



Case No.: 12-2375-EL-REN

A. Name of Renewable Generating Facility: Miami Fort Generating Station Units 7 & 8

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

Facility Location

Street Address: 11021 Brower Rd

City: North Bend State: OH County: Hamilton Zip Code: 45052

Facility Latitude and Longitude

Latitude: 39 degrees, 7.8 minutes North Longitude: 84 degrees, 46.6 minutes West

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: Miami Fort

EIA Plant Code: 2832

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: Duke Energy Ohio, Inc.

Legal Name of Facility Owner Representative (First Name, MI, Last Name): Timothy J. Thiemann

Title: VP Midwest Generation Operations

Organization: Duke Energy

Street Address: 139 East 4th St

City: Cincinnati

State: OH

Zip Code: 45202

Phone: 513-287-2642

Fax: 513-287-2695

Email Address: tim.thiemann@duke-energy.com

Web Site Address: www.duke-energy.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): Timothy J. Thiemann

Title: VP Midwest Generation Operations

Organization: Duke Energy

Street Address: 139 East 4th St

City: Cincinnati State: OH Zip Code: 45202

Phone: 513-287-2642 Fax: 513-287-2695

Email Address: tim.thiemann@duke-energy.com

Web Site Address: www.duke-energy.com

D. Name of Generation Facility Operating Company:

Name of Generation Facility Operating Company: Duke Energy Ohio, Inc.

Legal Name of Contact Person (First Name, MI, Last Name): David Beck

Title: GM III - NonReg Fossil Station

Organization: Duke Energy

Street Address: 139 East 4th St

City: Cincinnati State: OH Zip Code: 45202

Phone: 513-287-2640 Fax: Email Address: david.beck@duke-energy.com

Web Site Address (if applicable):

E. Regulatory/Emergency contact

Legal Name of Contact Person (First Name, MI, Last Name): Timothy J. Thiemann

Title: VP Midwest Generation Operations

Organization: Duke Energy

Street Address: 139 East 4th St

City: Cincinnati State: OH Zip Code: 45202

Phone: 513-287-2642 Fax: 513-287-2695

Email Address: tim.thiemann@duke-energy.com

Web Site Address: www.duke-energy.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:

Yes The facility is located in Ohio.

No 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 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, PLEASE 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 technology used by the facility will be co-firing of biofuels. Co-firing in this sense refers to blending fossil and renewable fuels prior to combustion and generation of energy. The intent is to use biodiesel or a blend of biodiesel and No.2 fuel oil as a direct substitute for No.2 fuel oil.

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).

The output of this facility will be measured and verified using the metering infrastructure in place as shown in section N.

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.

July 01, 2010



G.10 BIOMASS (includes biologically-derived methane gas, such as landfill gas)

G.10a Identify the fuel type used by the facility:

Landfill gas: N

Solid fuel

Wood: N

Agricultural: N

Other: N

Wood and paper manufacturing waste: N

Biogas (anaerobic digestion)

On-farm: N

Wastewater treatment: N

Food processing: N

Other: N

Biofuel (biodiesel): Y

Biomass (other): N

G.10b Describe the content (fully characterize the fuel material) and source of solid waste:
Biodiesel compliant with ASTM D-6751-09 Standard

G.10c What is the expected heat content for each of the fuels used by the plant?

Biodiesel will have a heat content of ~136,000 Btu/gallon.

The coal will have an average heat content of 9,000-13,000 Btu/lb.

The fuel oil will have an average heat content of 137,000 Btu/gallon.

G.10d Is the facility co-firing more than one fuel type? Yes

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

G.10e List all fuel types used by the facility and respective proportions (show by the percent of heat input):

Primary fuel is coal, which will have up to 100% heat input.

Secondary fuel for startup and flame stabilization is biodiesel/fuel oil which has historically been about 1% of overall heat input.

G.10f Please submit (or input here) the formula for computing the proportions of output per fuel type by MWh or kWh generated:

$$\text{MWhREC} = ((\text{mbd} * \text{HHVbd}) / (\text{mbd} * \text{HHVbd} + \text{mfo} * \text{HHVfo} + \text{mc} * \text{HHVc} * 2,000))$$

Where:

MWhREC = Renewable energy produced

mbd = measured mass of biodiesel consumed (gallons)

mfo = measured mass of fuel oil consumed (gallons)

mc = measured mass of coal consumed (tons)

HHVbd = biodiesel heating value (Btu/gal)
HHVfo = fuel oil heating value (Btu/gal)
HHVc = coal heating value (Btu/lb)
MWhNET,MEASURED = measured megawatt-hours

G.10g What is the projected annual gross generation from each fuel type?

The total Miami Fort unit 7 and 8 combined projected gross generation ranges from ~6,600,000 MWh to ~7,800,000 MWh per year.

Coal will account for ~99% of the generation, and biodiesel/fuel oil will account for ~1% of the generation. The fuel oil will typically contain up to 5% biodiesel.

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):

No has a placed-in-service date on or after January 1, 1998; (month/day/year):

Yes has been modified or retrofitted on or after January 1, 1998; (month/day/year): 4/20/12

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 modification is introducing biodiesel as a renewable fuel to the facility. The biodiesel contract is in place and initial deliveries started 4/20/2012.

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? No

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 kilowatts (kW): 1,020,000.00 or in megawatts (MW): 1,020

I.b If applicable, what is the expected heat rate of resource used per kWh of net generation:
10,150 BTU/kWh

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

<u>Unit In-Service</u> <u>Date</u>	<u>Unit Nameplate</u> <u>Capacity (MW)</u>	<u>Projected Gross</u> <u>Annual Generation</u>	<u>Expected Annual</u> <u>Capacity Factor %</u>	<u>Number of</u> <u>Generating Units</u>
4/20/12	510	3,500,000	78.3	1
4/20/12	510	3,500,000	78.3	1

$$\text{Capacity Factor \%} = \frac{\text{Projected Annual Generation}}{\text{Nameplate Capacity} \times 8,760} \times 100$$

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

Arc 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: Unit 7:

MSET87160107 Unit 8: MSET87160108

(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).

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? No

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

<u>Name of State</u>	<u>State Certification Agency</u>	<u>State Certification Number</u>	<u>Date Issued</u>
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M. Type of Generating Facility

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

Yes Utility Generating Facility:

Yes 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 with which the facility is interconnected:

No 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:

N Inverter Meter(s)

Y 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: Schlumberger

N.1.b Serial Number: 22615091

N.1.c Type: multi-function polyphase sangamo ST-Q220

N.1.d Date of Last Certification: March 16, 2011

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): 72688

September 11, 2012



N.a The meter(s) that are measuring output from the facility are:

N Inverter Meter(s)

Y 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: Schlumberger

N.1.b Serial Number: 22615093

N.1.c Type: multi-function polyphase sangamo ST-Q220

N.1.d Date of Last Certification: April 06, 2011

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): 37818

September 11, 2012



O. Start date from which applicant requests to begin reporting generation towards the creation of Renewable Energy Credits (RECs) for Ohio's purposes

The start date from which an attribute tracking system will begin to count generation data toward the creation of renewable energy credits for Ohio's purposes will be the date of certificate issuance in the state of Ohio (i.e. generation prior to the date of certification would not be recognized), 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 or 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.

Note: An application that leaves section O blank, or does not include the required documentation, will be assigned a start date for Ohio that corresponds with the date of Ohio certification.

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:

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:

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 at 34.)

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



Public Utilities Commission

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

Case No.: 12-2375-EL-REN

AFFIDAVIT

State of Ohio:

Cincinnati ss. (Town)

County of Hamilton :

Timothy J. Thiemann, Affiant, being duly sworn/affirmed according to law, deposes and says that:

- 1. I am the duly authorized representative of Miami Fort Generating Station Units 7 & 8.
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.

[Signature], VP Midwest Generation Operations
Signature of Affiant & Title

Sworn and subscribed before me this 8th day of OCTOBER, 2012 Month/Year

[Signature]
Signature of official administering oath

PATRIA A. LENOIR
Notary Public, State of Ohio
My Commission Expires 03-21-2016
Print Name and Title

My commission expires on MARCH 21, 2016

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 15, 2011