

**In the Matter of the Application for Integration of  
Mercantile Customer Energy  
Efficiency or Peak-Demand Reduction  
Programs between Duke Energy Ohio, Inc. and  
AK Steel Corporation  
(Case No. 14-146-EL-EEC)**

**Summary of Filing**

Rule 4901:1-39-05, Ohio Administrative Code (O.A.C.), permits a mercantile customer to file, either individually or jointly with an electric utility, an application to commit the customer's demand reduction, demand response, and energy efficiency programs for integration with the electric utility's programs. In the above captioned case, AK Steel Corporation (Applicant) filed an application in accordance with the mercantile application program established by the Commission in case 10-834-EL-EEC. In the application, AK Steel proposes committing to Duke Energy Ohio as energy efficiency, the electrical energy generated from a planned Waste Energy Recovery Pressure Reducing Valve (PRV) Turbine.

**Staff's Review**

Pursuant to section (G) of Ohio Adm. Code 4901:1-39-05, the filing must:

- (a) Address coordination requirements between the electric utility and the mercantile Customer, including specific communication procedures.
- (b) Grant permission to the electric utility and Staff to measure and verify energy savings and/or peak-demand reductions resulting from Customer-sited projects and resources.
- (c) Identify all consequences of noncompliance by the Customer with the terms of the commitment.
- (d) Include a copy of the formal declaration or agreement that commits the mercantile Customer's programs for integration, including any requirement that the electric utility will treat the Customer's information as confidential and will not disclose such information except under an appropriate protective agreement or a protective order issued by the commission.
- (e) Include a description of methodologies, protocols, and practices used or proposed to be used in measuring and verifying program results, and identify and explain all deviations from any program measurement and verification guidelines that may be published by the commission.

Staff reviewed this application and further supporting documentation provided by the AK Steel Corporation that describes a waste heat recovery project at the AK Steel Middletown Works facility. The PRV Turbine, after installation, will generate electricity solely by the use of heat

that would otherwise be exhausted to the atmosphere. Therefore, ongoing operational decisions would not be dependent on differentials between the costs of various energy sources. In a project of this type, Staff views the energy to be generated by the facility as equivalent to energy savings that would be achieved in a standard energy efficiency project. The application includes calculations of the expected energy production along with cost estimates for the proposed new equipment. The Applicant uses more than 700,000 kWh annually and meets the requirements to be classified as a mercantile Customer. Within the Mercantile Customer Project Commitment Agreement, the Applicant committed the Energy Project for the life of the project. In committing this Energy Project, the Applicant provided:

- Annual Energy Baseline Consumption data;
- An accounting of expected incremental energy saved (as generation);
- A description of the project to be implemented and measures taken;
- A description of methodologies, protocols and practices that will be used to measure and verify the energy savings;
- An accounting of expected expenditures to demonstrate the cost effectiveness of the project; and,
- Supporting documents including a proposed timeline and in service dates of the project

Staff compared the Customer's average annual energy baseline consumption with the expected energy savings to verify the length of rider exemption for the project and concludes that the proposed rider exemption is accurately calculated. In reviewing this application, Staff also verified that the EDU's avoided cost will exceed the cost that the EDU will spend to acquire the mercantile Customer's self-directed energy efficiency project.

The Project presented in the application is consistent with the presumption that this mercantile project is part of a demand response, energy efficiency, or peak demand reduction program to the extent the project achieves reductions in energy use and peak demand that exceed the reductions that would have occurred had the Customer used standard practices where practicable.

AK Steel Corporation included within their filing a proposed plan for proceeding with the project, which included: approval of their application; project installation; rider exemption period; measurement and verification of the project's energy production; and, completion of a compliance report. Staff believes that the proposed plan is reasonable.

The Waste Energy Recovery Project consists of installing and operating a PRV Turbine. After Commission approval, the Waste Energy Recovery Project is scheduled to be fully operational within 14 months.

### **Staff Recommendation**

Based upon its review, the Staff believes that the proposed Waste Energy Recovery Project meets the requirements for inclusion in the Company's EEDR compliance plan. Staff also recommends that the applicant be required, as a condition of approval, to file within this docket the following project status reports: notification when the project construction commences; notification when the project becomes fully operational; a production (savings) report quantifying the production achieved after the first month of service; a compliance report to demonstrate that the production (savings) proposed within the application were achieved after the first year of service.

This Application does not appear to be unreasonable, was properly filed in conformance with the applicable rules, and Staff recommends approval of this rider exemption as requested. After notification by the Applicant that the project is fully operational, the AK Steel Middletown facility should receive a 9 month rider exemption.

Filed by: Robert Wolfe  
Date: February 21, 2014

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Summary: Staff Review and Recommendation electronically filed by Mr. Robert Wolfe on behalf of PUCO Staff