

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application for Certification :
As an Ohio Renewable Energy Resource Generating : Case No. 14-2244-EL-REN
Facility for Collinwood BioEnergy, LLC :

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

CASE HISTORY

On December 16, 2014, Collinwood BioEnergy LLC (Applicant) submitted an application for Commission certification of the heat captured¹ from its combined heat and power (CHP) generator set, located at its anaerobic digester facility as a renewable energy resource generator. The Collinwood BioEnergy facility is located at 13550 Aspinwall Avenue, in Cleveland, Ohio.

According to the application, the Collinwood BioEnergy plant is an anaerobic digester facility that converts biomass materials such as biosolids, fats, oil and grease, and food waste into biologically derived methane gas, which is also referred to as biogas. These biomass materials were previously unused or otherwise would be sent to landfills. The application indicates that the facility was placed in-service in July 2012.

An Entry dated January 12, 2015, was issued that suspended the automatic approval process for this application. On April 15, 2015, Staff sent the Applicant an initial set of questions related to the application. On May 14, 2015 staff held site visits with the Applicant's representative at two anaerobic digester facilities similar to this facility. The Applicant filed its responses to the initial data request on October 27, 2015. Staff and Applicant conducted conference calls on November 23, 2015, December 7, 2015, and December 21, 2015. The Applicant filed answers to questions raised during these conference calls on December 23, 2015.

STAFF REVIEW

The Staff's review of applications for certification of a renewable energy resource facility consists primarily, but not exclusively, of three items: (1) the deliverability of the facility's output to the state of Ohio, (2) the resource/ technology used at the facility, and (3) the facility's placed in-service date.

1) Deliverability

The Applicant indicates that the Collinwood BioEnergy LLC facility is located in Ohio therefore the facility meets the generation deliverability requirements, pursuant to Ohio Revised Code (R.C.) 4928.64(B)(3)(a).

¹ R.C. 4928.01(A)(37)(a)(x)

2) Resource/Technology

Quasar² energy group's Collinwood BioEnergy LLC facility accepts approximately 138 wet tons of biomass per day from various sources. All waste material is delivered to the site by truck. The biomass which is fed into the anaerobic digester is converted to biogas. The biogas is then used to fuel a nominally rated 1.0 megawatt (MW) internal combustion engine and electric generator set³.

The generator produces electricity, and a byproduct of the electricity production process is hot exhaust gas. The Applicant captures the heat from the hot exhaust gas in a combined heat and power (CHP) unit heat loop, which consists of a jacket water heat loop and exhaust gas heat exchanger. The heat from the CHP unit heat loop is then transferred to a second heat loop for the plant. The plant heat loop provides heat to the biosolids pasteurization process, heating to the anaerobic digestion process, and seasonal heating to the shop floor. The facility sometimes flares excess biogas, and a portion of the genset heat is vented to the atmosphere by a radiator. These items are not part of this Application.

Staff concurs with Applicant's proposed methodology⁴ for measuring the heat captured and used by the facility and for converting the measured quantities to an equivalent MWH production level. Based on Staff's review of the application, interrogatory responses, site visits of similar Quasar Energy facilities, and discussions with the Applicant, Staff concludes that the facility does capture heat from a generator of electricity and that the generator is fueled by biologically derived methane gas. As such, Staff concludes that this facility qualifies as a renewable energy resource pursuant to R.C. 4928.01(A)(37)(a).

3) Placed In-Service Date

The Applicant indicated in its application, that its placed in-service date of the facility was July 2, 2012, thereby satisfying the requirement of R.C. 4928.64(A)(1) in which a qualifying renewable energy resource has a placed-in-service date on or after January 1, 1998.

4) Additional Considerations

- (a) The facility must be registered with either M-RETS or PJM EIS' GATS, the two attribute tracking systems currently recognized by the Commission. The Applicant indicates that, once approved, it would register the facility in the PJM GATS.

STAFF RECOMMENDATION

Based on the foregoing analysis, Staff recommends that the Commission certify Collinwood BioEnergy LLC as a renewable energy resource generating facility as it satisfies all the applicable eligibility requirements.

² Quasar energy group designs, builds, owns and operates anaerobic digestion renewable energy systems including the Collinwood BioEnergy LLC facility

³ The electricity produced by this generator received a renewable energy certificate number 12-BIO-OH-GATS-1313 on November 2, 2012 in Case No. 12-2117-EL-REN.

⁴ Applicant responses dated October 27, 2015 (Question 12) and December 23, 2015 (Question 1).

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