14 of your revised plans, stamped "REVIEWED — NO CORRECTIONS NOTED."

Mr. Mike G. Jones

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June 30, 2010

For any further correspondence with Metropolitan relating to this project, please make reference to the Substructures Job Number shown in the upper right-hand corner of this letter. Should you require any additional information, please contact Ken Chung, telephone (213) 217-7670.

Very truly yours,

A handwritten signature in black ink, appearing to read "K. Callanan". The signature is fluid and cursive, with the first name "Kieran" and last name "Callanan" clearly distinguishable.

Kieran M. Callanan, P.E.
Manager, Substructures Team

KC/ly
DOC 2001-94-004b

Enclosures (4)

cc: Mr. Michael A. Peroni, President
The Altum Group
Suite 15
73-255 El Paso Drive
Palm Desert, CA 92260



RIVERSIDE COUNTY SHERIFF'S DEPARTMENT

Palm Desert Station
Stanley Sniff, Sheriff - Coroner

RECEIVED

JAN 11 2008

Riverside County
Planning Department
Desert Office

December 17, 2007

County of Riverside
Planning Department
4080 Lemon Street, 9th Floor
Riverside, California 92502

ATTN: Ron Goldman; Planning Director
RE: Commercial Weecs Permit No. 00071S4 APN: 516-020-003

Thank you for the opportunity to comment on the precise plan to replace 60 previously approved gamesa 850 KW wind turbines (unbuilt) up to 300 feet in height with 60 EWT 52-900 KW wind turbines up to 300 feet high. This project was located at an area north of Interstate 10 and west of White water Canyon Road.

Pre-Construction & Construction Phases:

Concerning the construction on parcel there should be a temporary chain link fence around the entire construction site. The valuable material and equipment at the construction site should be protected from theft and vandalism. I recommend a 6 foot high temporary chain link fence be erected around those areas. I would also recommend that a list of serial or license numbers of equipment and vehicles stored at this site be maintained at the builder's nearest office. This will allow Sheriff's personnel to obtain these numbers immediately for the reporting and recovery purposes. The builder's name, address and telephone number should be conspicuously posted at the construction site. Visibility into the construction site should not be blocked. Temporary lighting of sufficient wattage to illuminate the presence of any person on the site during the hours of darkness should be provided. A trespassing authorization letter should be completed by the builder and kept on file with the Sheriff's Department for possible future prosecution of trespassers.

Addressing:

Addressing numbers should be minimum height of 12 inches and illuminated during the hours of darkness. I also recommend the address numbers be painted on the roof of the building with 3' to 4' black or contrasting colors. This will assist law enforcement observers or air ambulance crewmembers in identifying the locations quicker in the event

of an emergency. The addressing numbers should also be very visible from the main streets of the buildings for a quicker response of assistance.

Alarm Service:

An alarm service is recommended for the buildings constructed on these parcels. An emergency contact record should be on file with the alarm company and the Riverside County Sheriff's Department, identifying persons who are available to respond to the buildings in the event of an emergency.

Private Security:

A private security company should be utilized during the hours of darkness to patrol the fenced in construction site. The patrol could start at 10:00 PM at night and end at about 5:00 AM when construction begins. That patrol would help in deterring people from entering the construction site without permission and reduce the occurrences of theft and vandalism.

Doors:

I recommend adequate security hardware, such as single cylinder dead-bolt locks, should be installed. Glass doors should have decorative wrought iron or metal backing to prevent burglars from breaking the glass and entering the buildings. Overhead roll-up doors should be secured from the inside by a cylinder lock or padlock, which cannot be defeated from outside the door.

Windows:

I recommend windows and glass doors contain rated burglary-resistant glazing or its equivalent be installed. The window type that attached to the frame is recommended. Absent any fire or building codes that require windows on the side or rear of the buildings, I recommend that windows only be constructed in the front of the buildings.

Roof Access:

The design for access to the roof should not have exterior ladders, equipment, or landscaping (i.e. trees) that can be used by unauthorized persons to climb up on the roof. Additionally any roof top vents should be reinforced with burglary resistant material in accordance with current fire and building codes.

Post Construction & Project Completion:

Lighting:

In the interest of the property owners, public safety and Sheriff's Department, I make the following recommendations. The monument signs should be well lighted during the hours of darkness. The parking lot area, driveway, sides of the buildings, recesses and grounds contiguous to buildings should be provided with lighting of sufficient wattage.

They should provide illumination to make clearly visible the presence of any person on or around the property during the hours of darkness. All exterior doors should have their own light source that will adequately illuminate entry/exit areas at all hours in order to make any person near the door clearly visible. Provide adequate illumination for persons entering and exiting the buildings.

Parking Lot:

I would recommend the installation of handicapped parking stalls in accordance with prevailing Riverside County and California State Building Codes. Also, specifically marked parking spaces for company officials should be eliminated. This reduces the ability of potential robbers or kidnapers identifying high profile executives. Pay phones could be installed throughout the location with illuminating light to help individuals that don't use or have access to a cellular phone.

Graffiti Prevention:

The surface of walls, buildings, logo monument, etc. should be covered with graffiti resistant surface composition, applied paint and/or shielding by defensive landscaping or plants. For example, plants with thorns or stickers.

Landscaping:

Landscaping should be of the type and situated in locations to maximize natural surveillance of the property while providing the desired degree of aesthetics.

CCTV Surveillance:

A digital CCTV surveillance system should be utilized to monitor areas on the property where cash or credit card transactions occur. I would recommend the CCTV system be of such quality that persons may be identified through direct viewing or later review of the recording system.

Trash Bins:

I recommend trash bins be enclosed and locked to prevent entry by unauthorized persons. Employees can access a key to open locked enclosures and bins.

Fencing/Barriers:

Whenever possible, open fencing design such as wrought iron, tubular steel, or densely linked and heavy-posted chain-link should be utilized in order to maximize natural surveillance while establishing territoriality. Other barrier considerations include decorative cement planters, access control to high valued storage areas, locked cages, rooms and safes to store valuables. Fencing that will conceal any part of the buildings could be a location that an intruder might want to use as a possible staging area for crime.

Emergency Notification:

As these developments are completed and prior to the County of Riverside Planning Department granting occupancy, we respectfully request the occupants provide the Riverside County Sheriff's Department and Fire Department information regarding emergency notification. If you have any questions regarding this report and my recommendations, please call me at the office (760) 836-1600. If the developers or builders have any questions, I will consult with you so you can provide them with the answers.

Respectfully submitted

A handwritten signature in black ink, appearing to read 'James D. Navarro', written in a cursive style.

Lieutenant James D. Navarro
Riverside County Sheriff's Department

**Coachella Valley Conservation Commission
Joint Project Review (JPR)**

Date: March 9, 2010

Project Information

Permittee: County of Riverside

Applicant/Project Name: Mark Technologies Windfarm

Permit ID: WCS00071S4

CVCC ID: 07-018b

Conservation Area: Stubbe and Cottonwood Canyons & Whitewater Canyon Conservation Area

Total Project Acreage: 640 acres

Project Acreage within Conservation Area: 640 acres

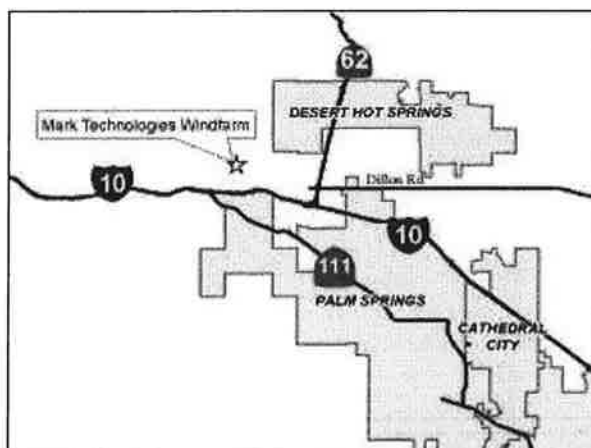
APNs within Conservation Area: 516-020-001, 002, 003

Project Description: Addition of up to 60 new wind turbines within an existing array.

Acres of Proposed New Disturbance: 25.75 acres in Riverside County jurisdiction (Also, 2.75 acres in Metropolitan Water District jurisdiction and one acre in Bureau of Land Management jurisdiction)

Acres of Pre-1996 Disturbance on property: 39 acres

Acres of Proposed Conservation: 0 acres



Conservation Objectives Review:

The Conservation Objectives for the Stubbe and Cottonwood Canyons Conservation Area are described in Section 4.3 of the CVMSHCP. These Conservation Objectives are summarized in the table below. No Disturbance is proposed in the Whitewater Canyon Conservation Area.

Stubbe and Cottonwood Canyons Conservation Area Mark Technologies Windfarm (excluding BLM and MWD lands) *										
Conservation Objective	Total Acres of Proposed Disturbance **	Acres of Disturbance Authorized by Plan	Proposed Disturbance as Percentage of Authorized Disturbance	Rough Step (Acres of Disturbance Currently Available)	Total Acres of Proposed Conservation	Acres of Conservation Required by Plan	Proposed Conservation as Percentage of Required Conservation	Total Amount of Take Allocated to Other Projects	Total Area within Project Area (not including BLM lands)	Maximum Allowable Disturbance per County Ordinance (8%)
Conserve Core Habitat for desert tortoise	25.75	253	10%	89	0.00	2,276	0%	0.00	507.00	40.56
Conserve sand source areas	25.75	138	19%	33	0.00	1,241	0%	0.00	507.00	40.56

* Excludes proposed disturbance on Metropolitan Water District (MWD) and Bureau of Land Management (BLM) lands.
 ** Approximately 2.75 acres of MWD and 1 acre of BLM land is proposed for disturbance for desert tortoise and sand source.

Required Measures for the Conservation Area Applicable to this Proposed Project

The Permittees shall comply with applicable avoidance, minimization, and mitigation measures described in Section 4.4 and the Land Use Adjacency Guidelines as described in Section 4.5.

Other Plan Requirements

Section 4.4: Avoidance, Minimization, and Mitigation Measures

Burrowing Owl. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities other than levees, berms, dikes, and similar features that are known to contain burrowing owl burrows. O&M of roads is not subject to this requirement. For other projects that are subject to CEQA, the Permittees will require burrowing owl surveys in the Conservation Areas using an accepted protocol (as determined by the CVCC in coordination with the Permittees and the Wildlife Agencies). Prior to Development, the construction area and adjacent areas within 500 feet of the Development site, or to the edge of the property if less than 500 feet, will be surveyed by an Acceptable Biologist for burrows that could be used by burrowing owl. If a burrow is located, the biologist will determine if an owl is present in the burrow. If the burrow is determined to be occupied, the burrow will be flagged and a 160-foot buffer during the non-breeding season and a 250-foot buffer during the breeding season, or a buffer to the edge of the property boundary if less than 500 feet, will be established around the burrow. The buffer will be staked and flagged. No Development or O&M activities will be permitted within the buffer until the young are no longer dependent on the burrow.

If the burrow is unoccupied, the burrow will be made inaccessible to owls, and the Covered Activity may proceed. If either a nesting or escape burrow is occupied, owls shall be relocated pursuant to accepted Wildlife Agency protocols. A burrow is assumed occupied if records indicate that, based on surveys conducted following protocol, at least one burrowing owl has been observed occupying a burrow on site during the past three years. If there are no records for the site, surveys must be conducted to determine, prior to construction, if burrowing owls are present. Determination of the appropriate method of relocation, such as eviction/passive relocation or active relocation, shall be based on the specific site conditions (e.g., distance to nearest suitable habitat and presence of burrows within that habitat) in coordination with the Wildlife Agencies. Active relocation and eviction/passive relocation require the preservation and maintenance of suitable burrowing owl habitat determined through coordination with the Wildlife Agencies.

Within one (1) year of Permit issuance, CVCC will cooperate with County Flood Control, CVWD and IID to conduct an inventory of levees, berms, dikes, and similar features in the Plan Area maintained by those Permittees. Burrowing owl burrow locations will be mapped and each of these Permittees will incorporate the information into its O&M practices to avoid impacts to the burrowing owl to the maximum extent Feasible. CVCC in cooperation with County Flood Control, CVWD, and IID will prepare a manual for maintenance staff, educating them about the burrowing owl and appropriate actions to take when owls are encountered to avoid impacts to the maximum extent Feasible. The manual will be submitted to the Wildlife Agencies for review and comment within two (2) years of Permit issuance. In conjunction with the Monitoring Program, the maps of the burrowing owl locations along the above-described levees, berms, dikes, and similar features will be periodically updated.

Desert tortoise. This measure does not apply to single-family residences and any non-commercial accessory uses and structures, including but not limited to second units on an existing legal lot, or to O&M of Covered Activities for Permittee infrastructure facilities. Within Conservation Areas, the Permittees will require surveys for desert tortoise for **Development** in modeled desert tortoise Habitat. Prior to Development, an Acceptable Biologist will conduct a presence/absence survey of the Development area and adjacent areas within 200 feet of the Development area, or to the property boundary if less than 200 feet and permission from the adjacent landowner cannot be obtained, for fresh sign of desert tortoise, including live tortoises, tortoise remains, burrows, tracks, scat, or egg shells. The presence/absence survey must be conducted during the window between February 15 and October 31. Presence/absence surveys require 100% coverage of the survey area. If no sign is found, a clearance survey is not required. A presence/absence survey is valid for 90 days or indefinitely if tortoise-proof fencing is installed around the Development site.

If fresh sign is located, the Development area must be fenced with tortoise-proof fencing and a clearance survey conducted during the clearance window. Desert tortoise clearance surveys shall be conducted during the clearance window from February 15 to June 15 and September 1 to October 31 or in accordance with the most recent Wildlife Agency protocols. Clearance surveys must cover 100% of the Development area. A clearance survey must be conducted during different tortoise activity periods (morning and afternoon). All tortoises encountered will be moved from the Development site to a specified location. Prior to issuance of the Permits, CVCC will either use the *Permit Statement Pertaining to High Temperatures for Handling Desert Tortoises* and *Guidelines for Handling Desert Tortoises During Construction Projects*, revised July 1999, or develop a similar protocol for relocation and monitoring of desert tortoise, to be reviewed and approved by the Wildlife Agencies. Thereafter, the protocol will be revised as needed based on the results of monitoring and other information that becomes available.

For O&M activities in the Conservation Areas, the Permittees shall ensure that personnel conducting such activities are instructed to be alert for the presence of desert tortoise. If a tortoise is spotted, activities adjacent to the tortoise's location will be halted and the tortoise will be allowed to move away from the activity area. If the tortoise is not moving, it will be relocated by an Acceptable Biologist to nearby suitable Habitat and placed in the shade of a shrub. To the maximum extent Feasible, O&M activities will avoid the period from February 15 and October 31. Utility development protocols have been developed to avoid or minimize potential adverse impacts to the desert tortoise in the Conservation Areas from utility and road right-of-way projects, such as the installation and maintenance of water, sewer, and electric lines and roadway maintenance. The objectives of these protocols are to provide reliable and consistent direction on utility development within the Conservation Areas. Two utility development protocols, inactive and active season, provide specific direction on site preparation and construction phases of utility projects in the Conservation Areas. The protocols include steps to be followed during the desert tortoise active and/or inactive season. The inactive season protocol must be used for utility maintenance or development within the November 1 to February 14 time frame; the active season protocol must be used for utility maintenance or development within the February 15 to October 31 time frame. Deviations from these time frames must be presented to the RMOC.

Inactive Season Protocol. This protocol is applicable to pre-construction and construction phases of utility Covered Activity projects occurring between November 1 and February 14. These protocols apply only to the site preparation and construction phases of projects. The project proponent must follow the eight pre-construction protocol requirements listed below.

1. A person from the entity contracting the construction shall act as the contact person with the representative of the appropriate RMUC. He/she will be responsible for overseeing compliance with the protective stipulations as stated in this protocol.
2. Prior to any construction activity within the Conservation Areas, the contact person will meet with the representative of the appropriate RMUC to review the plans for the project. The representative of the appropriate RMUC will review alignment, pole spacing, clearing limits, burrow locations, and other specific project plans which have the potential to affect the desert tortoise. He or she may recommend modifications to the contact person to further avoid or minimize potential impacts to desert tortoise.
3. The construction area shall be clearly fenced, marked, or flagged at the outer boundaries to define the limits of construction activities. The construction right-of-way shall normally not exceed 50 feet in width for standard pipeline corridors, access roads and transmission corridors, and shall be minimized to the maximum extent Feasible. Existing access roads shall be used when available, and rights-ofway for new and existing access roads shall not exceed 20 feet in width unless topographic obstacles require greater road width. Other construction areas including well sites, storage tank sites, substation sites, turnarounds, and laydown/staging sites which require larger areas will be determined in the preconstruction phase. All construction workers shall be instructed that their activities shall be confined to locations within the fenced, flagged, or marked areas.
4. An Acceptable Biologist shall conduct pre-construction clearance surveys of all areas potentially disturbed by the proposed project. Any winter burrows discovered in the Conservation Areas during the pre-construction survey shall be avoided or mitigated. The survey shall be submitted to the representative of the appropriate RMUC as part of plan review.
5. All site mitigation criteria shall be determined in the pre-construction phase, including but not limited to seeding, barrier fences, leveling, and laydown/staging areas, and will be reviewed by the representative of the appropriate RMUC prior to implementation.
6. A worker education program shall be implemented prior to the onset of each construction project. All construction employees shall be required to read an educational brochure prepared by the representative of the appropriate RMUC and/or the RMOC and attend a tortoise education class prior to the onset of construction or site entry. The class will describe the sensitive species which may be found in the area, the purpose of the MSHCP Reserve System, and the appropriate measures to take upon discovery of a sensitive species. It will also cover construction techniques to minimize potential adverse impacts.
7. All pre-construction activities which could Take tortoises in any manner (e.g., driving off an established road, clearing vegetation, etc.) shall occur under the supervision of an Acceptable Biologist.
8. If there are unresolvable conflicts between the representative of the appropriate RMUC and the contact person, then the matter will be arbitrated by the RMOC and, if necessary, by CVCC.

The following terms are established to protect the desert tortoise during utility-related construction activities in the Conservation Areas and are to be conducted by an Acceptable Biologist.

- ❖ An Acceptable Biologist shall oversee construction activities to ensure compliance with the protective stipulations for the desert tortoise.
- ❖ Desert tortoises found above ground inside the project area during construction shall be moved by an Acceptable Biologist out of harm's way and placed in a winter den (at a distance no greater than 250 feet). If a winter den cannot be located, the USFWS or CDFG shall determine appropriate action with respect to the tortoise. Tortoises found above ground shall be turned over to the Acceptable Biologist.
- ❖ No handling of tortoises will occur when the air temperature at 15 centimeters above ground exceeds 90 degrees Fahrenheit.
- ❖ Desert tortoise burrows shall be avoided to the maximum extent Feasible. An Acceptable Biologist shall excavate any burrows which cannot be avoided and will be disturbed by construction. Burrow excavation shall be conducted with the use of hand tools only, unless the Acceptable Biologist determines that the burrow is unoccupied immediately prior to burrow destruction.
- ❖ Only burrows within the limits of clearing and surface disturbance shall be excavated. Burrows outside these limits, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the construction area. Installation and removal of such barrier fencing shall be under the direction and supervision of an Acceptable Biologist.
- ❖ For electrical transmission line and road construction projects, only burrows within the right-of-way shall be excavated. Burrows outside the right-of-way, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the right-of-way. Installation and removal of such barrier fencing shall be under the direction and supervision of an Acceptable Biologist.
- ❖ Tortoises in the Conservation Areas are not to be removed from burrows until appropriate action is determined by USFWS or CDFG with respect to the tortoise. The response shall be carried out within 72 hours.
- ❖ Blasting is not permissible within 100 feet of an occupied tortoise burrow.

During construction, contractors will comply with the mitigation and minimization measures contained within this protocol. These measures are:

- ❖ All trenches, pits, or other excavations shall be inspected for tortoises by an Acceptable Biologist prior to filling.
- ❖ All pipes and culverts stored within desert tortoise Habitat shall have both ends capped to prevent entry by desert tortoises. During construction, all open ended pipeline segments that are welded in place shall be capped during periods of construction inactivity to prevent entry by desert tortoises.
- ❖ Topsoil removed during trenching shall be re-spread on the pipeline construction area following compaction of the backfill. The area shall be restored as determined during the environmental review.
- ❖ All test pump water will be routed to the nearest wash or natural drainage. The route will be surveyed by an Acceptable Biologist. If tortoises are found in the drainage area the Acceptable Biologist will remove the tortoises.
- ❖ Powerlines associated with water development, such as to provide power for pumps, should be buried underground adjacent to the pipe. All above ground

structures deemed to be necessary shall be equipped with functional anti-perching devices that would prevent their use by ravens and other predatory birds, and shall adhere to the electrical distribution protocol which follows.

- ❖ In order to perform routine O&M of the water systems such as wells, pumps, water lines and storage tanks, etc., employees are to be trained in the area of desert tortoise education. This training will be performed on a regular basis by an Acceptable Biologist for those personnel not previously trained. The training will include at a minimum the following: identification of tortoises, burrows, and other sign; and instructions on installing tortoise barrier fencing. During the course of basic O&M, desert tortoise will be avoided. Untrained employees shall not perform maintenance operations within the reserve.
- ❖ All disturbance areas around poles or concrete pads will be reduced to a size just large enough for the construction activity.
- ❖ Areas disturbed around poles or construction pads will be restored as determined during the pre-construction process.
- ❖ Poles or other above ground structures necessary for electrical distribution development shall be minimized as much as possible. All above ground structures shall be equipped with functional anti-perching devices that would prevent their use by ravens and other predatory birds.
- ❖ In order to perform routine O&M of the electrical distribution systems such as transmission lines and poles, substations, etc., employees are to be trained in the area of desert tortoise education. This training will be performed on a regular basis by a qualified biologist for those personnel not previously trained. The training will include at a minimum the following: identification of tortoises, burrows, and other sign; and instructions on installing tortoise barrier fencing. During the course of basic O&M, desert tortoise will be avoided. Untrained employees shall not perform maintenance operations within the non-Take areas.
- ❖ All trash and food items shall be promptly contained and removed daily from the project site to reduce the attractiveness of the area to common ravens and other desert tortoise predators.
- ❖ Construction activities which occur between dusk and dawn shall be limited to areas which have already been cleared of desert tortoises by the Acceptable Biologist and graded or located in a fenced right-of-way. Construction activities shall not be permitted between dusk and dawn in areas not previously graded. ***Active Season Protocol.*** This protocol is applicable to pre-construction and construction phases of utility development projects occurring between February 15 and November 1. It is identical to the Inactive Season Protocol with the following additions:
- ❖ Work areas shall be inspected for desert tortoises within 24 hours of the onset of construction. To facilitate implementation of this condition, burrow inspection and excavation may begin no more than seven (7) days in advance of construction activities, as long as a final check for desert tortoises is conducted at the time of construction.
- ❖ All pre-construction activities which could Take tortoises in any manner (e.g., driving off an established road, clearing vegetation, etc.) shall occur under the overall supervision of an Acceptable Biologist. Any hazards to tortoises created by this activity, such as drill holes, open trenches, pits, other excavations, or any steep-sided depressions, shall be checked three times a day for desert tortoises.

These hazards shall be eliminated each day prior to the work crew leaving the site, which may include installing a barrier that will preclude entry by tortoises. Open trenches, pits or other excavations will be backfilled within 72 hours, whenever possible. A 3:1 slope shall be left at the end of every open trench to allow trapped desert tortoises to escape. Trenches not backfilled within 72 hours shall have a barrier installed around them to preclude entry by desert tortoises. All trenches, pits, or other excavations shall be inspected for tortoises by a biological monitor trained and approved by the Acceptable Biologist prior to filling.

- ❖ If a desert tortoise is found, the biological monitor shall notify the Acceptable Biologist who will remove the animal as soon as possible.
- ❖ Only burrows within the limits of clearing and surface disturbance shall be excavated. Burrows outside these limits, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the construction area. The barrier fence shall be at least 20 feet long and shall be installed to direct the tortoise leaving the burrow away from the construction area. Installation and removal of such barrier fencing shall be under the direction and supervision of the biological monitor.
- ❖ If blasting is necessary for construction, all tortoises shall be removed from burrows within 100 feet of the blast area.

Disposition of Sick, Injured, or Dead Specimens. Upon locating dead, injured, or sick desert tortoises under any utility or road project, initial notification by the contact representative or Acceptable Biologist must be made to the USFWS or CDFG within three (3) working days of its finding. Written notification must be made within five (5) calendar days with the following information: date; time; location of the carcass; photograph of the carcass; and any other pertinent information. Care must be taken in handling sick or injured animals to ensure effective treatment and care. Injured animals shall be taken care of by the Acceptable Biologist or an appropriately trained veterinarian. Should any treated tortoises survive, USFWS or CDFG should be contacted regarding the final disposition of the animals.

Section 4.5 Land Use Adjacency Guidelines

The purpose of Land Use Adjacency Guidelines is to avoid or minimize indirect effects from Development adjacent to or within the Conservation Areas. Adjacent means sharing a common boundary with any parcel in a Conservation Area. Such indirect effects are commonly referred to as edge effects, and may include noise, lighting, drainage, intrusion of people, and the introduction of non-native plants and non-native predators such as dogs and cats. Edge effects will also be addressed through reserve management activities such as fencing. The following Land Use Adjacency Guidelines shall be considered by the Permittees in their review of individual public and private Development projects adjacent to or within the Conservation Areas to minimize edge effects, and shall be implemented where applicable.

4.5.1 Drainage

Proposed Development adjacent to or within a Conservation Area shall incorporate plans to ensure that the quantity and quality of runoff discharged to the adjacent Conservation Area is not altered in an adverse way when compared with existing conditions. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the adjacent Conservation Area.

4.5.2 Toxics

Land uses proposed adjacent to or within a Conservation Area that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife and plant species, Habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in any discharge to the adjacent Conservation Area.

4.5. Lighting

Numerous studies have shown artificial light to negatively impact a variety of wildlife species (see, for example, Ecological consequences of artificial night lighting 2006, Rich, C. and Longcore, T. (eds.). Island Press: Washington, D.C.). The purpose of this guideline is to minimize the impact of artificial light on wildlife within Conservation Areas. For proposed Development adjacent to or within a Conservation Area, lighting shall be shielded and directed toward the developed area. Landscape shielding or other appropriate methods shall be incorporated in project designs to minimize the effects of lighting adjacent to or within the adjacent Conservation Area. Projects requiring discretionary approval shall provide the permitting jurisdiction with a light study showing the proposed methods to minimize escape of light from the project into Conservation Areas. This study shall include all exterior lighting including street lights and security lighting.

4.5.4 Noise

Noise has been shown to negatively impact numerous species of wildlife (see, for example, Bowles, A.E. 1995. **Responses of wildlife to noise. pp. 109-156. In: Knight, R.L. and K.J. Gutzwiller. (eds.) Wildlife and Recreationists: Coexistence through Management and Research. Island Press: Washington, D.C.**). The purpose of this guideline is to minimize the impact the noise on wildlife within Conservation Areas. Proposed Development adjacent to or within a Conservation Area that generates noise in excess of 75 dBA L_{eq} hourly, as measured at the property line, shall incorporate setbacks, berms, or walls, as appropriate, to minimize the effects of noise on the adjacent Conservation Area. Required Measures in any Conservation Area that preclude or limit berms or walls shall have precedence over this guideline. This guideline is intended to apply to land uses that generate noise on a permanent basis such as race tracks, night clubs and shooting ranges and does not apply to temporary noise due to construction or special events. Public safety activities are exempt from this guideline.

4.5.5 Invasives

Invasive species are a known threat to native wildlife and wildlife habitat in the Coachella Valley. Impacts of invasive species on wildlife in the Coachella Valley have been documented in research conducted by the Center for Conservation Biology at the University of California, Riverside. Invasive, non-native plant species shall not be incorporated in the landscape for land uses adjacent to or within a Conservation Area. Landscape treatments within or adjacent to a Conservation Area shall incorporate native plant materials to the maximum extent Feasible; recommended native species are listed in Table 4-112. The plants listed in Table 4-113 shall not be used within or adjacent to a Conservation Area. This list may be amended from time to time through a Minor Amendment with Wildlife Agencies' concurrence.

Table 4-112: Coachella Valley Native Plants Recommended for Landscaping¹

BOTANICAL NAME	COMMON NAME
Trees	
<i>Washingtonia filifera</i>	California Fan Palm
<i>Cercidium floridum</i>	Blue Palo Verde
<i>Chilopsis linearis</i>	Desert Willow
<i>Olneya tesota</i>	Ironwood Tree
<i>Prosopis glandulosa var. torreyana</i>	Honey Mesquite
Shrubs	
<i>Acacia greggii</i>	Cat's Claw Acacia
<i>Ambrosia dumosa</i>	Burro Bush
<i>Atriplex canescens</i>	Four Wing Saltbush
<i>Atriplex lentiformis</i>	Quailbush
<i>Atriplex polycarpa</i>	Cattle Spinach
<i>Baccharis sergiloides</i>	Squaw Water-weed
<i>Bebia juncea</i>	Sweet Bush
<i>Cassia (Senna) covesii</i>	Desert Senna
<i>Condalia parryi</i>	Crucillo
<i>Crossosoma bigelovii</i>	Crossosoma
<i>Dalea emoryi</i>	Dye Weed
<i>Dalea (Psorothamnus) schottii</i>	Indigo Bush
<i>Datura meteloides</i>	Jimson Weed
<i>Encelia farinosa</i>	Brittle Bush
<i>Ephedra aspera</i>	Mormon Tea
<i>Eriogonum fasciculatum</i>	California Buckwheat
<i>Eriogonum wrightii membranaceum</i>	Wright's Buckwheat
<i>Fagonia laevis</i>	(No Common Name)
<i>Gutierrezia sarothrae</i>	Matchweed
<i>Haplopappus acradeniis</i>	Goldenbush
<i>Hibiscus denudatus</i>	Desert Hibiscus
<i>Hoffmannseggia microphylla</i>	Rush Pea
<i>Hymenoclea salsola</i>	Cheesebush
<i>Hyptis emoryi</i>	Desert Lavender
<i>Isomeris arborea</i>	Bladder Pod
<i>Juniperus californica</i>	California Juniper

BOTANICAL NAME	COMMON NAME
<i>Krameria grayi</i>	Ratany
<i>Krameria parvifolia</i>	Little-leaved Ratany
<i>Larrea tridentate</i>	Creosote Bush
<i>Lotus rigidus</i>	Desert Rock Pea
<i>Lycium andersonii</i>	Box Thorn
<i>Petalonyx linearis</i>	Long-leaved Sandpaper Plant
<i>Petalonyx thurberi</i>	Sandpaper Plant
<i>Peucephyllum schottii</i>	Pygmy Cedar
<i>Prunus fremontii</i>	Desert Apricot
<i>Rhus ovata</i>	Sugar-bush
<i>Salazaria mexicana</i>	Paper-bag Bush
<i>Salvia apiana</i>	White Sage
<i>Salvia eremostachya</i>	Santa Rosa Sage
<i>Salvia vaseyi</i>	Wand Sage
<i>Simmondsia chinensis</i>	Jojoba
<i>Sphaeralcia ambigua</i>	Globemallow (Desert Mallow)
<i>Sphaeralcia ambigua rosacea</i>	Apricot Mallow
<i>Trixis californica</i>	Trixis
<i>Zauschneria californica</i>	California Fuchsia
Groundcovers	
<i>Mirabilis bigelovii</i>	Wishbone Bush (Four O'Clock)
<i>Mirabilis tenuiloba</i>	White Four O'Clock (Thin-lobed)
Vines	
<i>Vitis girdiana</i>	Desert Grape
Accent	
<i>Muhlenbergia rigens</i>	Deer Grass
Herbaceous Perennials²	
<i>Adiantum capillus-veneris</i>	Maiden-hair Fern (w)
<i>Carex alma</i>	Sedge (w)
<i>Dalea parryi</i>	Parry Dalea
<i>Eleocharis montevidensis</i>	Spike Rush (w)
<i>Equisetum laevigatum</i>	Horsetail (w)
<i>Juncus bufonis</i>	Toad Rush (w)
<i>Juncus effusus</i>	Juncus (w)
<i>Juncus macrophyllus</i>	Juncus (w)
<i>Juncus mexicanus</i>	Mexican Rush (w)
<i>Juncus xiphioides</i>	Juncus (w)
<i>Notholaena parryi</i>	Parry Cloak Fern
<i>Pallaea mucronata</i>	Bird-foot Fern
Cacti and Succulents	
<i>Agave deserti</i>	Desert Agave
<i>Asclepias albicans</i>	Desert Milkweed (Buggy-whip)
<i>Asclepias subulata</i>	Ajamete
<i>Dudleya arizonica</i>	Live-forever
<i>Dudleya saxosa</i>	Rock Dudleya
<i>Echinocereus engelmannii</i>	Calico Hedgehog Cactus
<i>Ferocactus acanthodes</i>	Barrel Cactus
<i>Fouquieria splendens</i>	Ocotillo
<i>Mamillaria dioica</i>	Nipple Cactus

BOTANICAL NAME	COMMON NAME
<i>Mamillaria tetrancistra</i>	Corkseed Cactus
<i>Nolina parryi</i>	Parry Nolina
<i>Opuntia acanthocarpa</i>	Stag-horn or Deer-horn Cholla
<i>Opuntia bigelovii</i>	Teddy Bear or Jumping Cholla
<i>Opuntia basilaris</i>	Beavertail Cactus
<i>Opuntia echinocarpa</i>	Silver or Golden Cholla
<i>Opuntia ramosissima</i>	Pencil Cholla, Darning Needle Cholla
<i>Yucca schidigera</i>	Mojave Yucca, Spanish Dagger
<i>Yucca whipplei</i>	Our Lord's Candle

¹ Source: "Coachella Valley Native Plants, Excluding Annuals (0 ft. to approximately 3,000 ft. elevation)." Compiled by Dave Heveron, Garden Collections Manager, and Kirk Anderson, Horticulturist, The Living Desert, May, 2000, for the Coachella Valley Mountains Conservancy.

² Common names for herbaceous perennials that are followed by "(w)" indicate a water or riparian species.

Table 4-113: Prohibited Invasive Ornamental Plants¹

BOTANICAL NAME	COMMON NAME
<i>Acacia</i> spp. (all species except <i>A. greggii</i>)	Acacia (all species except native catclaw acacia)
<i>Arundo donax</i> (✓)	Giant Reed or Arundo Grass
<i>Atriplex semibaccata</i> (✓)	Australian Saltbush
<i>Avena barbata</i>	Slender Wild Oat
<i>Avena fatua</i>	Wild Oat
<i>Brassica tournefortii</i> (✓✓)	African or Saharan Mustard
<i>Bromus madritensis</i> ssp. <i>rubens</i> (✓)	Red Brome
<i>Bromus tectorum</i> (✓✓)	Cheat Grass or Downy Brome
<i>Cortaderia jubata</i> [syn. <i>C. atacamensis</i>]	Jubata Grass or Andean Pampas Grass
<i>Cortaderia dioica</i> [syn. <i>C. selloana</i>]	Pampas Grass
<i>Descurainia sophia</i>	Tansy Mustard
<i>Eichhornia crassipes</i>	Water Hyacinth
<i>Elaeagnus angustifolia</i>	Russian Olive
<i>Foeniculum vulgare</i>	Sweet Fennel
<i>Hirschfeldia incana</i>	Mediterranean or Short-pod Mustard
<i>Lepidium latifolium</i>	Perennial Pepperweed
<i>Lolium multiflorum</i>	Italian Ryegrass
<i>Nerium oleander</i>	Oleander
<i>Nicotiana glauca</i> (✓)	Tree Tobacco
<i>Oenothera berlandieri</i> (#)	Mexican Evening Primrose
<i>Olea europea</i>	European Olive Tree
<i>Parkinsonia aculeata</i> (✓)	Mexican Palo Verde
<i>Pennisetum clandestinum</i>	Kikuyu Grass
<i>Pennisetum setaceum</i> (✓✓)	Fountain Grass
<i>Phoenix canariensis</i> (#)	Canary Island Date Palm
<i>Phoenix dactylifera</i> (#)	Date Palm
<i>Ricinus communis</i> (✓)	Castorbean
<i>Salsola tragus</i> (✓)	Russian Thistle
<i>Schinus molle</i>	Peruvian Pepper Tree or California Pepper
<i>Schinus terebinthifolius</i>	Brazilian Pepper Tree
<i>Schismus arabicus</i>	Mediterranean Grass
<i>Schismus barbatus</i> (✓✓)	Saharan Grass, Abu Mashi

BOTANICAL NAME	COMMON NAME
<i>Stipa capensis</i> (✓✓)	No Common Name
<i>Tamarix</i> spp. (all species) (✓✓)	Tamarisk or Salt Cedar
<i>Taeniatherum caput-medusae</i>	Medusa-head
<i>Tribulus terrestris</i>	Puncturevine
<i>Vinca major</i>	Periwinkle
<i>Washingtonia robusta</i>	Mexican fan palm
<i>Yucca gloriosa</i> (#)	Spanish Dagger

Sources: California Exotic Pest Plant Council, United States Department of Agriculture-Division of Plant Health and Pest Prevention Services, California Native Plant Society, Fremontia Vol. 26 No. 4, October 1998, The Jepson Manual; Higher Plants of California, and County of San Diego Department of Agriculture.

Key to Table 4-113:

- # indicates species not on CalEPPC October 1999 "Exotic Pest Plants of Greatest Ecological Concern in California" list
- ✓ indicates species known to be invasive in the Plan Area
- ✓✓ indicates particularly troublesome invasive species

4.5.6 Barriers

Land uses adjacent to or within a Conservation Area shall incorporate barriers in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in a Conservation Area. Such barriers may include native landscaping, rocks/boulders, fencing, walls and/or signage.

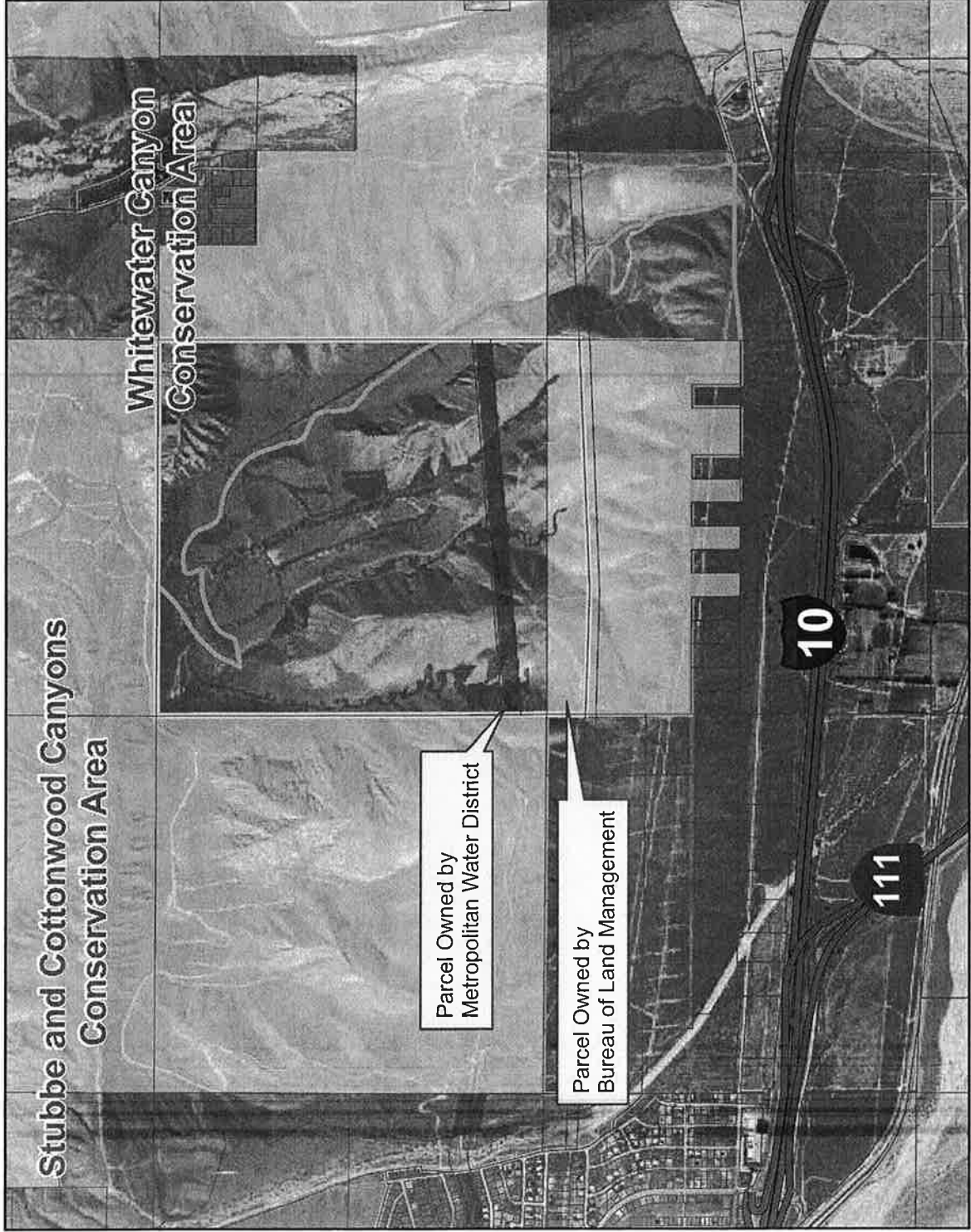
4.5.7 Grading/Land Development

Manufactured slopes associated with site Development shall not extend into adjacent land in a Conservation Area.

Map of Project Vicinity in Conservation Area

Map(s) of Project Boundaries and Species etc Disturbance

Mark Technologies Windfarm - Joint Project Review Project Area Map



Legend

- Major Roads
- Parcel Boundaries
- Project Area
- Existing Disturbance in 1996
- Proposed Disturbance
- Conservation Area

Owner

- Metropolitan Water District
- Bureau of Land Management



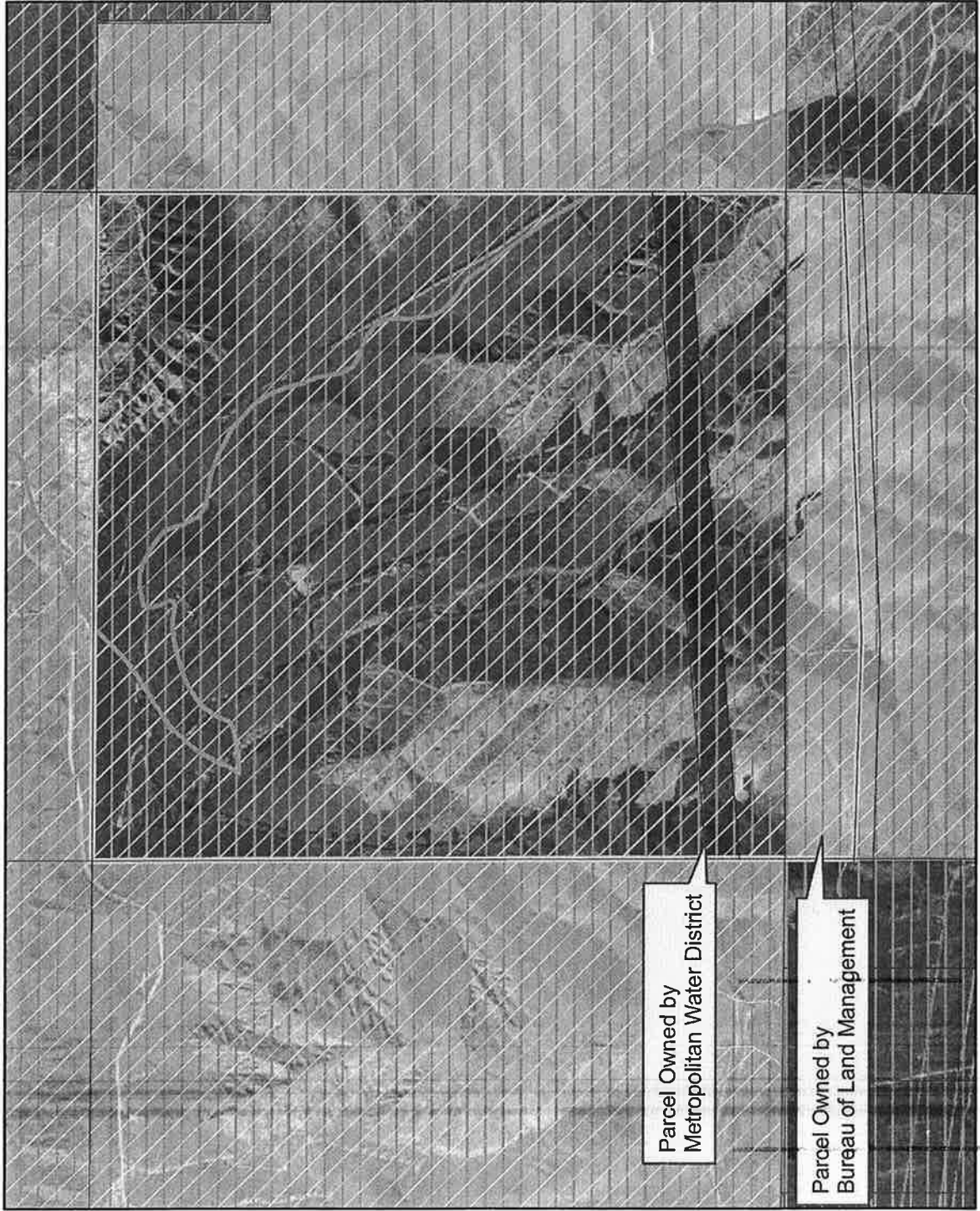
Map by
Nicholas Peihl,
Coachella Valley Association
of Governments












Map Document: (F:\npel\MSDE Projects\PR\MarkTechWindfarm_VerB_projectmap.mxd)
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Disclaimer: Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. CVAG and the County of Riverside make no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

Mark Technologies Windfarm - Joint Project Review Conservation Objectives



Legend

-  Parcel Boundaries
-  Project Area
-  Desert Tortoise Habitat
-  Sand Source Area
-  Existing Disturbance in 1996
-  Proposed Disturbance
-  Conservation Area
- Owner**
-  Metropolitan Water District
-  Bureau of Land Management



Map by
Nicholas Peihl,
Coachella Valley Association
of Governments



Parcel Owned by
Metropolitan Water District

Parcel Owned by
Bureau of Land Management

Map Document: (F:\np\peihl\ISDE Projects\IPR\MarkTechWindfarm_VerB_ConsObj.mxd)
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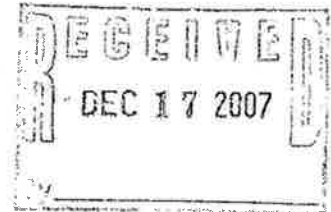
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COUNTY OF RIVERSIDE
TRANSPORTATION AND LAND MANAGEMENT
AGENCY

Tony Carstens · Agency Director
Planning Department
Ron Goldman · Planning Director

December 10, 2007

Coachella Valley Conservation Commission
73-710 Fred Waring Drive, Suite 200
Palm Desert, CA 92260



RE: Interim Project Review Application for WCS00071S4

Dear Sir,

I am requesting to schedule an Interim Project Review for Pre-Application Review No. WCS00071S4 that has been submitted to the Riverside County Planning Department. The project lies within APN 516-020-001, 002, 003 and is generally located northerly of Interstate 10, westerly of Whitewater Canyon Road. Our GIS maps indicate that the parcel is within Santa Rosa and San Jacinto Mountains conservation area of the proposed Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP).

The project seeks to replace 60 previously approved Gamesa 850 KW wind turbines (unbuilt) up to 300 feet in height with 60 EWT 52-900 KW wind turbines up to 300 feet in height. This is a discretionary permit, potential for new ground disturbance exists. See attached exhibit for prior approved ground disturbance.

Attached is the interim project review application as submitted by the applicant with project site plan that depicts the location with any existing and proposed site development. We are hoping to schedule the review as soon as possible, however, I would ask you to please call our office first at (760) 863-8277 to coordinate time and dates to avoid possible scheduling conflicts.

Should you desire, you may find general information about the Riverside County Planning Department, or land use, zoning and subdivision requirements as well as property specific zoning and development data via the *INTERNET* at the following address: www.rctlma.org. In the event you have any questions or further concerns, please feel free to contact the project planner, Jay Olivas, at (760) 863-8277.

Very truly yours,

RIVERSIDE COUNTY PLANNING DEPARTMENT
Ron Goldman, Planning Director


Paul F. Clark, AICP, Principal Planner

cc: Applicant/Owner
Environmental Programs Department

Riverside Office · 4080 Lemon Street, 9th Floor
P.O. Box 1409, Riverside, California 92502-1409
(951) 955-3200 · Fax (951) 955-3157

Desert Office 38686 El Cerrito Road
Palm Desert, CA 92211
(760) 863-8277 · Fax (760) 863-7555

Murietta Office · 39493 Los Alamos Road
Murietta, California 92563
· Fax (951) 600-6145

RECEIVED
NOV 26 2007

Riverside County
Transportation & Land
Management Agency

Coachella Valley Conservation Commission
Interim Project Review Application

The 30-day Joint Project Review timeline does not start until the CVCC receives this completed application as well as the required project information from the Permittee.

Date: _____

SECTION 1

PROPERTY OWNER INFORMATION: PROPERTY OWNER(S)/OWNER'S REPRESENTATIVE

Assessor's Parcel Number(s) (APNs): 516-020-001, 002, 003

A. Property Owner Name(s)/Owner's Representative: Michael Shoberg

Stantec Consulting, Inc.

Mailing Address: 73-733 Fred Waring Drive, Suite 100

Street

Palm Desert, CA 92260

City

State

ZIP

Daytime Phone No: (760) 346-9844

Fax No: (760) 346-9368

E-Mail: Mike.Shoberg@stantec.com

Michael A. Shoberg

PRINTED NAME OF PROPERTY OWNER(S)/OWNER'S REPRESENTATIVE


SIGNATURE OF PROPERTY OWNER(S)/OWNER'S REPRESENTATIVE

All signatures must be originals ("wet-signed"). Photocopies of signatures are not acceptable.

Coachella Valley Conservation Commission

73-710 Fred Waring Drive, Suite 200, Palm Desert, CA 92260 Phone: (760) 346-1127 Fax: (760) 340-5949

SECTION 2

Total Acres Planned for Development: 640 acres

Project Description: The additional of up to 60 new wind turbines within an existing array.

- Attach a map of the project location.
 - Attach a map delineating;
 - the areas of proposed disturbance on the project site.
 - areas on the project site proposed to be left undisturbed
 - areas of proposed permanent conservation on the project site
- If an area is graded for any purpose it, it is considered disturbed.

All documentation supplied must be in a hard copy format. To further expedite the review process, applicants are strongly encouraged to also submit maps as digital files via CD-Rom. The preferred digital format is ESRI shape files. For import into the CVCC GIS, please assign a coordinate system to any data provided. Technical GIS digital data submission specifications are included in Table 1 below.

TABLE 1
Coachella Valley Conservation Commission
Digital Data Submission Specifications

Data Formats	ESRI shape file, Microstation CAD file, or Autodesk Auto CAD file
Projection	State Plane
Zone	California VI
Datum	North American Datum 1983 (NAD83)
Units	U.S. Feet
Spheroid	"GRS_1980",6378137.0,298.257222101
False Easting	6561666.666666666
False Northing	1640416.666666667
Central Meridian	116.25
Standard Parallel 1	32.78333333333333
Standard Parallel 2	33.88333333333333
Latitude of Origin	32.16666666666666

Should you have any questions about these specifications please contact CVCC GIS at 760-346-1127.

Coachella Valley Conservation Commission
73-710 Fred Waring Drive, Suite 200, Palm Desert, CA 92280 Phone: (760) 346-1127 Fax: (760) 340-5949

SECTION 3

AUTHORITY FOR THIS APPLICATION IS HEREBY GIVEN:

I certify that I am/we are the record owner(s) or authorized agent and that the information filed is true and correct to the best of my knowledge. An authorized agent must submit a letter from the owner(s) indicating authority to sign the application on the owner's behalf. As the owner of record/authorized agent, I hereby authorize the information to be released to Property Owner(s)/Owner's Representative/authorized agent.

All signatures must be originals ("wet-signed"). Photocopies of signatures are not acceptable.

Mark G. Jones

PRINTED NAME OF PROPERTY OWNER

SIGNATURE OF PROPERTY OWNER

Michael A. Shoberg

PRINTED NAME OF PROPERTY OWNER
REPRESENTATIVE

SIGNATURE OF PROPERTY OWNER
REPRESENTATIVE

If the subject property is owned by persons who have not signed as owners above, attach a separate sheet that references the application case number and lists the printed names and signatures of all persons having an interest in the property.

Coachella Valley Conservation Commission

73-710 Fred Waring Drive, Suite 200, Palm Desert, CA 92260 Phone: (760) 348-1127 Fax: (760) 340-5949

COUNTY OF RIVERSIDE
TRANSPORTATION AND LAND MANAGEMENT AGENCY
Planning Department
Ron Goldman - Planning Director

APPLICATION FOR SUBSTANTIAL CONFORMANCE

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED.

CASE NUMBER: WCB0007184 DATE SUBMITTED: 10/26/07

APPLICATION INFORMATION

Applicant's Name: Mark Technologies E-Mail: Mark@tenderland.com

Mailing Address: 250 East Fifth Street, Suite 1500
Cincinnati, OH 45202
Street

City State ZIP

Daytime Phone No: (513) 407-4336 Fax No: (509) 694-9171

Engineer/Representative's Name: Stantec Consulting, Inc. E-Mail: mike.shoberg@stantec.com

Mailing Address: 73-733 Fred Waring Drive, Suite 100
Palm Desert, CA 92260
Street

City State ZIP

Daytime Phone No: (760) 346-9844 Fax No: (760) 346-9368

Property Owner's Name: Applicant E-Mail: _____

Mailing Address: _____
Street

City State ZIP

Daytime Phone No: (_____) _____ Fax No: (_____) _____

If the property is owned by more than one person, attach a separate page that reference the application case number and lists the names, mailing addresses, and phone numbers of all persons having an interest in the real property or properties involved in this application.

The Planning Department will primarily direct communications regarding this application to the person identified above as the Applicant. The Applicant may be the property owner, representative, or other assigned agent.

PROPERTY INFORMATION:

Assessor's Parcel Number(s): 516-020-001, 002, 003

Approximate Gross Acreage: 640

APPLICATION FOR SUBSTANTIAL CONFORMANCE

General location (nearby or cross streets): North of I-10, South of None, East of None, West of Whitewater Canyon Road

Thomas Brothers map, edition year, page number, and coordinates: Page 724 A-1, 2005 Edition

Have there been any prior requests for substantial conformance? Yes No

If yes, of what nature? _____

Describe the existing uses, structures, buildings, and/or entitlements. What is the nature and extent of current substantial conformance request and the reason(s) necessitating the changes(s): (use additional pages if necessary.)

The property currently has wind energy conversion turbines and approval for more.

The request to change the approved nacelle with another without any change in height, noise, or number.

The signature below acknowledges that fees collected in excess of the actual cost of providing specific services will be refunded. If additional funds are needed to complete the processing of your application, you will be billed, and processing of the application will cease until the outstanding balance is paid and sufficient funds are available to continue the processing of the application. The applicant understands the deposit fee process as described above, and that there will be NO refund of fees which have been expended as part of the application review or other related activities or services, even if the application is withdrawn or the application is ultimately denied.

All signatures must be originals ("wet-signed"). Photocopies of signatures are not acceptable.

Mark G. Jones

PRINTED NAME OF APPLICANT



SIGNATURE OF APPLICANT

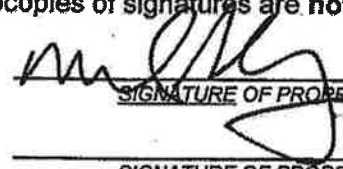
AUTHORITY FOR THIS APPLICATION IS HEREBY GIVEN:

I certify that I am/we are the record owner(s) or authorized agent and that the information filed is true and correct to the best of my knowledge. An authorized agent must submit a letter from the owner(s) indicating authority to sign the application on the owner's behalf.

All signatures must be originals ("wet-signed"). Photocopies of signatures are not acceptable.

Mark G. Jones

PRINTED NAME OF PROPERTY OWNER(S)



SIGNATURE OF PROPERTY OWNER(S)

PRINTED NAME OF PROPERTY OWNER(S)

SIGNATURE OF PROPERTY OWNER(S)

If the subject property is owned by persons who have not signed as owners above, attach a separate sheet that references the application case number and lists the printed names and signatures of all persons having an interest in the property.

APPLICATION FOR SUBSTANTIAL CONFORMANCE

INFORMATION REQUIRED FOR APPLICATION SUBMITTAL

The following instructions are intended to provide the necessary information and procedures to facilitate the processing of a Substantial Conformance application. Your cooperation with these instructions will insure that your application can be processed in the most expeditious manner possible.

THE SUBSTANTIAL CONFORMANCE FILING PACKAGE MUST CONSIST OF THE FOLLOWING:

1. One completed and signed application form.
2. One copy of the current legal description for each property involved. A copy of a grant deed of each property involved will suffice.
3. Fifteen (15) copies of a site plan of the entire parcel (e.g. all of a shopping center even if the substantial conformance is only for one store within a shopping center).
4. One copy (two, if submitted in the Desert office) of a floor plan delineating the types of usage (e.g. office, storage, sales area, etc).
5. Applicable deposit-based fees.

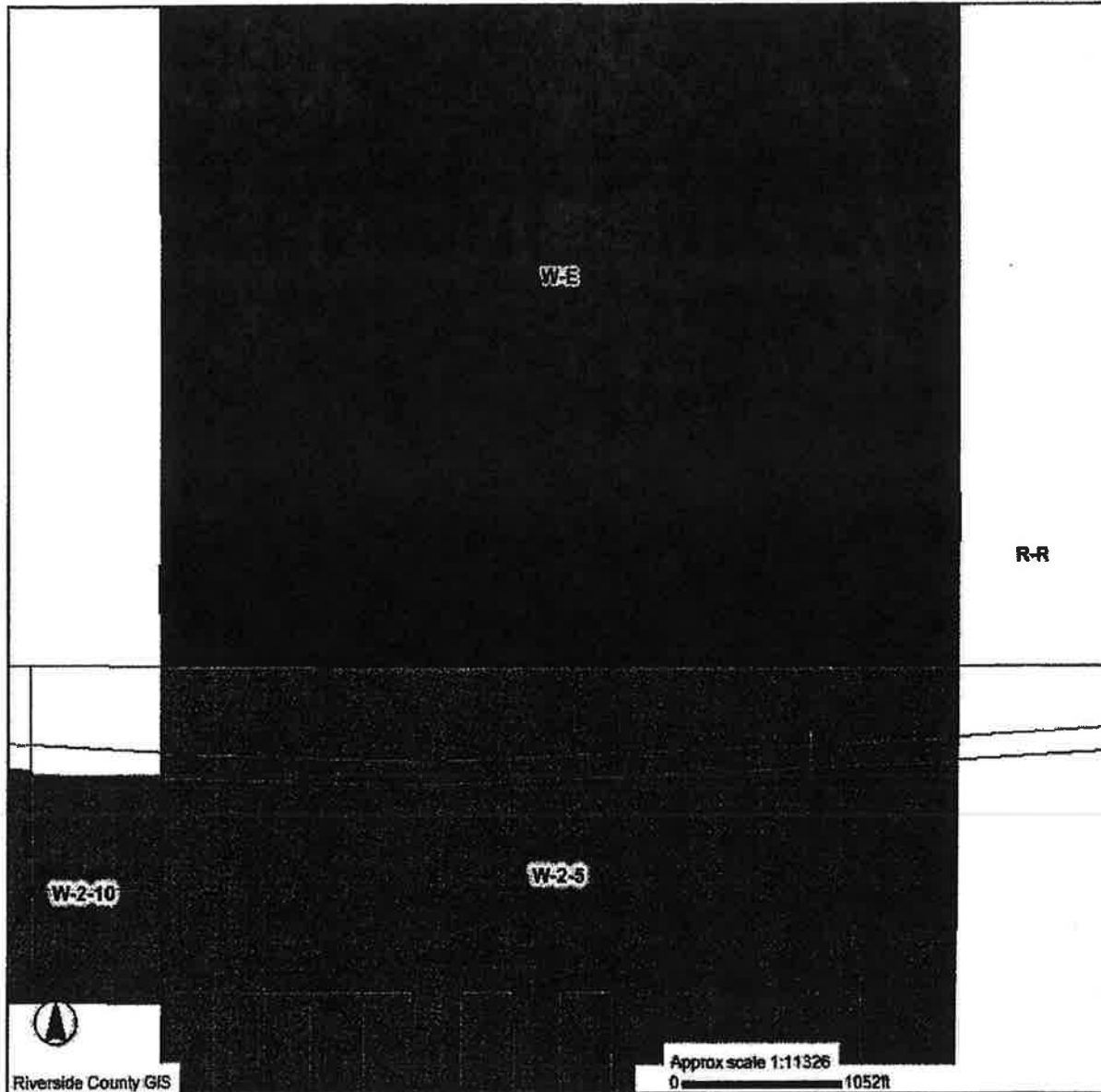
CRITERIA FOR REVIEW FOR SUBSTANTIAL CONFORMANCE

A Substantial Conformance application can be used to modify an approved, valid, permit, such as a plot plan, conditional use permit, public use permit, second unit permit, variance, surface mining permit, reclamation plan, or wind energy conversion systems permit (WECS), provided the current and/or proposed use is in conformance with the subject site's zoning classification and General Plan designation. A Substantial Conformance application cannot be used to modify an approved, valid parcel map or tract map.

A Substantial Conformance is a request for a non-substantial modification of an approved permit that does not change the original approval or the effect of the approval on surrounding property. A Substantial Conformance may include, but is not limited to, modifications for upgrading facilities, modifications for compliance with the requirements of other public agencies, modifications necessary to comply with final conditions of approval, or modifications to on-site circulation and parking, lighting, fencing or walls, landscaping and/or signage requirements, provided that said modifications, as determined by the Planning Director, will have no adverse effect upon public health, safety, welfare, and/or the environment.

Procedures for processing a Substantial Conformance require the Planning Director to approve, conditionally approve, or disapprove an application for Substantial Conformance within 30 days after accepting a completed application, and give notice by mail of the decision, including any additional conditions of approval, to the applicant or any other person who has filed a written request for notice. The Planning Director's determination shall be based upon the standards set forth in Ordinance No. 348 for the approval of the original application. An application of Substantial Conformance shall not require a public hearing.

RIVERSIDE COUNTY GIS



Selected parcel(s):
516-020-003

ZONING

- SELECTED PARCEL
- PARCELS
- ZONING BOUNDARY
- R-R
- W-2-10, W-2-5
- W-E
- CITY BOUNDARY

IMPORTANT

This information is made available through the Riverside County Geographic Information System. The information is for reference purposes only. It is intended to be used as base level information only and is not intended to replace any recorded documents or other public records. Contact appropriate County Department or Agency if necessary. Reference to recorded documents and public records may be necessary and is advisable.

FULL REPORT APN(s): 516-020-003-5

OWNER NAME: - NOT AVAILABLE ONLINE

ADDRESS: - 516-020-003
ADDRESS NOT AVAILABLE

MAIL TO NAME/ADDRESS: - 516-020-003
- TENDERLAND POWER MARK TECHNOLOGIES
- 1411 4TH NO 820

- SEATTLE WA. 98101

APN CAME FROM:

- 516-020-003
 - CAME FROM: NO DATA AVAILABLE

LOT SIZE:

- 516-020-003
 - RECORDED LOT SIZE IS: 30.39 ACRES
 - MAPPED LOT SIZE IS APPROX.: 31.083 ACRES

PROPERTY CHARACTERISTICS:

- 516-020-003
 - NO PROPERTY DESCRIPTION AVAILABLE

ELEVATION MIN/MAX:

- 1738/2228 FEET

LEGAL DESCRIPTION:

- APN: 516020003
 - RECORDED BOOK/PAGE: NOT AVAILABLE
 - SUBDIVISION NAME: NOT AVAILABLE
 - LOT/PARCEL: NOT AVAILABLE
 - TRACT NUMBER: NOT AVAILABLE

BASE YEAR ASSESSMENT:

- 516-020-003
 - BASE YEAR: 2007

TOWNSHIP/RANGE:

- T3SR3E SEC 3

CEMETERY DISTRICTS:

- SUMMIT CEMETERY DISTRICT

CITY BOUNDARY/SPHERE:

- CITY: NOT WITHIN A CITY
 - CITY SPHERE: undefined
 - ANNEXATION DATE: undefined
 - LAFCO CASE #: undefined
 - PROPOSALS: undefined

COMMUNITY:

- IN OR PARTIALLY WITHIN WHITEWATER CANYON. SEE MAP FOR MORE INFORMATION.

2001 SUPERVISORIAL DISTRICT:

- MARION ASHLEY, DISTRICT 5
 as established by County Ordinance 813, August 14, 2001

AREA PLAN:

- WESTERN COACHELLA VALLEY

COACHELLA VALLEY MSHCP PLAN BOUNDARY:

- WITHIN THE COACHELLA VALLEY MSHCP BOUNDARY

COACHELLA VALLEY MSHCP CONSERVATION AREA:

- WITHIN THE STUBBE AND COTTONWOOD CANYONS CONSERVATION AREA

WESTERN MSHCP FEE AREA:

- NOT WITHIN THE WESTERN RIVERSIDE COUNTY MSHCP FEE AREA

WESTERN RIVERSIDE COUNTY MSHCP AREA PLAN:

- NOT IN AN AREA PLAN

WESTERN RIVERSIDE COUNTY MSHCP CELL GROUP:

- NOT IN A CELL GROUP

WESTERN RIVERSIDE COUNTY MSHCP CELL NUMBER:

- NOT IN A CELL

IMPORTANT NOTICE: On October 7, 2003, the County of Riverside adopted a new General Plan. The General Plan provides new land use designations for all parcels in the unincorporated area of Riverside County. For any parcel, the General Plan may provide for a different type of land use than is provided for under existing zoning. During the next one to two years, the County will undertake a program to review all the zoning in the unincorporated area, and where necessary, change the zoning, following advertised public hearings, to conform to the County's new General Plan. Until then, please be advised that there may be a difference between the zoning and General Plan designations on any parcel. This may result in, at a minimum, the need to change the zoning before desired development may proceed. For further information, please contact the Riverside County Planning Department offices in Riverside at (951) 955-3200, in Murrieta at (951) 600-6170, or in Indio at (760) 863-8277.:

LANDUSE DESIGNATION:

- OS-RUR
- CHECK MAP TO CONFIRM LANDUSE DESIGNATION
 - FOR MORE INFORMATION ABOUT LANDUSE DESIGNATIONS, CALL THE COUNTY'S PLANNING DEPARTMENT AT 951-955-3200.

ZONING CLASSIFICATION(S) ORD. 348:

- W-E (CZ 8531)
- CHECK MAP TO CONFIRM ZONING CLASSIFICATIONS
 - FOR MORE INFORMATION ABOUT ZONING CLASSIFICATIONS, CALL THE COUNTY'S PLANNING DEPARTMENT AT 951-955-3200.

ZONING DISTRICT/AREA: - WHITEWATER AREA

OUTDOOR BILLBOARDS: - BILLBOARDS NOT PERMITTED BY ZONING

SPECIFIC PLAN: - NOT WITHIN A SPECIFIC PLAN

NOTE: Non-mapped Policy Area issues may exist on this parcel. Please contact the Planning Department at (951)955-3200 for more information.

MAPPED POLICY AREAS: - SAN GORGONIO PASS WIND ENERGY POLICY AREA

GENERAL PLAN POLICY OVERLAY: - NOT IN A GENERAL PLAN POLICY OVERLAY AREA

DEVELOPMENT AGREEMENT #: - NOT IN A DEVELOPMENT AGREEMENT AREA

REDEVELOPMENT AREAS: - NOT IN A REDEVELOPMENT AREA

AGRICULTURE PRESERVE: - NOT IN AN AGRICULTURE PRESERVE

AIRPORT INFLUENCE AREAS: - NOT IN AN AIRPORT INFLUENCE AREA

AIRPORT COMPATIBILITY ZONES: - NOT IN AN AIRPORT COMPATIBILITY ZONE

Planning Case Map information may not be complete, current, or up-to-date for this area. Please contact the Planning Department if more information is needed.

PLANNING CASE(S):

- WCS00071S3 SC TO RELOCATE TURBINES/CHANGE ROTOR DIAMETERS
APPLIED DATE: 09/04/2001 STATUS AS OF 12/14/2007: WITHDRWN
- PP17259 ALTA MESA PUMPED STORAGE HYDROELECTRIC PLANT
APPLIED DATE: 07/31/2001 STATUS AS OF 12/14/2007: DRT
- EA38393 EA FOR PP17259/CZ6823
APPLIED DATE: 07/31/2001 STATUS AS OF 12/14/2007: DRT
- EA38142 EA FOR WCS00071R7 & VAR01708
APPLIED DATE: 11/14/2000 STATUS AS OF 12/14/2007: APPROVED
- WCS00071R7 ADD 23 WECS TO EXISTING WECS ARRAY
APPLIED DATE: 11/14/2000 STATUS AS OF 12/14/2007: APPROVED
- WCS00071S2 ADD 4 TURBINE MODELS
APPLIED DATE: 12/20/2000 STATUS AS OF 12/14/2007: APPROVED
- EA37977 EA FOR WCS00071R6
APPLIED DATE: 05/04/2000 STATUS AS OF 12/14/2007: APPROVED
- CFG01959 F&G FOR EA38142 (WCS00071R8 & VAR01708)
APPLIED DATE: 02/08/2002 STATUS AS OF 12/14/2007: PAID
- VAR01708 REDUCE WESTERLY SAFETY SETBACK
APPLIED DATE: 11/14/2000 STATUS AS OF 12/14/2007: APPROVED
- GEO01025 GEOLOGICAL REPORT OF WCS00071R7
APPLIED DATE: 12/04/2000 STATUS AS OF 12/14/2007: APPROVED
- WCS00071R6 RVP TO ADD FIVE 600 KW TURBINES
APPLIED DATE: 05/04/2000 STATUS AS OF 12/14/2007: APPROVED
- VAR01690 VARIANCE FOR WIND ACCESS SETBACK FROM 650 FEET TO 400 FEET FOR WCS00071R6
APPLIED DATE: 05/04/2000 STATUS AS OF 12/14/2007: WITHDRWN
- CZ06531 CZ FROM R-R TO W-E ON 30 ACRES FOR WCS00071R6
APPLIED DATE: 05/04/2000 STATUS AS OF 12/14/2007: APPROVED
- WCS00071R9 CONSTRUCT 60 NEW WIND TURBINES WITHIN EXIST ARRAY
APPLIED DATE: 05/16/2005 STATUS AS OF 12/14/2007: APPROVED
- WCS00071S4 REPLACE 60 PREVIOUSLY APPROVED GAMESA 850 KW WIND TURBINES (UNBUILT) UP TO 300 FEET IN HEIGHT WITH 60 EWT 52-900 KW WIND TURBINES UP TO 300 FEET IN HEIGHT.
APPLIED DATE: 10/26/2007 STATUS AS OF 12/14/2007: APPLIED

DEV. IMP. FEE AREA ORD. 659: - WESTERN COACHELLA VALLEY

2000 CENSUS TRACT: - 044503

1990 FARMLAND DESIGNATION:	- NOT A IN FARMLAND DESIGNATION
2000 CENSUS DESIGNATION:	- CENSUS DESIGNATION REPORT IS NOT AVAILABLE
INDIAN TRIBAL LANDS:	- NOT IN A TRIBAL LAND
SCHOOL DISTRICT:	- <u>BANNING UNIFIED</u>
ROAD & BRIDGE DISTRICT:	- NOT IN A DISTRICT
ROADBOOK PAGE:	- 145
* BOUNDARIES ARE APPROXIMATIONS. USE FOR REFERENCE ONLY. SURVEY INFORMATION MUST BE CONSULTED OR PREPARED TO ACCURATELY DETERMINE ANY RIGHT-OF-WAY BOUNDARY.	
CETAP CORRIDORS:	- NOT IN A CETAP CORRIDOR.
CIRCULATION ELEMENT ULTIMATE RIGHT-OF-WAY ROADS:	- NOT IN A CIRCULATION ELEMENT RIGHT-OF-WAY
EAST T.U.M.F. ORD. 873:	- IN OR PARTIALLY WITHIN THESE FEE AREAS. SEE MAP FOR MORE INFORMATION. - EAST
WEST T.U.M.F. ORD. 824:	- NOT WITHIN THE WESTERN TUMF FEE AREA
WATER DISTRICT:	- <u>DESERT WATER AGENCY (DWA)</u>
FLOOD CONTROL DISTRICT:	- RIVERSIDE COUNTY FLOOD CONTROL DISTRICT
FLOOD PLAIN (ZONE A - 100 YEAR):	- NOT REQUIRED.
WATERSHED:	- WHITEWATER
VEGETATION:	- DATA NOT AVAILABLE
SKR FEE AREA ORD. 663.10:	- NOT WITHIN A FEE AREA
FTL FEE AREA ORD. 457 & 460:	- NOT WITHIN A FEE AREA
FTL SAND SOURCE AREA:	- NOT IN A SAND SOURCE AREA
FTL PRESERVE:	- NOT INSIDE A FTL PRESERVE
HANS/ERP PROJECT:	- NONE
FAULT ZONE:	- SAN ANDREAS FAULT ZONE CONTACT THE COUNTY'S CHIEF ENGINEERING GEOLOGIST AT (951)955-6863.
FAULTS:	WITHIN A 1/2 MILE OF - GARNET HILL FAULT - SAN ANDREAS FAULT - SAN ANDREAS FAULTS CONTACT THE COUNTY'S CHIEF ENGINEERING GEOLOGIST AT (951)955-6863.
LIQUEFACTION POTENTIAL:	- MODERATE
SUBSIDENCE:	- SUSCEPTIBLE
HIGH FIRE AREA ORD. 787:	- IN HIGH FIRE AREA - Grading And Building Permit Applications Require Fire Dept Clearance Prior To Permit Issuance.
LIGHTING ORD. 855:	- ZONE B, 41.39 MILES.
COUNTY SERVICE AREA:	- NOT IN A COUNTY SERVICE AREA.
BUILDING PERMIT(S):	- NO BUILDING PERMITS
ENVIRON. HEALTH CASE(S):	
TAX RATE AREA:	- 055-011

TAX ASSESSMENT DISTRICTS:

- 055-011
- BANNING UNIF SCH DIST LIB
- BANNING UNIFIED SCHOOL
- COACHELLA VALLEY RESOURCE CONSER
- COUNTY STRUCTURE FIRE PROTECTION
- COUNTY WASTE RESOURCE MGMT DIST
- CSA 152
- DESERT WATER AGENCY
- FLOOD CONTROL ADMINISTRATION
- FLOOD CONTROL ZONE 6
- GENERAL
- GENERAL PURPOSE
- MISSION SPRINGS WATER DISTRICT
- MT SAN JACINTO JUNIOR COLLEGE
- RIV CO REG PARK & OPEN SPACE
- RIV. CO. OFFICE OF EDUCATION
- SAN GORGONIO PASS MEM HOSPITAL
- SUMMIT CEMETERY DISTRICT

RCA AQUISITIONS/GAINS: - NOT IN A RCA AQUISITIONS/GAINS AREA

RCA AGRICULTURAL OPERATIONS: - NOT IN A RCA AGRICULTURAL OPERATIONS AREA

PUBLIC/QUASI PUBLIC CONSERVED LANDS: - NOT IN PUBLIC/QUASI PUBLIC CONSERVED AREA

PROJECT LOSSES: - NOT IN A PROJECT LOSS AREA

MSHCP CONSERVED LANDS: - NOT IN A CONSERVED AREA

AREAPLAN SUBUNIT: - NOT IN AN AREAPLAN SUBUNIT

ROUGHSTEP UNIT: - NOT IN A ROUGHSTEP UNIT

SURFACE MINES: - NO SURFACE MINES

PALEONTOLOGICAL SENSITIVITY: - UNDETERMINED POTENTIAL.
 AREAS UNDERLAIN BY SEDIMENTARY ROCKS FOR WHICH LITERATURE AND UNPUBLISHED STUDIES ARE NOT AVAILABLE HAVE UNDETERMINED POTENTIAL FOR CONTAINING SIGNIFICANT PALEONTOLOGICAL RESOURCES. THESE AREAS MUST BE INSPECTED BY A FIELD SURVEY CONDUCTED BY A QUALIFIED VERTEBRATE PALEONTOLOGIST.

COMMUNITY FACILITY DISTRICTS: - NAME: NOT IN A COMMUNITY FACILITY DISTRICT
 - DISTRICT NUMBER: NOT AVAILABLE

THOMAS BROS. MAPS PAGE/GRID: - 724-H1
 - 724-J1
 - 725-A1

SPECIAL NOTES: - NO SPECIAL NOTES

REPORT PRINTED ON...Fri Dec 14 09:18:25 2007

**Coachella Valley Conservation Commission
Joint Project Review (JPR)**

Date: November 25, 2008

Project Information

Permittee: County of Riverside

Applicant/Project Name: Mark Technologies Windfarm

Permit ID: WCS00071S4

CVCC ID: 07-018b

Conservation Area: Stubbe and Cottonwood Canyons & Whitewater Canyon Conservation Area

Total Project Acreage: 640 acres

Project Acreage within Conservation Area: 640 acres

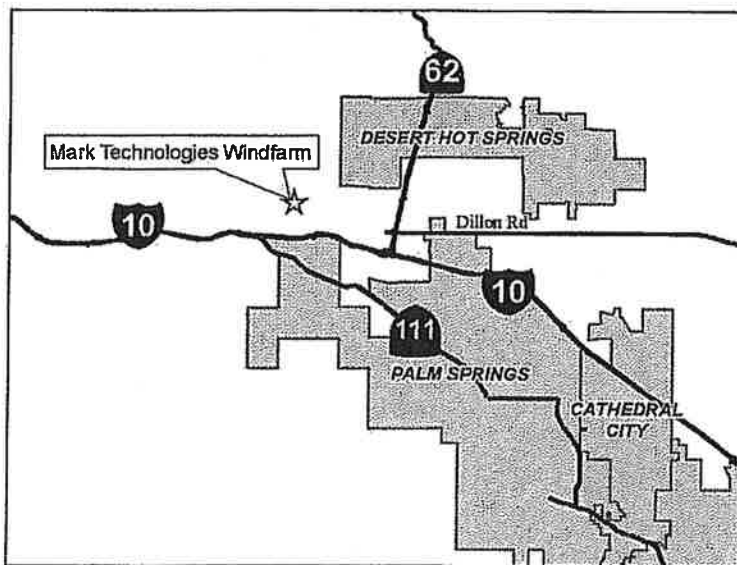
APNs within Conservation Area: 516-020-001, 002, 003

Project Description: Addition of up to 60 new wind turbines within an existing array

Acres of Proposed New Disturbance: 28.25 acres

Acres of Pre-1996 Disturbance on property: 39 acres

Acres of Proposed Conservation: 0 acres



Conservation Objectives Review:

The Conservation Objectives for the Stubbe and Cottonwood Canyons Conservation Area are described in Section 4.3 of the CVMSHCP. These Conservation Objectives are summarized in the table below. No Disturbance is proposed in the Whitewater Canyon Conservation Area.

**Stubbe and Cottonwood Canyons Conservation Area
Mark Technologies Windfarm (excluding BLM lands)**

Conservation Objective	Total Acres of Proposed Disturbance	Acres of Disturbance Authorized by Plan	Proposed Disturbance as Percentage of Authorized Disturbance	Rough Step (Acres of Disturbance Currently Available)	Total Acres of Proposed Conservation	Acres of Conservation Required by Plan	Proposed Conservation as Percentage of Required Conservation	Total Amount of Take Allocated to Other Projects	Total Area within Project Area (not including BLM lands)	Maximum Allowable Disturbance per County Ordinance (8%)
Conserve Core Habitat for desert tortoise	28.25	253	11.17%	79	0.00	2,276	0.00%	0.00	507.00	40.56
Conserve sand source areas	28.25	138	20.47%	31	0.00	1,241	0.00%	0.00	507.00	40.56

* The Project proposes 2.75 acres of Disturbance for desert tortoise and sand source areas on Metropolitan Water District (MWD) land and one (1) acre of Disturbance for desert tortoise and sand source areas on Bureau of Land Management (BLM) land.

Required Measures for the Conservation Area Applicable to this Proposed Project

The Permittees shall comply with applicable avoidance, minimization, and mitigation measures described in Section 4.4 and the Land Use Adjacency Guidelines as described in Section 4.5.

Other Plan Requirements

Section 4.4: Avoidance, Minimization, and Mitigation Measures

Burrowing Owl. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities other than levees, berms, dikes, and similar features that are known to contain burrowing owl burrows. O&M of roads is not subject to this requirement. For other projects that are subject to CEQA, the Permittees will require burrowing owl surveys in the Conservation Areas using an accepted protocol (as determined by the CVCC in coordination with the Permittees and the Wildlife Agencies). Prior to Development, the construction area and adjacent areas within 500 feet of the Development site, or to the edge of the property if less than 500 feet, will be surveyed by an Acceptable Biologist for burrows that could be used by burrowing owl. If a burrow is located, the biologist will determine if an owl is present in the burrow. If the burrow is determined to be occupied, the burrow will be flagged and a 160-foot buffer during the non-breeding season and a 250-foot buffer during the breeding season, or a buffer to the edge of the property boundary if less than 500 feet, will be established around the burrow. The buffer will be staked and flagged. No Development or O&M activities will be permitted within the buffer until the young are no longer dependent on the burrow.

If the burrow is unoccupied, the burrow will be made inaccessible to owls, and the Covered Activity may proceed. If either a nesting or escape burrow is occupied, owls shall be relocated pursuant to accepted Wildlife Agency protocols. A burrow is assumed occupied if records indicate that, based on surveys conducted following protocol, at least one burrowing owl has been observed occupying a burrow on site during the past three years. If there are no records for the site, surveys must be conducted to determine, prior to construction, if burrowing owls are present. Determination of the appropriate method of relocation, such as eviction/passive relocation or active relocation, shall be based on the specific site conditions (e.g., distance to nearest suitable habitat and presence of burrows within that habitat) in coordination with the Wildlife Agencies. Active relocation and eviction/passive relocation require the preservation and maintenance of suitable burrowing owl habitat determined through coordination with the Wildlife Agencies.

Within one (1) year of Permit issuance, CVCC will cooperate with County Flood Control, CVWD and IID to conduct an inventory of levees, berms, dikes, and similar features in the Plan Area maintained by those Permittees. Burrowing owl burrow locations will be mapped and each of these Permittees will incorporate the information into its O&M practices to avoid impacts to the burrowing owl to the maximum extent Feasible. CVCC in cooperation with County Flood Control, CVWD, and IID will prepare a manual for maintenance staff, educating them about the burrowing owl and appropriate actions to take when owls are encountered to avoid impacts to the maximum extent Feasible. The manual will be submitted to the Wildlife Agencies for review and comment within two (2) years of Permit issuance. In conjunction with the Monitoring Program, the maps of the burrowing owl locations along the above-described levees, berms, dikes, and similar features will be periodically updated.

Desert tortoise. This measure does not apply to single-family residences and any non-commercial accessory uses and structures, including but not limited to second units on an existing legal lot, or to O&M of Covered Activities for Permittee infrastructure facilities. Within Conservation Areas, the Permittees will require surveys for desert tortoise for Development in modeled desert tortoise Habitat. Prior to Development, an Acceptable Biologist will conduct a presence/absence survey of the Development area and adjacent areas within 200 feet of the Development area, or to the property boundary if less than 200 feet and permission from the adjacent landowner cannot be obtained, for fresh sign of desert tortoise, including live tortoises, tortoise remains, burrows, tracks, scat, or egg shells. The presence/absence survey must be conducted during the window between February 15 and October 31. Presence/absence surveys require 100% coverage of the survey area. If no sign is found, a clearance survey is not required. A presence/absence survey is valid for 90 days or indefinitely if tortoise-proof fencing is installed around the Development site.

If fresh sign is located, the Development area must be fenced with tortoise-proof fencing and a clearance survey conducted during the clearance window. Desert tortoise clearance surveys shall be conducted during the clearance window from February 15 to June 15 and September 1 to October 31 or in accordance with the most recent Wildlife Agency protocols. Clearance surveys must cover 100% of the Development area. A clearance survey must be conducted during different tortoise activity periods (morning and afternoon). All tortoises encountered will be moved from the Development site to a specified location. Prior to issuance of the Permits, CVCC will either use the *Permit Statement Pertaining to High Temperatures for Handling Desert Tortoises* and *Guidelines for Handling Desert Tortoises During Construction Projects*, revised July 1999, or develop a similar protocol for relocation and monitoring of desert tortoise, to be reviewed and approved by the Wildlife Agencies. Thereafter, the protocol will be revised as needed based on the results of monitoring and other information that becomes available.

For O&M activities in the Conservation Areas, the Permittees shall ensure that personnel conducting such activities are instructed to be alert for the presence of desert tortoise. If a tortoise is spotted, activities adjacent to the tortoise's location will be halted and the tortoise will be allowed to move away from the activity area. If the tortoise is not moving, it will be relocated by an Acceptable Biologist to nearby suitable Habitat and placed in the shade of a shrub. To the maximum extent Feasible, O&M activities will avoid the period from February 15 and October 31. Utility development protocols have been developed to avoid or minimize potential adverse impacts to the desert tortoise in the Conservation Areas from utility and road right-of-way projects, such as the installation and maintenance of water, sewer, and electric lines and roadway maintenance. The objectives of these protocols are to provide reliable and consistent direction on utility development within the Conservation Areas. Two utility development protocols, inactive and active season, provide specific direction on site preparation and construction phases of utility projects in the Conservation Areas. The protocols include steps to be followed during the desert tortoise active and/or inactive season. The inactive season protocol must be used for utility maintenance or development within the November 1 to February 14 time frame; the active season protocol must be used for utility maintenance or development within the February 15 to October 31 time frame. Deviations from these time frames must be presented to the RMOC.

Inactive Season Protocol. This protocol is applicable to pre-construction and construction phases of utility Covered Activity projects occurring between November 1 and February 14. These protocols apply only to the site preparation and construction phases of projects. The project proponent must follow the eight pre-construction protocol requirements listed below.

1. A person from the entity contracting the construction shall act as the contact person with the representative of the appropriate RMUC. He/she will be responsible for overseeing compliance with the protective stipulations as stated in this protocol.
2. Prior to any construction activity within the Conservation Areas, the contact person will meet with the representative of the appropriate RMUC to review the plans for the project. The representative of the appropriate RMUC will review alignment, pole spacing, clearing limits, burrow locations, and other specific project plans which have the potential to affect the desert tortoise. He or she may recommend modifications to the contact person to further avoid or minimize potential impacts to desert tortoise.
3. The construction area shall be clearly fenced, marked, or flagged at the outer boundaries to define the limits of construction activities. The construction right-of-way shall normally not exceed 50 feet in width for standard pipeline corridors, access roads and transmission corridors, and shall be minimized to the maximum extent Feasible. Existing access roads shall be used when available, and rights-of-way for new and existing access roads shall not exceed 20 feet in width unless topographic obstacles require greater road width. Other construction areas including well sites, storage tank sites, substation sites, turnarounds, and laydown/staging sites which require larger areas will be determined in the preconstruction phase. All construction workers shall be instructed that their activities shall be confined to locations within the fenced, flagged, or marked areas.
4. An Acceptable Biologist shall conduct pre-construction clearance surveys of all areas potentially disturbed by the proposed project. Any winter burrows discovered in the Conservation Areas during the pre-construction survey shall be avoided or mitigated. The survey shall be submitted to the representative of the appropriate RMUC as part of plan review.
5. All site mitigation criteria shall be determined in the pre-construction phase, including but not limited to seeding, barrier fences, leveling, and laydown/staging areas, and will be reviewed by the representative of the appropriate RMUC prior to implementation.
6. A worker education program shall be implemented prior to the onset of each construction project. All construction employees shall be required to read an educational brochure prepared by the representative of the appropriate RMUC and/or the RMOC and attend a tortoise education class prior to the onset of construction or site entry. The class will describe the sensitive species which may be found in the area, the purpose of the MSHCP Reserve System, and the appropriate measures to take upon discovery of a sensitive species. It will also cover construction techniques to minimize potential adverse impacts.
7. All pre-construction activities which could Take tortoises in any manner (e.g., driving off an established road, clearing vegetation, etc.) shall occur under the supervision of an Acceptable Biologist.
8. If there are unresolvable conflicts between the representative of the appropriate RMUC and the contact person, then the matter will be arbitrated by the RMOC and, if necessary, by CVCC.

The following terms are established to protect the desert tortoise during utility-related construction activities in the Conservation Areas and are to be conducted by an Acceptable Biologist.

- ❖ An Acceptable Biologist shall oversee construction activities to ensure compliance with the protective stipulations for the desert tortoise.
- ❖ Desert tortoises found above ground inside the project area during construction shall be moved by an Acceptable Biologist out of harm's way and placed in a winter den (at a distance no greater than 250 feet). If a winter den cannot be located, the USFWS or CDFG shall determine appropriate action with respect to the tortoise. Tortoises found above ground shall be turned over to the Acceptable Biologist.
- ❖ No handling of tortoises will occur when the air temperature at 15 centimeters above ground exceeds 90 degrees Fahrenheit.
- ❖ Desert tortoise burrows shall be avoided to the maximum extent Feasible. An Acceptable Biologist shall excavate any burrows which cannot be avoided and will be disturbed by construction. Burrow excavation shall be conducted with the use of hand tools only, unless the Acceptable Biologist determines that the burrow is unoccupied immediately prior to burrow destruction.
- ❖ Only burrows within the limits of clearing and surface disturbance shall be excavated. Burrows outside these limits, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the construction area. Installation and removal of such barrier fencing shall be under the direction and supervision of an Acceptable Biologist.
- ❖ For electrical transmission line and road construction projects, only burrows within the right-of-way shall be excavated. Burrows outside the right-of-way, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the right-of-way. Installation and removal of such barrier fencing shall be under the direction and supervision of an Acceptable Biologist.
- ❖ Tortoises in the Conservation Areas are not to be removed from burrows until appropriate action is determined by USFWS or CDFG with respect to the tortoise. The response shall be carried out within 72 hours.
- ❖ Blasting is not permissible within 100 feet of an occupied tortoise burrow.

During construction, contractors will comply with the mitigation and minimization measures contained within this protocol. These measures are:

- ❖ All trenches, pits, or other excavations shall be inspected for tortoises by an Acceptable Biologist prior to filling.
- ❖ All pipes and culverts stored within desert tortoise Habitat shall have both ends capped to prevent entry by desert tortoises. During construction, all open ended pipeline segments that are welded in place shall be capped during periods of construction inactivity to prevent entry by desert tortoises.
- ❖ Topsoil removed during trenching shall be re-spread on the pipeline construction area following compaction of the backfill. The area shall be restored as determined during the environmental review.
- ❖ All test pump water will be routed to the nearest wash or natural drainage. The route will be surveyed by an Acceptable Biologist. If tortoises are found in the drainage area the Acceptable Biologist will remove the tortoises.
- ❖ Powerlines associated with water development, such as to provide power for pumps, should be buried underground adjacent to the pipe. All above ground

structures deemed to be necessary shall be equipped with functional anti-perching devices that would prevent their use by ravens and other predatory birds, and shall adhere to the electrical distribution protocol which follows.

- ❖ In order to perform routine O&M of the water systems such as wells, pumps, water lines and storage tanks, etc., employees are to be trained in the area of desert tortoise education. This training will be performed on a regular basis by an Acceptable Biologist for those personnel not previously trained. The training will include at a minimum the following: identification of tortoises, burrows, and other sign; and instructions on installing tortoise barrier fencing. During the course of basic O&M, desert tortoise will be avoided. Untrained employees shall not perform maintenance operations within the reserve.
 - ❖ All disturbance areas around poles or concrete pads will be reduced to a size just large enough for the construction activity.
 - ❖ Areas disturbed around poles or construction pads will be restored as determined during the pre-construction process.
 - ❖ Poles or other above ground structures necessary for electrical distribution development shall be minimized as much as possible. All above ground structures shall be equipped with functional anti-perching devices that would prevent their use by ravens and other predatory birds.
 - ❖ In order to perform routine O&M of the electrical distribution systems such as transmission lines and poles, substations, etc., employees are to be trained in the area of desert tortoise education. This training will be performed on a regular basis by a qualified biologist for those personnel not previously trained. The training will include at a minimum the following: identification of tortoises, burrows, and other sign; and instructions on installing tortoise barrier fencing. During the course of basic O&M, desert tortoise will be avoided. Untrained employees shall not perform maintenance operations within the non-Take areas.
 - ❖ All trash and food items shall be promptly contained and removed daily from the project site to reduce the attractiveness of the area to common ravens and other desert tortoise predators.
 - ❖ Construction activities which occur between dusk and dawn shall be limited to areas which have already been cleared of desert tortoises by the Acceptable Biologist and graded or located in a fenced right-of-way. Construction activities shall not be permitted between dusk and dawn in areas not previously graded.
- Active Season Protocol.** This protocol is applicable to pre-construction and construction phases of utility development projects occurring between February 15 and November 1. It is identical to the Inactive Season Protocol with the following additions:
- ❖ Work areas shall be inspected for desert tortoises within 24 hours of the onset of construction. To facilitate implementation of this condition, burrow inspection and excavation may begin no more than seven (7) days in advance of construction activities, as long as a final check for desert tortoises is conducted at the time of construction.
 - ❖ All pre-construction activities which could Take tortoises in any manner (e.g., driving off an established road, clearing vegetation, etc.) shall occur under the overall supervision of an Acceptable Biologist. Any hazards to tortoises created by this activity, such as drill holes, open trenches, pits, other excavations, or any steep-sided depressions, shall be checked three times a day for desert tortoises.

These hazards shall be eliminated each day prior to the work crew leaving the site, which may include installing a barrier that will preclude entry by tortoises. Open trenches, pits or other excavations will be backfilled within 72 hours, whenever possible. A 3:1 slope shall be left at the end of every open trench to allow trapped desert tortoises to escape. Trenches not backfilled within 72 hours shall have a barrier installed around them to preclude entry by desert tortoises. All trenches, pits, or other excavations shall be inspected for tortoises by a biological monitor trained and approved by the Acceptable Biologist prior to filling.

- ❖ If a desert tortoise is found, the biological monitor shall notify the Acceptable Biologist who will remove the animal as soon as possible.
- ❖ Only burrows within the limits of clearing and surface disturbance shall be excavated. Burrows outside these limits, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the construction area. The barrier fence shall be at least 20 feet long and shall be installed to direct the tortoise leaving the burrow away from the construction area. Installation and removal of such barrier fencing shall be under the direction and supervision of the biological monitor.
- ❖ If blasting is necessary for construction, all tortoises shall be removed from burrows within 100 feet of the blast area.

Disposition of Sick, Injured, or Dead Specimens. Upon locating dead, injured, or sick desert tortoises under any utility or road project, initial notification by the contact representative or Acceptable Biologist must be made to the USFWS or CDFG within three (3) working days of its finding. Written notification must be made within five (5) calendar days with the following information: date; time; location of the carcass; photograph of the carcass; and any other pertinent information. Care must be taken in handling sick or injured animals to ensure effective treatment and care. Injured animals shall be taken care of by the Acceptable Biologist or an appropriately trained veterinarian. Should any treated tortoises survive, USFWS or CDFG should be contacted regarding the final disposition of the animals.

Section 4.5 Land Use Adjacency Guidelines

The purpose of Land Use Adjacency Guidelines is to avoid or minimize indirect effects from Development adjacent to or within the Conservation Areas. Adjacent means sharing a common boundary with any parcel in a Conservation Area. Such indirect effects are commonly referred to as edge effects, and may include noise, lighting, drainage, intrusion of people, and the introduction of non-native plants and non-native predators such as dogs and cats. Edge effects will also be addressed through reserve management activities such as fencing. The following Land Use Adjacency Guidelines shall be considered by the Permittees in their review of individual public and private Development projects adjacent to or within the Conservation Areas to minimize edge effects, and shall be implemented where applicable.

4.5.1 Drainage

Proposed Development adjacent to or within a Conservation Area shall incorporate plans to ensure that the quantity and quality of runoff discharged to the adjacent Conservation Area is not altered in an adverse way when compared with existing conditions. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the adjacent Conservation Area.

4.5.2 Toxics

Land uses proposed adjacent to or within a Conservation Area that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife and plant species, Habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in any discharge to the adjacent Conservation Area.

4.5. Lighting

Numerous studies have shown artificial light to negatively impact a variety of wildlife species (see, for example, *Ecological consequences of artificial night lighting 2006*, Rich, C. and Longcore, T. (eds.). Island Press: Washington, D.C.). The purpose of this guideline is to minimize the impact of artificial light on wildlife within Conservation Areas. For proposed Development adjacent to or within a Conservation Area, lighting shall be shielded and directed toward the developed area. Landscape shielding or other appropriate methods shall be incorporated in project designs to minimize the effects of lighting adjacent to or within the adjacent Conservation Area. Projects requiring discretionary approval shall provide the permitting jurisdiction with a light study showing the proposed methods to minimize escape of light from the project into Conservation Areas. This study shall include all exterior lighting including street lights and security lighting.

4.5.4 Noise

Noise has been shown to negatively impact numerous species of wildlife (see, for example, Bowles, A.E. 1995. *Responses of wildlife to noise*. pp. 109-156. In: Knight, R.L. and K.J. Gutzwiller. (eds.) *Wildlife and Recreationists: Coexistence through Management and Research*. Island Press: Washington, D.C.). The purpose of this guideline is to minimize the impact the noise on wildlife within Conservation Areas. Proposed Development adjacent to or within a Conservation Area that generates noise in excess of 75 dBA L_{eq} hourly, as measured at the property line, shall incorporate setbacks, berms, or walls, as appropriate, to minimize the effects of noise on the adjacent Conservation Area. Required Measures in any Conservation Area that preclude or limit berms or walls shall have precedence over this guideline. This guideline is intended to apply to land uses that generate noise on a permanent basis such as race tracks, night clubs and shooting ranges and does not apply to temporary noise due to construction or special events. Public safety activities are exempt from this guideline.

4.5.5 Invasives

Invasive species are a known threat to native wildlife and wildlife habitat in the Coachella Valley. Impacts of invasive species on wildlife in the Coachella Valley have been documented in research conducted by the Center for Conservation Biology at the University of California, Riverside. Invasive, non-native plant species shall not be incorporated in the landscape for land uses adjacent to or within a Conservation Area. Landscape treatments within or adjacent to a Conservation Area shall incorporate native plant materials to the maximum extent Feasible; recommended native species are listed in Table 4-112. The plants listed in Table 4-113 shall not be used within or adjacent to a Conservation Area. This list may be amended from time to time through a Minor Amendment with Wildlife Agencies' concurrence.

Table 4-112: Coachella Valley Native Plants Recommended for Landscaping¹

BOTANICAL NAME	COMMON NAME
Trees	
<i>Washingtonia filifera</i>	California Fan Palm
<i>Cercidium floridum</i>	Blue Palo Verde
<i>Chilopsis linearis</i>	Desert Willow
<i>Olneya tesota</i>	Ironwood Tree
<i>Prosopis glandulosa var. torreyana</i>	Honey Mesquite
Shrubs	
<i>Acacia greggii</i>	Cat's Claw Acacia
<i>Ambrosia dumosa</i>	Burro Bush
<i>Atriplex canescens</i>	Four Wing Saltbush
<i>Atriplex lentiformis</i>	Quailbush
<i>Atriplex polycarpa</i>	Cattle Spinach
<i>Baccharis sergiloides</i>	Squaw Water-weed
<i>Bebia juncea</i>	Sweet Bush
<i>Cassia (Senna) covesii</i>	Desert Senna
<i>Condalia parryi</i>	Crucillo
<i>Crossosoma bigelovii</i>	Crossosoma
<i>Dalea emoryi</i>	Dye Weed
<i>Dalea (Psorothamnus) schottii</i>	Indigo Bush
<i>Datura meteloides</i>	Jimson Weed
<i>Encelia farinosa</i>	Brittle Bush
<i>Ephedra aspera</i>	Mormon Tea
<i>Eriogonum fasciculatum</i>	California Buckwheat
<i>Eriogonum wrightii membranaceum</i>	Wright's Buckwheat
<i>Fagonia laevis</i>	(No Common Name)
<i>Gutierrezia sarothrae</i>	Matchweed
<i>Haplopappus acradenius</i>	Goldenbush
<i>Hibiscus denudatus</i>	Desert Hibiscus
<i>Hoffmannseggia microphylla</i>	Rush Pea
<i>Hymenoclea salsola</i>	Cheesebush
<i>Hyptis emoryi</i>	Desert Lavender
<i>Isomeris arborea</i>	Bladder Pod
<i>Juniperus californica</i>	California Juniper

BOTANICAL NAME	COMMON NAME
<i>Krameria grayi</i>	Ratany
<i>Krameria parvifolia</i>	Little-leaved Ratany
<i>Larrea tridentate</i>	Creosote Bush
<i>Lotus rigidus</i>	Desert Rock Pea
<i>Lycium andersonii</i>	Box Thorn
<i>Petalonyx linearis</i>	Long-leaved Sandpaper Plant
<i>Petalonyx thurberi</i>	Sandpaper Plant
<i>Peucephyllum schottii</i>	Pygmy Cedar
<i>Prunus fremontii</i>	Desert Apricot
<i>Rhus ovata</i>	Sugar-bush
<i>Salazaria mexicana</i>	Paper-bag Bush
<i>Salvia apiana</i>	White Sage
<i>Salvia eremostachya</i>	Santa Rosa Sage
<i>Salvia vaseyi</i>	Wand Sage
<i>Simmondsia chinensis</i>	Jojoba
<i>Sphaeralcia ambigua</i>	Globemallow (Desert Mallow)
<i>Sphaeralcia ambigua rosacea</i>	Apricot Mallow
<i>Trixis californica</i>	Trixis
<i>Zauschneria californica</i>	California Fuchsia
Groundcovers	
<i>Mirabilis bigelovii</i>	Wishbone Bush (Four O'Clock)
<i>Mirabilis tenuiloba</i>	White Four O'Clock (Thin-lobed)
Vines	
<i>Vitis girdiana</i>	Desert Grape
Accent	
<i>Muhlenbergia rigens</i>	Deer Grass
Herbaceous Perennials²	
<i>Adiantum capillus-veneris</i>	Maiden-hair Fern (w)
<i>Carex alma</i>	Sedge (w)
<i>Dalea parryi</i>	Parry Dalea
<i>Eleocharis montevidensis</i>	Spike Rush (w)
<i>Equisetum laevigatum</i>	Horsetail (w)
<i>Juncus bufonis</i>	Toad Rush (w)
<i>Juncus effuses</i>	Juncus (w)
<i>Juncus macrophyllus</i>	Juncus (w)
<i>Juncus mexicanus</i>	Mexican Rush (w)
<i>Juncus xiphioides</i>	Juncus (w)
<i>Notholaena parryi</i>	Parry Cloak Fern
<i>Pallaea mucronata</i>	Bird-foot Fern
Cacti and Succulents	
<i>Agave deserti</i>	Desert Agave
<i>Asclepias albicans</i>	Desert Milkweed (Buggy-whip)
<i>Asclepias subulata</i>	Ajamete
<i>Dudleya arizonica</i>	Live-forever
<i>Dudleya saxosa</i>	Rock Dudleya
<i>Echinocereus engelmannii</i>	Calico Hedgehog Cactus
<i>Ferocactus acanthodes</i>	Barrel Cactus
<i>Fouquieria splendens</i>	Ocotillo
<i>Mamillaria dioica</i>	Nipple Cactus

BOTANICAL NAME	COMMON NAME
<i>Mamillaria tetrancistra</i>	Corkseed Cactus
<i>Nolina parryi</i>	Parry Nolina
<i>Opuntia acanthocarpa</i>	Stag-horn or Deer-horn Cholla
<i>Opuntia bigelovii</i>	Teddy Bear or Jumping Cholla
<i>Opuntia basilaris</i>	Beavertail Cactus
<i>Opuntia echinocarpa</i>	Silver or Golden Cholla
<i>Opuntia ramosissima</i>	Pencil Cholla, Darning Needle Cholla
<i>Yucca schidigera</i>	Mojave Yucca, Spanish Dagger
<i>Yucca whipplei</i>	Our Lord's Candle

¹ Source: "Coachella Valley Native Plants, Excluding Annuals (0 ft. to approximately 3,000 ft. elevation)."
Compiled by Dave Heveron, Garden Collections Manager, and Kirk Anderson, Horticulturist, The Living Desert,
May, 2000, for the Coachella Valley Mountains Conservancy.

² Common names for herbaceous perennials that are followed by "(w)" indicate a water or riparian species.

Table 4-113: Prohibited Invasive Ornamental Plants¹

BOTANICAL NAME	COMMON NAME
<i>Acacia</i> spp. (all species except <i>A. greggii</i>)	Acacia (all species except native catclaw acacia)
<i>Arundo donax</i> (✓)	Giant Reed or Arundo Grass
<i>Atriplex semibaccata</i> (✓)	Australian Saltbush
<i>Avena barbata</i>	Slender Wild Oat
<i>Avena fatua</i>	Wild Oat
<i>Brassica tournefortii</i> (✓✓)	African or Saharan Mustard
<i>Bromus madritensis</i> ssp. <i>rubens</i> (✓)	Red Brome
<i>Bromus tectorum</i> (✓✓)	Cheat Grass or Downy Brome
<i>Cortaderia jubata</i> [syn. <i>C. atacamensis</i>]	Jubata Grass or Andean Pampas Grass
<i>Cortaderia dioica</i> [syn. <i>C. selloana</i>]	Pampas Grass
<i>Descurainia sophia</i>	Tansy Mustard
<i>Eichhornia crassipes</i>	Water Hyacinth
<i>Elaeagnus angustifolia</i>	Russian Olive
<i>Foeniculum vulgare</i>	Sweet Fennel
<i>Hirschfeldia incana</i>	Mediterranean or Short-pod Mustard
<i>Lepidium latifolium</i>	Perennial Pepperweed
<i>Lolium multiflorum</i>	Italian Ryegrass
<i>Nerium oleander</i>	Oleander
<i>Nicotiana glauca</i> (✓)	Tree Tobacco
<i>Oenothera berlandieri</i> (#)	Mexican Evening Primrose
<i>Olea europea</i>	European Olive Tree
<i>Parkinsonia aculeata</i> (✓)	Mexican Palo Verde
<i>Pennisetum clandestinum</i>	Kikuyu Grass
<i>Pennisetum setaceum</i> (✓✓)	Fountain Grass
<i>Phoenix canariensis</i> (#)	Canary Island Date Palm
<i>Phoenix dactylifera</i> (#)	Date Palm
<i>Ricinus communis</i> (✓)	Castorbean
<i>Salsola tragus</i> (✓)	Russian Thistle
<i>Schinus molle</i>	Peruvian Pepper Tree or California Pepper
<i>Schinus terebinthifolius</i>	Brazilian Pepper Tree
<i>Schismus arabicus</i>	Mediterranean Grass
<i>Schismus barbatus</i> (✓✓)	Saharan Grass, Abu Mashī

BOTANICAL NAME	COMMON NAME
<i>Stipa capensis</i> (✓✓)	No Common Name
<i>Tamarix</i> spp. (all species) (✓✓)	Tamarisk or Salt Cedar
<i>Taeniatherum caput-medusae</i>	Medusa-head
<i>Tribulus terrestris</i>	Puncturevine
<i>Vinca major</i>	Periwinkle
<i>Washingtonia robusta</i>	Mexican fan palm
<i>Yucca gloriosa</i> (#)	Spanish Dagger

Sources: California Exotic Pest Plant Council, United States Department of Agriculture-Division of Plant Health and Pest Prevention Services, California Native Plant Society, Fremontia Vol. 26 No. 4, October 1998, The Jepson Manual; Higher Plants of California, and County of San Diego Department of Agriculture.

Key to Table 4-113:

- # indicates species not on CalEPPC October 1999 "Exotic Pest Plants of Greatest Ecological Concern in California" list
- ✓ indicates species known to be invasive in the Plan Area
- ✓✓ indicates particularly troublesome invasive species

4.5.6 Barriers

Land uses adjacent to or within a Conservation Area shall incorporate barriers in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in a Conservation Area. Such barriers may include native landscaping, rocks/boulders, fencing, walls and/or signage.

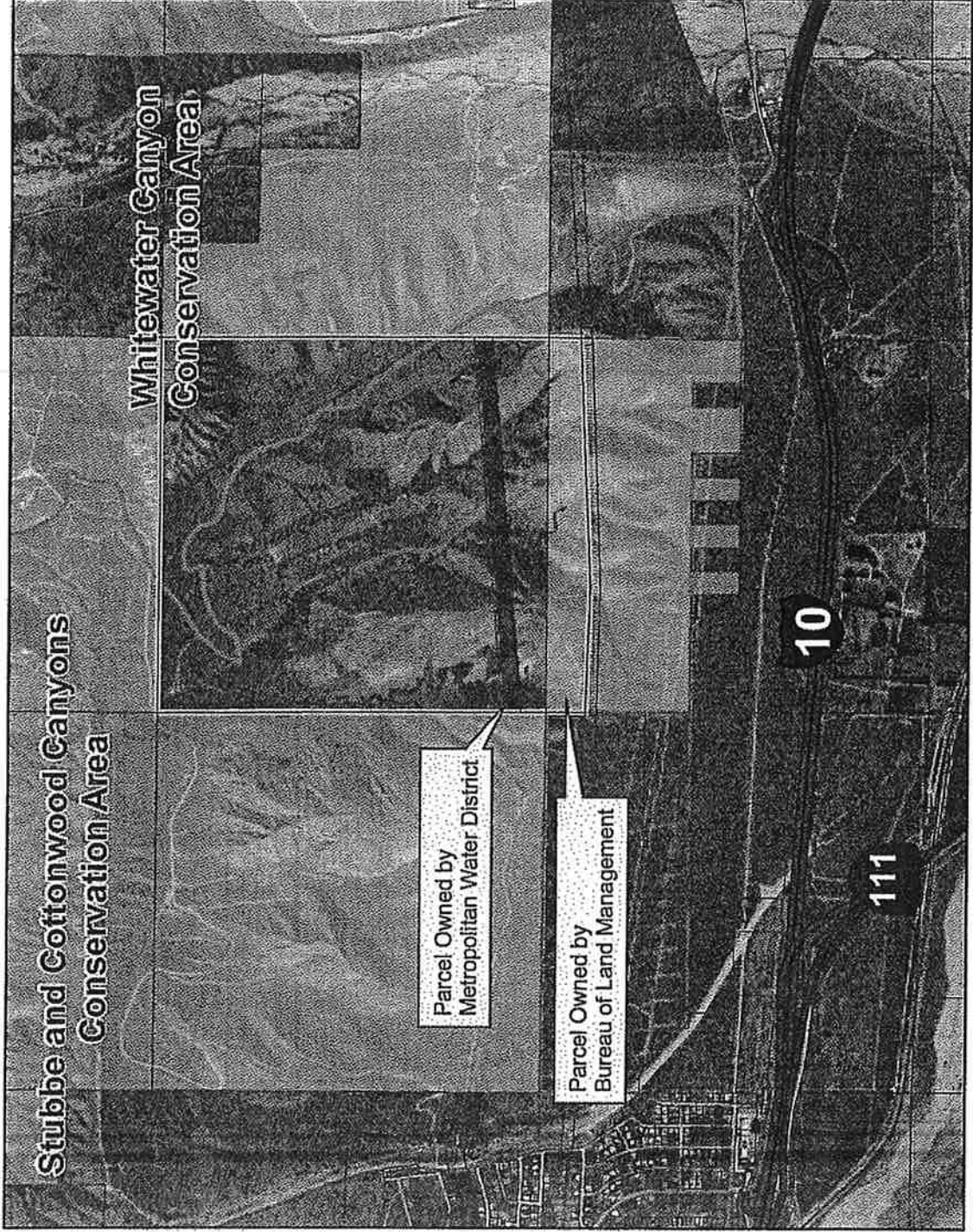
4.5.7 Grading/Land Development

Manufactured slopes associated with site Development shall not extend into adjacent land in a Conservation Area.

Map of Project Vicinity in Conservation Area

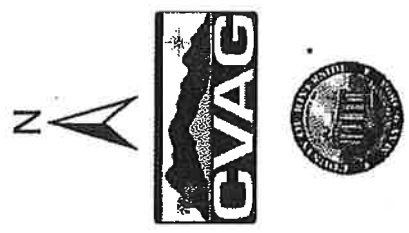
Map(s) of Project Boundaries and Species etc Disturbance

Mark Technologies Windfarm - Joint Project Review Project Area Map



Legend

- Major Roads
- Parcel Boundaries
- Project Area
- Existing Disturbance in 1996
- Proposed Disturbance
- Conservation Area
- Owner**
 - Metropolitan Water District
 - Bureau of Land Management



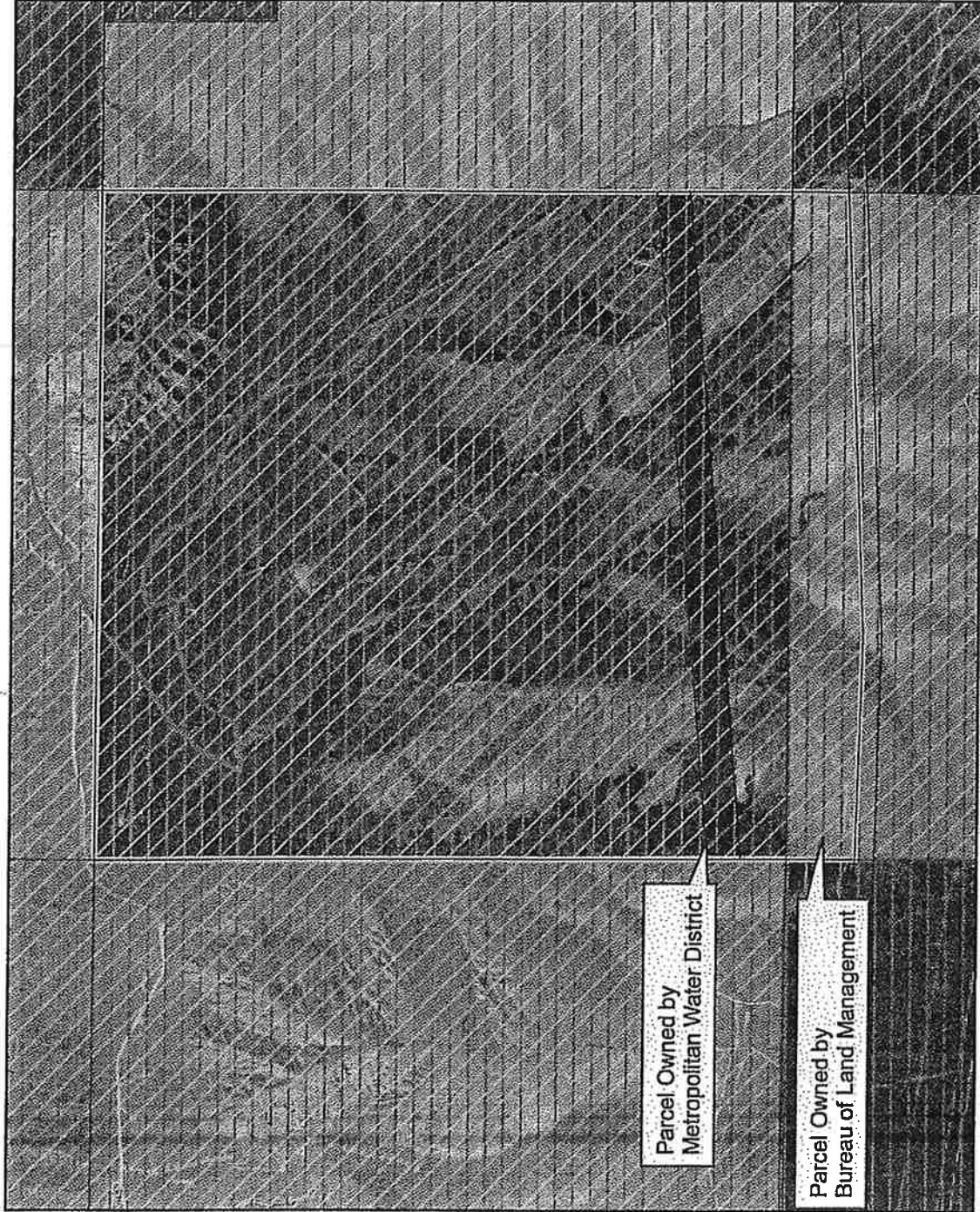
Map by
Nicholas Peihl,
Coachella Valley Association
of Governments



Map Document: (F:\projects\PR\MarkTechWindfarm_VerB_projectmap.mxd)
11/25/2008 - 10:35:11 AM

Disclaimer: Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. CVAG and the County of Riverside make no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

Mark Technologies Windfarm - Joint Project Review Conservation Objectives



Legend

- Parcel Boundaries
- Project Area
- Desert Tortoise Habitat
- Sand Source Area
- Existing Disturbance in 1996
- Proposed Disturbance
- Conservation Area
- Owner**
- Metropolitan Water District
- Bureau of Land Management



Map by
Nicholas Pethi,
Coachella Valley Association
of Governments



Map Document: F:\projects\PR\MarkTechWindfarm_VerB_ConsObj.mxd
11/25/2008 -- 10:42:17 AM

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COUNTY OF RIVERSIDE
TRANSPORTATION AND LAND MANAGEMENT AGENCY
Planning Department
Ron Goldman · Planning Director

**SUBSTANTIAL CONFORMANCE APPLICATION FOR LAND
USE AND DEVELOPMENT**

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED.

CASE NUMBER: WCS00071S4 DATE SUBMITTED: 6/23/2010

APPLICATION INFORMATION

Applicant's Name: Mark Technologies Corporation E-Mail: mark@TenderLand.com

Mailing Address: 250 E. 5th Street, Suite 1500
Cincinnati OH 45202
City State ZIP

Daytime Phone No: (513) 562-1280 Fax No: (509) 694-9171

Engineer/Representative's Name: The Altum Group E-Mail: mike.peroni@thealtumgroup.com

Mailing Address: 73-255 El Paseo Drive Suite 15
Palm Desert CA 92260
City State ZIP

Daytime Phone No: (760) 346-4750 Fax No: (760) 340-0089

Property Owner's Name: Same as Applicant E-Mail: _____

Mailing Address: _____
Street

City State ZIP

Daytime Phone No: (____) _____ Fax No: (____) _____

If the property is owned by more than one person, attach a separate page that reference the application case number and lists the names, mailing addresses, and phone numbers of all persons having an interest in the real property or properties involved in this application.

The Planning Department will primarily direct communications regarding this application to the person identified above as the Applicant. The Applicant may be the property owner, representative, or other assigned agent.

PROPERTY INFORMATION:

Assessor's Parcel Number(s): 516-020-001, 516-020-002, 516-020-003

APPLICATION FOR SUBSTANTIAL CONFORMANCE

Section: 3 Township: 3S Range: 3E

Approximate Gross Acreage: 638.69

General location (nearby or cross streets): North of Interstate 10, South of
---, East of ---, West of Whitewater Canyon Road

Thomas Brothers map, edition year, page number, and coordinates: 2008 edition pg.724 H1, H2, J1, J2

Have there been any prior requests for substantial conformance? Yes No

If yes, of what nature? changes in turbine types and number of turbines

Describe the existing uses, structures, buildings, and/or entitlements. What is the nature and extent of current substantial conformance request and the reason(s) necessitating the changes(s): (use additional pages if necessary.)

~~Existing use is wind energy generation; structures onsite include wind turbines~~
The request is to change the currently approved turbine type to a taller and more efficient type which will result in fewer turbines on the site than currently installed and approved.

The signature below acknowledges that fees collected in excess of the actual cost of providing specific services will be refunded. If additional funds are needed to complete the processing of your application, you will be billed, and processing of the application will cease until the outstanding balance is paid and sufficient funds are available to continue the processing of the application. The applicant understands the deposit fee process as described above, and that there will be NO refund of fees which have been expended as part of the application review or other related activities or services, even if the application is withdrawn or the application is ultimately denied.

All signatures must be originals ("wet-signed"). Photocopies of signatures are **not** acceptable.

PRINTED NAME OF APPLICANT SIGNATURE OF APPLICANT

AUTHORITY FOR THIS APPLICATION IS HEREBY GIVEN:

I certify that I am/we are the record owner(s) or authorized agent and that the information filed is true and correct to the best of my knowledge. An authorized agent must submit a letter from the owner(s) indicating authority to sign the application on the owner's behalf.

All signatures must be originals ("wet-signed"). Photocopies of signatures are **not** acceptable.

PRINTED NAME OF PROPERTY OWNER(S) SIGNATURE OF PROPERTY OWNER(S)

PRINTED NAME OF PROPERTY OWNER(S) SIGNATURE OF PROPERTY OWNER(S)

RECEIVED
NOV 26 2007

Riverside County
Transportation & Land
Management Agency

Coachella Valley Conservation Commission
Interim Project Review Application

The 30-day Joint Project Review timeline does not start until the CVCC receives this completed application as well as the required project information from the Permittee.

Date: _____

SECTION 1

PROPERTY OWNER INFORMATION: PROPERTY OWNER(S)/OWNER'S REPRESENTATIVE

Assessor's Parcel Number(s) (APNs): 516-020-001, 002, 003

A. Property Owner Name(s)/Owner's Representative: Michael Shoberg
Stantec Consulting, Inc.

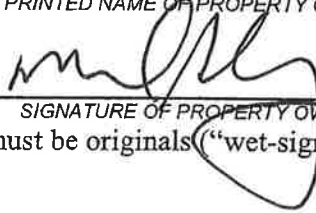
Mailing Address: 73-733 Fred Waring Drive, Suite 100
Street
Palm Desert, CA 92260
City State ZIP

Daytime Phone No: (760) 346-9844 Fax No: (760) 346-9368

E-Mail: Mike.Shoberg@stantec.com

Michael A. Shoberg

PRINTED NAME OF PROPERTY OWNER(S)/OWNER'S REPRESENTATIVE



SIGNATURE OF PROPERTY OWNER(S)/OWNER'S REPRESENTATIVE

All signatures must be originals ("wet-signed"). Photocopies of signatures are **not** acceptable.

Coachella Valley Conservation Commission

73-710 Fred Waring Drive, Suite 200, Palm Desert, CA 92260 Phone: (760) 346-1127 Fax: (760) 340-5949

SECTION 2

Total Acres Planned for Development: 640 acres

Project Description: The additional of up to 60 new wind turbines within an existing array.

- Attach a map of the project location.
- Attach a map delineating;
 - the areas of proposed disturbance on the project site.
 - areas on the project site proposed to be left undisturbed
 - areas of proposed permanent conservation on the project siteIf an area is graded for any purpose it, it is considered disturbed.

All documentation supplied must be in a hard copy format. To further expedite the review process, applicants are strongly encouraged to also submit maps as digital files via CD-Rom. The preferred digital format is ESRI shape files. For import into the CVCC GIS, please assign a coordinate system to any data provided. Technical GIS digital data submission specifications are included in Table 1 below.

TABLE 1
Coachella Valley Conservation Commission
Digital Data Submission Specifications

Data Formats	ESRI shape file, Microstation CAD file, or Autodesk Auto CAD file
Projection	State Plane
Zone	California VI
Datum	North American Datum 1983 (NAD83)
Units	U.S. Feet
Spheroid	"GRS 1980",6378137.0,298.257222101
False Easting	6561666.666666666
False Northing	1640416.666666667
Central Meridian	116.25
Standard Parallel 1	32.78333333333333
Standard Parallel 2	33.88333333333333
Latitude of Origin	32.16666666666666

Should you have any questions about these specifications please contact CVCC GIS at 760-346-1127.

SECTION 3

AUTHORITY FOR THIS APPLICATION IS HEREBY GIVEN:

I certify that I am/we are the record owner(s) or authorized agent and that the information filed is true and correct to the best of my knowledge. An authorized agent must submit a letter from the owner(s) indicating authority to sign the application on the owner's behalf. As the owner of record/authorized agent, I hereby authorize the information to be released to Property Owner(s)/Owner's Representative/authorized agent.

All signatures must be originals ("wet-signed"). Photocopies of signatures are **not** acceptable.


Mark G. Jones

PRINTED NAME OF PROPERTY OWNER

SIGNATURE OF PROPERTY OWNER

Michael A. Shoberg

PRINTED NAME OF PROPERTY OWNER
REPRESENTATIVE



SIGNATURE OF PROPERTY OWNER
REPRESENTATIVE

If the subject property is owned by persons who have not signed as owners above, attach a separate sheet that references the application case number and lists the printed names and signatures of all persons having an interest in the property.



73-255 El Paseo Drive, Suite 15
Palm Desert, California 92260
760.346.4750 Tel
760.340.0089 Fax

Project Description

Proposed Amendment to Substantial Conformance Application No. 4

Mark Technologies, the Applicant of the WECS Permit No. 71 (WECS 71) project, is currently proposing an amendment to the current Substantial Conformance No. 4 (SC 4) which was submitted on October 26, 2007. The Applicant previously submitted a letter, dated May 17, 2010, describing the proposed changes to SC 4 and how those changes constitute a substantial conformance. The following text describes the revised project configuration proposed for the amendment to SC 4.

Existing Entitlements

The current operating turbines on the site were constructed in three phases:

Alta Mesa Project -

Phase I - 60 Danwin 160kW wind turbines installed in 1988

Phase II - 57 Danwin 160kW wind turbines installed in 1989

Phase III - 42 Vestas V27-225kW wind turbines installed in 1995 and 1997

An additional 66 Vestas V47-660kW wind turbines were included in WECS Permit No. 71 as part of prior revisions and have not been constructed. Commercial WECS Permit No. 71, Revised Permit No. 9 was approved on December 13, 2005 by the Riverside County Board of Supervisors. The revised permit proposed to construct 60 turbines (replacing the proposed Vestas V47-660kW wind turbines), up to nearly 300 feet high within the existing WECS array consisting of 159 turbines on 640 acres. The 60 proposed turbines were to be Gamesa Eolica G52-850 kW, in two sizes:

- Short—41 turbines with a total height of 229.7 ft. (70 m) and rotor diameter of 170.6 ft. (52 m)
- Tall—19 turbines with a total height of 298.6 ft. (91 m) and rotor diameter of 170.6 ft. (52 m)

Thus, the current revised permit allows a total of 219 turbines to be constructed; however, the proposed 60 were not built and 159 turbines still remain on the site.

In addition, a variance (VAR #1771) was requested in conjunction with the Revised Permit No. 9 in order to reduce wind access and safety setbacks. Wind access setbacks were reduced from 855 feet to 0 feet and safety setbacks were reduced from 330 feet to 0 feet. These reductions were requested due to topography constraints and visibility concerns from Bonnie Bell to the East.

Environmental Assessment (EA) 40187 was also approved and evaluated environmental impacts resulting from the addition of 60 turbines to the site. The EA found there would be potentially significant impacts in the following areas: aesthetics, biological resources, geology/soils, land use

planning, noise, and transportation/traffic. These impacts were determined to be fully mitigated by the measures indicated in the EA and conditions of approval and a mitigation monitoring/reporting program was incorporated.

In October 2007, the Applicant filed the referenced Substantial Conformance Application (Substantial Conformance No. 4) in order to change the turbine model for the remaining 60 entitled turbines from the Gamesa to EWT 52-900 kW turbines. The only difference between the Gamesa and EWT turbines was the nacelle. All other specifications were the same. The approval of this Substantial Conformance Application is currently pending with the County. During 2008, the Applicant submitted an application for a Grading Permit for the 60 entitled turbines and such Grading Permit has been approved by the Department of Building and Safety, the applicable requirements of the CVMSHCP have been fulfilled and the amount of allowable site disturbance has been established that can now be included in the Conditions of Approval for the Substantial Conformance No. 4 along with any other applicable language concerning conformance of the project with the requirements of the CVMSHCP.

Proposed Changes

During the time period between the Substantial Conformance No. 4 Application submittal in 2007 and the present time, the market for wind turbines has continued to rapidly trend toward larger and more efficient turbine models, with the customary resulting phase out of earlier wind turbine models. The Applicant has decided to modify the site plan of WECS 71 Revised Permit No. 9 because of these trends. The turbine models considered for the project are the currently approved but uninstalled Gamesa Eolica G52-850 kW and Nordex N80 2.5 MW. The proposed Nordex turbines are more efficient, have been selected based on their suitability for the high wind conditions at the project site, have higher generation rates per unit due to improved technology and greater generation capacity, and because of this, far fewer wind turbines are required to produce more power than the current entitlement.

The changes being proposed for the project are as follows:

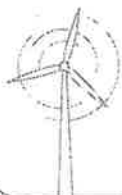
- A total of 134 existing Danwin and Vestas turbines will be removed. A removal plan will be submitted in compliance with Section 18.42a(a)(6) of Ordinance 348 and will detail which turbines will be removed and protocols for removal. Twenty-five (25) of the existing turbines (19 Danwin and 6 Vestas) will remain installed onsite. Fifteen (15) of the currently approved but uninstalled Gamesa turbines and 27 new Nordex N80 2.5 MW turbines will be added, bringing the total number of turbines at the site to 67.
- The new Nordex turbines will be incrementally but imperceptibly taller than the currently approved "Tall" Gamesa turbines. The 15 Gamesa turbines to remain will be the "Short" version measuring 229.7 feet in total height, measured from the ground to the tip of the blade at the 12 o'clock position. The 27 Nordex turbines will be 328.1 feet in total height. The rotor diameter of the Nordex turbines will be 262.5 feet and the rotor diameter of the Gamesa turbines will be 170.6 feet (See turbine brochures for Gamesa and Nordex models at the end of this document).

- The newly installed Nordex and Gamesa turbines will be located in essentially the same areas of the project site as presently depicted on the WECS 71 Revised Permit No. 9 site plan and associated Grading Permit. The amount of site disturbance associated with the newly installed Nordex and Gamesa turbines will be the same or less (due to the significant reduction in the number of turbines) than the amount of site disturbance allowed pursuant to the Grading Permit application which has been reviewed and accepted by the County as indicated above. Upon approval of the referenced Substantial Conformance Application, the Applicant will revise the Grading Permit application and associated grading plans to conform to the revised site plan.



DESIGNED TO PERFORM.

**GAMMA GENERATION –
THE 2.5 MW EFFICIENCY CLASS.**



N80/2500
N90/2500
N100/2500

 **NORDEX**
We've got the power.

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NORDEX – A PROFILE

Dependable power plants for a clean environment.

Economic prosperity, progress and environmental protection – for Nordex these go hand in hand. Since 1985, we have been developing increasingly efficient turbines that help meet the global demand for energy while reducing the impact on the environment.

As an internationally expanding company, Nordex has a footprint in all the growth markets. Our factories in Germany, China and the United States serve the markets in the core regions of Europe, Asia and the Americas. Our customers receive tailor-made solutions – from planning a wind farm, through turnkey installation, to maintenance and service. Our own training institute, the “Nordex Academy”, provides a high level of training to all our staff, guaranteeing superior know-how as a supplier of sophisticated products and services.

Our core competence is wind turbines in the 2.5 MW class. Nordex follows a proven development concept: we offer different machine types for each wind class using a common technical platform. For instance, the 2.5 MW product family includes the strong-wind turbine N80/2500, the N90/2500 for medium-wind locations and the N100/2500, which is able to generate high yields even where wind speeds are low.

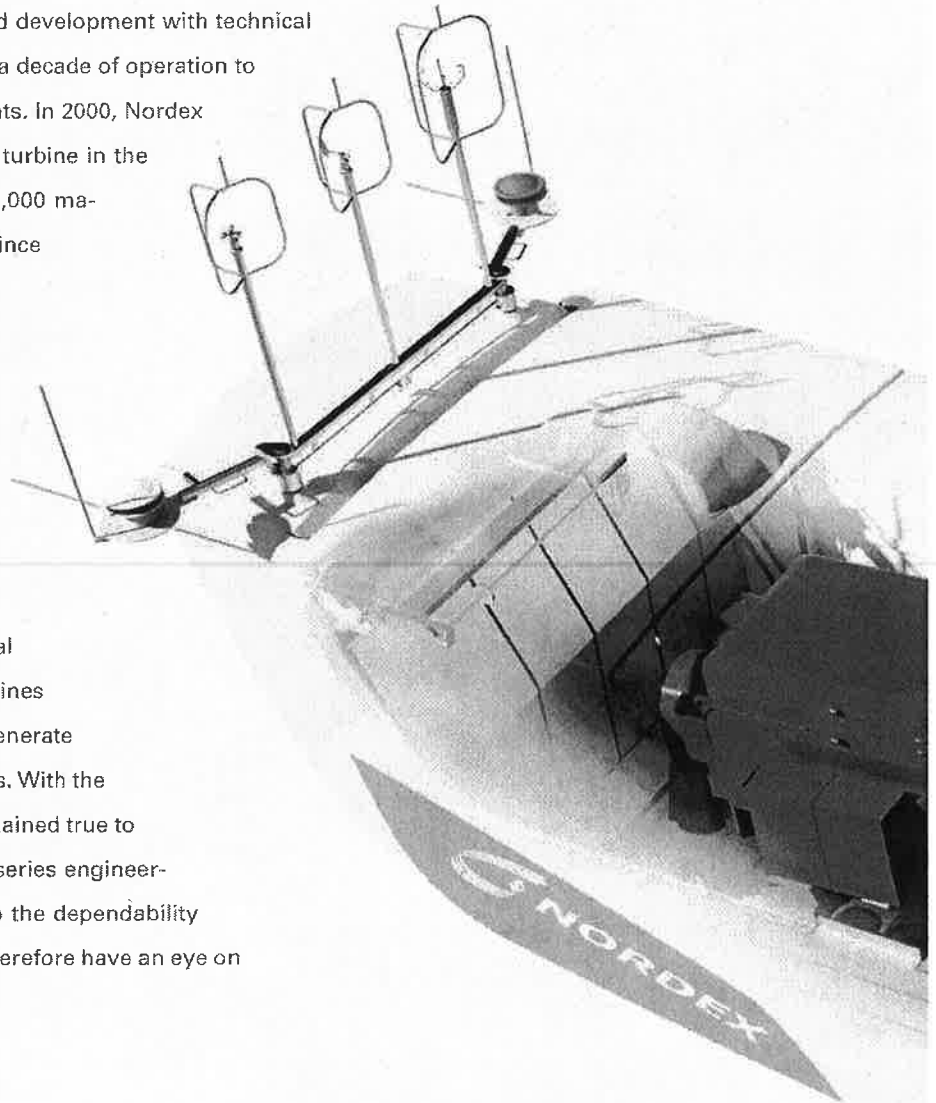


NORDEX'S EFFICIENCY CLASS

Experience puts us one step ahead.

The third generation of our 2.5 MW series, the Gamma generation, combines the latest research and development with technical know-how and experience from a decade of operation to meet today's market requirements. In 2000, Nordex installed the first 2.5 MW series turbine in the world and has put more than 1,000 machines of this type in operation since then. When we say that our turbines offer high quality, mature technology and dependable performance even in extreme locations, we know what we're talking about.

Thanks to continuous technical enhancements, Nordex wind turbines are capital goods designed to generate reliable yields for at least 20 years. With the new generation, Nordex has remained true to proven principles, using tested series engineering and assigning top priority to the dependability of all system components. We therefore have an eye on the entire value chain process.

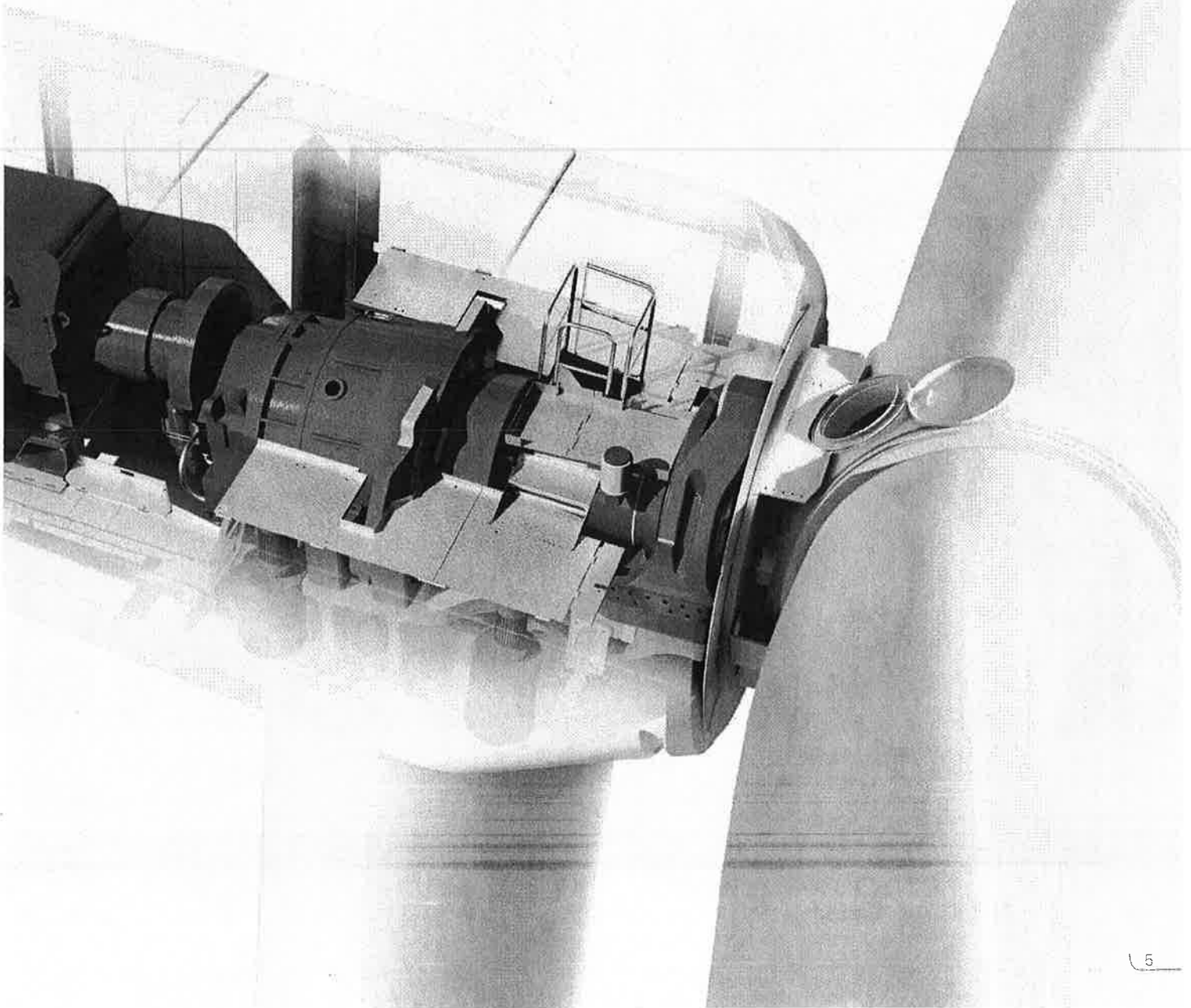


➤ *The new Nordex turbine generation combines proven technology with optimised details.*

Nordex's Gamma generation of 2.5 MW turbines

sets new standards for

- Yield
- Availability
- Ease of service
- Quality
- Delivery and installation time
- Grid code compliance



YIELD

Top energy yield in any climate.

The N80/2500, N90/2500 and N100/2500 use high-capacity yaw and temperature control systems. These ensure maximum yield in every corner of the world – regardless of weather conditions.

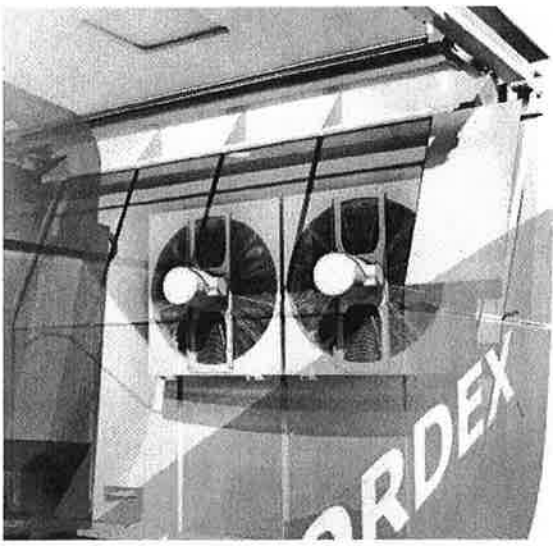
Perfectly placed in the wind

In the yaw system, Nordex has further developed its proprietary Torque-Limited Yaw control system. Here, the motors are controlled using the master-follower principle. This means that the loads are evenly distributed over the three to four yaw drives and the nacelle can track the wind dependably even at turbulent sites. In addition, the high torque of the yaw brakes holds it firmly in the best position for maximum yield.



➤ *The new yaw system consists of three to four drives. They make sure that the nacelle is perfectly placed in the wind.*





➤ *The cooling system is housed at the rear of the nacelle and ensures efficient heat dissipation.*

For hot or cold climates

An improved concept for temperature control ensures maximum yield in both permafrost and desert climates.

The variable-speed coolers for the generator and gearbox are located in a separate area in the rear section of the nacelle. They enable efficient heat dissipation and thus the smooth operation of the main components even in extreme heat.

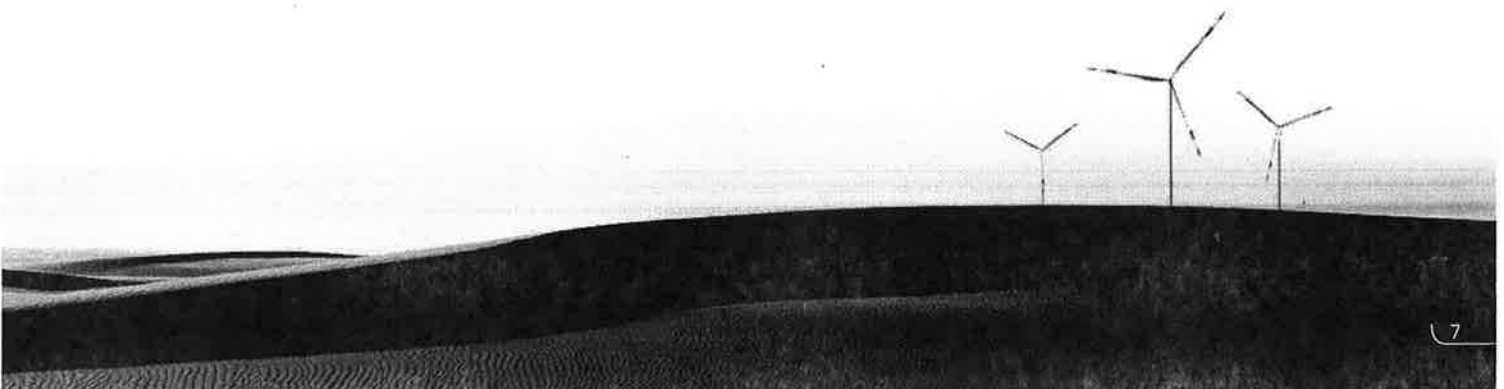
Nordex turbines are also equipped for locations with low ambient temperatures: special thermo bypasses and heating units in the cooling circuits rapidly warm the components to start-up temperature.

A modern turbine cockpit

Highly efficient control of a wind turbine is a prerequisite for maximum yield. The 2.5 MW turbines are controlled, regulated and monitored by means of our interactive Nordex Control™ system. Nordex Control™ provides both direct and remote access to the operating states as well as other data from individual wind turbines and entire wind farms. Data are permanently recorded and evaluated. The latest automation and information technologies are thus merged to form a modern and efficient turbine management control system.

High in the sky for a better yield

Wind conditions differ from site to site. Wind quality improves in line with altitude. This is why Nordex offers the 2.5 MW machines on modular tubular steel or hybrid towers with heights ranging from 60 to 140 metres.



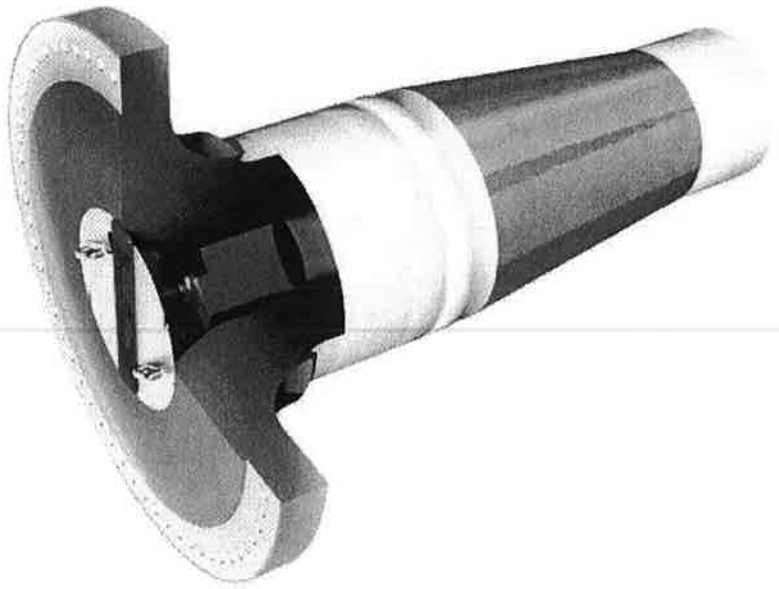
AVAILABILITY

Assured performance for at least 20 years.

Operators demand a consistently high level of technical availability over a minimum period of 20 years from a wind turbine. Even seemingly small technical advances can make a big difference. For instance, in the third generation of the 2.5 MW turbines Nordex has redesigned the rotor shaft and integrated the slip ring.

In this way, the slip ring is better protected from the weather and mechanical influences. Furthermore, it is heated to stop condensation from forming.

➤ *Integration in the rotor shaft means that the slip ring is perfectly protected.*



A perfect balance

Nordex has redesigned the nacelle, hub and rotor blades in the new generation to be both lighter and more robust. We reduced weight by making more effective use of materials, particularly in the rotor shaft, hub and machine frame. This not only simplifies transport and erection but also reduces the static and dynamic loads on the overall turbine, increasing the length of its service life.

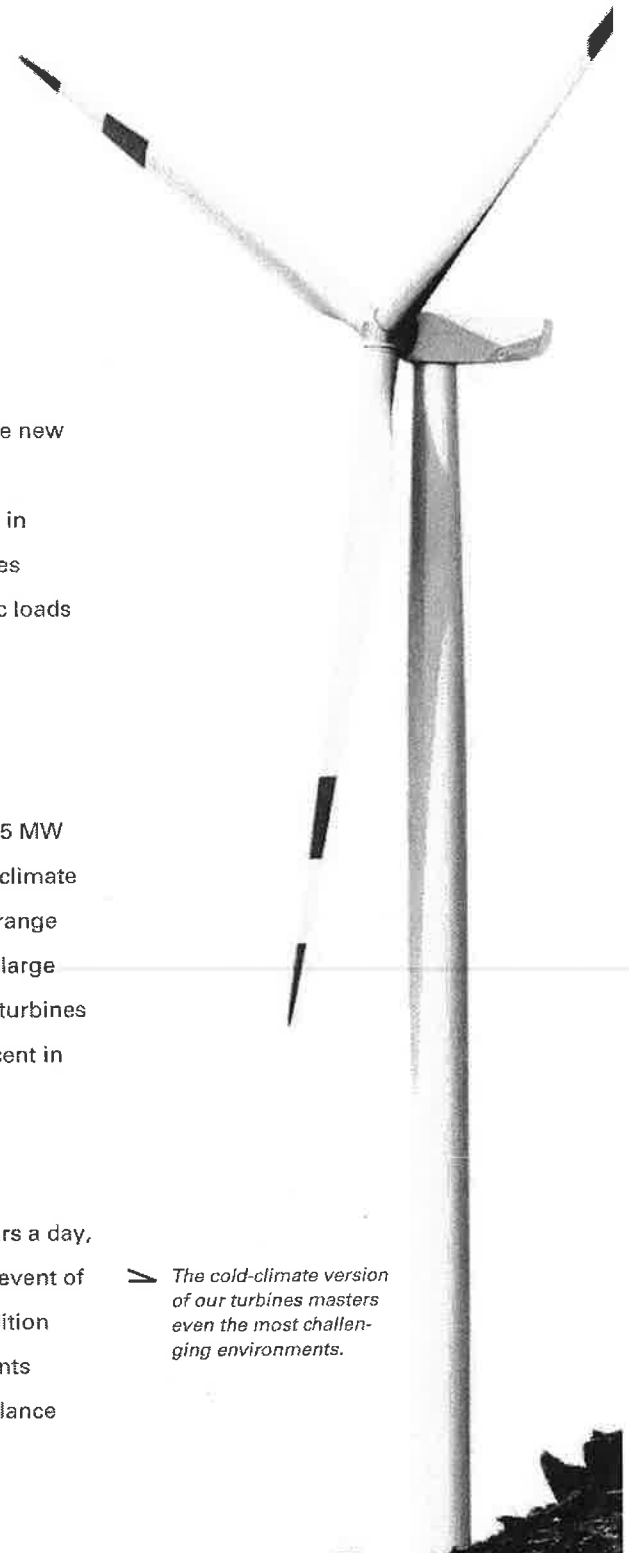
Robust technology for cold regions

Many good wind locations are to be found in extreme climate regions. This is why we also offer three turbine types in the 2.5 MW product family as a cold-climate version. The innovative cold-climate turbine can provide its rated output over a wide temperature range from -30 to $+40$ °C. This means that Nordex is able to meet a large demand: in Europe we supply around 10 percent of our wind turbines in the cold-climate version, while the figure is roughly 50 percent in North America.

Round-the-clock performance checks

We constantly monitor our customers' wind turbines – 24 hours a day, 7 days a week, 365 days a year – and take direct action in the event of any deviations from set values. In addition, the optional Condition Monitoring System checks the state of wear-critical components and initiates preventive maintenance if needed. Nordex's vigilance ensures that your turbines operate for as long as possible.

➤ *The cold-climate version of our turbines masters even the most challenging environments.*



EASE OF SERVICE

Service – simple, fast and safe.

For the 2.5 MW product family, ease of service is a priority, setting the highest standards for economic efficiency. Low maintenance and maintenance-free components support dependable turbine operation and speed up routine service work. Components subject to high stress, such as the rotor and generator bearings as well as the point where the gears mesh in the pitch and yaw systems, are protected by separate automatic lubricating systems.

Perfection in ergonomics

The nacelle and hub are generously sized from an ergonomic point of view. Uninterrupted working areas with sufficient space and light support fast and safe servicing. All the components can be directly accessed and, up to a weight of one tonne, can be simply and inexpensively maintained with the aid of a new crane system.

The interior design of the nacelle makes it possible to service all components, including the cooling system, with the roof closed and in all types of weather. The rear entrance to the hub and the new pitch and rotor locking systems offer further advances in speed of service as well as in health and safety.

➤ *The rear hatch makes accessing the rotor hub easier and increases workplace safety further still.*



QUALITY

Top-quality engineering – simply routine for us.

Thanks to their sophisticated design, Nordex wind turbines are certified quality products. From the earliest development phase, our engineers check the stress levels of materials and components using advanced computer-aided calculation routines, such as the finite-element method. These are followed by extensive testing at the Nordex Test Centre and in the field.

Extreme testing of hardware and software

At the Nordex Test Centre, engineers inspect the components and systems of prototypes under simulated wind and weather conditions. By subjecting them to stress in excess of the usual specification, among other things by means of long-term, extreme climate and vibration tests, Nordex ensures that they meet all quality standards and that a high-quality product goes into series production.

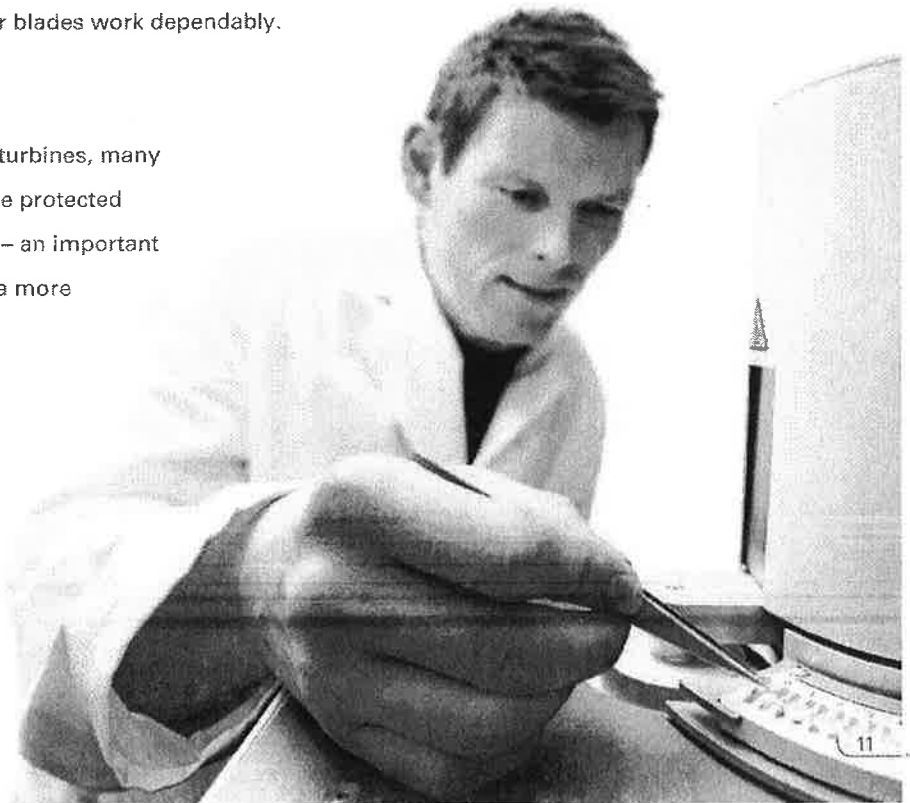
Quality-assured rotor blades


Nordex sets especially high standards when it comes to the materials used for our rotor blades, which can be up to 50 metres in length. Using modern measurement and testing methods, including ultrasound, we monitor the product quality during the entire production process, guaranteeing that the rotor blades work dependably.

➤ *An eye for detail: in the laboratory Nordex checks the materials for the rotor blade.*

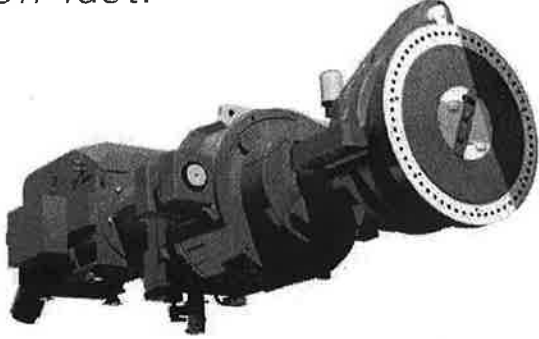
Optimised manufacturing

For the third generation of 2.5 MW turbines, many assembly steps are performed in the protected environment of the production hall – an important step toward quality assurance and a more efficient erection process.

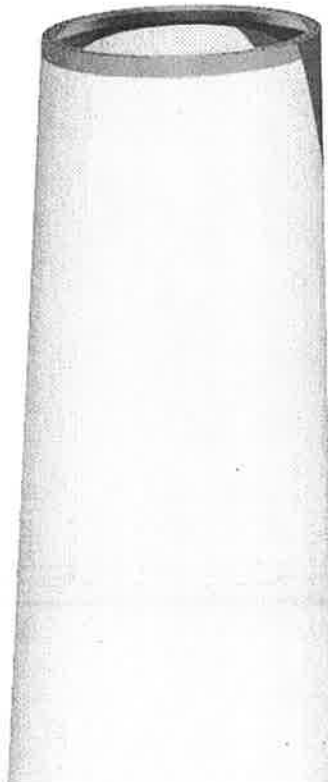




DELIVERY AND
INSTALLATION TIME
*An investment that
pays off fast.*



The N80/2500, N90/2500 and
N100/2500 are based
on a common technical
platform. Modular
design allows us to
add type-specific
components and
customer options.
This special design
enables Nordex to struc-
ture flexible procurement
and production processes.



For our customers this means that once
an order is placed, all the components are
readily available. The modular concept
and the maximum component weight of
50 tonnes make it possible to transport
turbines almost anywhere in the world
and speed up both installation and service.
It is not necessary to use especially large
cranes with extra lifting capacity –
an advantage especially in remote regions.

➤ *Nordex designs wind turbines
using a modular concept, which
facilitates rapid and economic
installation at any site.*

GRID CODE COMPLIANCE

Active support for every grid.

Nordex wind turbines are certified for the grids of the most demanding international markets. They can also be flexibly adapted to new and complex connection requirements.

The turbines feature excellent control of reactive power capability, which stabilises the frequency of the public grid. Consequently, they satisfy all the prerequisites necessary to qualify for the system service bonus (SDL bonus) in Germany*. The turbine can continue to operate during transient voltage dips or surges (fault ride-through). The Nordex wind farm management system also makes it possible for the grid operator to directly control the output of the wind farm to the grid.

Always striving to progress

Our aim is to offer the best power quality on the market. Nordex intensively tests grid connection technology both in the field and on the test bench. For this reason, our wind turbines have long been recognised for quality and dependability of supply equal to or better than that of conventional power plants.

*The requirements concerning the SDL bonus are covered in the System Service Ordinance (SDL/WindV), an additional ordinance to the Renewable Energy Sources Act (EEG) in Germany. It stipulates that electricity generated by new wind turbines, which due to their technical characteristics increase the security and stability of electrical grids, are subject to an additional remuneration of 0.5 euro cents per kilowatt hour above the regular subsidy rate.

➤ *Nordex makes sure that the 2.5 MW turbines always meet the latest grid connection requirements.*





THE N80/2500

A robust turbine for strong winds.

Due to their harsh climate, many good wind locations around the globe require a turbine with perfected, robust technology. The IEC-1a-certified N80/2500 is thus designed especially for regions where a constant strong wind blows. This turbine is the first choice in terms of price/performance ratio for extreme wind conditions.

With the N80/2500, our customers have a wind turbine for secure yields in unfavourable climates.

➤ *The N80/2500 is the pioneer of our successful 2.5 MW product family. In 2000, this was the first series wind turbine of this power class in the world to go into operation.*

FACTS AND FIGURES

N80/2500

Operating data

Rated power	2,500 kW
Cut-in wind speed	Approx. 3 m/s
Cut-out wind speed	Approx. 25 m/s

Rotor

Diameter	80 m
Swept area	5,026 m ²
Speed	10.8 –18.9 rpm
Max. tip speed	Approx. 80 m/s
Rotor bearing	Spherical roller bearing
Power regulation	Individual electromechanically driven pitch system

Gearbox

Type	Two-stage planetary gearbox with one spur-gear stage or differential gearbox
Ratio	1 : 68.3

Generator

Type	Double-fed asynchronous generator with cascade converter, liquid-cooled
Voltage (frequency)	660 V (50 Hz)
Speed	740 –1,300 rpm

Yaw system

Drive	3 – 4 asynchronous motors with integrated brakes
Brake	Hydraulic disk brake

Control

Type	Nordex Control™ (PLC) with remote control, remote monitoring and data reporting
Grid connection	Via IGBT converter
Visualisation	PC in switch cabinet, web-based access from any PC, laptop connection at base of tower and in nacelle

Brake system

Primary brake	Rotor blade pitch (3 independent systems with emergency power supply)
Secondary brake	Hydraulic disk brake

Lightning protection Fully compliant with EN 62305

Tower

Type	Modular tubular steel tower
Rotor hub height/Certificates	60 m IEC 1a 70 m IEC 1a 80 m IEC 1a, DIBt 3

POWER CURVE N80/2500

Wind speed (m/s)	Power (kW)
3,5	12
4,0	48
4,5	93
5,0	147
5,5	212
6,0	288
6,5	376
7,0	479
7,5	596
8,0	728
8,5	872
9,0	1.026
9,5	1.189
10,0	1.358
10,5	1.530
11,0	1.703
11,5	1.873
12,0	2.024
12,5	2.148
13,0	2.250
13,5	2.331
14,0	2.394
14,5	2.440
15,0	2.472
15,5	2.491
16,0	2.499
16,5 - 25,0	2.500





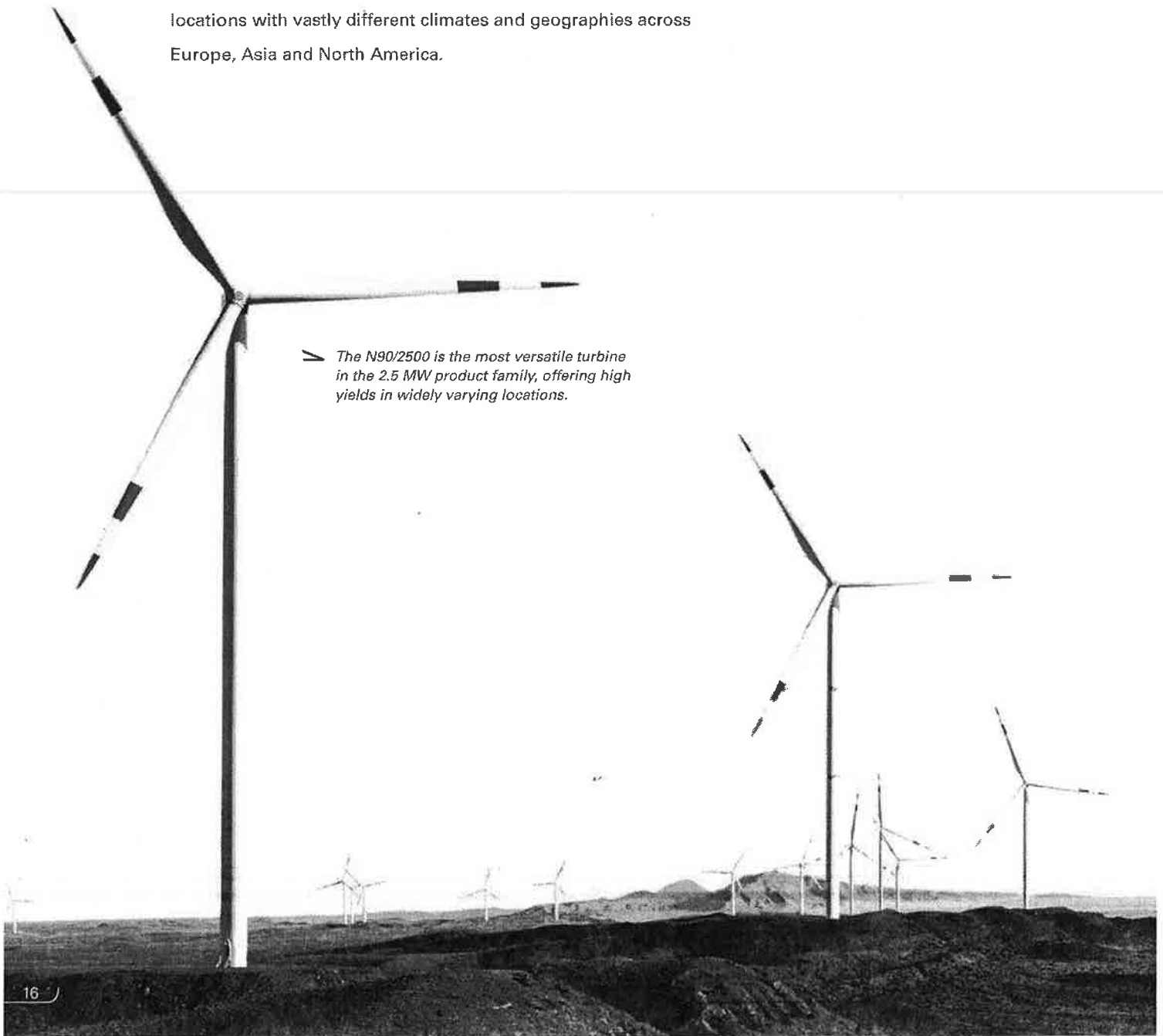
THE N90/2500

A versatile globetrotter.

As an all-round turbine in the 2.5 MW product line, the N90/2500 can be deployed at almost any location in the world. Nordex offers it in the high-speed (HS) version, in the noise-reduced low-speed (LS) version as well as with the option of a frequency of 50 or 60 Hertz. With different tower heights, it covers the wind classes IEC 1b, 2a and 3a.

This makes the N90/2500 our most versatile 2.5 MW turbine and the classic in the series. Hundreds are in operation at various locations with vastly different climates and geographies across Europe, Asia and North America.

➤ *The N90/2500 is the most versatile turbine in the 2.5 MW product family, offering high yields in widely varying locations.*



FACTS AND FIGURES

N90/2500	
Operating data	
Rated power	2,500 kW
Cut-in wind speed	Approx. 3 m/s
Cut-out wind speed	Approx. 25 m/s
Rotor	
Diameter	90 m
Swept area	6,362 m ²
Speed	LS: 9.6–16.8 rpm, HS: 10.3–18.1 rpm
Max. tip speed	LS: approx. 70 m/s HS: approx. 75 m/s
Rotor bearing	Spherical roller bearing
Power regulation	Individual electromechanically driven pitch system
Gearbox	
Type	Two-stage planetary gearbox with one spur-gear stage or differential gearbox
Ratio	LS: 1 : 77.5 (50 Hz)/1 : 93.2 (60 Hz) HS: 1 : 72.0 (50 Hz)/1 : 86.3 (60 Hz)
Generator	
Type	Double-fed asynchronous generator with cascade converter, liquid-cooled
Voltage (frequency)	660 V (50/60 Hz)
Speed	740–1,300 rpm (50 Hz)/890–1,560 rpm (60 Hz)
Yaw system	
Drive	3–4 asynchronous motors with integrated brakes
Brake	Hydraulic disk brake
Control	
Type	Nordex Control™ (PLC) with remote control, remote monitoring and data reporting
Grid connection	Via IGBT converter
Visualisation	PC in switch cabinet, web-based access from any PC, laptop connection at base of tower and in nacelle
Brake system	
Primary brake	Rotor blade pitch (3 independent systems with emergency power supply)
Secondary brake	Hydraulic disk brake
Lightning protection	Fully compliant with EN 62305
Tower	
Type	Modular tubular steel tower
Rotor hub height/Certificates	LS: 80 m IEC 2a, DIBt 3 100 m IEC 3a, DIBt 2 HS: 70 m IEC 1b 80 m IEC 1b

POWER CURVE N90/2500 HS/LS		
Wind speed (m/s)	Power (kW)	
	HS	LS
3,5	17	27
4,0	62	73
4,5	119	129
5,0	188	197
5,5	269	277
6,0	363	371
6,5	472	480
7,0	599	608
7,5	746	754
8,0	912	916
8,5	1,097	1,092
9,0	1,299	1,279
9,5	1,515	1,473
10,0	1,744	1,671
10,5	1,969	1,870
11,0	2,149	2,054
11,5	2,288	2,203
12,0	2,389	2,317
12,5	2,456	2,399
13,0	2,492	2,455
13,5	2,500	2,487
14,0	2,500	2,499
14,5 - 25,0	2,500	2,500





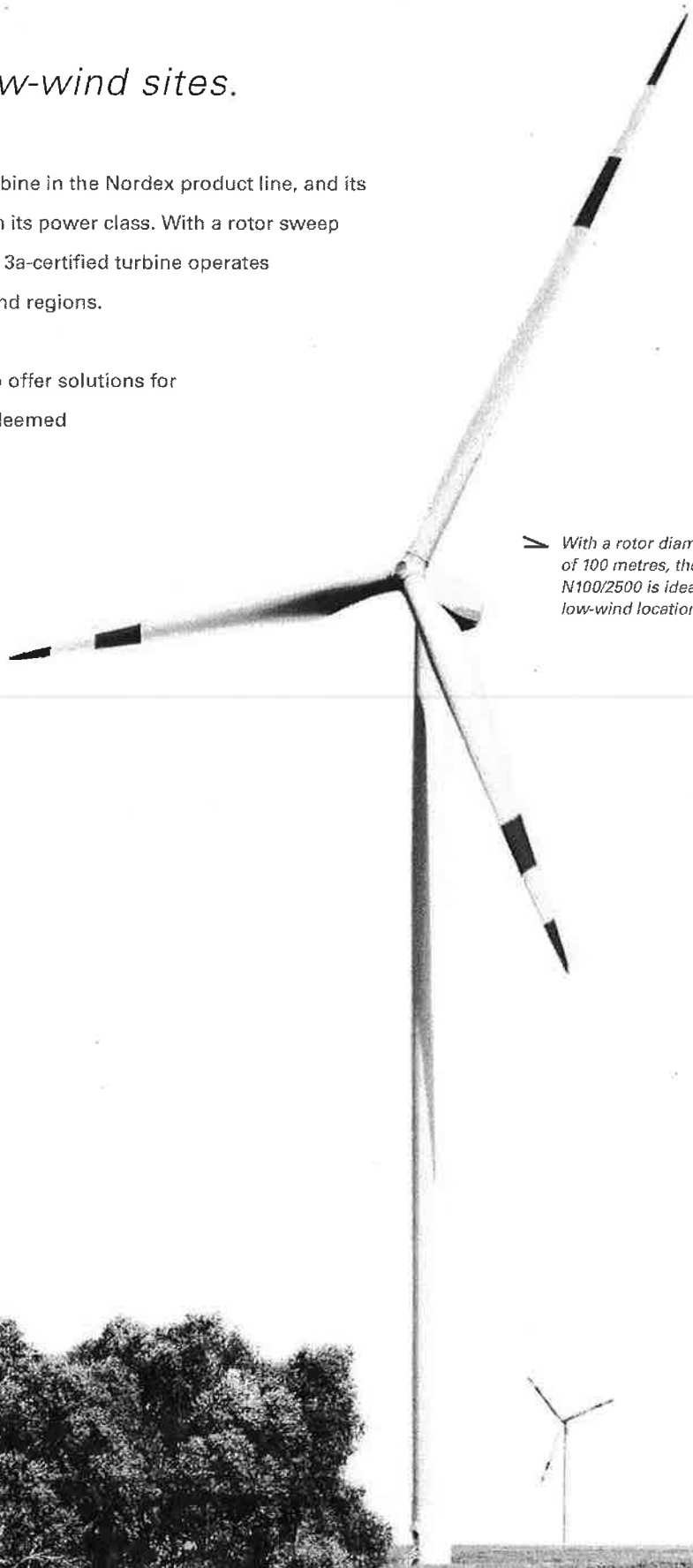
THE N100/2500

High yield for low-wind sites.

The N100/2500 is the largest turbine in the Nordex product line, and its yield rates among the highest in its power class. With a rotor sweep of 7,854 square metres, this IEC 3a-certified turbine operates particularly profitably in low-wind regions.

Consequently, Nordex is able to offer solutions for locations that previously were deemed unprofitable.

➤ *With a rotor diameter of 100 metres, the N100/2500 is ideal for low-wind locations.*



FACTS AND FIGURES

N100/2500	
Operating data	
Rated power	2,500 kW
Cut-in wind speed	Approx. 3 m/s
Cut-out wind speed	Approx. 20 m/s
Rotor	
Diameter	100 m
Swept area	7,854 m ²
Speed	9.6–14.9 rpm
Max. tip speed	Approx. 77 m/s
Rotor bearing	Spherical roller bearing
Power regulation	Individual electromechanically driven pitch system
Gearbox	
Type	Two-stage planetary gearbox with one spur-gear stage or differential gearbox
Ratio	1:77.5 (50 Hz)/1:93.2 (60 Hz)
Generator	
Type	Double-fed asynchronous generator with cascade converter, liquid-cooled
Voltage (frequency)	660 V (50/60 Hz)
Speed	740–1,300 rpm (50 Hz)/890–1,560 rpm (60 Hz)
Yaw system	
Drive	4 asynchronous motors with integrated brakes
Brake	Hydraulic disk brake
Control	
Type	Nordex Control™ (PLC) with remote control, remote monitoring and data reporting
Grid connection	Via IGBT converter
Visualisation	PC in switch cabinet, web-based access from any PC, laptop connection at base of tower and in nacelle
Brake system	
Primary brake	Rotor blade pitch (3 independent systems with emergency power supply)
Secondary brake	Hydraulic disk brake
Lightning protection	
	Fully compliant with EN 62305
Tower	
Type	Modular tubular steel tower Hybrid tower (140 m)
Rotor hub height/Certificates	80 m IEC 3a 100 m IEC 3a, DIBt 2 140 m IEC 3a, DIBt 2

POWER CURVE N100/2500	
Wind speed (m/s)	Power (kW)
3,5	34
4,0	88
4,5	155
5,0	237
5,5	333
6,0	448
6,5	582
7,0	738
7,5	919
8,0	1.123
8,5	1.351
9,0	1.604
9,5	1.845
10,0	2.043
10,5	2.200
11,0	2.321
11,5	2.409
12,0	2.467
12,5	2.495
13,0	2.500
13,5	2.500
14,0	2.500
14,5 - 20,0	2.500



WE ARE REPRESENTED with offices and subsidiaries worldwide.

Nordex SE

Bornbarch 2, 22848 Norderstedt
Germany
Phone: +49 40 30030 1000
Fax: +49 40 30030 1101
E-mail: info@nordex-online.com

Service

Nordex Energy GmbH

Bornbarch 2, 22848 Norderstedt
Germany
Phone: +49 40 30030 1209
Fax: +49 40 30030 1301
E-mail: info@nordex-online.com

Germany

Nordex Energy GmbH

Centroallee 263a, 46047 Oberhausen
Germany
Phone: +49 208 8241 120
Fax: +49 208 8241 105
E-mail: SalesGermany@nordex-online.com

Denmark, Norway, Baltic countries

Nordex Energy GmbH

Niels Bohrs Vej 12 B, 8000 Kolding, Denmark
Phone: +45 75 73 44 00
Fax: +45 75 73 41 47
E-mail: SalesDenmark@nordex-online.com

UK

Nordex UK Ltd.

Suite 4, Egerton House
The Towers Business Park, Wilmslow Road,
Didsbury M20 2DX, United Kingdom
Phone: +44 161 445 99 00
Fax: +44 161 445 99 88
E-mail: SalesUK@nordex-online.com

Ireland

Nordex Energy Ireland Ltd.

Clonmel House, Forster Way
Swords, Co. Dublin, Ireland
Phone: +353 1 897 0260
Fax: +353 1 897 0299
E-mail: SalesIreland@nordex-online.com

Austria, South-east Europe

Nordex Energy GmbH

Am Wassen 20, 4755 Zell an der Pram
Austria
Phone: +43 7764 69259
Fax: +43 7764 69259 20
E-mail: SalesAustria@nordex-online.com

Spain

Nordex Energy Ibérica S.A.

Pso. de la Castellana, 23 2º-A
28046 Madrid, Spain
Phone: +34 91 7000356
Fax: +34 91 3199388
E-mail: SalesSpain@nordex-online.com

Sweden, Finland

Nordex Sverige AB

Kungsängsvägen 21, 75323 Uppsala, Sweden
Phone: +46 18 185 900
Fax: +46 18 185 927
E-mail: SalesSweden@nordex-online.com

BeneLux

Nordex Energy GmbH Benelux

It Reidlân 79, 8502 CE Joure, Netherlands
Phone: +31 513 41 23 54
Fax: +31 513 41 85 88
E-mail: SalesBenelux@nordex-online.com

Italy

Nordex Italia S.r.l.

Viale Città d'Europa 679, 00144 Roma, Italy
Phone: +39 06 83 46 30 1
Fax: +39 06 83 46 30 60
E-mail: SalesItaly@nordex-online.com

Poland

Nordex Polska SP z o.o.

Ul. Kruczkowskiego 12, 80-288 Gdansk, Poland
Phone: +48 58 7320260
Fax: +48 58 7320269
E-mail: SalesPoland@nordex-online.com

Turkey

Nordex enerji A.Ş.

Havaalanı Kavşağı EGS Business Park Blok1an
B3 Blok Kat: 16 No: 462, Yeşilköy/İstanbul,
Turkey
Phone: +90 212 465 36 03
Fax: +90 212 465 36 04
E-mail: SalesTurkey@nordex-online.com

France

Nordex France S.A.S.

1, Rue de la Procession
93217 La Plaine Saint-Denis, France
Phone: +33 1 55 93 43 43
Fax: +33 1 55 93 43 40
E-mail: SalesFrance@nordex-online.com

Rest of the world

Nordex Energy GmbH

Bornbarch 2, 22848 Norderstedt, Germany
Phone: +49 40 30030 1490
Fax: +49 40 30030 1491
E-mail: info@nordex-online.com

USA, North America

Nordex USA, Inc.

300 South Wacker Drive, Suite 1500
Chicago, Illinois 60606, USA
Phone: +1 312 386 4100
Fax: +1 312 386 4101
E-mail: SalesUSA@nordex-online.com

Asia

Nordex China

Room 808, First Shanghai Center, No. 39
Liangmaqiao Road, Chaoyang District
Beijing 100125, P. R. China
Phone: +86 10 84 53 51 88
Fax: +86 10 84 53 51 88
E-mail: SalesChina@nordex-online.com

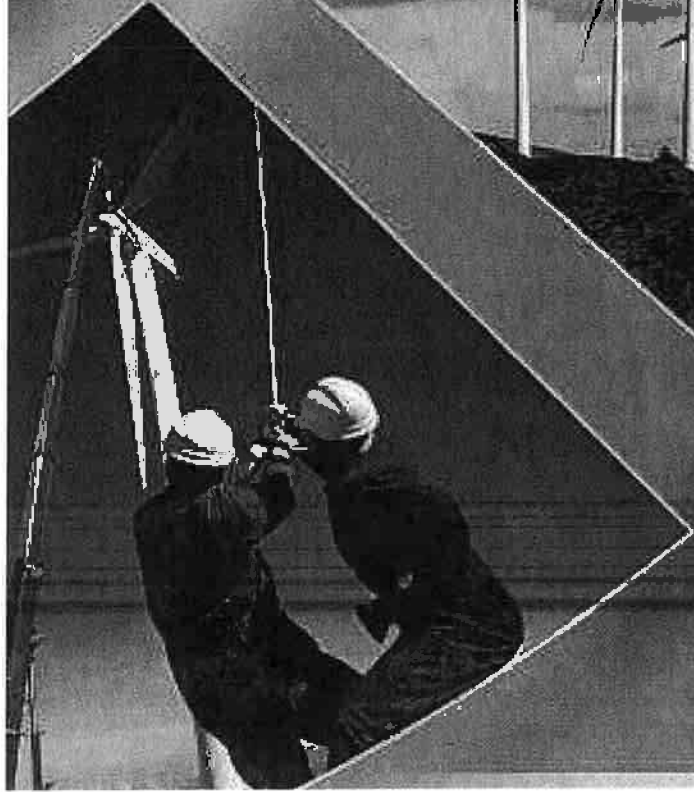
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As of: 04/2010



**Gamesa
G52-850 kW**

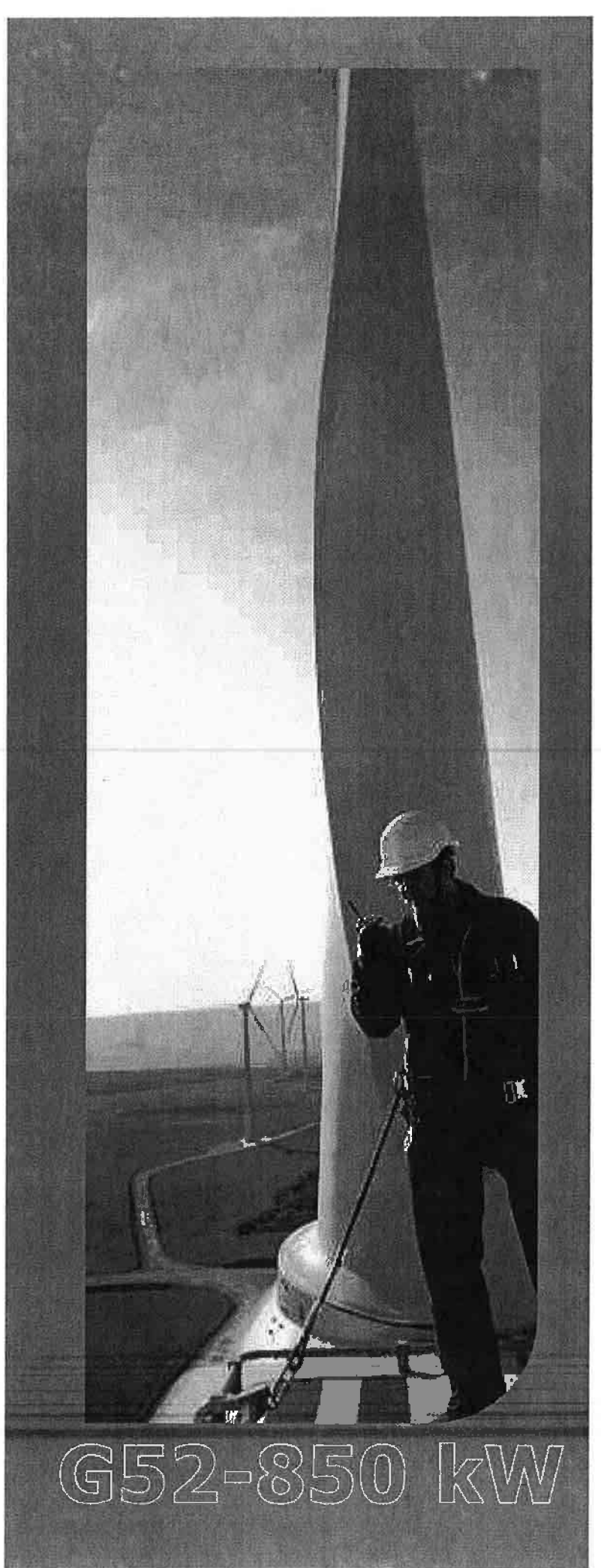


Gamesa 

Benefits

Optimum performance for medium and high winds

- ▶ Class IA for high wind sites.
- ▶ Pitch and variable speed technology to maximize energy production.
- ▶ Production of lighter blades using fiberglass and prepreg method.
- ▶ Compliance with the main international Grid Codes.
- ▶ Aerodynamic design and Gamesa NRS® control system to minimize noise emissions.
- ▶ Gamesa WindNet®: Remote monitoring and control system with Web access.
- ▶ Over 7,700 Gamesa G5X-850 kW wind turbines installed.



G52-850 kW

Rotor

Diameter	52 m
Swept area	2,124 m ²
Rotational speed	Variable 14.6 - 30.8 rpm, tower 55 and 65m Variable 16.2 - 30.8 rpm, tower 44m
Rotational direction	Clock Wise (front view)
Weight (incl. Hub)	Approx. 10 T
Top head mass	Approx. 33 T

Blades

Number of blades	3
Length	25.3 m
Airfoils	NACA 63.XXX + FFA-W3
Material	Epoxy reinforced glass fiber
Total blade weight	1,900 kg

Tubular Tower

Modular type	Height	Weight
2 sections	44 m	45 T
2 sections	49 m	53 T
3 sections	55 m	62 T
3 sections	65 m	79 T

Gearbox

Type	1 planetary stage / 2 helical stages
Ratio	1:61.74 (50 Hz) 1:74.5 (60 Hz)
Cooling	Oil pump with oil cooler
Oil heater	1.5 kW

Generator 850 kW

Type	Doubly-fed machine
Rated power	850 kW
Voltage	690 V ac
Frequency	50 Hz / 60 Hz
Protection class	IP 54
Number of poles	4
Rotational speed	1,000:1,950 rpm (50 Hz) 1,320:2,340 rpm (60 Hz)
Rated Stator Current	670 A @ 690 V
Power factor (standard)	0.95 CAP - 0.95 IND at partial loads and 1 at nominal power.*
Power factor (optional)	0.95 CAP - 0.95 IND throughout the power range.*

* Power factor at generator output terminals, on low voltage side before transformer input terminals.

Mechanical design

Drive train with main shaft supported by two spherical bearings that transmit the side loads directly to the frame by means of the bearing housing. This prevents the gearbox from receiving additional loads, reducing malfunctions and facilitating its service.

Brake

Aerodynamic primary brake by means of full-feathering blades. In addition, a hydraulically-activated mechanical disc brake for emergencies is mounted on the gearbox high speed shaft.

Lightning protection

The Gamesa G52-850 kW wind turbine generator uses the "total lightning protection" system, in accordance with standard IEC 61024-1. This system conducts the lightning from both sides of the blade tip down to the root joint and from there across the nacelle and tower structure to the grounding system located in the foundations. As a result, the blade and sensitive electrical components are protected from damage.

Control System

The Generator is a doubly fed machine (DFM), whose speed and power is controlled through IGBT converters and PWM (Pulse Width Modulation) electronic control.

Benefits:

- ▶▶ Active and reactive power control.
- ▶▶ Low harmonic content and minimal losses.
- ▶▶ Increased efficiency and production.
- ▶▶ Prolonged working life of the turbine.

Gamesa WindNet®

The new generation SCADA System (a wind farm control system) entirely developed by Gamesa allows realtime operation and remote control of wind turbines, meteorological mast and the electrical substation. This innovative modular design based on TCP/IP architecture has tools for controlling active and reactive energy, voltage and frequency. It also contains environmental options to optimize the production to perfectly comply with regulations currently in force. The intuitive remote web client employs a very friendly user interface. The system includes analytical tools for decision-making, Report Generator and Information Manager and TrendViewer, to give a sharp, clear view of trends.

SMP Predictive Maintenance System

Predictive Maintenance System for the early detection of potential deterioration or malfunctions in the wind turbine's main components.

Benefits:

- ▶▶ Reduction in major corrective measures.
- ▶▶ Increase in the machine's availability and working life.
- ▶▶ Preferential terms in negotiations with insurance companies.
- ▶▶ Integration within the control system.

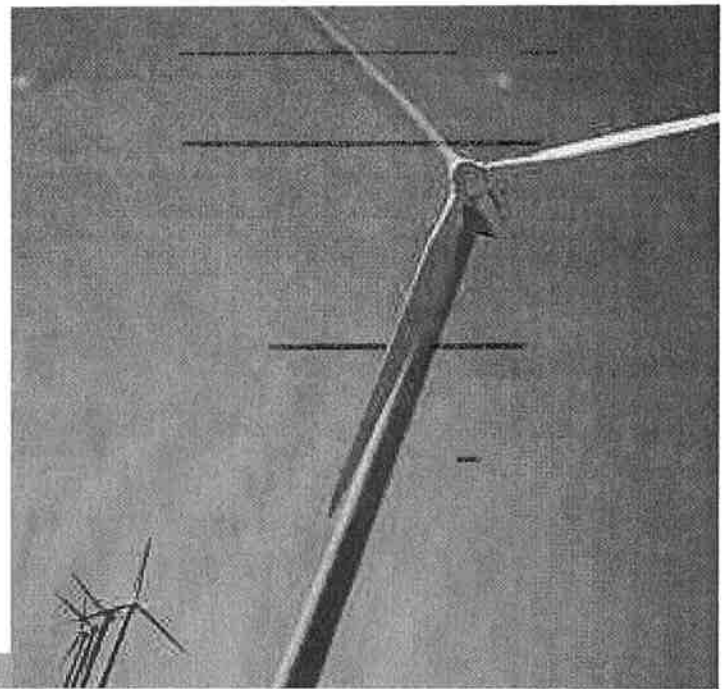
Noise control

Aerodynamic blade tip and mechanical component design minimize noise emissions. In addition, Gamesa has developed the Gamesa NRS® noise control system, which permits programming the noise emissions according to criteria such as date, time or wind direction. This achieves the goals of local regulation compliance as well as maximum production.

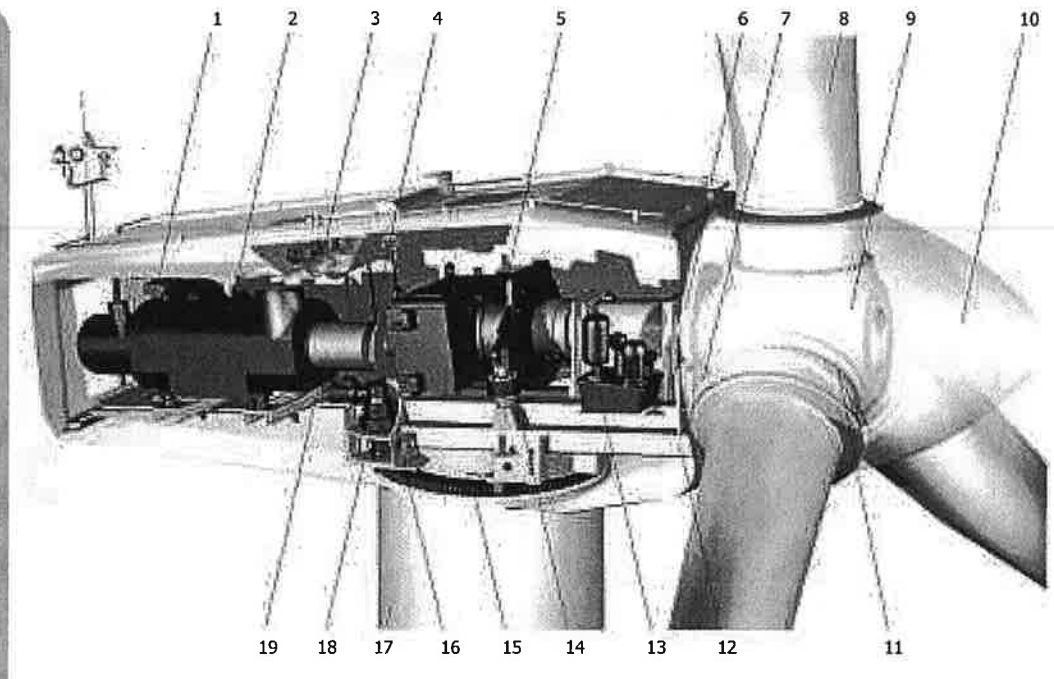
Grid connection

Gamesa's doubly-fed wind turbines and Active Crowbar and over sized converter technologies ensure compliance with the most demanding grid connection requirements.

Low voltage ride-through capability and dynamic regulation of active and reactive power.



- 1 Service crane
- 2 Generator
- 3 Cooling system
- 4 Top control unit
- 5 Gearbox
- 6 Main shaft with two bearings
- 7 Rotor lock system
- 8 Blade
- 9 Hub
- 10 Hub cover
- 11 Blade bearing
- 12 Bed frame
- 13 Hydraulic unit
- 14 Shock absorbers
- 15 Yaw ring
- 16 Brake
- 17 Tower
- 18 Yaw gears
- 19 Transmission, High speed shaft

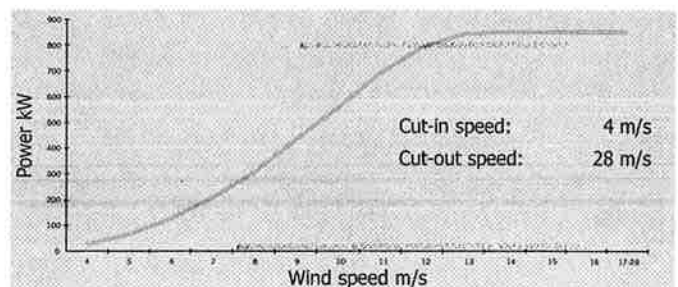


Power Curve Gamesa G52-850kW

(for an air density of 1.225 kg/m³)

Power curve calculation based on NACA 63.XXX and FFA-W3 airfoils.

Calculation parameters: 50 Hz grid frequency; tip angle pitch regulated, 10% turbulence intensity and a variable rotor speed ranging from 14.6 - 30.8 rpm.



Gamesa



C/ Ciudad de la Innovación, 9-11
31621 Sarriena (Spain)
Tel: +34 948 771000
Fax: +34 948 165039
Info@gamesacorp.com
www.gamesacorp.com

CHINA

Room 605,
CBD International Building
N.º 16, Yong An Dong Li,
Chaoyang District,
Beijing 100022
Tel.: +86 10 85679888
Fax: +86 10 85669666

DENMARK

Vejlsøvej 51
8600 Silkeborg
Te.: +45 87 229203 / 9204
Fax: +45 87 229281

EGYPT

12 Dar el Shefa Street 3th. Floor,
Garden City- Cairo
Tel: +20 160642424
Fax: +20 227951866

FRANCE

118-122 Avenue de France
75013 Paris
Tel: +33 1 46461423

GERMANY

Wailandstrasse 7
63741 Aschaffenburg
Tel: +49 (0) 6021 15 09 0
Fax: +49 (0) 6021 15 09 199
igermany.wind@gamesacorp.com

INDIA

N.º 469, GNT Road, Thandal Kappan Village
Vadagarai Post, Redhills, Chennai-600 052
Tel: +91 44 3098 9898
sales.india@gamesacorp.com

ITALY

Via Mentore Maggini 48/56
00143 Rome
Tel: +39 0645543650
Fax: +39 0645553874

JAPAN

Daewa Jisho Building 4F - 411
2-1 Naka-ku,
Yamashita-cho
Yokohama-city 231-0023
Kanagawa
Tel: +81 45 680 50 80
Fax: +81 45 680 50 81

MOROCCO

345, Lot Gzennaya A B.P 397
Tangier (Boukhalef)
Tel: +212 539 393308/09
Fax: +212 539 393312

POLAND

Gdansk
Tel: +48 602 692 792

UNITED STATES

2050 Cabot Boulevard West
Langhorne, PA 19047
Tel: +1 215 710 3100
Fax: +1 215 741 4048

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CHANNEL ISLANDS ACOUSTICS
676 WEST HIGHLAND DRIVE
CAMARILLO, CA 93010
805-484-8000 FAX 805-482-5075
bwalker@channelislandsacoustics.com

WIND TURBINE NOISE ANALYSIS
FOR
WECS #71 DEVELOPMENT ADDITIONS
USING NORDEX TYPE N80/2500 WIND TURBINES
ALTA MESA, SECTION 3, R. 3 E. / T. 3 S.
RIVERSIDE COUNTY, CALIFORNIA

March 26, 2010
Revised April 7, 2010

Prepared for

TenderLand Power Company, Inc.
250 E. 5th Street, Suite 1500
Cincinnati, OH 45202

Prepared by



Bruce Walker, Ph.D., INCD Bd. Cert.

INTRODUCTION

TenderLand Power Company proposes to add 27 Nordex type N80/2500 wind turbines to its existing WECS 71 project on Alta Mesa in Riverside County, CA, while deleting some of the smaller old turbines and resulting in a net reduction in the total number of turbines and the total noise emissions.. Based on available noise emissions data for these turbines and field data for the existing turbines on WECS 71, noise levels from the proposed turbines would be below 40 dB at the nearest existing residences in the Bonnie Bell community and undeveloped property approximately 2000 feet southerly of Bonnie Bell.

PROJECT DESCRIPTION

The project will result in a mix of turbine types as shown in Figure 1. It may be noted that the proposed Nordex Turbines will be in lieu of some of the Gamesa Eolica turbines discussed in our letter report of July, 2005. See Figure 2 for reference.

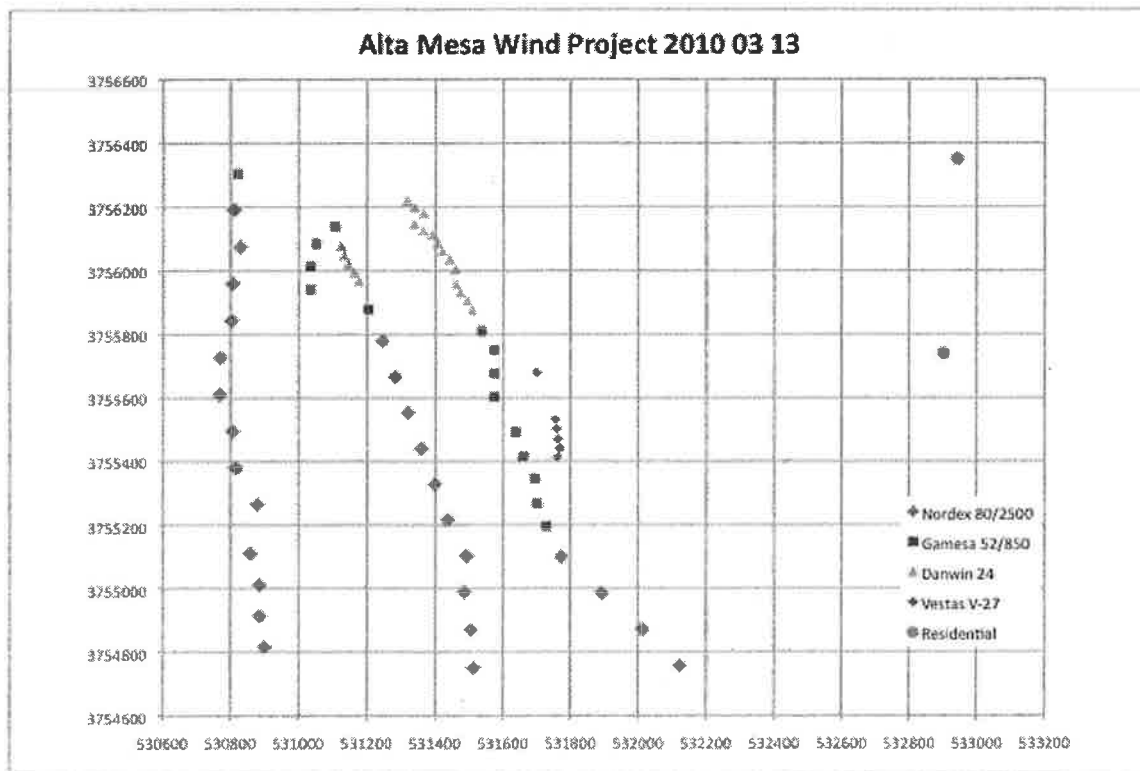


Figure 1. Proposed Turbine Layout and Location of Nearest Existing and Potential Residential Uses

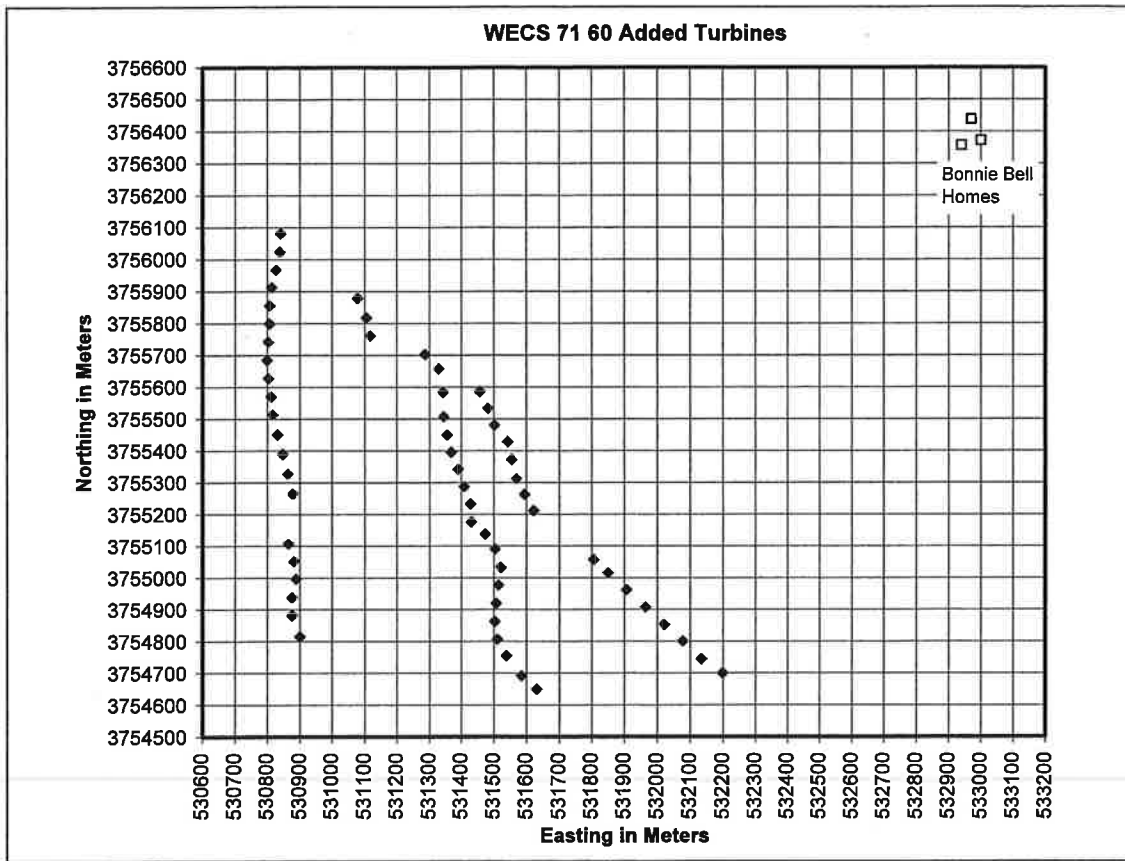


Figure 2 – Previously Proposed Gamesa Eolica Layout and Bonnie Bell Residence Locations

The wind turbines proposed for use in this project are Nordex type N80/2500. These are 80 meter diameter three-blade, variable pitch, upwind rotor turbines, mounted atop rolled steel towers of height 60 meters. Noise emission guarantees from the manufacturer are shown in **Figure 3**

Noise Emission Nordex N80		
Warranty levels		
according to IEC 61400-11:2002		
Hub height \leq 80 m		
Standardised wind speed (at 10 m height)	Apparent sound power level	Tonal audibility
V_s [m/s]	L_{WA} [dB(A)]	ΔL_s [dB]
4	98.0	≤ 4
5	100.5	≤ 4
6	102.5	≤ 4
7	103.0	≤ 4
8	103.5	≤ 4
9	104.0	≤ 4
10	104.0	≤ 4
11	104.5	≤ 4
12	105.0	≤ 4

Figure 3. Noise vs Wind Speed Guarantees for Nordex N80

The frequency spectra for 8 and 10 meter per second winds as shown in Figure 4 show that over the frequency range 25-10,000 Hz, the turbine noise is free of pronounced spectral peaks.

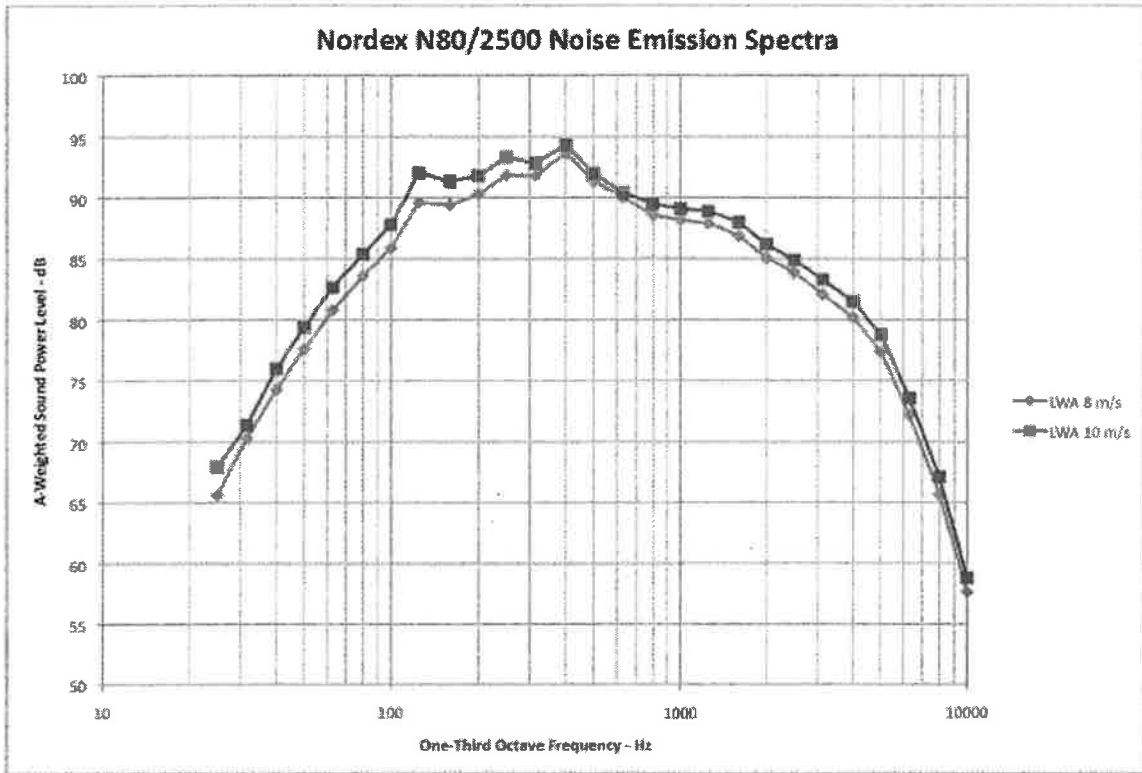


Figure 4. One-Third Octave Noise Emission Spectrum for Nordex N80/2500

OFF-SITE NOISE LEVELS

Noise contours were computed for the project based on established noise emission levels for turbines in Phases I-III and the proposed new turbines, assuming downwind radiation applies to all directions. The contours were computed using ISO-9613 in SoundPLAN 7.0, assuming Ground Effect 0.6, 10 C temperature and 70% Relative Humidity. Turbine locations and sound power levels and topographic features are included in the calculations.

Figure 5 shows the proposed Nordex turbine array and noise level contours in 5 dB increments, surrounding the site by about one mile in each direction.

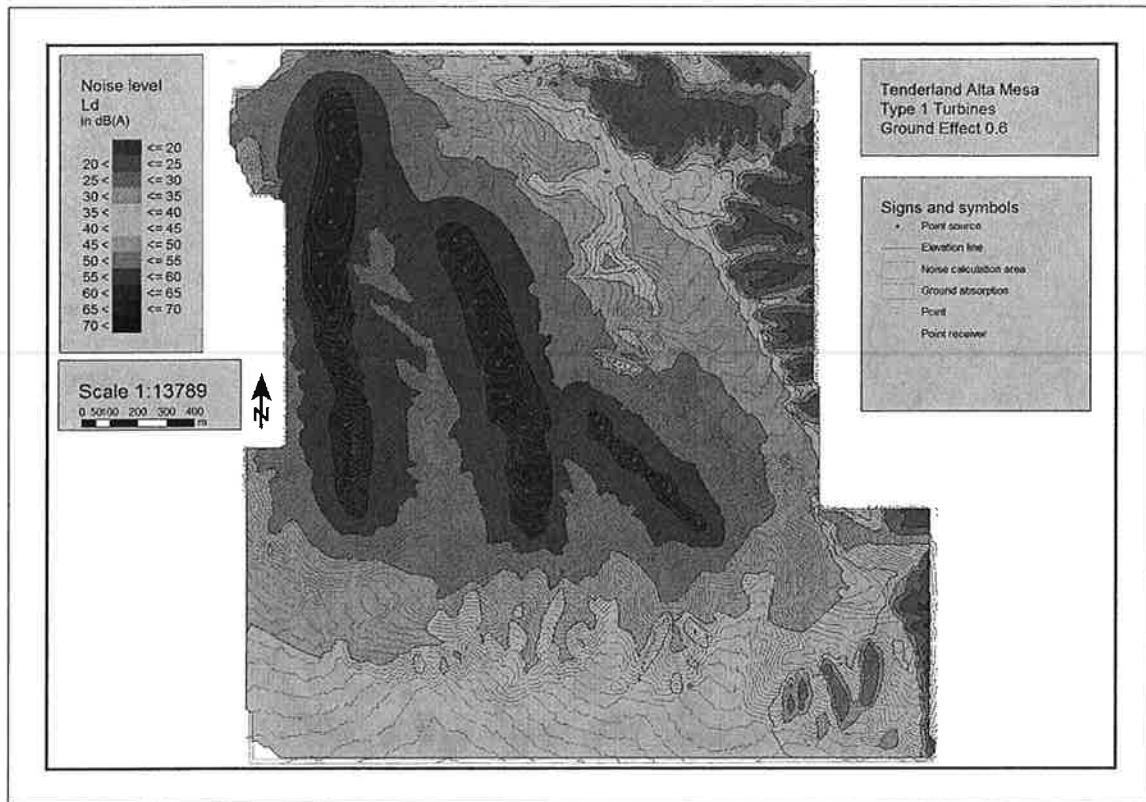


Figure 5 - Computed 5 dB Noise Contours Surrounding WECS 71 Proposed Nordex Turbines. Existing Residences are Represented by Small Yellow Dot at Upper Right Corner.

Figure 6 shows computed noise contours for the facility with all proposed turbines included. The predicted overall noise levels are below 40 dB at the residences, consistent with measurement data taken in prior years.

On this basis, it is expected that Bonnie Bell noise levels resulting from the combination of proposed and existing turbines would be in the range 39-40 dB. Note also that Riverside County currently applies a 55 dB noise criterion for new and retrofit WECS projects, so that the 45 dB criterion for WECS 71 is quite conservative.

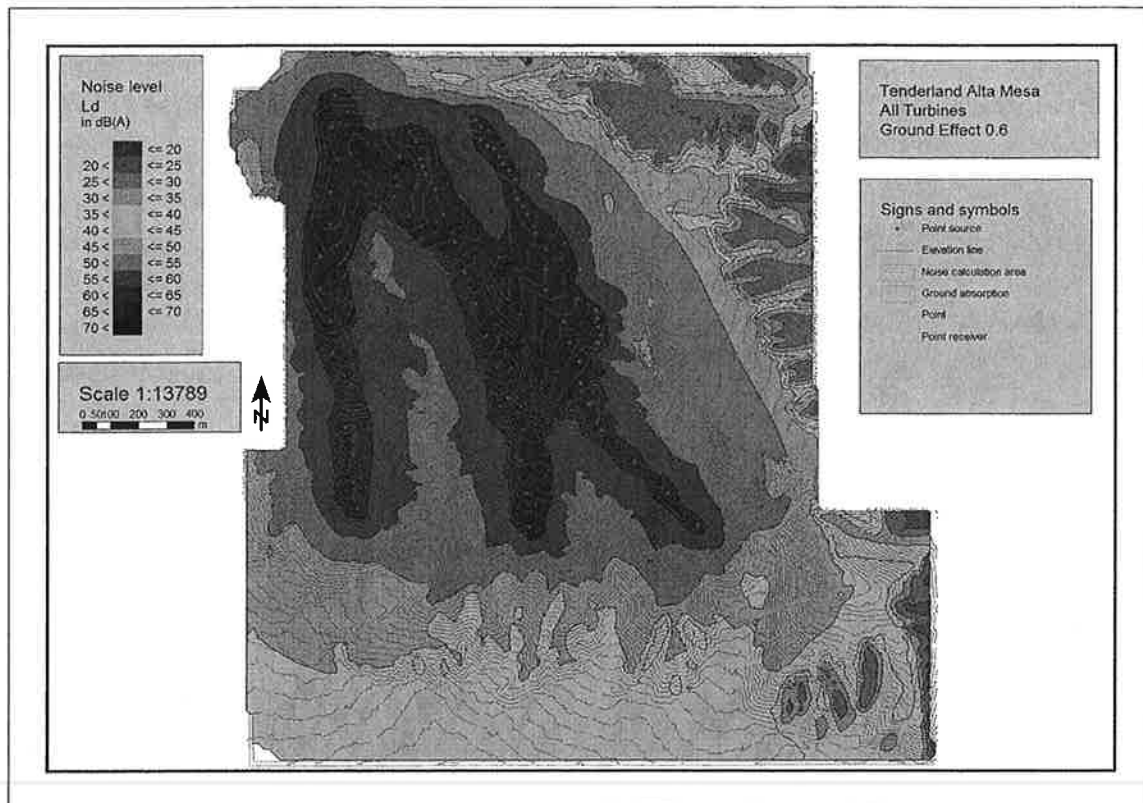



Figure 6 - Approximate 5 dB Noise Contours for WECS 71 with All Proposed Turbines. Existing Residences are Represented by Small Yellow Dot at Upper Right Corner.

SUMMARY

- 27 ea. Nordex N80/2500 are proposed as substitutes for Gamesa Eolica G52 wind turbines as additions to WECS 71, Section 3, R. 3 E. / T. 3 N. in Riverside County.
- Noise emission measurements for the proposed new turbines indicate a reference A-weighted sound power level 103-105 dB re 1 pW (approximately 53-55 dB sound level at 400 ft)
- Computed off-site noise level at the nearest residences in Bonnie Bell Community are below 40 dB per ISO-9613 as implemented in SoundPLAN 7.0
- Off-site noise levels for the combined project are predicted to comply with the Riverside County 45 dB noise criterion for WECS 71 at existing residences.
- Overall project noise levels will be substantially below the new Riverside County WECS noise standard of 55 dB.

REFERENCES

	NORDEX N80 Noise levels	Doc. No.: F008_158_EN Revision: 2 Date: 2005 Oct 18
Department responsible: Central Engineering/PDE	Project:	Classification: PB – Public
Created G. Potzka/Sales	Checked H. Resing-Wörmer/CE FAM	Released G. Steininger/CE PDE
		Status: FI – Final

Document will be published electronically – Original with signatures at "Department responsible".

"Acoustical measurement report of WECS 71 noise levels in Bonnie Bell community, Riverside County, California," Hersh Walker Acoustics, October 9, 2000

"WIND TURBINE NOISE ANALYSIS FOR WECS #71 PHASE V DEVELOPMENT ALTA MESA, SECTION 3, R. 3 E. / T. 3 S, RIVERSIDE COUNTY, CALIFORNIA" Hersh Walker Acoustics, November 13, 2000

"WIND TURBINE NOISE ANALYSIS FOR WECS #71 DEVELOPMENT ADDITIONS USING GAMESA EOLICA TYPE G 52 ALTA MESA, SECTION 3, R. 3 E. / T. 3 S. RIVERSIDE COUNTY, CALIFORNIA" Channel Islands Acoustics, July, 2005

PROPERTY OWNERS CERTIFICATION FORM

I, VINNIE NGUYEN, certify that on 10/7/2010.

The attached property owners list was prepared by Riverside County GIS,

APN (s) or case numbers WCS0007154 For

Company or Individual's Name Planning Department,

Distance buffered 2640'.

Pursuant to application requirements furnished by the Riverside County Planning Department, Said list is a complete and true compilation of the owners of the subject property and all other property owners within 600 feet of the property involved, or if that area yields less than 25 different owners, all property owners within a notification area expanded to yield a minimum of 25 different owners, to a maximum notification area of 2,400 feet from the project boundaries, based upon the latest equalized assessment rolls. If the project is a subdivision with identified off-site access/improvements, said list includes a complete and true compilation of the names and mailing addresses of the owners of all property that is adjacent to the proposed off-site improvement/alignment.

I further certify that the information filed is true and correct to the best of my knowledge. I understand that incorrect or incomplete information may be grounds for rejection or denial of the application.

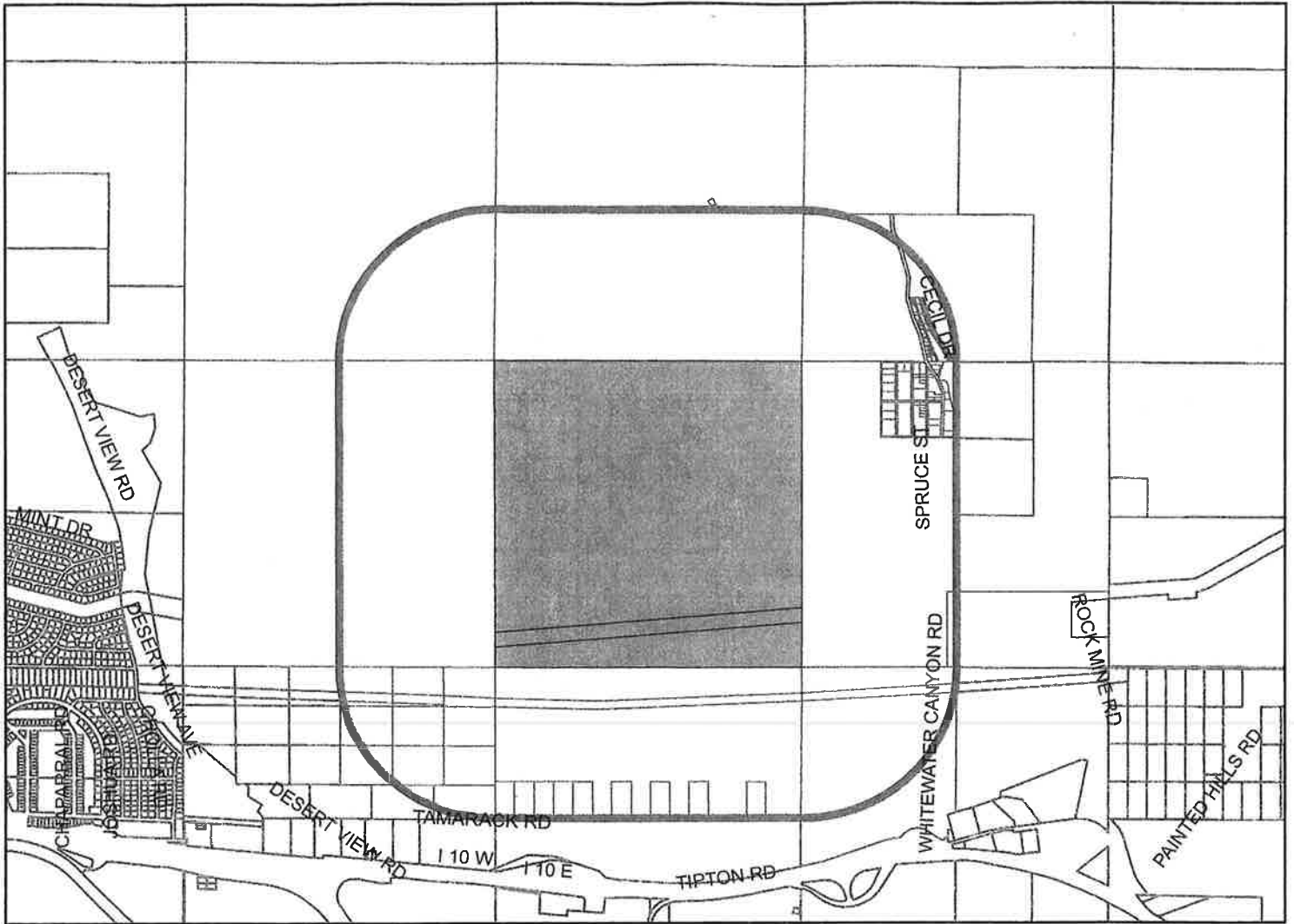
NAME: Vinnie Nguyen

TITLE GIS Analyst

ADDRESS: 4080 Lemon Street 2nd Floor
Riverside, Ca. 92502

TELEPHONE NUMBER (8 a.m. – 5 p.m.): (951) 955-8158

2640 feet buffer



Selected Parcels

514-273-054	514-273-053	514-272-006	516-044-004	514-273-051	516-060-031	514-273-047	514-271-040	514-271-039	516-080-006
516-043-004	516-080-004	514-273-029	514-272-008	514-271-016	514-271-015	514-271-014	514-271-013	514-271-011	514-271-012
514-273-030	516-080-009	514-273-052	514-273-019	514-273-020	514-273-018	514-273-049	516-100-003	516-100-004	516-100-005
514-260-003	514-260-004	514-260-005	514-271-001	514-271-002	514-271-003	514-271-004	514-271-005	514-271-006	514-271-007
514-271-008	514-271-009	514-271-010	514-271-017	514-271-018	514-271-019	514-271-020	514-271-021	514-271-022	514-271-023
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516-043-006	516-044-003	516-051-004	516-051-005	516-051-007	516-052-003	516-053-002	516-053-004	516-053-005	516-053-007

rst 90 parcels shown



3,750 1,875 0 3,750 Feet

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APN: 514272006, ASMT: 514272006
ARNULF DICKMANN
8033 WOODLAND LN
LOS ANGELES CA 90046

APN: 516043004, ASMT: 516043004
BRUCE B MACKENZIE, ETAL
8855 SUTTER CIR APT 515D
HUNTINGTON BEACH CA 92646

APN: 516044004, ASMT: 516044004
BARBARA G FAIRLESS, ETAL
C/O KENNETH D FAIRLESS
6762 LAFAYETTE DR
HUNTINGTON BEACH CA 92647

APN: 516080004, ASMT: 516080004
CARL E LEE
C/O LEONARD KLAMM
2231 BAYSIDE DR
CORONA DEL MAR CA 92625

APN: 514273051, ASMT: 514273051
BARBARA T YORK
11920 CECIL DR
WHITEWATER CA 92282

APN: 514271012, ASMT: 514271012
DANIEL F MCCLEARY, ETAL
2521 W 4TH ST
LOS ANGELES CA 90057

APN: 516060031, ASMT: 516060031
BENITO O MICHEL
16021 E PROMONTORY PL
LA MIRADA CA 90638

APN: 514273030, ASMT: 514273030
DAVID A CROWTHER
11826 CECIL DR
WHITEWATER CA. 92282

APN: 514273047, ASMT: 514273047
BILLEE R DEEMER
P O BOX 6540
PAHRUMP NV 89041

APN: 516080009, ASMT: 516080009
DAVID E FINKELSTEIN, ETAL
P O BOX 480948
LOS ANGELES CA 90048

APN: 514271039, ASMT: 514271039
BRUCE A BOLITHO, ETAL
412 N DOWNEY LN
PLACENTIA CA 92870

APN: 514273052, ASMT: 514273052
EDMOND COHEN, ETAL
11868 CECIL DR
WHITEWATER CA 92282

APN: 516080006, ASMT: 516080006
BRUCE A KAPLAN, ETAL
P O BOX 1543
RANCHO MIRAGE CA 92270

APN: 514273018, ASMT: 514273018
ELEANOR M TROUPE
1655 E PALM CYN DR NO 507
PALM SPRINGS CA 92264

APN: 514273049, ASMT: 514273049
EVELYN ELAINE HANNA
11900 CECIL
WHITE WATER CA 92282

APN: 516080002, ASMT: 516080002
LOIS ELEANOR MOROG
2009 TERRACE LN
LEBENON IN 46052

APN: 516100005, ASMT: 516100005
FISHERMANS WHARF
C/O BERNARD TOHL
848 N LA CIENEGA NO 207
LOS ANGELES CA 90069

APN: 516060017, ASMT: 516060017
MANUEL FLORES RAMIREZ
3593 PERSHING AVE
SAN DIEGO CA 92104

APN: 516056007, ASMT: 516056007
FRIENDS OF THE DESERT MOUNTAINS
P O BOX 1281
PALM DESERT CA 92261

APN: 516060035, ASMT: 516060035
MANUEL PAVON, ETAL
3671 IVYDALE CT
PASADENA CA 91107

APN: 516080005, ASMT: 516080005
HELEN L KLAMM
C/O LEONARD KLAMM
2231 BAYSIDE DR
CORONA DEL MAR CA 92625

APN: 514273050, ASMT: 514273050
MARCUS WYNNE HUGHES
C/O ALBERT E VOGEL
12304 SANTA MONICA BLV 300
LOS ANGELES CA 90025

APN: 516060020, ASMT: 516060020
HSIU CHU TSENG
85 CUTLER RD
GREENWICH CT 6831

APN: 516044001, ASMT: 516044001
MARCUS WYNNE HUGHES, ETAL
C/O EDMOND COHEN
3002 PACIFIC AVE
VENICE CA 90291

APN: 514273042, ASMT: 514273042
JAMES B MACKENZIE, ETAL
P O BOX 339
NEWPORT BEACH CA 92662

APN: 516060018, ASMT: 516060018
MARK TECHNOLOGIES CORP
250 E 5TH ST STE 1500
CINCINNATI OH 45202

APN: 514271030, ASMT: 514271030
KEITH A MEADER
271 ROUND LAKE RD
BALLSTON LAKE NY 12019

APN: 516080001, ASMT: 516080001
MARVIN C LOGAN, ETAL
C/O MARVIN LOGAN
30015 AVE LOS NINOS
CATHEDRAL CITY CA 92234



APN: 516020003, ASMT: 516020003
METROPOLITAN WATER DIST OF SO CALIF
TENDERLAND POWER MARK TECHNOLOGIES
250 E 5TH ST STE 1500
CINCINNATI OH 45202

APN: 516030017, ASMT: 516030017
MWD
C/O GUY WALTERS
700 N ALAMEDA ST NO 3
LOS ANGELES CA 90012

APN: 514273025, ASMT: 514273025
MICHAEL J BICKFORD, ETAL
2260 ORANGE AVE
COSTA MESA CA 92627

APN: 516052008, ASMT: 516052008
OTIS BAINBRIDGE, ETAL
C/O GARY G PERRY
12 RIVER PEBBLE CT
SACRAMENTO CA 95833

APN: 514273027, ASMT: 514273027
MICHAEL J BICKFORD, ETAL
10625 PALM DR
DSRT HOT SPGS CA 92240

APN: 516080008, ASMT: 516080008
PAUL V MC CARTHY, ETAL
1908 TOLL BRIDGE CT
ALEXANDRIA VA 22308

APN: 514273023, ASMT: 514273023
MICHAEL J BICKFORD, ETAL
2260 ORANGE AVE
COSTA MESA CA 92627

APN: 514273011, ASMT: 514273011
PETER JAMES MACKENZIE
STAR RTE 1 BOX 560
WHITEWATER CA 92282

APN: 514273026, ASMT: 514273026
MICHAEL J BICKFORD, ETAL
10625 PALM DR
DSRT HOT SPGS CA 92240

APN: 514273012, ASMT: 514273012
PETER MACKENZIE, ETAL
C/O LAUREN MACKENZIE
11940 WHITEWATER CANYON RD
WHITEWATER CA 92282

APN: 514273024, ASMT: 514273024
MICHAEL J BICKFORD, ETAL
2260 ORANGE AVE
COSTA MESA CA 92627

APN: 516060036, ASMT: 516060036
RICK ALLEN POWELL
21609 LOOP ST
TEHACHAPI CA 93561

APN: 516055009, ASMT: 516055009
MICHAEL JAMES GALLAGHER
P O BOX 3248
PALM SPRINGS CA 92263

APN: 516060023, ASMT: 516060023
ROBERT J HRUSKA
9833 N HIGHLAND PL
KANSAS CITY MO 64155





APN: 516060034, ASMT: 516060034
ROBIN E HARRIS
59511 US HIGHWAY 111
PALM SPRINGS CA 92262

APN: 516030016, ASMT: 516030016
USA 516
NONE
UNKNOWN 03-17-77
0

APN: 514271025, ASMT: 514271025
STEPHEN C NICHOLS, ETAL
879 N PALM CANYON DR
PALM SPRINGS CA 92262

APN: 516080007, ASMT: 516080007
WILFERT EMILIE ESTATE OF
23191 MINDANAO
DANA POINT CA 92629

APN: 516052009, ASMT: 516052009
THEODORE GARLAND
5994 VIA LOMA
RIVERSIDE CA 92506

APN: 516060041, ASMT: 516060041
ZOND SYSTEMS INC
P O BOX 1910
TEHACHAPI CA 93581

APN: 516080003, ASMT: 516080003
THOMAS O MENZIES, ETAL
C/O JAMES MENZIES
102 FOXTAIL DR
SANTA MONICA CA 90402

APN: 514250016, ASMT: 514250016
USA 514
NONE
UNKNOWN 03-17-77
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APN: 516020004, ASMT: 516020004
USA 516
0
CA. 0

APN: 516080012, ASMT: 516080012
USA 516
NONE
UNKNOWN
0