

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application for Certification	:	
As an Ohio Renewable Energy Resource Generating	:	Case No. 14-0432-EL-REN
Facility for the Verso Quinnesec Mill-TG2 Facility	:	

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

Case History

On April 16, 2014, Verso Quinnesec, LLC (Applicant) submitted an application for Commission certification of its Verso Quinnesec Mill-TG2 steam turbine generator, located at its pulp and paper mill in Quinnesec, Michigan, as a renewable energy resource generating facility.

According to the application, the mill generates electricity with a 28 MW back pressure turbine generator designated as Verso Quinnesec Mill-TG1 (TG1) placed in service in 1985, and a 31 MW steam turbine generator (TG2) placed in service in 2011. The mill operates three boilers: a package boiler using natural gas; a waste fuel boiler using bark, natural gas, and coal; and a recovery boiler, using black liquor and natural gas. The steam produced by the boilers feeds a single 600 PSIG steam header which is the sole supply of steam to the steam turbine generators.

The TG2 generator is the applicable unit for the facility application. The application indicates that the renewable energy output from TG2 will be the total energy produced from TG2 deducting the amount attributable to fossil fuel energy. The company will first calculate the fossil fuel portion of steam produced by the waste fuel and recovery boilers and then add that amount to the steam output of the natural gas package boiler. The total steam generated from fossil fuels is then subtracted from the total steam produced to obtain the steam produced from the renewable fuels. The electricity generated by each fuel type is then determined based on the percentage of total steam produced from each fuel. The application states that the proportions of fuel types used by the facility are as follows: black liquor 60.6 percent, bark/solid wood waste 38.3 percent, natural gas 1.03 percent and coal 0.07 percent.

Staff Review

1. Resource/Technology

In its application, Verso indicates that it is seeking certification of the TG2 generator output resulting from the utilization of black liquor and bark from the pulping process, and other wood

waste. Energy derived from nontreated byproducts of the pulping process or wood manufacturing process, including bark, wood chips, sawdust, and lignin in spent pulping liquors, is recognized as a renewable resource, pursuant to Section 4928.01(A)37(a)(xi), Revised Code. As indicated above, the mill sometimes produces a small portion of its steam requirements from natural gas and coal. Using the company's calculation methodology, if the fraction of steam generated by natural gas or coal increases, the amount of renewable energy output reported will decrease proportionally.

Based on Staff's review of the application, interrogatory responses, and discussions with the Applicant, Staff concludes that the facility does produce a portion of its electricity using qualified renewable energy resources, as defined in Section 4928.01(A)37(a)(xi), Revised Code.

2. Placed In-Service Date

Verso indicated in its application, that its placed in-service date for the steam turbine generator TG2 was December 2011, thereby satisfying the requirement of Section 4928.64(A)(1), Revised Code, in which a qualifying renewable energy resource has a placed-in-service date on or after January 1, 1998.

3. Deliverability and Grid Interconnection

The Applicant indicates that the Verso mill is a distributed generation facility located in Michigan with an interconnection agreement with WE Energies of MI-WI Electric Power Company along with a "surplus energy purchase agreement-parallel customer generation." Based upon its location in a state geographically contiguous to Ohio, Staff believes that the facility meets the generation deliverability requirements, pursuant to Section 4928.64(B)(3)(b), Revised Code.

4. Renewable Energy Output

As stated above, the Applicant indicates that it seeks certification of the facility output resulting from the utilization of wood wastes and black liquor fuels. To calculate the proportion of electricity generated using these fuels, Verso calculates the steam produced by the fossil fuels and then deducts the fossil fuel steam flow from the total steam flow to obtain the steam produced by the wood waste and black liquor resources. The total steam flow from each boiler is recorded in the mill process information system. Steam produced by fossil fuels in the waste fuel and recovery boilers is calculated by using the fuel heat content and boiler efficiencies for the respective fuels. Natural gas flows are metered prior to combustion in the boilers. Coal consumption is based on accounting records of purchases. The natural gas fuel heat content is obtained monthly with the sale invoice. The coal fuel heat content is calculated using a fixed factor of 24 MMBTU/metric ton.

The total steam from fossil fuels is the sum of the fossil steam output from the waste fuel and recovery boilers, and the natural gas-fueled package boiler. The electricity generated is then allocated on a pro rata basis to the fuel types based on the amount of steam associated with the fuels. The energy from renewable fuels is calculated by multiplying the generation output of TG2, as recorded in the process information system, by the percentage of steam produced by the renewable fuels. The applicable renewable fuels include wood waste (used in the waste fuel boiler) and black liquor (used in the Recovery Boiler). The package boiler steam output will not be separately allocated to TG1.

5. Facility Tracking

The Applicant indicates that the facility is currently registered with the Michigan MIRECS system. However, once the application is approved, the Applicant indicated that it would withdraw its registration in MIRECS and register the facility in the PJM EIS Generation Attribute Tracking System (GATS).

Staff Recommendation

Based on the foregoing analysis, Staff recommends that the Verso Quinnesec Mill-TG2 be certified as a renewable energy resource generating facility. Staff further recommends that upon receiving Ohio certification that the Applicant withdraw from MIRECS and register in the GATS tracking system.

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Summary: Staff Review and Recommendation electronically filed by Ms. Anne E. Goodge on behalf of PUCO Staff