

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

Case Number: 14-0403-EL-REN

A. Generating Facility

Name of Renewable Generating Facility: Mother Ann Lee Hydroelectric Station

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

Facility Location

Street Address: 1 Shaker Ferry Road

City: Harrodsburg State: KY County: Mercer Zip Code: 40330

Facility Latitude and Longitude

Latitude: 37o 49' 47" **Longitude:** 84o 43' 29"

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: Mother Ann Lee

EIA Plant Code: 1359

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: Lock 7 Hydro Partners, LLC

Legal Name of Facility Owner Representative: David H. Brown Kinloch

Title: President/CEO

Organization: Lock 7 Hydro Partners, LLC

Street Address: 414 S. Wenzel Street

City: Louisville **State:** KY **Zip Code:** 40204 **Phone:** 502-589-0975 **Fax:** 502-589-0975

Email Address: softenergy@juno.com

Web Site Address (if applicable): www.kyhydropower.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: Lock 7 Hydro Partners, LLC

Title: President/CEO

Organization: Lock 7 Hydro Partners, LLC **Street Address:** 414 S. Wenzel Street

City: Louisville State: KY Zip Code: 40204 Phone: 502-589-0975 Fax: 502-589-0975 Email Address: softenergy@juno.com

Web Site Address (if applicable): www.kyhydropower.com

D. Name of Generation Facility Operating Company

Name of Generation Facility Operating Company: Shaker Landing Hydro Associates, Inc.

Legal Name of Contact Person: David H. Brown Kinloch

Title: President

Organization: Shaker Landing Hydro Associates, Inc.

Street Address: 414 S. Wenzel Street

City: Louisville State: KY Zip Code: 40204 Phone: 502-589-0975 Fax: 502-589-0975 Email Address: softenergy@juno.com Web Site Address (if applicable):

E. Regulatory/Emergency Contact

Legal Name of Contact Person: David H. Brown Kinloch

Title: President/CEO

Organization: Lock 7 Hydro Partners, LLC **Street Address:** 414 S. Wenzel Street

City: Louisville **State:** KY **Zip Code:** 40204 **Phone:** 502-589-0975 **Fax:** 502-589-0975

Email Address: softenergy@juno.com

Web Site Address (if applicable): www.kyhydropower.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 (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 facility is a 2,209 kW run-of-river conventional hydroelectric facility located at Lock 7 on the Kentucky River near Harrodsburg, Kentucky. The facility is certified by the Low Impact Hydropower Institute (Certificate No. 24) and is also Green-e certified. The facility consist of 3 hydroelectric turbine generators. Lock 7 Hydro Partners, LLC put the first unit on-line on March 9, 2007, and had all three units on-line, and the plant declared fully operational, on December 30, 2008. The plant operates under FERC Hydropower License No. 539. The facility is in the East Kentucky Power Cooperative (a PJM member) Control Area.

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).

Net Generation Output is currently self-reported in the PJM-EIS GATS system (Unit ID:NON43335). Gross output is metered by East Kentucky Power Cooperative (a PJM member) and reported to us on a monthly basis. Auxilliary power used by the facility is metered by Kentucky Utilities Company and reported to us on a monthly basis. The Auxilliary power consumption is subtracted from the Gross power output, to arrive at the Net Generation Output, which is recorded monthly in the PJM-EIS GATS system. Paper records of the East Kentucky Power Cooperative and Kentucky Utilities Company meter readings are kept in the Lock 7 Hydro Power office for verification if requested.

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.



January 03, 2010



G.7 __HYDROELECTRIC ("hydroelectric facility" means a hydroelectric generating facility that is located at a dam on a river, or on any water discharged to a river, that is within or bordering this state or within or bordering an adjoining state (Sec. 4928.01(35) O.R.C.)

Check each of the following to verify that the facility meets each of the statutory standards (Sec. 4928.01(35) O.R.C.):

- <u>Yes</u> (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.
- Yes (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.
- <u>Yes</u> (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.
- <u>Yes</u> (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.
- <u>Yes</u> (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.
- <u>Yes</u> (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.
- <u>Yes</u> (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.
- <u>Yes</u> (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.7.1** Is the facility currently certified by the Low-Impact Hydro Institute? Yes

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:

No has a placed-in-service date on or after January 1, 1998; Date:

Yes has been modified or retrofitted on or after January 1, 1998; Date: 3/9/07

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.

The in-service date of the Mother Ann Lee Hydroelectric Station is March 9, 2007 after the first unit was placed on-line and the plant began producing renewable electricity. The plant became fully operational (all 3 units) and declared in-service on December 30, 2008.

This plant was previous owned and operated by Kentucky Utilities Co. (KU) as the "Lock 7 Plant" and the plant was retired in the 1990's. In 2004, KU filed an application with the FERC to surrender the FERC license and tear the plant down (the dam was to stay for water supply). Because of public opposition to tearing down one of Kentucky's few renewable energy facilities, KU decided not to tear the plant down, but instead sell it to Lock 7 Hydro Partners. The purchase was completed on December 30, 2005 after the FERC license was transferred on November 23, 2005. The plant was in very bad condition. Since then, Lock 7 Hydro Partners has spent over \$2 million to get the abandoned plant operational again. Currently, Lock 7 Hydro Partners is completely rebuilding one of the turbines and replacing the runner, at a total cost of about a half a million dollars.

The refurbished facility is quite different from the abandoned plant that was the starting point. Besides the new owner, the original plant was called the Lock 7 Plant and had a rated capacity of 2.04 MW. This newly refurbished plant is named the Mother Ann Lee Hydroelectric Station and has a rated capacity of 2.209 MW. In addition, the new refurbished plant is part of a new utility Control Area (East Kentucky Power Cooperative) and is no longer a part of the KU system. Because the Lock 7 plant was retired, abandoned, and the capacity removed from the utility inventory, it has been considered as new renewable capacity for the purpose of Production Tax Credits, Green-e certification, and LIHI certification. Pictures of the renovation work (before and after) can be seen at www.kyhydropower.com.

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): 2,209.00 (megawatts (MW): 2.209)

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
12/30/08	0.68	3,000	50.4	1
6/15/07	0.849	4,000	53.8	1
3/9/07	0.68	3,000	50.4	1
	C F 0/			
	Capacity Factor % :	Nameplate Capacity	× 8,760 × 100	

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: 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: NON43335

(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? Yes

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

Name of State	State Certification Agency	State Certification Number	Certification Date <u>Issued</u>
Illinois	Illinois Commerce Commission	IL-06361-WAT-I	08/17/2010

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

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

No Distributed Generation with a net metering and interconnection agreement with a utility.

Identify the Utility:

No Distributed Generation with both on-site use and wholesale sales.

Identify the Utility:

<u>Yes</u> Distributed Generation, interconnected without net metering.

Identify the Utility: <u>East Kentucky Power Cooperative</u>

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: Rochester/Columbus Scientific JEMSTAR Digital

N.1.b Serial Number: 06 16 06871

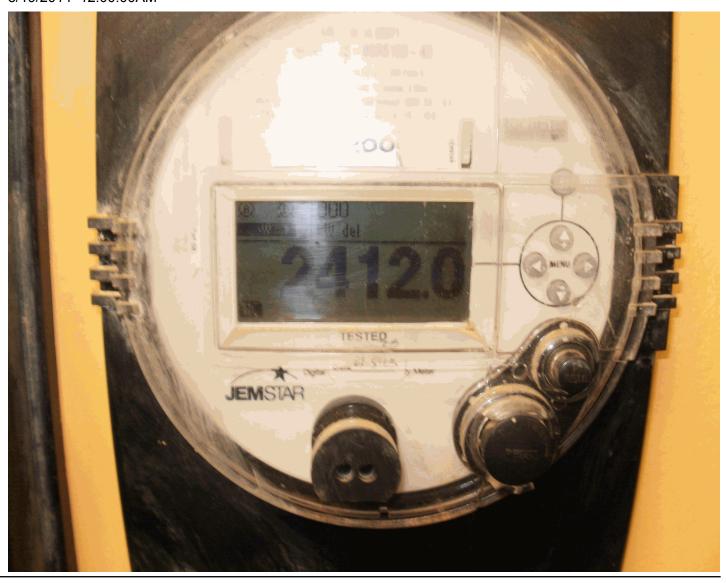
N.1.c Type: Model JS-05R6120-43 Remote read recording meter with x3200 multiplier

N.1.d Date of Last Certification: April 08, 2013

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): $2412.0 \times 3200 = 7,718,400 \text{ kWh}$ on 3/19/2014

3/19/2014 12:00:00AM





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: 14-0403-EL-REN

Facility Name: Mother Ann Lee Hydroelectric Station

Name of person making this affidavit: David Brown Kinloch

State of Kentucky

County of Jefferson

affirmo 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,
- 2. 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,
- 4. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature of Affiant & Title

worn and subscribed before me this 19thday of March

My commission expires on Notary Public, State at Large, KY

My commission expires Oct. 19, 2015

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

Commission of Ohio Docketing Information System on

3/19/2014 4:06:20 PM

in

Case No(s). 14-0403-EL-REN

Summary: Application Application for Certification as an Ohio Renewable Energy Resource Generating Facility for the Mother Ann Lee Hydroelectric Station electronically filed by Mr. David H Brown Kinloch on behalf of Lock 7 Hydro Partners, LLC