

February 28, 2018

Chairman Sally A. Talberg Michigan Public Service Commission 7109 W. Saginaw Highway Lansing, MI 48917

Re: Case U-18255; Reply to Exceptions; *In the matter of the application of DTE ELECTRIC COMPANY for authority to increase its rates, amend its rate schedules and rules governing the distribution and supply of electric energy, and for miscellaneous accounting authority*; Comments and Recommendations of the Alliance for Industrial Efficiency

Dear Chairman Talberg,

The Alliance for Industrial Efficiency (the "Alliance") appreciates the opportunity to submit our Reply to Exceptions in DTE Energy Case U-18255. The Alliance is a diverse coalition that includes representatives from the business, labor, contractor, and academic communities, including over 620 electrical 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).

The Alliance has a track record of engagement in this area. In March 2017, the Alliance submitted public <u>comments</u> urging the Michigan Public Service Commission (the "Commission") to review each Michigan utility's standby tariffs to ensure equitable revenue allocation and rates which are correlated to cost of service. We also supported the adoption of the <u>model tariff</u> put forth by the Midwest Cogeneration Association (MCA), which would help Michigan utilities achieve fair rates, accurate cost recovery, and reductions in peak load.

We are writing now to support the following recommendations in Judge Eyster's Proposal for Decision regarding "Standby Service under Rider 3":

- 1. The inclusion of equitable cost allocation in the rider, and
- 2. The proposal to reconvene the standby working group to consider standardizing and clarifying standby tariff terms and conditions.

These items would promote and support the further deployment of CHP and WHP, which would ultimately benefit all ratepayers, as outlined below.



About CHP and WHP 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 doubles the fuel efficiency of a conventional plant, using more than 70 percent of fuel inputs. WHP systems recover waste heat and use it to generate electricity with no additional fuel and no incremental emissions. As a consequence, CHP and WHP 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 3,382 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.

¹ U.S. DOE Combined Heat and Power Installation Database, (<u>https://doe.icfwebservices.com/chpdb/state/MI</u>). ² U.S. Department of Energy, Mar. 2016, "Combined Heat and Power (CHP) Technical Potential in the United States" (<u>http://energy.gov/sites/prod/files/2016/03/f30/CHP%20Technical%20Potential%20Study%203-18-2016%20Final.pd</u>).

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" (<u>http://alliance4industrialefficiency.org/wp-content/uploads/2016/09/FINAL-AIE-State-Industrial-Efficiency-Ranking-Report_9_15_16.pdf</u>). Unpublished data on results from CHP and WHP deployment alone.

 ⁵ National Association of Manufacturers, Feb. 2015, "Michigan Manufacturing Facts," (<u>http://www.nam.org/Data-and-Reports/State-Manufacturing-Data/2014-State-Manufacturing-Data/Manufacturing-Facts--Michigan/</u>).
⁶ U.S. Energy Information Administration, "Michigan: State Profile and Energy Estimates," December 2015 (<u>https://www.eia.gov/state/?sid=MI#tabs-2</u>).



Impact on Standby Rates on CHP

In the Working Group meetings held in early 2017, 5 Lakes Energy 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 demonstrated the different approaches to cost allocation between Michigan utilities. As a result, the same customer may face significantly different charges for the same level of standby service dependent upon where the facility is located. For example, a company with a 2 MW CHP system with no outages would be required to pay \$8,300 in standby fees if it was in Consumer's service territory, but more than \$10,500 each month if it was in DTE's service territory. That disparity is even greater when outages occur. In fact, 5 Lakes Energy found that fees would *more than double* for a 32-hour scheduled on-peak outage, dependent upon service territory.

This variation between utilities puts manufacturers at a competitive disadvantage and discourages companies from investing in CHP and WHP in large portions of the state. 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

As noted above, the Alliance supports the following recommendations in the discussion of "Standby Service under Rider 3" in the Notice of Proposal for Decision: (1) the inclusion of equitable cost allocation in the rider, (2) the ABATE rate design proposal, and (3) the proposal to reconvene the standby working group to consider standardizing and clarifying standby tariff terms and conditions.

1. Equitable Cost Allocation

We agree with the testimony of Midwest Cogeneration Association (MCA) witness Douglas Jester in which he states that DTE Electric should "treat customers with self-service generation as a separate class or subclass for purposes of the cost of service study, including both supplemental and standby-service" and that "it demonstrate that the combined tariffs for standby-service and supplemental service of customers with self-service generation accurately reflect the cost of service for those customers." (8T 1554)

We urge the Commission to ensure standby tariffs are designed to achieve fair rates, accurate cost recovery, reductions in peak load, and customer and public transparency. One way the Commission can achieve that is to adopt the conceptual model tariff proposed by MCA and presented in the 2017 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:

- Tariff demand charges should be proportionate to the customer's reliance on the utilities generation, transmission and distribution resources for standby service, i.e., demand charges should be calculated based on daily kWh used or a daily rate that is proportionate to the monthly rate charged to full-time use customers under the applicable base tariff, as proposed by MCA in this proceeding;
- Where fixed charges (such as Reservation Fees) are employed, they should be based on the CHP system's actual Forced Outage Rate or a good approximation of that rate (e.g. the equipment class outage rate for CHP systems is less than 5%, as testified to by MCA's witnesses) – this will encourage hosts to install more reliable systems;
- Tariffs should distinguish between peak and off-peak outages to encourage scheduled outages to occur during periods of low demand;
- Tariffs should incorporate reasonable price differentials to encourage scheduled maintenance, which will reduce the occurrence of unscheduled outages.

We believe that such a model tariff would help Michigan utilities assign fair and reasonable rates to their distributed customers, while still allowing for accurate cost recovery and facilitating reductions in peak load. Further, standby tariffs should be readily understandable for customers, the public and regulators. To achieve that end, we recommend the Commission require each utility to include in its Standby Tariff a standardized, brief summary of charges. Such transparency will allow potential hosts and developers to easily compare rates across utilities.

2. Standby Working Group

Finally, we support the Commission's recommendation to reconvene the Standby Rate Working Group to "develop[] State-wide standardized standby service tariffs and ... develop[] clear and concise language to describe the terms, conditions, and costs of such service." (U-18255-0365). We agree wholeheartedly with this recommendation and believe that the Standby Rate Working Group can help ensure that standby tariffs are designed to achieve fair rates, accurate cost recovery, reductions in peak load, and customer and public transparency.

Conclusion

For all of the reasons stated above, the Alliance urges the Commission to ensure standby rates are fair and reasonable, thus encouraging more CHP and WHP deployment in the state. Standby rates should be transparent and designed to send a clear price signal to encourage the most efficient use of CHP and WHP resources. Ensuring that tariffs reflect equitable cost



allocation and reconvening the standby rate working group will help 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,

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Jennifer Kefer Executive Director Alliance for Industrial Efficiency