

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application for Certification	:	
as an Ohio Renewable Energy Resource Generating	:	Case No. 17-1881-EL-REN
Facility for the North Lake Energy, LLC Unit 17	:	

REVIEW AND RECOMMENDATION
SUBMITTED ON BEHALF OF THE STAFF OF
THE PUBLIC UTILITIES COMMISSION OF OHIO

CASE HISTORY

On September 18, 2017, North Lake Energy, LLC (Applicant) filed an application for certification of its waste energy recovery system as a renewable energy resource. North Lake Energy, LLC Unit 17 is located at 3210 Watling Street MC-2-991, East Chicago, IN, 46321 on the site of the ArcelorMittal Indiana Harbor steelmaking plant.

On November 16, 2017, an Attorney Examiner issued an entry that suspended the automatic approval process for this application.

STAFF REVIEW

Staff reviewed this application for certification as a renewable energy resource. Staff specifically reviewed (1) the resource/technology used at the facility, (2) whether the electricity was deliverable into the state of Ohio, (3) the technology's placed-in-service date, and (4) additional considerations.

(1) Resource/Technology used at the Facility

The Applicant's electrical generator is situated on the grounds of the ArcelorMittal Indiana Harbor steelmaking plant. Since 1996, the steelmaking plant has had a 75 MW condensing steam turbine generator onsite, which captured the excess steam from ArcelorMittal boilers numbered 501, 502, and 503, and generated electricity. A new boiler (#504) was installed at the steelmaking plant on September 19, 2012, to generate more steam from blast furnace gas, which was previously flared. This boiler #504 generates steam that is then used in the steelmaking plant, plus some in excess of the steel plant's needs.

To now utilize the excess waste steam heat from the new ArcelorMittal boiler #504, the Applicant began a retrofit process for the condensing steam turbine generator in 2011 to increase its capacity by 15 MW. The retrofit process was completed on May 9, 2015.

The retrofit process included a major overhaul of the high-pressure turbine, gearbox, and controls. Also, the new boiler #504 was installed at the steelmaking plant on September 19, 2012, which serves as the waste heat source for the waste energy recovery (WER) system. Also, wiring modifications were performed to upgrade the automatic voltage regulators in November 2012. In February/March 2013, the condensate pumps were modified. Replacement of cross-over pipe bellows was performed in December

2013. Replacement of a fourth stage row of blades in the low-pressure turbine was completed in August 2014. The turbine manufacturer performed restoration and shakedown from March through May 2015. At the conclusion of the retrofit process, the Applicant's WER system had an additional 15 MW of capacity, for 90 MW total gross output.

A WER system placed into service or retrofitted on or after September 10, 2012 is defined as a renewable energy resource in R.C. 4928.01(A)(37). The Applicant indicates that its purpose is to recycle waste heat from the steelmaking process, through combustion in boilers, to generate steam and then utilize this steam to produce electricity, which aligns with an additional definition of a WER system from R.C. 4928.01(A)(38).

Staff agrees with the Applicant that the retrofit process was concluded on May 9, 2015, making the technology a WER system. Also, staff concludes that the WER system uses the exhaust heat from the ArcelorMittal industrial site's boiler #504 and converts it to produce up to 15 MW of electricity from a renewable energy resource. Therefore, the facility represents a resource/technology that is eligible for certification as a renewable facility under the renewable portfolio standard.

(2) Deliverability

Renewable facilities must be located in Ohio, or their output deliverable to Ohio, in order to be eligible for certification as a renewable energy resource facility.¹ The Ohio Administrative Code provides further guidance on this topic in its definition of "deliverable into this state":

That the electricity originates from a facility within a state contiguous to Ohio. It may also include electricity originating from other locations, pending a demonstration that the electricity could be physically delivered to the state.²

This facility is located in neighboring Indiana. The facility is a distributed generation facility without net metering and is interconnected with the Northern Indiana Public Service Company. Therefore, Staff concludes that this facility satisfies the deliverability requirement.

(3) Placed-In-Service Date

To be a qualified renewable energy resource, the resource would need to be either placed in service, created by modification, or retrofit on or after January 1, 1998, as required in R.C. 4928.64(A).

The Applicant is seeking certification for the 15 MW of additional capacity that was created by the retrofit process completed on May 9, 2015. Staff concludes that the 15 MW addition satisfies the placed-in-service requirement under R.C. 4928.64(A)(1)(d).

(4) Additional Considerations

The meter described in the application satisfies a Commission rule that requires facilities with a capacity above six kilowatts measure the renewable output with a utility-grade meter.³

¹ R.C. 4928.64(B)(3)

² Ohio Adm.Code 4901:1-40-01(I)

³ Ohio Adm.Code 4901:1-40-04(D)(1)

According to the application, and as confirmed by Staff, the facility is currently registered with PJM Environmental Information Services' Generation Attribute Tracking System (GATS) and assigned the identification number NON87768. That registration with GATS will allow an electric utility or electric services company to use RECs generated by the Applicant as a means of compliance with Ohio's RPS.

The Applicant intends to report to GATS on a monthly basis only those net megawatt hours generated when its gross power is between 75 and 90 MW. The auxiliary load (electric power used to run its facility) of 243.33 megawatt hours will be subtracted from that monthly amount.

The statute prohibits those WER systems that are qualified renewable energy resources if they were/are also included in an energy efficiency program of an electric distribution utility on or after January 1, 2012.⁴ The Applicant indicated that the WER system has not been included in any electric distribution utility energy efficiency program.

STAFF RECOMMENDATION

Because all of the applicable requirements are satisfied, Staff recommends that the Commission approve the application submitted in Case No. 17-1881-EL-REN for certification of the North Lake Energy, LLC Unit 17.

⁴ R.C. 4928.01(A)(37)(a)

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Summary: Staff Review and Recommendation electronically filed by Mr. Andrew S Conway on behalf of PUCO Staff