**Ohio** Public Utilities Commission Online application for Certification as an Eligible Ohio Renewable Ene rgy Resource Generating Facility

V91310

Case No.: 10-3136-EL-REN

## A. Name of Renewable Generating Facility: Shireman Residence

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

## **Facility Location**

Street Address: 419 S. Hershey RoadCity: HummelstownState: PAZip Code: 17036

## Facility Latitude and Longitude

Latitude: 40.323816 Longitude: -76.710698 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: Steve Shireman

Legal Name of Facility Owner Representative (First Name, MI, Last Name): Joe Feldman Title: SREC Manager Organization: Astrum Solar, Inc. Street Address: 419 S. Hershey Road City: Hummelstown State: PA Zip Code: 17036 Phone: 717-579-8115 Fax: 443-267-0036 Email Address: stabshi@gmail.com Web Site Address: astrumsolar.com

## 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 (First Name, MI, Last Name): Steve Shireman Title: Organization: Street Address: 419 S. Hershey Road City: Hummelstown State: PA Zip Code: 17036 Phone: 717-579-8115 Fax: 443-267-0036 Email Address: stabshi@gmail.com Web Site Address: astrumsolar.com

## **D.** Name of Generation Facility Operating Company:

Name of Generation Facility Operating Company: Shireman Residence Legal Name of Contact Person (First Name, MI, Last Name): Steve Shireman Title: Organization: Street Address: 419 S. Hershey Road City: Hummelstown State: PA Zip Code: 17036 Phone: 717-579-8115 Fax: 443-267-0036 Email Address: stabshi@gmail.com Web Site Address (if applicable): astrumsolar.com

## E. Regulatory/Emergency contact

Legal Name of Contact Person (First Name, MI, Last Name):Joe Feldman Title: SREC Manager Organization: Astrum Solar, Inc. Street Address: 8955 Henkels Lane City: Annapolis Junction State: Maryland Zip Code: 20701 Phone: 301-814-7653 Fax: 443-267-0036 Email Address: joe.feldman@astrumsolar.com Web Site Address: astrumsolar.com

## 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:

No The facility is located in Ohio.

- Yes The facility is located in a state geographically contiguous to Ohio (Indiana, Kentucky, Michigan, Pennsylvania, or West Virginia).
- 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 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. The study may be conducted by someone other than the RTO provided that the RTO approves the study. This study must be appended to the application as an exhibit.

## 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 renewable generation system is a 10.15kW roof-mounted, grid-interconnected solar photovoltaic electric system consisting of 58 Suntech 180 Watt solar panels and 58 Enphase Energy M-190 microinverters.

**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).

Installed with the system was a GE Hialeah utility grade meter to measure system output; the system's production is also measured using the Enphase Energy Envoy system.

**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.

December 14, 2010



December 14, 2010



The Applicant is applying for certification in Ohio for a facility using one of the following qualified resources or technologies (Sec. 4928.01 ORC):

## G.4 \_\_ SOLAR PHOTOVOLTAIC

G.4a Total PV Capacity (DC): 10.1500
G.4b Total PV Capacity (AC): 8.6300
G.4c Expected Capacity Factor: 0.1335 *Capacity factor is the ratio of the energy produced to the maximum possible at full power, over a given time period. Capacity factor may be calculated using this formula:*

Projected annual gross generation (kWh or MWh) **divided by** [the nameplate capacity (in kW or MW) **times** 8760]

G.4d Anticipated annual output in kWh/yr: 11,875.5000
G.4e Location of the PV array: <u>Yes</u> Roof <u>No</u> Ground <u>No</u> Other Description:
G.4f Total number of Modules and/or size of the array: 58

## G.4.1 PV Modules

For each PV module, provide the following information:

G.4.1.a Manufacturer: Suntech G.4.1.b Model and Rating: 180S Adb+

## 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; (month/day/year):

Yes has a placed-in-service date on or after January 1, 1998; (month/day/year): 5/27/10

No has been modified or retrofitted on or after January 1, 1998; (month/day/year):

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 (month/day/year):

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? <u>No</u>

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

#### **I. Facility Information**

I.a The nameplate capacity of the entire facility in megawatts (MW): 0.0102

**I.b** If applicable, what is the expected heat rate of resource used per kWh of net generation: 11.8755 BTU/kWh

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

Unit In-Service	Unit Nameplate	Projected Gross	Expected Annual	Number of
Date	Capacity (MW)	Annual Generation	Capacity Factor %	Generating Units
5/27/10	0.0102	11.8755	13.3500	1

#### J. Regional Transmission Organization Information

In which Regional Transmission Organization area is your facility located:

- Yes 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: Yes

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*):

Yes 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: <u>NON43238</u> If the generation ID number has not yet been assigned, you will need to provide this number to the PUCO within 15 days of the facility receiving this number from the tracking system).

## 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? <u>Yes</u>

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

		<u>State</u>	
		<b>Certification</b>	
Name of State	State Certification Agency	Number	Date Issued
PA	PA AEPS	PA-391731-SUN	June 15, 2010
		-I	

## M. Type of Generating Facility

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

No Utility Generating Facility:

- No Investor Owned Utility
- No Rural Electric Cooperative
- No Municipal System
- <u>No</u> 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: <u>PPL</u>
- <u>No</u> Distributed Generation with both on-site use and wholesale sales. Identify the utility with which the facility is interconnected:
- <u>No</u> Distributed Generation, interconnected without net metering. Identify the utility with which the facility is interconnected:

#### **N. Meter Specifications**

#### **Metering Requirements**

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.

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)

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:
<u>No</u> Inverter Meter(s)
<u>Yes</u> Utility Grade Meter(s) *N.1 Please provide the following information for each meter used in your system.*N.1.a Manufacturer: Schlumberger
N.1.b Serial Number: 13705892
N.1.c Type: Hialeah
N.1.d Date of Last Certification: May 17, 2010

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): 7457kWh

## December 14, 2010



# O. Start date from which the facility may begin reporting generation towards the creation of Renewable Energy Credits (RECs)

The start date from which an attribute tracking system will begin to count generation data toward the creation of renewable energy credits will be the date of certificate issuance in the state of Ohio, unless the facility satisfies one of the criterion established in the Commission's June 17, 2009 Entry on Rehearing issued in Case No. 08-888-EL-ORD.

In that Entry, the Commission found it to be appropriate to recognize the creation of RECs back to July 31, 2008, the date in which the Ohio alternative energy portfolio standard law became effective, provided that "The facility was a participant in an existing attribute tracking system during that time <u>or</u> had a meter in place which can accurately demonstrate generation levels from July 31, 2008 forward." (June 17, 2009 Entry on Rehearing at 34.)

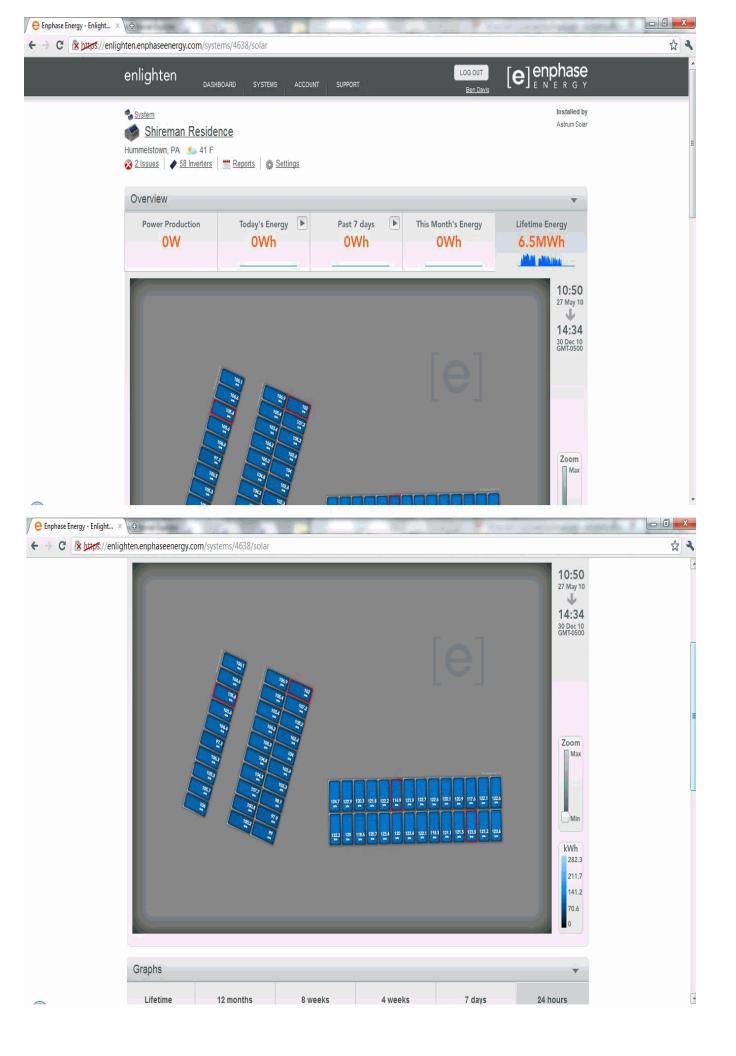
- (1) Existing attribute tracking system:
  - a. For facilities that are currently participating in an attribute tracking system, it is not sufficient to merely be registered with the tracking system; you also must be reporting generation data.
  - b. If the facility was a participant in an existing attribute tracking system, please state the specific start date that will be used to recognize historical RECs.
- (2) Meter which can accurately demonstrate generation levels from July 31, 2008:
  - a. For facilities which have had a meter in place, accurately demonstrating generation levels must include documentation from an electric remote monitoring and reporting system, from the specified start date, and recorded on at least a monthly basis.
  - b. If the facility had a meter that accurately demonstrates generation levels, please state the specific start date, and attach documentation from the remote monitoring and reporting system.

If the facility was a participant in an existing attribute tracking system, please state the specific start date, in accordance with the tracking system's rules, that will be used to recognize historical RECs: <u>May 27, 2010</u>

If the facility had a meter that accurately demonstrates generation levels, please state the specific start date, and below insert documentation from the remote monitoring and reporting system: May 27, 2010

Also, in the Commission's Entry on Rehearing, the Commission explained that consistent with its policy on double counting, the Commission "will not retroactively recognize any past RECs which have been sold or otherwise consumed." (June 17, 2009 Entry on Rehearing at34.)

Has any of the generation of the facility been tracked as RECS that have been sold or otherwise consumed? <u>No</u>



Ohio Public Utilities Commission

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

Case No.: 10-3136-EL-REN

## AFFIDAVIT

State of Maryland:

Annapolis Junction ss. (Town)

County of Howard :

Joe Feldman, Affiant, being duly sworn/affirmed according to law, deposes and says that:

- 1. I am the duly authorized representative of Shireman Residence.
- 2. I have personally examined and am familiar with all information contained in the foregoing application, including any exhibits and attachments, and that based upon my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete.
- 3. The facility has obtained or will obtain and will maintain all required local, state and federal environmental permits.
- 4. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

, SREC Manager

Signature of Affiant & Title

Sworn and subscribed before me this 30 day of December , 2010 Month/Year

Signature of official administering oath

My commission expires on

OSHUA M GOLDBERG NOTARY PUBLIC HOWARD COUNTY My Commision Ends: 61

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: September 13, 2010

"Note to applicants: please remember to file the required affidavit along with the application, or the application will be rejected by the PUCO Docketing Division. The affidavit form is available here: <a href="http://www.puco.ohio.gov/PUCO/Forms/Form.cfm?id=9464>">http://www.puco.ohio.gov/PUCO/Form.cfm?id=9464>">http://www.puco.ohio.gov/PUCO/Form.cfm?id=9464>">http://www.puco.ohio.gov/PUCO/Form.cfm?id=9464>">http://www.puco.ohio.gov/PUCO/Form.cfm?id=9464>">http://www.puco.ohio.gov/PUCO/Form.cfm?id=9464>">http://www.puco.ohio.gov/PUCO/Form.cfm?id=9464>">http://www.puco.ohio.gov/PUCO/Form.cfm?id=9464>">http://www.puco.ohio.gov/PUCO/Form.cfm?id=9464>">http://www.puco.ohio.gov/PUCO/Form.cfm?id=9464>">http://www.puco.ohio.gov/PUCO/Form.cfm?id=9464>">http://www.puco.gov/PUC0/Form.cfm?id=9464>">http://www.puco.gov/PUCO/Form.cfm?id

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in

Case No(s). 10-3136-EL-REN

Summary: Application for Shireman Residence to be certified as an Ohio renewable generation facility. electronically filed by Max Schwartz on behalf of Astrum Solar, Inc and Mr. Steve Shireman