

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

Case No.: <u>09-763-EL-REN</u>

### A. Name of Renewable Generating Facility: Solaris Blackstone Energy, LLC

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

#### **Facility Location:**

**Solaris Blackstone Energy** 

Street Address: 1775 Meloy Road

City: Kent State: Ohio Zip Code: 44240

**Facility Latitude and Longitude** 

Latitude: 41°07' North Longitude: 81°19' W

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. Name of the Facility Owner:** Steve Drago

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

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

Applicant's Legal Name: Steven Michael Drago

Title: Owner

Organization: Solaris Blackstone Energy, LLC

Owner's Address:

Street Address: 1775 Meloy Road

City: Kent State: Ohio Zip Code: 44240

Country: USA

Phone: 330-221-2580 Fax: 330-247-3988 Email Address: sdrago@neo.rr.com

Web Site Address (if applicable): solarisblackstone.com

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

Applicant's Legal Name: Steven Drago

Title: Owner

Organization: Solaris Blackstone Energy LLC

Owner's Address:

Street Address: 1775 Meloy Road

City: Kent State: Ohio Zip Code: 44240

Country: USA

Phone: 330-221-2580 Fax: 330-247-3988 Email Address: sdrago@neo.rr.com

Web Site Address (if applicable): solarisblackstone.com

D. Name of Generation Facility Operating Company: Same

E. Contact person for regulatory or emergency matters: Same

# 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 your facility's location:

- X The facility is located in Ohio.
- The facility is located in a state geographically contiguous to Ohio (Indiana, Kentucky, Michigan, Pennsylvania, or West Virginia).
- \_\_ 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 your 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 your 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.

For the resource or technology you identify below, please provide a written description of your system. Please indicate if the facility is a customer-owned renewable distributed generation system. Please also include a detailed description of how the output of the facility is going to be measured and verified. If the facility is behind-the-meter and grid connected, please describe the configuration of the meter and the meter type. Please also attach digital photographs that depict an accurate characterization of your installed system. Please indicate the date(s) the photographs were taken. If you need additional sheets for the description of your system, please include those as an exhibit and clearly identify the subject matter in the heading.

Solaris Blackstone 10.5 KW PV System is customer owned grid-interconnected system. The Interconnection Agreement w/ First Energy was signed 7-15-2009 . The system is a roof-mount array pointing approximate  $40^{\circ}$  East of south at a pitch of  $26^{\circ}$  off the horizon. The array consists of two 5.25 KW sub-arrays each feeding a back-fed breaker in a Main Lug on the load side of the utility meter. The utility meter is a Siemens ALTIMUS bidirectional meter.

The system is a negative ground system with DC and AC lightning arrestors and AC lightning capacitors. Each 5.25 KW sub-array consists of three series strings of 10 modules. 2 x E-mon Class 1000 meters are used (one for each inverter output) to measure AC KWH. The system includes a SMA Sunny Webbox to collect Power and Energy usage. Panels: O(1000) = O(100) =

Inverters: Qty 2 – SMA Sunny Boy 5000 (240V)

Metering: Qty 2 – Emon CLASS <u>1000</u>, <u>Model # 320850</u> (ser # 09052206 and #09052209)

Disconnects: Qty 4 – Square D HU361 RB (2 x AC, 2 x DC)

The Applicant is applying for certification in Ohio based on the following qualified resource or technology (Sec. 4928.01 O.R.C.):

#### G.1 \_ SOLAR PHOTOVOLTAIC

Total PV Capacity (DC): 10.5 KW Total PV Capacity (AC): 7.35 KW Expected Capacity Factor: 70%

Anticipated Annual output in kWh/yr: 10,400 KWH

Location of the PV array: X\_ Roof \_ Ground \_ Other

# of Modules and/or size of the array: QTY 60 x 175 WATT Modules = 10.5KW

#### **G.1a** PV Modules

For each PV module, provide the following information:

Manufacturer: BP

Model and Rating: 3175 SX / 175 Watt STC

#### G.2 \_ SOLAR THERMAL

## G.3 WIND

Total Nameplate Capacity (kilowatts AC): kW DC

**Expected Capacity Factor:** 

Anticipated Annual Output in kWh/yr or MWh/yr:

# of Generators:

#### **G.3a** Wind Generators

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

Manufacturer:

Model Name and Number:

Generator Nameplate Capacity (kilowatts AC):

Wind Hub Height (ft):

Wind Rotor Diameter (ft):

that is	HYDROELECTRIC ("hydroelectric facility" means a hydroelectric generating facility solocated at a dam on a river, or on any water discharged to a river, that is within or bring this state or within or bordering an adjoining state (Sec. 4928.01(35) O.R.C.)
	Check each of the following to verify that your facility meets each of the statutory standards (Sec. 4928.01(35) O.R.C.):
_	(a) The facility provides for river flows that are not detrimental for fish, wildlife, and water quality, including seasonal flow fluctuations as defined by the applicable licensing agency for the facility.
_	(b) The facility demonstrates that it complies with the water quality standards of this state, which compliance may consist of certification under Section 401 of the "Clean Water Act of 1977," 91 Stat. 1598, 1599, 33 U.S.C. 1341, and demonstrates that it has not contributed to a finding by this state that the river has impaired water quality under Section 303(d) of the "Clean Water Act of 1977," 114 Stat. 870, 33 U.S.C. 1313.
_	(c) The facility complies with mandatory prescriptions regarding fish passage as required by the Federal Energy Regulatory Commission license issued for the project, regarding fish protection for riverine, anadromous, and catadromus fish.
_	(d) The facility complies with the recommendations of the Ohio Environmental Protection Agency and with the terms of its Federal Energy Regulatory Commission license regarding watershed protection, mitigation, or enhancement, to the extent of each agency's respective jurisdiction over the facility.
	(e) The facility complies with provisions of the "Endangered Species Act of 1973," 87 Stat. 884, 16 U.S.C. 1531 to 1544, as amended.
_	(f) The facility does not harm cultural resources of the area. This can be shown through compliance with the terms of its Federal Energy Regulatory Commission license or, if the facility is not regulated by that commission, through development of a plan approved by the Ohio Historic Preservation Office, to the extent it has jurisdiction over the facility.
_	(g) The facility complies with the terms of its Federal Energy Regulatory Commission license or exemption that are related to recreational access, accommodation, and facilities or, if the facility is not regulated by that commission, the facility complies with similar requirements as are recommended by resource agencies, to the extent they have jurisdiction over the facility; and the facility provides access to water to the public without fee or charge.
_	(h) The facility is not recommended for removal by any federal agency or agency of any state, to the extent the particular agency has jurisdiction over the facility.

#### **G.5** \_ **GEOTHERMAL**

**G.6** \_\_ **SOLID WASTE** (as defined in ORC section 3734.01), electricity generation using fuel derived from solid wastes through fractionation, biological decomposition, or other process that does not principally involve combustion. (Sec. 4928.01(A)(35) O.R.C.)

Identify all fuel types used by the facility and respective proportions (show by the percent of heat input):

#### G.7 \_ BIOMASS

Identify the fuel type used by the facility:

If co-firing an electric generating facility with a biomass energy resource, the proportion of fuel input attributable to the biomass energy resource shall dictate the proportion of electricity output from the facility that can be considered biomass energy.

**G.7a** List all fuel types used by the facility and respective proportions (show by the percent of heat input):

**G.7b** Please attach the formula for computing the proportions of output per fuel type by MWh or kWh generated.

**G.8** \_\_ **FUEL CELL** (any fuel cell used in the generation of electricity, including, but not limited to, a proton exchange membrane fuel cell, phosphoric acid fuel cell, molten carbonate fuel cell, or solid oxide fuel cell; Sec. 4928.01(35)(A) O.R.C.).

Identify all fuel types used by the facility and respective proportions:

### **G.9** \_\_ **STORAGE FACILITY**

If using compressed air or pumped hydropower, the renewable energy resource used to impel the resource into the storage reservoir is (include resource type and facility name):

H. Certification Criteria 3: Placed in Service Date (Sec. 4928.64. (A)(1) O.R.C.)
The Renewable Energy Facility:
X has a placed-in-service date on or after January 1, 1998; (month/day/year): <b>July 28, 2009</b>
<b>H.1</b> Is the renewable energy facility owner a mercantile customer?
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.
<u>X</u> No
Yes
Has the mercantile customer facility owner committed to integrate the resource under the provisions of Rule 4901:1-39-08 O.A.C?
No
Yes
If yes, please attach a copy of your approved application as an exhibit to this filing.

## I. Facility Information

The nameplate capacity of the facility in megawatts (MW): 10.5DC KW = .0105 DC MW

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

Number of Generating Units: 1

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

In-Service date of each unit	The nameplate capacity of each unit in megawatts (MW)	Projected Annual Generation	Expected Annual Capacity Factor %
July 28, 2009	.0105 MW	10.4 MWH	70

(To expand the number of rows if more units need to be reported, place your cursor in the bottom right cell and hit tab).

J. Regional Transmission Organization Information				
<b>J.1</b> In which Regional Transmission Organization area is your facility located:				
Within Geographic Area of PJM Interconnection, L.L.C.				
X Within Geographic Area of Midwest ISO				
Other (specify):				
<b>J.2</b> Are you a member of a regional transmission organization?				
Yes; specify which one:				
<b>X</b> No; explain why you are not a member of a regional transmission organization:				
I am a small commercial generator << 20KW.				
<ul><li>J.3 Balancing Authority operator or control area operator for the facility:</li><li> PJM</li></ul>				
X Midwest ISO				
Other (specify):				
K. Attribute Tracking System Information				
Are you currently registered with an attribute tracking system: $\underline{\underline{X}}$ 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>X</u> GATS				
M-RETS				
Other (specify):				

days of your 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?			
Yes			
<u>X</u> No			

If the generation ID number has not yet been assigned, you will need to provide this number to the PUCO within 15

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

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

Name of State	State Certification Agency	State Certification Number	Date Issued

(To expand the number of rows if more units need to be reported, place your cursor in the bottom right cell and hit tab).

# M. Type of Generating Facility

Pleas	se check all of the following that apply to your facility:
_	Utility Generating Facility:
	Investor Owned Utility
	Rural Electric Cooperative
	Municipal System
_	Electric Services Company (competitive retail electric service provider)
<u>X</u>	Distributed Generation with a net metering and interconnection agreement with a utility. Identify the utility: <b>First Energy</b>
	Distributed Generation with both on-site use and wholesale sales. Identify the utility with which the facility is interconnected:
	Distributed Generation, interconnected without net metering. Identify the utility with which the facility is interconnected:

Note: if the facility does not yet have an interconnection agreement with a utility or transmission system operator, please note here the status of the application for such an agreement:

## N. Meter Specifications

All facilities are required to measure output with a utility grade meter. Please provide this information for each meter used in your system.

Manufacturer: E-mon

Serial Number: ser # 09052206 sub-array 1, and #09052209 sub array 2)

Type: Class 1000 Model, Model # 320850

Date of Last Certification: Certified in 5-2009, by manufacturer

Attach a photograph of the meter with date image taken. The meter reading must be clearly



Taken 8-26-2009

Taken 8-26-2009

Total kWh shown on meter at time of photograph:

**Sub-Array 1 – 980 KWH Sub-Array 2 – 981 KWH** 

**Total = 1961 KWH** 

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.



SOLARIS BLACKSTONE 10.5 KW ARRAY Switchgear, Inverters, Meters, Web-box Taken 8-26-2009



SOLARIS BLACKSTONE 10.5 KW ARRAY 1775 Meloy Road, Kent, Ohio 44240 Taken July 8, 2009



SOLARIS BLACKSTONE 10.5 KW ARRAY Commercial Meter / Siemens Bi-Directional Meter Taken 8-26-2009

This foregoing document was electronically filed with the Public Utilities

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Summary: Application Application to become Ohio RE Resources Generating Facility filed by Steve Drago - PDF version electronically filed by Mr. Steve Michael Drago on behalf of Solaris Blackstone Energy LLC