

Online Application for Certification as an Eligible Ohio Renewable Energy Resource Generating Facility

Case Number: 13-0479-EL-REN

A. Generating Facility

Name of Renewable Generating Facility: Oregon City Schools Clay HS Location

The name specified will appear on the facility's certificate of eligibility issued by the Public Utilities Commission of Ohio.

Facility Location

Street Address: 5721 Seaman Road

City: Oregon State: OH County: Lucas Zip Code: 43616

Facility Latitude and Longitude

Latitude: 41.657171 **Longitude:** -83.413568

There are internet mapping tools available to determine the latitude and longitude, if you do not have this information.

If applicable, U.S. Department of Energy, Energy Information Administration Form EIA-860 Plant Name and Plant Code.

EIA-860 Plant Name:

EIA Plant Code:

B. Legal Name of the Facility Owner

Please note that the facility owner name listed will be the name that appears on the certificate.

The address provided in this section is where the certificate will be sent.

If the facility has multiple owners, please provide the following information for each on additional sheets.

Legal Name of the Facility Owner: Oregon Board of Education
Legal Name of Facility Owner Representative: Dean E. Sandwisch

Title: Director of Business Affairs **Organization:** Oregon City Schools **Street Address:** 5721 Seaman Road

City: Oregon State: OH Zip Code: 43616 Phone: (419)693-0661 Fax: (419)698-6016 Email Address: dsandwisch@oregoncs.org

Web Site Address (if applicable): www.oregoncityschools.org

C. List the name, address, telephone number and web site address under which the Applicant will do business in Ohio

Legal Name of Facility Owner Representative: Dean E. Sandwisch

Title: Director of Business Affairs **Organization:** Oregon City Schools **Street Address:** 5721 Seaman Road

City: Oregon State: OH Zip Code: 43616 Phone: (419)693-0661 Fax: (419)698-6016 Email Address: dsandwisch@oregoncs.org

Web Site Address (if applicable): www.oregoncityschools.org

D. Name of Generation Facility Operating Company

Name of Generation Facility Operating Company: Carpe Ventus XI, L.L.C.

Legal Name of Contact Person: Elizabeth K. Amburgy

Title: CFO

Organization: Carpe Ventus XI, L.L.C. **Street Address:** 319 Howard Drive

City: Sandusky **State:** OH **Zip Code:** 44810 **Phone:** (419)626-8000 **Fax:** (419)626-8095

Email Address: N/A

Web Site Address (if applicable): N/A

E. Regulatory/Emergency Contact

Legal Name of Contact Person: Elizabeth K. Amburgy

Title: CFO

Organization: PUREnergy Partners, Ltd. **Street Address:** 319 Howard Drive

City: Sandusky **State:** OH **Zip Code:** 44870 **Phone:** (419)626-8000 **Fax:** (419)626-8095

Email Address: N/A

Web Site Address (if applicable): N/A

F. Certification Criteria 1: Deliverability of the Generation into Ohio

Ohio Revised Code (ORC) Sec. 4928.64(B)(3)

The facility must have an interconnection with an electric utility.

Check which of the following applies to the facility's location:

Yes The facility is located in Ohio.

No The facility is located in a state geographically contiguous to Ohio (IN, KY, MI, PA, WV).

No The facility is located in the following state:

(If the renewable energy resource generation facility is not located in Ohio, Indiana, Kentucky, Michigan, Pennsylvania, or West Virginia, you are required to submit a POWER FLOW study by one of the regional transmission organizations (RTO) operating in Ohio, either PJM or Midwest ISO, demonstrating that the power from the facility is physically deliverable into the state of Ohio. This study must be appended to the application as an exhibit. THE FACILITY MUST BE INTERCONNECTED TO TRANSMISSION LINES. FOR ADDITIONAL INFORMATION ON DELIVERABILITY REQUIREMENTS, PLASE REFER TO THE COMMISSION FINDING & ORDER of 3/23/11 IN CASE NO. 09-555-EL-REN.)

G. Certification Criteria 2: Qualified Resource or Technology

You should provide information for only one resource or technology on this application; please check and/or fill out only one of the sections below. If you are applying for more than one resource or technology, you will need to complete a separate application for each resource or technology.

G.1. For the resource or technology you identify in Sections G.4 - G.13 below, please provide a written description of the system.

The PowerWind 500 is a variable-speed, pitch-controlled wind turbine, certified in accordance with IEC wind class IIA. It has a rated power output of 500 kW and a rotor diameter of 56 m. The turbine design is based on a well-proven modular drive train concept and combines robust mechanical engineering with state-of-the-art power electronics.

Performance information including Rotor diameter, Rotor Speed, Yaw Drive and Brake, Hub Height, and Blade information attached .pdf.

G.2. Please include a detailed description of how the output of the facility is going to be measured and verified, including the configuration of the meter(s) and the meter type(s).

The kilowatt output of the generation facility will be measured via the net-meter installed by the utility company (First Energy) as well as with the "My Windfarm" computer data aquiring/monitoring software, which is installed in the turbine.

G.3. Please submit digital photographs that depict an accurate characterization of the renewable generating facility. Please indicate the date(s) the photographs were taken. For existing facilities, these photographs must be submitted for your application to be reviewed. For proposed facilities or those under construction, photographs will be required to be filed within 30 days of the on-line date of the facility.



G.6 WIND GENERATOR(S)

If your system includes multiple generators, please provide the following information for each unique generator you have in your system

Manufacturer: PowerWind

Model Name and Number: PowerWind PW 56

Generator Nameplate Capacity (kilowatts AC): 900.00

Wind Hub Height (ft): 197.00 Wind Rotor Diameter (ft): 182.00

H. Certification Criteria 3: Placed-in-Service Date (Sec. 4928.64. (A)(1) O.R.C.)

The Renewable Energy Facility:

No has a placed-in-service date before January 1, 1998; Date:

Yes has a placed-in-service date on or after January 1, 1998; Date: 10/24/12

No has been modified or retrofitted on or after January 1, 1998; Date:

Please provide a detailed description of the modifications or retrofits made to the facility that rendered it eligible for consideration as a qualified renewable energy resource. In your description, please include the date of initial operation and the date of modification or retrofit to use a qualified renewable resource. Please include this description as an exhibit attached to your application filing and identify the subject matter in the heading of the exhibit.

No Not yet online; projected in-service date:

H.1 Is the renewable energy facility owner a mercantile customer? No

ORC Sec. 4928.01 (19) "Mercantile customer" means a commercial or industrial customer if the electricity consumed is for nonresidential use and the customer consumes more than seven hundred thousand kilowatt hours per year or is part of a national account involving multiple facilities in one or more states.

Has the mercantile customer facility owner committed to integrate the resource under the provisions of Rule 4901:1-39-08 O.A.C? No

If yes, please insert/submit a copy of your approved application as an exhibit to this filing.

I. Facility Information

La The nameplate capacity of the entire facility kilowatts (kW): 900.00 (megawatts (MW): 0.9)

I.b If applicable, what is the expected heat rate of resource used per kWh of net generation: BTU/kWh

I.1 For each generating unit, provide the following information:

Unit In-Service	Unit Nameplate	Projected Gross	Expected Annual	Number of
<u>Date</u>	Capacity (MW)	Annual Generation	Capacity Factor %	Generating Units
10/24/12	0.9	2,200	27.9	1
	Capacity Factor % :	Projected Annual Gen	eration × 100	
		Nameplate Capacity	× 8,760	

J. Regional Transmission Organization Information

In which Regional Transmission Organization area is your facility located:

<u>Yes</u> Within Geographic Area of PJM Interconnection, L.L.C.

No Within Geographic Area of Midwest ISO

No Other (specify):

K. Attribute Tracking System Information

Are you currently registered with an attribute tracking system: No

In which attribute tracking system are you currently registered or in which do you intend to register (the tracking system you identify will be the system the PUCO contacts with your eligibility certification):

<u>Yes</u> GATS (Generation Attribute Tracking System)

No M-RETS (Midwest Renewable Energy Tracking System)

Other (specify):

K.1 Enter the generation ID number you have been assigned by the tracking system:

(If the generation ID number has not yet been assigned, you will need to file this number in the PUCO Case Docket within 15 days of the facility receiving this number from the tracking system).

K.2 Has any of the generation of the facility been tracked as RECS that have been sold or otherwise consumed? No

L. Other State Certification

Is the facility certified by another state as an eligible generating resource to meet the renewable portfolio standards of that state? \underline{No}

L.1 If yes, for each state, provide the following information:

	State Certification	State Certification	Certification Date
Name of State	Agency	<u>Number</u>	<u>Issued</u>

M. Type of Generating Facility

Please check all of the following that apply to the facility:

<u>No</u>	Utility Generating Facility:
No	Investor Owned Utility
<u>No</u>	Rural Electric Cooperative

No Municipal System

No Electric Services Company (competitive retail electric service provider certified by the PUCO)

<u>Yes</u> Distributed Generation with a net metering and interconnection agreement with a utility.

Identify the Utility: The Toledo Edison Company

No Distributed Generation with both on-site use and wholesale sales. Identify the Utility:

No Distributed Generation, interconnected without net metering. Identify the Utility:

N. Meter Specifications

Metering Requirements

- 1. If the renewable energy resource generating facility is 6 kW or below, the output may be measured with either an inverter meter or a utility grade meter.
- 2. All facilities that are larger than 6 kW must measure the output of the facility with a utility grade meter. Facilities that are larger than 6 kW and that are not measuring output with a utility grade meter will not be certified. OAC 4901:1-40-04 (D)(1)
- 3. Please only report on the meter or the meters used to measure the output from the facility which will be reported to the attribute tracking system.

N.a The meter(s) that are measuring output from the facility are:

No Inverter Meter(s)

<u>Yes</u> Utility Grade Meter(s) (Must meet ANSI 12.1, or demonstrate an accuracy level of \pm 2%)

N.1 Please provide the following information for each meter used in your system.

N.1.a Manufacturer: Siemens N.1.b Serial Number: 680447383

N.1.c Type: Bi-Directional

N.1.d Date of Last Certification: September 05, 2012

Attach a photograph of the meter(s) with date image taken. The meter reading(s) must be clearly visible in the photograph.

N.1.e Report the total meter reading number at the time the photograph was taken and specify the appropriate unit of generation (e.g., kWh): 00443 kWh

5/30/2013 12:00:00AM



		Rotor			Generator		
Turbine state	Production	1	Rotorrpm	8.3 pm		Generator speed	457.1 pm
Total active energy	3000 k/lh		Pitch angle	- Mº		Power	12.8 W
Total reactive energy	3590 k/lAm		Pitch angle 1	. 0		Reactive power	6.0kla
Cons. active energy	535KN/h		Pitch angle 2	-0,0 p		Generator stator temp.	740°C
Cons. reactive energy	4186 kVAIh		Pitch angle 3	1,0			
		Yawing			Heteorology		
Grid frequency	60,0Hz	A	Yawstate	Auto	٨	Windspeed	4.1m/s
Grid current	33.6A		Yaw error		V	Winddirection (30s)	236,90
Grid voltage	699,5V		llacelle direction	.123.1°		Ambient temp.	23.00



Affidavit for Application for Certification as an Eligible Ohio Renewable Energy Resource Generating Facility

Please be advised that all applicant's contact information, including address and telephone number, will be made public and is not subject to confidential treatment. Additionally, any information pertaining to trade secrets contained within the application will be made public unless filed under seal with a motion for protective order, pursuant to Rule 4901-1-24 of the Ohio Administrative Code.

Case Number: 13-0479-EL-REN

Facility Name: Oregon City Schools Clay HS Location

Name of person making this affidavit: Dean E. Sandwisch

State of Ohio County of Lucas

The undersigned, being duly sworn according to law, deposes and says that:

- 1. I am authorized to and do hereby make this affidavit on behalf of the Applicant,
- All facts and statements made in the application for certification, including all attachments and supplemental information or filings, are true and complete to the best of my knowledge, information, and belief,
- 3. The facility has obtained or will obtain and will maintain all required local, state, and federal environmental permits,
- I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

, Director of Business Affairs Signature of Affant & Title

Sworn and subscribed before me this 30 day of JULY . 2013 Month/Year

Notary

My commission expires on 10-19-13

CHRISTINE D. HOLLAND
Notary Public — State of Ohio
My Commission Expires 10-19-13

The Public Utilities Commission of Ohio reserves the right to verify the accuracy of the data reported to the
tracking system and to the PUCO.

Version: June 3, 2013

This foregoing document was electronically filed with the Public Utilities

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in

Case No(s). 13-0479-EL-REN

Summary: Application Clay Wind Turbine electronically filed by Mr. Dean E. Sandwisch on behalf of Oregon City Schools