



January 22, 2015

Mr. Stuart M. Siegfried  
Public Utilities Commission of Ohio  
Energy & Environment Department  
Efficiency & Renewables Division  
Environmental Specialist  
180 East Broad Street  
Columbus, Ohio 43215

Re: PUCO Case No. 14-2286-EL-REN

Dear Mr. Siegfried,

The City of Hamilton, Ohio received your inquiry regarding the December 12, 2014 Application for Certification as an Eligible Ohio Renewable Energy Resource Generating Facility in the above referenced docket and respectfully submits the responses that are attached hereto.

Additionally, pursuant to your request, the photographs that were attached to the Application were emailed directly to you concurrently with this response.

Please do not hesitate to contact Kevin M. Maynard, Director of Electric, City of Hamilton (at [maynardk@ci.hamilton.oh.us](mailto:maynardk@ci.hamilton.oh.us) or 513-785-7208), Jeff Martin, City of Hamilton (at [martinje@ci.hamilton.oh.us](mailto:martinje@ci.hamilton.oh.us) or 513-383-0728) or me (at [lmcalister@amppartners.org](mailto:lmcalister@amppartners.org) or 614-540-6400) if you have any questions regarding this matter. Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read "Lisa G. McAlister".  

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Lisa G. McAlister

## **The City of Hamilton, Ohio Responses to Staff Inquiries dated January 8, 2015**

1) Please affirm each of the items below – or if unable to affirm, provide details as to the status of each:

- 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 catadromous 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.

- i) 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.

**Response:** The City of Hamilton affirms that each of the items is true.

- 2) Please complete, have notarized and file the attached affidavit.

**Response:** Please see the attached affidavit.

- 3) Page 4 of the application indicates that in-house station usage is measured with one active rotary meter. The application further explains the presence of three rotary meters. If only one is used to measure the total system station usage, are the other 2 rotary meters used for back-up as needed?

**Response:** Only one rotary meter is in service at any given point in time to measure station usage. Each Unit has a dedicated in-house transformer, with each in-house transformer having a dedicated rotary meter that measures station usage. Either of the two rotary meters not in service at any given point of time can be designated as first back-up or second back-up.

- 4) Page 4 of the application shows a proposed formula for determining the facility's hourly net output. Given that the facility's hourly station service is deducted at the end of the equation, what is meant by "net hourly" for Units 1, 2, and 3 within the equation?

**Response:** The "Net <sub>hourly</sub>" descriptor for Units 1, 2 and 3 is incorrect, and should be replaced with a corrected descriptor of "Gross <sub>hourly</sub>". The corrected formula is as follows;

$$\text{Output Net}_{\text{hourly}} = [(\text{Unit \#1 Gross}_{\text{hourly}}) + (\text{Unit \#2 Gross}_{\text{hourly}}) + (\text{Unit \#3 Gross}_{\text{hourly}})] - \text{Station Service}_{\text{hourly}}$$

- 5) Page 7 of the application indicates projected annual generation per unit of 90,000 MWHs with a 65% annual capacity factor. Using the formula of Annual MWHs = MW \* 8760 \* % capacity factor, it appears that either the capacity factor in the application needs reduced or the projected annual generation needs increased. Please clarify.

**Response:** The formula on page 7 identified for calculating the capacity factor percentage does not take into account that the Greenup Hydro facility is a "run-of-the-river" plant, and the Units are not available to generate at nameplate capacity, 8760-hours per year. Both Unit generation and available generating hours are reduced during the year due to natural and navigation causes. These causes are primarily due to river conditions of high flows and low flows, and flow restrictions imposed by the U.S.

Army Corps of Engineers. The projected annual gross generation and expected annual capacity factor percentage is based on historical data.

6) Page 11 of the application includes a meter read of 1,540,325 kWhs which it indicates is the total of three rotary meter readings. Please confirm that these rotary meters measure station usage, rather than system output. In addition, clarify if all 3 rotary meters are used monthly or if only one rotary meter is used as suggested by the response on page 4 of the application.

**Response:** With respect to page 11 of the Application, it is an inaccurate assumption that the station service usage is the sum of all three rotary meter readings. Only one rotary meter is in service at any given point in time to measure station usage. Each Unit has a dedicated in-house transformer, with each in-house transformer having a dedicated rotary meter that measures station usage.

7) For the past 18 months, provide the monthly (a) total facility output, (b) station in-house usage, and (c) net facility output.

**Response:** Following is the generation performance of the Greenup Hydroelectric Plant for the period of July 1, 2013 through December 31, 2014:

1. Total Facility Output = 379,748.4 MWh
2. Station In-House Usage = 3542.7 MWh
3. Net Facility Output = 377,054.9 MWh

8) Please email the application photos separately to Staff. The photos, as they currently appear in the application, are awfully dark and difficult to discern any detail.

**Response:** The application photos are being emailed concurrently with the filing of this response.

9) The application indicates a placed in-service date of October 1982 for the facility. Provide a copy of any documentation that supports this assertion.

**Response:** The first Unit was tested in October 1982. The Plant went into commercial operation on December 7, 1982. Please see the attached scanned copy of the Operations Log Book entries for December 7, 1982 documenting the Plant commercial operation date.



# Public Utilities Commission

## 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:** 14-2286-EL-REN

**Facility Name:** Greenup Hydroelectric Project

**Name of person making this affidavit:** Kevin Maynard

State of Ohio  
County of Franklin

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.

Kevin M. Maynard Director of Electric  
Signature of Affiant & Title

Sworn and subscribed before me this 21<sup>st</sup> day of January, 2015 Month/Year

Lisa G. McAlister  
Notary

My commission expires on NA



LISA G. McALISTER  
ATTORNEY AT LAW  
State of Ohio  
No Expiration  
JAN 2015

1220 Brought units BACK UP. to Full Load, 0

#1 10,500 CFS 13.5 MW

#2 10,500 CFS 14.0 MW

#3 9,750 CFS 12.0 MW

30,750 Total CFS 39.5 Total MW

Called Locks & Canton

1600 WEDDINGTON - STAMM OUT

SHUT Down Unit #3 "LOSS OF HEAD 2ND Stage"

#1 10,593 CFS 14.5

#2 10,593 CFS 15

21,186 Total CFS

Wamsley & Liles IN

1705 CALLED LOCKS NO ANSWER

1942 "STANDBY XFMR PUMP OPERATION" & "XFMR WATER

TANK LEVEL LOW" CHANGED LEAD PUMP, ACKNOWLEDGED

FAULTS LIGHTS WENT OUT.

1955 CALLED LOCKS: REPORTED NO CHANGE IN CFS

UNIT #1 10,593 80% HN 6.04

" #2 10,593 80%

2240 M. Lewis called to tell we are going

Commercial at midnight - Called locks 08

"They" said plenty of water - Called Canton - Nothing  
different with Canton - MAKE SURE  
of hourly readings on M.W. output,  
Be Very Accurate -

2346 Brought Unit 3 on line 12

3 units 31,230 CFS

42 M.W. Total 5.81 HN

2400 Wamsley & Liles Out / Seifres & Paynter IN

12-7-82 Commenced Commercial Operation

0133 Called Locks and reported Present CFS. 160

0135 Checked oil level in Accumulator Compressors.

All 3 Comp. Full. (RES.) 16

0140 80% on all three units. Total CFS

is 31,248. HN 5.7 m

**This foregoing document was electronically filed with the Public Utilities**

**Commission of Ohio Docketing Information System on**

**1/22/2015 3:38:34 PM**

**in**

**Case No(s). 14-2286-EL-REN**

Summary: Response of the City of Hamilton Regarding the Application for Certification as an Eligible Ohio Renewable Energy Resource Generating Facility electronically filed by Errin C Harris on behalf of City of Hamilton