



March 17, 2017

Julie Baldwin, Manager
Renewable Energy Section
Electric Reliability Division
Michigan Public Service Commission

Re: MPSC Standby Rate Working Group – Combined Heat & Power
Comments and Recommendations of the Alliance for Industrial Efficiency

Dear Ms. Baldwin,

The Alliance for Industrial Efficiency (the “Alliance”) appreciates the opportunity to submit comments in response to the Standby Rate Working Group Report prepared by the Michigan Public Service Commission (MPSC). The Alliance is a diverse coalition that includes representatives from the business, environmental, labor and contractor communities, including over 500 electrical, mechanical, and sheet metal contractors in Michigan alone. We are committed to enhancing manufacturing competitiveness and reducing emissions through industrial energy efficiency, particularly through the use of clean and efficient power generating systems such as combined heat and power (CHP) and waste heat to power (WHP).

We greatly appreciate the effort of the MPSC to review and potentially revise standby rate policy for regulated utilities in the state. We are writing to support the concept of standardization of certain aspects of standby service rates, as proposed in the Model Standby Service Template presented by the Midwest Cogeneration Association (MCA) and 5 Lakes Energy LLC (“5 Lakes”). A model tariff can help ensure transparent, reasonable rates across utilities, which would help realize the substantial potential of CHP in Michigan.

About CHP in Michigan

CHP is a sustainable and efficient energy solution that recycles waste heat from power generation and converts it into useful thermal energy. By generating both heat (thermal energy) and electricity from a single fuel source, CHP dramatically increases overall fuel efficiency – allowing utilities and host companies to effectively “get more with less.” CHP more than double the fuel efficiency of a conventional plant, using more than 70 percent of fuel inputs. As a consequence, CHP can produce electricity while lowering costs for both host companies and all Michigan ratepayers.



In Michigan, there is a substantial opportunity to implement CHP. Currently, the state has 87 CHP sites, generating 3,380 megawatts (MW) of clean and efficient power.¹ The Department of Energy estimates the state has 4,987 MW of remaining CHP and WHP technical potential capacity (identified at 10,370 sites), with 2,170 MW of remaining onsite technical potential in the industrial sector alone.² A 2016 report from the Alliance for Industrial Efficiency found that if an economically-viable portion of the state's CHP and WHP was deployed,³ Michigan industrial sector customers would save \$2.27 billion on electricity costs from years 2016 to 2030.⁴ These cost savings result from increasing CHP and WHP deployment alone, demonstrating the importance of CHP to increasing manufacturing competitiveness.

Michigan is particularly well-positioned for CHP growth because of its strong industrial base, the availability of natural gas, and a potential supply chain already in the state. Manufacturing accounts for 19 percent (\$82.3 billion in 2013) of the total gross state product and employs nearly 14 percent of the workforce.⁵ Michigan's industrial sector consumed about 26% of the total energy used statewide in 2013 (or 746.2 trillion British thermal units).⁶ The size of the state's manufacturing industry and the significant technical potential for CHP indicates that Michigan has a tremendous opportunity for additional CHP implementation, which can be encouraged by removing barriers such as arbitrary and excessive standby rates.

Impact on Standby Rates on CHP

In the Working Group meetings, 5 Lakes provided a comparison of the impact of DTE Energy's and Consumers Energy's existing standby service tariffs on a hypothetical customer with an onsite CHP system. This analysis found that DTE and CE allocated costs to standby customers differently. As a result, the charges imposed on the same customer receiving the same level of standby service in the different utility territories can be substantially different. For example, a company with a 2 MW CHP system with no outages would be required to pay standby fees ranging from roughly \$8,300 to more than \$10,500 each month – dependent upon where the system is located.

¹ U.S. DOE Combined Heat and Power Installation Database, (<https://doe.icfwebservices.com/chpdb/state/MI>).

² U.S. Department of Energy, Mar. 2016, "Combined Heat and Power (CHP) Technical Potential in the United States" (<http://energy.gov/sites/prod/files/2016/03/f30/CHP%20Technical%20Potential%20Study%203-18-2016%20Final.pdf>).

³ Percentage of Michigan's technical potential for CHP with less than 10-year payback period.

⁴ The Alliance for Industrial Efficiency, Sep. 2016, "State Ranking of Potential Carbon Dioxide Emission Reductions through Industrial Energy Efficiency" (http://alliance4industrialefficiency.org/wp-content/uploads/2016/09/FINAL-AIE-State-Industrial-Efficiency-Ranking-Report_9_15_16.pdf). Unpublished data on results from CHP and WHP deployment alone.

⁵ National Association of Manufacturers, Feb. 2015, "Michigan Manufacturing Facts," (<http://www.nam.org/Data-and-Reports/State-Manufacturing-Data/2014-State-Manufacturing-Data/Manufacturing-Facts--Michigan/>).

⁶ U.S. Energy Information Administration, "Michigan: State Profile and Energy Estimates," December 2015 (<https://www.eia.gov/state/?sid=MI#tabs-2>).



This variation between utilities in the state puts manufacturers at a competitive disadvantage and discourages companies from investing in CHP and WHP in large portions of Michigan. Fair and equitable standby rates also create a business opportunity for CHP developers, who are more likely to build projects in states without excessive standby rates.

Recommendations for Standby Rates in Michigan

We urge the MPSC to ensure standby tariffs are designed to achieve fair rates, accurate cost recovery, reductions in peak load, and customer and public transparency. One way in which the MPSC can achieve that is to adopt the conceptual model tariff proposed by the Midwest Cogeneration Association (MCA) and presented in the Working Group meetings. This model tariff provides a framework for designing and assessing utility standby tariffs and is based on the following best practice principles:

- Either: All “time of use” charges or a mix of “time of use” charges and fixed charges as a reasonable proxy for “time of use” charges;
- Where fixed charges are employed they should be based on the CHP system’s actual FOR or a good approximation of that rate (e.g. equipment class outage rate);
- Cost-based price differentials for peak/off-peak demand;
- Additional reasonable price differentials to encourage scheduled maintenance which reduces unscheduled outages.

We believe that such a model tariff would help Michigan utilities achieve fair rates, accurate cost recovery, and reductions in peak load. We recommend the MPSC include this model tariff in the final Standby Rate Working Group Report. Further, standby tariffs should be readily understandable and comparable to customers, the public and regulators. To achieve that end, we recommend the MPSC require each utility to include in their Standby Tariff a standardized, brief summary of charges, to aid in transparency.

Conclusion

For all of the reasons stated above, the Alliance urges the MPSC to ensure standby rates are fair and reasonable, thus encouraging more CHP and WHP deployment in the state. We urge the MPSC to review each Michigan utility’s standby tariffs to ensure equitable revenue allocation and rates which are correlated to cost of service. These rates should be transparent and designed to send a clear price signal for the most efficient interface between utility and CHP and WHP resources. Adopting this approach will keep electricity costs lower for all consumers and help cut electricity and heat costs for Michigan’s manufacturers, making them more competitive.



Thank you for your consideration.

Sincerely,

Jennifer Kefer
Executive Director
Alliance for Industrial Efficiency