



August 13, 2010

Mr. Iain Fisher  
CEQA Project Manager  
Energy Division  
California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, CA 94102-3296

**Re: Tule Wind Project - Response to Data Request No. 11**

Dear Mr. Fisher:

Pacific Wind Development, Inc., a wholly owned subsidiary of Iberdrola Renewables, Inc. (IBR) received your Data Request No. 11 regarding the Tule Wind Project. Enclosed is IBR's response.

If you have questions regarding this information, please contact me at 503-796-7781 or Patrick O'Neill at 858-712-8313.

Sincerely,

Jeffrey Durocher  
Wind Permitting Manager

cc (via e-mail): Greg Thomsen, BLM (GThomsen@blm.gov)  
Thomas Zale, BLM (Thomas\_Zale@blm.gov)  
Jeffery Childers, BLM (jchilders@blm.gov)  
Rica Nitka, Dudek (rnitka@dudek.com)  
Patrick O'Neill, HDR Engineering (Patrick.oneill@hdrinc.com)

Enclosed: Geo-Logic Estimate of Available Groundwater Memo  
County of San Diego Project Facility Availability Forms - Live Oak Springs  
Water Company  
County of San Diego Project Facility Availability Forms – Jacumba  
Community Service District

Via FTP: Update Draft Biological Report, Updated Tule Noise Report, GIS shape files.

IBERDROLA RENEWABLES, Inc.  
1125 NW Couch St., Suite 700  
Portland, OR 97209  
Telephone (503) 796-7000  
[www.iberdrolarenewables.us](http://www.iberdrolarenewables.us)

## Water

1. Based on the Live Oak Springs Water Company water availability email dated July 27, 2010, they have three potential sources of water. The total volume available in storage is listed as 40,000 gallons, 10,000 gallons, and 100,000 gallons. However, it is not clear what volume can be delivered on a daily basis. Based on information in the Applicant's Environmental Document (AED), the project needs are 250,000 gallons per day, which, based on the information provided could not be met by the volume of water Live Oak Springs Water Company has available in storage. Please provide the maximum daily volume that Live Oak Springs Water Company is able to deliver.

**Response:** The maximum daily volume of water that Live Oaks Springs Water Company can provide is 40,000 gallons per day (25-30 gpm). The water would be transferred into water trucks via their quick-fill system.

Two County of San Diego Project Facility Availability Forms are included in this data request:

- Live Oak Springs Water Company.
- Jacumba Community Service District. The Jacumba Community Service District (CSD) also has indicated that they are able to provide 20,000 to 40,000 gallons of water per day, equivalent to about 14 to 28 gpm.

The attached memorandum prepared by Geo-Logic (August 10, 2010) provides a detailed summary of the available water sources that can be utilized during the construction phase of the project.

2. The Tule Wind construction schedule is between 18 to 24 months; however, the AED states that the project is anticipated to use approximately 250,000 gallons per day for dust control along roads and the construction of turbine foundations over a period of 60 to 72 days, using a total of 17,512,000 gallons throughout construction. Please explain why water will only be used over an approximately 3-month period versus the expected construction schedule. Does the water figure include water use for site restoration activities following construction?

**Response:**

A conservative construction window of up to 24 months was established early in the process, taking into consideration the scope and scale of the project. Actual field construction activities requiring water consumption are not anticipated to occur during this entire 24-month period of time. As with any construction project, water use will fluctuate from day-to-day depending upon tasks being performed. The estimated 250,000 gallons of water use per day was used as a basis of analysis to reflect a worst-case water demand, which conservatively assumes all construction activities involving significant water use occur simultaneously. This scenario would

only occur for a short period of time (i.e., during portions of the 72 days of road building), if at all. Water demand after the 72-day period would be substantially less than the worst-case estimate provided. The attached memorandum prepared by Geo-Logic (August 10, 2010) provides a detailed summary of water demand during different phases of construction activity and identifies the significant reduction in water demand over the course of construction.

The water consumption figure does not include water use for site restoration following construction. Site restoration activities would demand substantially less water than peak construction periods and would only be needed on a short-term basis.

### **Biological Resources**

3. In response to Data Request No. 8, Iberdrola Renewables provided the GIS data for rare plants in the study area. The information provided did not include an analysis of temporary and permanent impacts for this data. This information remains a data request. Ideally, the most current existing and impacted species information would be incorporated in an updated Biological Technical Report (BTR). When does Iberdrola expect the BTR to be updated with latest information?

***Response:***

A copy of the updated Draft Biological Technical Report is posted on the HDR FTP site. Please note that a complete version (electronic) of the Applicant's Environmental Document (AED) will be provided the week of August 16<sup>th</sup>.

### **Noise**

4. The corona noise analysis does not clearly state whether estimates were used based on wet or dry weather. Please clarify. If dry weather conditions were used, please recalculate using wet weather conditions.

***Response:***

The corona noise analysis evaluated corona noise from the transmission line assuming wet weather conditions and worst case sag conditions. This information is presented in the Tule Noise Analysis Report.

Please note: In response to previously provided County comments, we have updated the Tule Noise Analysis Report. The report is posted on the HDR FTP site.

5. Please explain why the noise analysis evaluated noise impacts from only the 1.5 MW turbines and not the 3 MW turbines. Please provide information for the 3 MW turbines if greater than the 1.5 MW turbines.

***Response:***

The noise analysis evaluated noise impacts based on the maximum project build-out in terms of number of turbines. The maximum build-out for the project allows for up to 134, 1.5 MW turbines. The 3.0 MW turbines would be much fewer in number (approximately 67) and the turbines would have different placement. Accordingly, a noise model cannot be created by changing the sound data for a different turbine. Because there are numerous permutations that could be evaluated, the applicant has proposed that upon final design, approval of project layout, and prior to construction, a noise report will be finalized that demonstrates compliance with the San Diego County Code of Regulatory Ordinances Section 36.404, if any turbine other than the GE 1.5 MW model turbines are to be utilized.

**138 kV Transmission Line**

6. Please provide the following information regarding the Tule Wind 138 kV transmission line:
  - a. Milepost information for transmission line in shape file layer (GIS).

***Response:*** The GIS shape files for the milepost information has been posted on the HDR FTP site.

- b. Please provide the length of the proposed transmission line occurring on BLM-administered lands and length occurring on County of San Diego jurisdictional lands.

***Response:*** The length of proposed transmission line for the project totals 9.74 miles, with the following by jurisdiction; BLM-administered lands 7.42 miles, State of California 1.96 miles, and County of San Diego 0.36 miles.



COUNTY OF SAN DIEGO
DEPT. OF PLANNING & LAND USE
5201 RUFFIN ROAD, SUITE B
SAN DIEGO, CA 92123-1688
(619) 665-6911 • (619) 267-8770

PROJECT FACILITY AVAILABILITY FORM

WATER

W

Please type or use pen
Pacific Wind Development LLC, Subsid of Iberdrola Renewables 503-796-6955
Owner's Name Phone
1125 NW Couch Street, Suite 700
Owner's Mailing Address Street
Portland OR 97209
City State Zip

ORG \_\_\_\_\_
ACCT \_\_\_\_\_
ACT \_\_\_\_\_
TASK \_\_\_\_\_
DATE \_\_\_\_\_
AMT \$ \_\_\_\_\_
DISTRICT CASHIER'S USE ONLY

SECTION 1. PROJECT DESCRIPTION

TO BE COMPLETED BY APPLICANT

- A Major Subdivision (TM) Specific Plan or Specific Plan Amendment
Minor Subdivision (TPM) Certificate of Compliance
Boundary Adjustment
Rezoning (Reclassification) from \_\_\_\_\_ to \_\_\_\_\_ zone.
Major Use Permit (MUP), purpose: Major Impact Service & Utilities
Time Extension, Case No \_\_\_\_\_
Expired Map, Case No \_\_\_\_\_
Other \_\_\_\_\_
B Residential Total number of dwelling units \_\_\_\_\_
Commercial Gross floor area \_\_\_\_\_
Industrial Gross floor area \_\_\_\_\_
Other Gross floor area Wind Turbine Systems \_\_\_\_\_
C Total Project acreage 2.295 Total number of lots 20
D Is the project proposing the use of groundwater? [X] Yes [ ] No
Is the project proposing the use of reclaimed water? [ ] Yes [X] No

Assessor's Parcel Number(s)
(Add extra if necessary)
Thomas Bros. Page \_\_\_\_\_ Grid \_\_\_\_\_
Multiple Properties
Project address Street
Mountain Empire/Boulevard Subregion 91905
Community Planning Area/Subregion Zip

Owner/Applicant agrees to pay all necessary construction costs, dedicate all district required easements to extend service to the project and COMPLETE ALL CONDITIONS REQUIRED BY THE DISTRICT.

Applicant's Signature \_\_\_\_\_ Date: 08/02/2010
Address: 1125 NW Couch Street, Suite 700, Portland Oregon 97209 Phone: 503-796-6955

(On completion of above, present to the district that provides water protection to complete Section 2 below.)

SECTION 2: FACILITY AVAILABILITY

TO BE COMPLETED BY DISTRICT

District Name: JACUMBA COMMUNITY SERVICE DISTRICT Service area \_\_\_\_\_
A [X] Project is in the district.
[ ] Project is not in the district but is within its Sphere of Influence boundary, owner must apply for annexation.
[ ] Project is not in the district and is not within its Sphere of Influence boundary.
[ ] The project is not located entirely within the district and a potential boundary issue exists with the District
B [X] Facilities to serve the project [X] ARE [ ] ARE NOT reasonably expected to be available within the next 5 years based on the capital facility plans of the district. Explain in space below or on attached \_\_\_\_\_ (Number of sheets)
[ ] Project will not be served for the following reason(s): \_\_\_\_\_
C [ ] District conditions are attached. Number of sheets attached: 0
[ ] District has specific water reclamation conditions which are attached. Number of sheets attached: 0
[ ] District will submit conditions at a later date.
D [ ] How far will the pipeline(s) have to be extended to serve the project? 0

This Project Facility Availability Form is valid until final discretionary action is taken pursuant to the application for the proposed project or until it is withdrawn, unless a shorter expiration date is otherwise noted.

Authorized signature: Tom Lindenmeyer Print name: TOM LINDENMEYER
Print title: GENERAL MANAGER Phone: 619-766-4359 Date: 08-10-10

NOTE: THIS DOCUMENT IS NOT A COMMITMENT OF SERVICE OR FACILITIES BY THE DISTRICT
On completion of Section 2 by the district, applicant is to submit this form with application to:
Zoning Counter, Department of Planning and Land Use, 5201 Ruffin Road, San Diego, CA 92123



DPLU-399W (02/07)



## JACUMBA COMMUNITY SERVICE DISTRICT

1266 RAILROAD STREET

PO BOX 425

JACUMBA, CA 91934

(619)766-4359 PHONE

### RATE STRUCTURE AND BILLING

#### RESIDENTIAL:

**BASE RATE: \$33.00 FOR THE FIRST 1000 CUBIC FEET**

**1001-2999 CU FT \$.40 PER 100 CU FEET**

**3000-3999 CU FT \$.60 PER 100 CU FEET**

**4000-4999 CU FT \$.85 PER 100 CU FEET**

**5000 AND OVER CU FT \$1.10 PER 100 CU FEET**

#### COMMERCIAL

**BASE RATE: \$49.00 FOR THE FIRST 1000 CU FEET**

**1001-2000 CU FT \$.70 PER 100 CU FEET**

**2001-3000 CU FT \$.94 PER 100 CU FEET**

**3001-4000 CU FT \$1.18 PER 100 CU FEET**

**OVER 4001 CU FT \$1.54 PER 100 CU FEET**

#### CONSTRUCTION

**ADMIN / BASE RATE: 100.00 PER MONTH.**

**PUMPING FEE: 200.00 PER MONTH**

**WATER USAGE \$9.48 PER 100 CU FEET**

- The District bills in advance for the base rate.
- Bills are mailed by the first of each month and due by the 20<sup>th</sup> of that month.
- All requests for new service will require a connection fee of \$25.00 and a deposit of \$50.00
- A late fee of 10% will be charged to any Account with an outstanding balance after the 20<sup>th</sup> of each month. Payments must be received by the 20<sup>th</sup> to avoid a late fee.
- Per District policy a service charge of \$25.00 will be added to any account that has a returned check for non sufficient funds. If there are two returned checks in a 12 month period, no further checks will be accepted.
- Any account with an outstanding balance after 30 days will be subject to shut off and the meter will be locked. A re connection fee of \$25.00 will be added to the account to re instate service. A deposit will be added to your account if you don't already have one. The balance must be paid in full to re instate service.
- Charges for shut off for customer repairs are \$10.00 during business hours and \$20.00 after hours. We ask that you do not attempt to turn on and off the meters. If you break a water line or meter while doing so, you will be charged parts plus hourly wage to have the repairs done.
- We recommend that all customers install a customer shut off valve to avoid the above charges. There will be no charge for shut off so that the customer may install a shut off valve.
- The District Office hours are 9AM-12PM Tue, Wed, & Thurs.
- Any questions you may have may be directed to the District Secretary by calling the number above.



# PROJECT FACILITY AVAILABILITY FORM

WATER

**W**

Please type or use pen

Pacific Wind Development LLC, Subsid of Iberdrola Renewables 503-796-6955  
 Owner's Name Phone  
 1125 NW Couch Street, Suite 700  
 Owner's Mailing Address Street  
 Portland OR 97209  
 City State Zip

ORG \_\_\_\_\_  
 ACCT \_\_\_\_\_  
 ACT \_\_\_\_\_  
 TASK \_\_\_\_\_  
 DATE \_\_\_\_\_ AMT \$ \_\_\_\_\_

DISTRICT CASHIER'S USE ONLY

## SECTION 1. PROJECT DESCRIPTION

TO BE COMPLETED BY APPLICANT

- A.  Major Subdivision (TM)  Specific Plan or Specific Plan Amendment  
 Minor Subdivision (TPM)  Certificate of Compliance: \_\_\_\_\_  
 Boundary Adjustment  
 Rezone (Reclassification) from \_\_\_\_\_ to \_\_\_\_\_ zone.  
 Major Use Permit (MUP), purpose: Major Impact Service & Utilities  
 Time Extension... Case No. \_\_\_\_\_  
 Expired Map... Case No. \_\_\_\_\_  
 Other \_\_\_\_\_

Assessor's Parcel Number(s)  
(Add extra if necessary)


- B.  Residential . . . . . Total number of dwelling units \_\_\_\_\_  
 Commercial . . . . . Gross floor area \_\_\_\_\_  
 Industrial . . . . . Gross floor area \_\_\_\_\_  
 Other . . . . . Gross floor area Wind Turbine Systems \_\_\_\_\_

Thomas Bros. Page \_\_\_\_\_ Grid \_\_\_\_\_

Multiple Properties \_\_\_\_\_

- C.  Total Project acreage 2.295 Total number of lots 20

Project address \_\_\_\_\_ Street \_\_\_\_\_

- D. Is the project proposing the use of groundwater?  Yes  No  
 Is the project proposing the use of reclaimed water?  Yes  No

Mountain Empire/Boulevard Subregion 91905

Community Planning Area/Subregion \_\_\_\_\_ Zip \_\_\_\_\_

Owner/Applicant agrees to pay all necessary construction costs, dedicate all district required easements to extend service to the project and COMPLETE ALL CONDITIONS REQUIRED BY THE DISTRICT.

Applicant's Signature: \_\_\_\_\_ Date: 08/02/2010

Address: 1125 NW Couch Street, Suite 700, Portland Oregon 97209 Phone: 503-796-6955

(On completion of above, present to the district that provides water protection to complete Section 2 below.)

## SECTION 2: FACILITY AVAILABILITY

TO BE COMPLETED BY DISTRICT

District Name: LIVE OAK SPRINGS WATER Co. Service area BOULEVARD, CA.

- A.  Project is in the district.  
 Project is not in the district but is within its Sphere of Influence boundary, owner must apply for annexation.  
 Project is not in the district and is not within its Sphere of Influence boundary.  
 The project is not located entirely within the district and a potential boundary issue exists with the \_\_\_\_\_ District.
- B.  Facilities to serve the project  ARE  ARE NOT reasonably expected to be available <sup>NOW</sup> within the next 5 years based on the capital facility plans of the district. Explain in space below or on attached \_\_\_\_\_ (Number of sheets)  
 Project will not be served for the following reason(s): \_\_\_\_\_
- C.  District conditions are attached. Number of sheets attached: \_\_\_\_\_  
 District has specific water reclamation conditions which are attached. Number of sheets attached: \_\_\_\_\_  
 District will submit conditions at a later date.
- D.  How far will the pipeline(s) have to be extended to serve the project? NOW - (PICK UP WITH TRUCKS)

This Project Facility Availability Form is valid until final discretionary action is taken pursuant to the application for the proposed project or until it is withdrawn, unless a shorter expiration date is otherwise noted.

Authorized signature: Nazar Najor Print name NAZAR NAJOR  
 Print title MANAGER Phone 619-889-8666 Date 8-12-2010

NOTE: THIS DOCUMENT IS NOT A COMMITMENT OF SERVICE OR FACILITIES BY THE DISTRICT

On completion of Section 2 by the district, applicant is to submit this form with application to:  
 Zoning Counter, Department of Planning and Land Use, 5201 Ruffin Road, San Diego, CA 92123



## MEMORANDUM

**TO:** Patrick O'Neill, HDR

**FROM:** Sarah J. Battelle, Geo-Logic Associates

**DATE:** August 10, 2010

**SUBJECT: ESTIMATE OF AVAILABLE GROUNDWATER  
TULE WIND PROJECT  
EAST SAN DIEGO COUNTY, CALIFORNIA**

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At your request, this memorandum presents a summary of the water needs identified for the Tule Wind Project construction and locally available water, both on site and from adjacent water providers. The data presented herein is based on a site reconnaissance and inquiries made of water suppliers. Construction water supply requirements are provided from discussions with Iberdrola Renewables (IBR), the project proponent.

The project will include the construction of up to 134 wind turbines and associated roads, transmission lines and support facilities. Based on information provided by IBR, the following water requirements have been estimated for the project construction (all work is anticipated to be performed over five-day work weeks):

1. Road Construction – Up to 120,000 gallons per work day will be required over a 72-day construction period. With continuous water storage, 24-hours per day, seven days per week, it is estimated that well production of 60 gallons per minute (gpm) will be required to support this work.
2. Turbine Foundation Concrete Mixing – Depending on the turbine, each foundation will require 7,500 to 15,000 gallons of water per foundation. As many as three foundations could be constructed each day; requiring up to 45,000 gallons of water per day. The maximum continuous pumping rate (24-hours per day, seven days per week), required to support concrete mixing for three turbine foundations per day is equivalent to 22 gpm.
3. Dust Control – During construction, 50,000 to 100,000 gallons per working day will be required for dust control on project roads. The maximum continuous pumping rate required for dust control would be 50 gpm for an estimated nine-month construction period.

As indicated above, it is anticipated that the water supply source will be available 24 hours per day, seven days per week. The contractors on the project will provide temporary water storage to ensure that there is adequate water supply available for required project water needs.



IBR has indicated that there will be some overlap of water uses as the project progresses. The initial road construction alone will be conducted until there is sufficient access to begin turbine foundation construction. At that time, with the combination of road construction, turbine foundation concrete mixing and dust control, the estimated peak water use will be approximately 250,000 gallons per day, requiring continuous pumping of 124 gpm (24-hours per day, seven days per week). This peak water demand will drop quickly after the initial road building activity is completed. Once road construction is complete, the peak water demand level is estimated to be about 130,000 gallons of water per day (equivalent to a 65 gpm pumping rate with pumping 24-hours per day, seven days per week). Once the subsequent 72-day turbine foundation work is complete, water demand will be reduced further to a maximum of 100,000 gallons of water per day (50 gpm of continuous pumping 24-hours per day, seven days per week) for the remainder of the nine month construction period requiring water. Subsequent site work is not expected to require additional groundwater supply. Further, when the Tule Wind Project turbines become operational, only a limited quantity of water will be required, estimated at 2,500 gallons per day to supply the operations and maintenance building services and support staff.

Based on the conservative peak water use requirements of 250,000 gallons per day (associated with road construction, concrete mixing and dust control activities), an estimated continuous supply of water (24-hours per day, seven days per week) will be required from wells pumping at a cumulative continuous rate of 124 gpm. Although there are several wells on the project site, two wells on the project site have been identified as readily available for project use:

1. One well is located on Rough Acres Ranch approximately one to two miles north of Interstate 8 off of Ribbonwood Road. Drilled in 2009, data provided on the well log for this well indicates that the estimated well yield is 60 gpm, however, with the current pump in this well, the Ranch Manager indicates that the well produces at a rate of 43 to 47 gpm;
2. One well is located on the Ewiiapaayp Reservation, about 7 miles north of Interstate 8 on La Posta Road. This well was tested following construction and yielded 55-60 gpm.

There are four potential additional water supply sources available for the project. The State Correctional Facility is located about one half mile north of Interstate 8 off of McCain Road. This correctional facility maintains two wells with estimated production of 45 and 65 gpm. The Live Oak Springs Resort located south of Interstate 8 on Old Highway 80 about ¾-mile northwest of the intersection with Highway 94 may provide a source of water supply. This resort (and water company) operates a well that pumps about 40,000 gallons per day (25 to 30 gpm) and maintains a 100,000 gallon pond, and two large tanks with an additional 50,000 gallons of storage capacity. The Jacumba Community Service District (CSD) also has indicated that they are able to provide 20,000 to 40,000 gallons of water per day, equivalent to about 14 to 28 gpm. Finally, the City of El Centro has indicated that they are willing to sell wastewater plant effluent to the project for use during the construction phase.

Based on the currently available well data, the project site wells are estimated to provide 98 gpm (or about 200,000 gallons per day [continuously pumped 24-hours per day, seven days per week]) of the peak 124 gpm (250,000 gallons) project-required water. Well testing is currently under way to fully characterize the on-site wells and their sustainable yields. However, with off-site water from the State Correctional Facility, Live Oak Springs Resort, and Jacumba CSD (conservatively assuming that one third of the available well production can be supplied to the Tule Wind Project), as well as possible wastewater plant effluent provided from the City of El Centro for purchase, the additional water could be available to support the project water supply needs; ample water for the project construction period, as outlined above.

If you have any questions, please call me at (858) 451-1136.