

SB 310- Specific

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

Case No.: 18-1084-EL-REN

A. Name of Renewable Facility: City of Hamilton Hydroelectric Plant

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

Facility Location

Street Address: 960 North Third Street

City: Hamilton State: OH Zip Code: 45013 County: Butler

Facility Latitude and Longitude

Latitude: 39D-25'-33" Longitude: 84D-30'-12"

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

have this information.

For facilities that have a total nameplate capacity of 1 MW or greater provide the U.S. Department of Energy, Energy Information Administration Form EIA-860 Plant Name and Plant Code.

EIA-860 Plant Name: Hamilton

EIA Plant Code: 7807

B. Legal Name of the Facility Owner: City of Hamilton

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 Facility Owner Representative (First Name, MI, Last Name): Jim Logan

Title: Executive Director of Infrastructure

Organization: City of Hamilton

Street Address: 345 High Street, Suite 450

City: Hamilton State: OH Zip Code: 45011

Country: USA

Phone: 513-785-7202 Fax: 513-785-7230 Email Address: jim.logan@hamilton-oh.gov

Web Site Address (if applicable): www.hamilton-city.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 (First Name, MI, Last Name): Jim Logan

Title: Executive Director of Infrastructure

Organization: City of Hamilton

Street Address: 345 High Street, Suite 450

City: Hamilton State: OH Zip Code: 45011

Phone: 513-785-7202 Fax: 513-785-7230 Email Address: jim.logan@hamilton-oh.gov

Web Site Address (if applicable): www.hamilton-city.org

D. Name of Generation Facility Operating Company: see above

Legal Name of Contact Person (First Name, MI, Last Name): Jim Logan

Title: Executive Director of Infrastructure

Organization: City of Hamilton

Street Address: 345 High Street, Suite 450

City: Hamilton State: OH Zip Code: 45011

Phone: 513-785-7202 Fax: 513-785-7230 Email Address: jim.logan@hamilton-oh.gov

Web Site Address (if applicable): www.hamilton-city.org

E. Regulatory/Emergency contact

Legal Name of Contact Person (First Name, MI, Last Name): Jim Logan

Title: Executive Director of Infrastructure

Organization: City of Hamilton

Street Address: 345 High Street, Suite 450

City: Hamilton State: OH Zip Code: 45011

Phone: 513-785-7202 Fax: 513-785-7230 Email Address: jim.logan@hamilton-oh.gov

Web Site Address (if applicable): www.hamilton-city.org

F. Certification Criteria 1: Deliverability of the Generation into Ohio Ohio Revised Code (ORC) Sec. 4928.64(B)(3)

Check which of the following applies to the 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 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, SEE THE COMMISSION'S MARCH 23, 2011 ORDER IN CASE NO. 09-0555-EL-REN.

G. Certification Criteria 2: Qualified Resource or Technology

You should provide information for only one generation facility in this application. If you are applying for more than one facility, you will need to complete a separate application for each facility.

The resource or technology for which you are applying for certification must be a renewable energy resource or technology included in Amended Substitute Senate Bill 310 (SB 310) that was not previously recognized as a renewable energy resource under previous statutes. If the resource or technology was a renewable resource or technology recognized by statute before the effective date of SB 310, the applicant must use the online Renewable Energy Resource Generating Facility Application for Certification at

 $\frac{http://www.puco.ohio.gov/puco/index.cfm/puco-forms/renewable-energy-resource-generating-facility-application-for-certification/$

G.1 The Applicant is applying for certification in Ohio for a facility using the following SB 310 qualified resources or technologies (Sec. 4928.01 Ohio Revised Code): Small Hydroelectric on the Great Miami River

G.2. For the resource or technology you identify in Sections G.1 above, please provide a detailed description of the system.

This 2 MW hydroelectric plant is located on the Ford Canal which is part of the Great Miami Waterway. The facility has been owned by the City of Hamilton since 1963 and generates enough energy to supply more than 400 local homes annually.

In 1918, Henry Ford and Son Inc. purchased the Hamilton & Rossville Hydraulic Co. for approximately \$200,000. The New York Times reported Ford's plans to "spend millions of dollars developing the water power of the United States," including the water powered tractor plant which Ford Motor Co. would open in Hamilton in 1920. The plant was located along the newly constructed Ford Canal and electricity was supplied to the plant by hydroelectric power generated from the canal.

Ford & Son Co. owned the hydroelectric facility on the canal until Ford's local plant was closed and sold to Bendix Aviation Corp. in 1951. In 1963, the manufacturing plant was purchased by Ward Manufacturing Co., and the adjacent hydroelectric facility was acquired by the City of Hamilton to supplement the City's electric generation assets.

G.3. 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 facility has the appropriate switchgear to integrate it into the City's electric distribution system.

G.4. Please attach digital photographs that depict an accurate characterization of the renewable generating facility. Please indicate the date(s) the photographs were taken.

Date photograph taken: 3/8/2018

INSERT PHOTOGRAPH(S)





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 before January 1, 1998; (month/day/year): 7/1/1996
has a placed-in-service date on or after January 1, 1998; (month/day/year):
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.
not yet online; projected in-service date (month/day/year):
H.1 Is the renewable energy facility owner a mercantile customer?Yes
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?
Yes
X No

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

I. Facility Information

I.a If applicable, the nameplate capacity of the entire facility in kilowatts (kW): 2,250 or in megawatts (MW): 2.25

To convert from kilowatts (kW) to megawatts (MW) divide by 1,000.

I.b If applicable, what is the expected net heat rate of the facility: BTU/kWh

Number of Generating Units:

I.1 If applicable, for each generating unit, provide the following information:

In-Service date of	The nameplate	Projected Annual	Expected Annual
each unit	capacity of each unit	Gross Generation	Capacity Factor %
	in megawatts (MW)	(MWh)	
Unit #1, 1996	1.125	2,982	30
Unit #2, 1996	1.125	1,453	15

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

Capacity Factor
$$\% = \frac{Projected\ Annual\ Generation}{Nameplate\ Capacity*\ 8760} * 100$$

J. Regional Transmission Organization Information

In which Regional Transmission Organization area is your facility located:

X	Within	Geographic	Area	of PJM	Interconnection	n, L.L.C
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__ Within Geographic Area of Midwest ISO

__ Other (specify):

K. Attribute Tracking	System Information		
Are you currently regist	tered with an attribute tra	acking system:Yes	<u>X</u> No
	stem you identify will b	ently registered or in whice the system the PUCO c	
X GATS (Generation	Attribute Tracking Syst	tem)	
M-RETS (Midwest l	Renewable Energy Track	king System)	
Other (specify):			
(If the generation ID num	ber has not yet been assign ys of the facility receiving	has been assigned by the ned, you will need to file thi this number form the tracki	s number in the PUCO
Is the facility certified by portfolio standards of the	•	gible generating resource	to meet the renewable
Yes			
<u>X</u> No			
L.1 If yes, for each state	e, 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

Plea	se check all of the following that apply to the facility:
	Utility Generating Facility:
	Investor Owned Utility
	Rural Electric Cooperative
	X Municipal System
	Electric Services Company (competitive retail electric service provider certified by the PUCO)
_	Distributed Generation with a net metering and interconnection agreement with a utility. Identify the utility:
_	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:
_	Other:

N. Meter Specifications

Metering Requirements

If the renewable energy resource electrical generating facility is 6 kW or below, the output may be measured with either an inverter meter or a utility grade meter.

All electrical generating facilities that are larger than 6 kW must measure the output of the facility with a utility grade meter. Electrical generating 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)(I)

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:

____ Inverter Meter(s)

X 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: Electro Industries

N.1.b Serial Number: unknown

N.1.c Type: Shark 200

N.1.d Date of Last Certification: 2016

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): Unit #1; 836,749 kwh Unit #2; 567,630 kwh

Date photograph taken: 6/28/18

INSERT PHOTOGRAPH(S)







Unit #2

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: August 28, 2014

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in

Case No(s). 18-1084-EL-REN

Summary: Application City of Hamilton hydro application for Renewable Energy Resource Generating Facility electronically filed by Mr. Anthony V Ferraro on behalf of City of Hamilton and Mr. Anthony V Ferraro