#### **STATE OF MICHIGAN**

#### MICHIGAN PUBLIC SERVICE COMMISSION

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./

Case No. U-18255

### DIRECT TESTIMONY OF JAMIE SCRIPPS ON BEHALF OF MIDWEST COGENERATION ASSOCIATION

Exhibits relabeled October 17, 2017

1	Q.	State your name, business name and address.
2	А.	My name is Jamie Scripps and I am a partner with 5 Lakes Energy LLC located at 115
3		West Allegan, Suite 710, Lansing, Michigan 48933.
4	Q.	On whose behalf are you appearing in this case?
5	A.	I am appearing here as an expert witness on behalf of the Midwest Cogeneration
6		Association.
7	Q.	Summarize your educational background.
8	A.	I have a law degree from the University of Michigan Law School, conferred in May
9		2005. I also have a Master's in Leadership Studies from North Central College in
10		Naperville, Illinois, conferred in June 2002, and a Bachelor's in Education from the
11		University of Michigan, conferred in May 1999.
12	Q.	Summarize your experience in the field of electric utility regulation.
12 13	<b>Q.</b> A.	<b>Summarize your experience in the field of electric utility regulation.</b> I have worked at 5 Lakes Energy since July 2012 as a consultant in energy policy and
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13	-	I have worked at 5 Lakes Energy since July 2012 as a consultant in energy policy and
13 14	-	I have worked at 5 Lakes Energy since July 2012 as a consultant in energy policy and utility regulation. I have been a partner at 5 Lakes Energy since November 2014. From
13 14 15	-	I have worked at 5 Lakes Energy since July 2012 as a consultant in energy policy and utility regulation. I have been a partner at 5 Lakes Energy since November 2014. From 2009-2010, I worked at the Michigan Department of Energy, Labor and Economic
13 14 15 16	-	I have worked at 5 Lakes Energy since July 2012 as a consultant in energy policy and utility regulation. I have been a partner at 5 Lakes Energy since November 2014. From 2009-2010, I worked at the Michigan Department of Energy, Labor and Economic Growth (DELEG) as the Assistant Deputy Director for energy programs, where I
13 14 15 16 17	-	I have worked at 5 Lakes Energy since July 2012 as a consultant in energy policy and utility regulation. I have been a partner at 5 Lakes Energy since November 2014. From 2009-2010, I worked at the Michigan Department of Energy, Labor and Economic Growth (DELEG) as the Assistant Deputy Director for energy programs, where I provided research and support for the application of scientific, engineering, and economic
13 14 15 16 17 18	-	I have worked at 5 Lakes Energy since July 2012 as a consultant in energy policy and utility regulation. I have been a partner at 5 Lakes Energy since November 2014. From 2009-2010, I worked at the Michigan Department of Energy, Labor and Economic Growth (DELEG) as the Assistant Deputy Director for energy programs, where I provided research and support for the application of scientific, engineering, and economic principles to the formation and adoption of energy policies for the State of Michigan.
13 14 15 16 17 18 19	-	I have worked at 5 Lakes Energy since July 2012 as a consultant in energy policy and utility regulation. I have been a partner at 5 Lakes Energy since November 2014. From 2009-2010, I worked at the Michigan Department of Energy, Labor and Economic Growth (DELEG) as the Assistant Deputy Director for energy programs, where I provided research and support for the application of scientific, engineering, and economic principles to the formation and adoption of energy policies for the State of Michigan. From 2008-2009, I worked as an associate attorney at Sondee, Racine & Doren LLP in

1		energy policy and utility regulation. From 2005-2007, I worked as an associate attorney
2		at Venable LLP in Washington, D.C., where I assisted in the legal representation of a
3		large investor-owned utility serving the Mid-Atlantic region. My work experience is set
4		forth in detail in my résumé, attached as Exhibit MCA-1 .
5	Q.	Summarize your professional development coursework in the field of electric utility
6		regulation.
7	A.	In July 2017, I completed the EUCI course titled "Introduction to Cost-of-Service
8		Concepts and Techniques for Electric Utilities." In August 2016, I completed the EUCI
9		course titled "Integrated Resource Plan Design Fundamentals."
10	Q.	Summarize your past speaking engagements in the field of electric utility regulation.
11	A.	In January 2015, I was invited to present on the topic of cogeneration at the Institute of
12		Public Utilities' 2015 Michigan Forum on Economic Regulatory Policy in East Lansing,
13		Michigan. In October 2016 and February 2017, I was invited to present on standby rates
14		to the Michigan Public Service Commission Staff Standby Rate Working Group. In
15		December of 2016, I was invited to present on standby rates to the Minnesota Department
16		of Commerce Workshop on Standby Rates and Cogeneration. Additionally, I have served
17		as the project manager for the Michigan Energy Office CHP Roadmap Grant Project
18		since February 2016, served on the leadership team for the 2015, 2016 and 2017
19		Michigan CHP Conferences, and I co-presented on the CHP Roadmap Grant Project at
20		the 2017 Michigan CHP Conference in June 2017.
21	Q.	Have you testified before this commission or as an expert in any other proceeding?
22	A.	Yes, in Case No. U-18322 (Consumers Energy general rate case).

1	Q.	Are you sponsoring any exhibits?
2	A.	Yes, I am sponsoring the following exhibits:
3		1. <u>Exhibit MCA-1</u> : Résumé of Jamie Scripps
4		2. <u>Exhibit MCA-2</u> : Narrative Compilation of 5 Lakes Energy "Apples to Apples"
5		Standby Rate Analyses
6		3. <u>Exhibit MCA-3</u> : Overview of Results from 5 Lakes Energy "Apples to Apples"
7		Standby Rate Analyses
8		4. Exhibit MCA-4: Energy and Environmental Analysis, Inc. Final Report:
9		Distributed Generation Operational Reliability and Availability Database,
10		submitted to Oakridge National Laboratory, January 2004.
11		5. Exhibit MCA-5: Regulatory Assistance Project (RAP), Standby Rates for
12		Combined Heat and Power Systems: Economic Analysis and Recommendations
13		for Five States, February 2014.
14		6. <u>Exhibit MCA-6</u> : Energy Resources Center, Analysis of Standby Rates and Net
15		Metering Policy Effects on Combined Heat and Power (CHP) Opportunities in
16		Minnesota, prepared for the Minnesota Department of Commerce Division of
17		Energy Resources, April 2014.
18		7. <u>Exhibit MCA-7</u> : Otter Tail Power Electric Rate Schedule, Standby Service.
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## Q. Have you provided analysis in support of testimony or comments in any other utility regulatory proceeding?

3 A. Yes. In 2016, I completed an "apples to apples" standby rate analysis that was utilized by Fresh Energy and Midwest Cogeneration Association in Minnesota PUC Docket. No. E-4 999/CI-15-115. The analysis took a hypothetical 2 MW CHP system through various 5 outage scenarios under a particular utility's standby tariff. The customer's estimated 6 7 standby bills were totaled and then compared across utilities to see how the same size CHP system would fare cost-wise in different utility service territories. In December 8 2016, I was invited by the Minnesota Department of Commerce to present the results of 9 10 my Minnesota-focused "apples to apples" analysis at their Workshop on Standby Rates and Cogeneration. Based on the same methodology, I completed a Michigan-focused 11 "apples to apples" standby rate analysis that was utilized by Midwest Cogeneration 12 Association in comments to the Michigan Public Service Commission Staff Standby Rate 13 14 Working Group in 2016 and 2017. To date, I have examined 14 utility standby tariffs using this "apples to apples" methodology, including those of Minnesota Power; Xcel 15 Energy (MN); Otter Tail Power; Dakota Electric; Consumers Energy, DTE; UPPCO; 16 17 UMERC; PECO Energy (PA); PPL Electric (PA); Duke Energy (OH); First Energy 18 (OH); AEP (OH); and Dayton Power & Light.

# Q. Based on your recent experience engaging with standby workshops and proceedings across a number of states, is there increasing interest in cogeneration?

A. Yes, there seems to be increasing interest in cogeneration. The Minnesota Department of
 Commerce Workshop and the Minnesota Public Utility Commission standby proceeding
 are evidence of strong interest by Minnesota policymakers and regulators in pursuing a

1	thoughtful approach to standby rates in light of the potential benefits of increased
2	deployment of cogeneration. Over the past few years, Minnesota policymakers and
3	regulators have engaged in an extensive stakeholder process around standby rates, and
4	required utilities to file revised standby tariffs to better reflect best practices, including
5	transparency, flexibility, the ability to promote economically efficient consumption and
6	accurately account for all relevant value streams including both costs and benefits. <sup>1</sup>
7	Similarly, the Michigan Public Service Commission Staff Standby Rate Working Group
8	seized an "opportune time to determine whether the current standby service tariffs reflect
9	the cost of serving self-generation customers with CHP or solar and address concerns of
10	the self-generation community." <sup>2</sup> As further evidence of the interest and complexity in
11	getting standby rates right for customers with cogeneration, once the initial time period
12	allocated to the workgroup had passed, the staff allotted extra time to explore CHP-
13	specific issues related to standby rates. <sup>3</sup> After the August 2016 report was issued, staff
14	held five additional workgroup meetings focused on standby rates for cogeneration, and a
15	supplemental report was issued in June 2017, featuring recommendations ranging from
16	ways in which the utilities can improve the transparency of their standby tariffs to ways
17	to better incent efficient use of system resources. <sup>4</sup>

Initial conversations with regulatory staff in Pennsylvania and Ohio have indicated an

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interest in gaining a better of understanding of how standby rates affect potential owners

<sup>&</sup>lt;sup>1</sup> See MN PUC Docket No. E-999/CI-15-115, In the Matter of a Commission Inquiry into Standby Service Tariffs.

<sup>&</sup>lt;sup>2</sup> MPSC Staff Standby Rate Working Group Report, August 19, 2016, p. 2.

<sup>&</sup>lt;sup>3</sup> Ibid at p. 29: "Some participants in the SRWG have asked for additional time to do a more in-depth analysis of the cost to provide standby service to customers with CHP and other generators with baseload operating characteristics. Staff agrees that more work is needed in this area."

<sup>&</sup>lt;sup>4</sup> See MPSC Staff Standby Rate Working Group Supplemental Report, June 2017 (CHP Focus), available at <u>http://www.michigan.gov/mpsc/0,4639,7-159-16377\_47107-376753--,00.html</u>.

1		of cogeneration systems. I am also aware of a collaborative effort ongoing in Missouri, in
2		which the Department of Economic Development is taking a close look at better aligning
3		standby rates with the unique characteristics of standby customers as a class.
4		In Ohio, AEP and Dayton Power & Light currently both have CHP incentive programs.
5		In Illinois, Commonwealth Edison adopted a CHP incentive program in 2015 paying
6		50% of project assessment costs and phased rebates based on energy savings for CHP
7		projects up to \$2 Million. There is also a Public Sector Combined Heat and Power (CHP)
8		Pilot Program active in Illinois, providing cash incentives for CHP projects that increase
9		energy efficiency of local governments, municipal corporations, public school districts,
10		community college districts, public universities, and state/federal facilities located in
11		certain Illinois utility service territories.
12		Overall, as interest in CHP grows, and states explore ways to remove barriers and/or
13		encourage its deployment, there is a recognition that any serious effort to promote CHP
14		must be done in the context of a fair, cost-based approach to standby rate design.
15	Q.	What customer characteristics do you assume in the "apples to apples" analysis?
16		
17	А.	I assume a General Service customer served at the Primary Distribution Level.
18		
19	Q.	Describe the outage scenarios used in the "apples to apples" analysis.
20		
21	A.	I use the following outage scenarios, assuming a complete outage of the CHP system for
22		all scenarios except "no outage":

1		2. Scheduled Outage 16 hours off-peak (spread over fewest number of outage days
2		possible)
3		3. Scheduled Outage 16 hours on-peak (spread over fewest number of outage days
4		possible)
5		4. Scheduled Outage 8 hours on-peak, 8 hours off-peak (spread over fewest number of
6		outage days possible)
7		5. Scheduled Outage 32 hours on-peak (spread over fewest number of outage days
8		possible)
9		6. Unscheduled Outage 8 hours on-peak, 8 hours off-peak (continuous outage)
10	Q.	What process do you follow in completing the "apples to apples" analysis for each
11		utility?
12	A.	The first step is a "cold read" of the utility's standby service tariff or rider. By initially
13		approaching the standby tariff with only the language of the published tariff to go by, I
14		am able to evaluate its transparency, clarity and straightforwardness. In my experience,
15		some published tariffs are relatively easy to navigate without interaction with a utility
16		representative; others are more difficult to decipher, or include references to data that
17		only the utility has access to. In those cases, I do my best to sketch out a reasonable
18		interpretation of how to correctly apply a utility's tariff to the hypothetical 2 MW CHP
19		system outage scenarios. I then reach out to the appropriate contacts at the utility to verify
20		and correct any errors in my draft interpretation.
21	Q.	You testified to having completed the "apples to apples" analysis for 14 utilities to
22		date. Have all 14 of these analyses been verified by utility representatives?

A. No, not all 14 have been verified as of yet. I am in the process of working with the Ohio
utilities to verify those analyses; so far, only AEP (OH) is verified from that state.
However, the analyses from Michigan, Minnesota and Pennsylvania have all been
verified, including the DTE Electric Company analysis based on Rider 3 that is currently
in effect. An overview of results from this verified compilation of analyses is attached as
Exhibit MCA-3. A narrative document describing the underlying calculations related to
each separate utility analysis is attached as Exhibit MCA-2.

#### 8 Q. What is the purpose of the "apples to apples" standby rate analysis?

The exercise of completing the "apples to apples" standby rate analysis has three main 9 A. benefits. First, it helps to evaluate the transparency, clarity and straightforwardness of a 10 11 utility's published standby tariff, and provides a real-world view of a utility's level of 12 openness and cooperation in working with a stakeholder in verifying the correct 13 interpretation of the Company's tariff. This is important because an indecipherable 14 standby tariff and/or a resistant or hostile utility can pose significant a barrier to the deployment of otherwise cost-effective CHP. Second, the exercise teases out how a utility 15 treats scheduled vs. unscheduled outages, and on-peak vs. off-peak outages, and 16 calculates through the "no outage" scenario the estimated minimum standby bill a 17 potential owner of a CHP system might face. Third, where one is able to compare 18 estimated standby bills across various outage scenarios, and across a number of different 19 20 utilities, outliers jump out, sometimes dramatically, and suggest areas for further discussion and investigation regarding fairness and cost justification. 21

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Q. Utility standby tariffs can be expected to vary based on each utility's revenue
 requirement, cost of service methodology and approach to rate design. Are these
 differences necessarily a reason for concern?

No, not necessarily, but in my experience the comparative analysis does a good job of 4 A. flagging extremes, which may be ripe for further discussion. In addition, the breakdown 5 of charges, across different outage scenarios, helps to identify the elements of the rate 6 7 design that may be leading to high charges. It also shows you how the utility's rate design works, and how it might encourage or discourage certain behavior on the part of the 8 customer, including whether it encourages efficiency. Through a number of discussions 9 10 with utilities and regulators, I've found that even if a utility has a reasonable cost of service-based justification for imposing high standby bills on customers, it is still 11 important for the utility, policymakers, regulators and other stakeholders to understand 12 how the published tariff impacts potential CHP projects. 13

Q. During the MPSC Staff Standby Rate Working Group, as to the comparative
analysis, the utilities raised the concern that other states may have policies and goals
in place that differ from the policies and goals in place in Michigan. Much of the
"apples to apples" analysis focuses on a comparison with Minnesota utilities. Does it
make sense to compare Minnesota with Michigan in this way?

A. Yes. Minnesota is similar to Michigan in a number of important ways, including in its
 focus on cost-justification. In Minnesota's current standby tariff docket, in which

1		Minnesota's four major utilities proposed revised standby tariffs based on recommended
2		best practices, the Minnesota Department of Commerce laid out the following key goals <sup>5</sup> :
3		1. Standby rates should be transparent, flexible, and promote economically efficient
4		consumption;
5		2. Standby rates should accurately account for all relevant value streams including
6		both costs and benefits;
7		3. Standby rates should simplify input data sets & methodology, where possible and
8		warranted;
9		4. Standby rates should provide neither an incentive nor a disincentive for
10		distributed generation.
11		Because Michigan and Minnesota share the same goals with regard to improving standby
12		rates, and in light of the fact that Minnesota specifically states that it does not wish to
13		provide an incentive or disincentive for distributed generation, we believe it is clear that
14		the "apples to apples" comparison with Minnesota utilities is valid.
15	Q.	In your analysis of standby tariffs from other states, are the same kinds of costs
16		reflected by DTE Electric Company's Delivery Capacity Charge included in other
17		states' utility standby rates?
18	A.	Yes. DTE Electric Company's Delivery Capacity Charge is one of the primary demand
19		charges imposed on its standby customers. The Delivery Capacity Charge is a key
20		element of the high total standby charges that would be experienced by its Rider 3
21		customers, and reflects costs to the utility related to distribution capacity. These charges
22		are assessed based on standby contract capacity and are not pro-rated based on a standby

<sup>&</sup>lt;sup>5</sup> See MN PUC Docket No. E-999/CI-15-115, In the Matter of a Commission Inquiry into Standby Service Tariffs.

1		customer's partial use of the system. In other states, costs related to distribution capacity
2		are reflected in the distribution component of reservation fees and demand charges. In
3		Minnesota, these fees are pro-rated to reflect partial use of the system by standby
4		customers. Pro-rating demand charges, including those reflecting distribution capacity
5		costs, is in line with best practices for standby rate design. According to the Regulatory
6		Assistance Project, "Pro-rated, daily, as-used demand charges for backup power and
7		shared transmission and distribution facilities should be used to provide an incentive for
8		generator reliability."6
9	Q.	Have you completed the "apples to apples" analysis for the version of Rider 3
10		proposed by DTE Electric Company in this proceeding?
11	A.	Yes, I have completed an analysis of the version of Rider 3 proposed in this proceeding.
12		This analysis is included in the attached Exhibit MCA-2 (the "apples to apples" narrative
13		compilation).
14	Q.	What potential impact does DTE Electric Company's definition of "standby
15		contract capacity" have on the results of the "apples-to-apples" analysis of Rider 3?
16	A.	Rider 3 states:"[T]he standby contract capacity for billing months that include periods
17		from calendar months June through October will be set at the 1001st highest half-hourly
18		kW output toward internal load during billing months that include periods from calendar
19		months June through October over the latest 12-month period. The standby contract
20		capacity for remaining billing months will be set at the 1001st highest half-hourly kW
21		output during those months over the latest 12month period. The standby contract capacity

<sup>&</sup>lt;sup>6</sup> Regulatory Assistance Project (RAP), *Standby Rates for Combined Heat and Power Systems: Economic Analysis and Recommendations for Five States*, February 2014, p. 5, attached as Exhibit MCA-5.

will be adjusted on an ongoing basis reflecting the current month and preceding eleven
 months."

3		During the Standby Rate Working Group, representatives from DTE Electric Company
4		claimed that this definition could potentially result in a customer's standby contract
5		capacity representing only 70% of a system's nameplate capacity, depending on the
6		system's actual output. While the estimate of a 30% reduction from nameplate capacity
7		was discussed by some participants as being aggressive, I have nonetheless performed an
8		additional "apples to apples" analysis using the construct of 70% of nameplate capacity
9		in order to demonstrate that even when viewed in the most generous light, the standby
10		rates of DTE Electric Company are still extremely high.
11		This additional analysis, titled "DTE Energy – 70%" – is included in Exhibits MCA-2
12		and MCA-3.
13		As discussed above, I remain concerned that a reduction of 30% from nameplate capacity
14		is an aggressive estimate of reduced output and could portray DTE Electric Company's
15		standby charges as being lower than they actually are experienced by customers with
16		CHP systems.
17	Q.	Based on your "apples to apples" analysis of DTE Electric Company's <u>proposed</u>
18		revisions to Rider 3, what are your observations as to the total estimated standby
19		bill for a DTE Electric Company customer?
20	A.	Total estimated standby bills are reflected in Table 1 of Exhibit MCA-3. When DTE
21		Electric Company's standby bills are compared across the various utilities in the "apples
22		to apples" analysis, it is clear that its customers pay extraordinarily high standby charges

1		compared to those of other Midwest utilities, including Consumers Energy Company. For
2		example, under the proposed revisions to Rider 3, DTE Electric Company imposes the
3		highest standby charges in a "no outage" month, with an estimated total bill of \$11,955.
4		Even when the customer's standby capacity reserved is reduced by 30% to aggressively
5		reflect any potential impact from the Company's definition of standby contract capacity,
6		DTE Electric Company still imposes the highest standby charges in a "no outage" month,
7		with an estimated bill of \$8457.
8		In addition to the "no outage" scenario, when compared across the other utilities in the
9		"apples-to-apples" analysis, DTE Electric Company also imposes the highest estimated
10		standby charges in the Scheduled 16-hour On-Peak and the Scheduled 32-hour On-Peak
11		scenarios, and relatively high charges in the remaining scenarios.
12		As discussed below, there exists confusion around whether DTE Electric Company's
13		proposed changes to Rider 3 are in fact cost-of-service based, as there have been errors
14		identified and revisions filed related to the Company's cost of service studies and revenue
15		targets as relate to Rider 3 customers. Especially in light of the extraordinarily high level
16		of charges imposed by the Company (as demonstrated by the "apples-to-apples"
17		analysis), if Rider 3 customers are entitled to reduced charges under the Company's own
18		cost of service study and revenue numbers, Rider 3 should be adjusted accordingly.
19	Q.	Based on your "apples to apples" analysis of DTE Electric Company's proposed
20		revisions to Rider 3, what are your observations as to the estimated standby bill for
21		a DTE Electric Company customer experiencing the "no outage" scenario?

1	A.	Monthly estimated standby bills in a "no outage" month are reflected in Table 2 of
2		Exhibit MCA-3. As stated above, DTE Electric Company imposes the highest standby
3		charges in a "no outage" month, with an estimated total bill of \$11,955. DTE Electric
4		Company charges a reservation fee based on standby contract capacity. Here, the
5		reservation fee alone is \$3820 for a hypothetical 2 MW CHP system. Counter to
6		recommended best practices for standby rate design, DTE Electric Company does not
7		take into account a system's forced outage rate (FOR) in assessing the reservation fee.
8		DTE Electric Company's relatively high standby charges in a "no outage" month are also
9		driven by high Delivery Capacity Charges, which are calculated based on contract
10		capacity and imposed on customers regardless of whether standby service is used during
11		the month. Delivery Capacity Charges are not pro-rated based on partial use. Here, the
12		Delivery Capacity Charges total \$7860 for a hypothetical 2 MW CHP system. Similarly
13		to the reservation fee, Delivery Capacity Charges are not adjusted by a system's forced
14		outage rate (FOR) to take into account a system's reliability.
15		Applying best practices, a Reservation Fee (and any other fixed monthly fees based on
16		standby contract capacity) would incorporate the forced outage rate (FOR) of a system.
17		According to the Energy Resources Center, "The Forced Outage Rate should be used in
18		the calculation of a customer's reservation charge. The inclusion of a customer's forced
19		outage rate directly incentivizes standby customers to limit their use of backup service.
20		This further links the use of standby to the price paid to reserve such service creating a
21		strong price signal for customers to run most efficiently."7 During the MPSC Staff

<sup>&</sup>lt;sup>7</sup> Energy Resources Center, <u>Analysis of Standby Rates and Net Metering Policy Effects on Combined Heat and</u> <u>Power (CHP) Opportunities in Minnesota</u>, prepared for the Minnesota Department of Commerce Division of Energy Resources, April 2014, p. 11, attached as Exhibit MCA-6.

1		Standby Rate Working Group (SRWG), the importance of incorporating the FOR of a
2		system was stressed by multiple participants. According to the SRWG Supplemental staff
3		report, "It may be appropriate to design the generation reservation fee so that it
4		incorporates the forced outage rate of the generator. One way to do this is to base the fee
5		on the forced outage rate of the highest performing generators taking standby service."8
6		In Minnesota, for example, Minnesota Power takes into account the FOR of a system,
7		which we assume to be 5% <sup>9</sup> in the "apples to apples" analysis. The Minnesota Power "no
8		outage" total is \$1007 compared to DTE Electric Company's "no outage" total of
9		\$11,955. Because there is no consideration of FOR under either the Reservation Fee or
10		the Delivery Capacity Charge, and in light of the high "no outage" charges imposed by
11		DTE Electric Company on customers, this would seem to be an area that is ripe for
12		further discussion and potential revision.
13	Q.	Based on your "apples to apples" analysis of DTE Electric Company's <u>proposed</u>
14		revisions to Rider 3, what are your observations as to the estimated standby bill for
15		a DTE Electric Company customer experiencing the Scheduled Outage 16-hours
16		Off-Peak scenario?
17	A.	Estimated standby bills for a month with a Scheduled 16-hour Off-Peak Outage are
18		reflected in Table 3 of Exhibit MCA-3. The average bill for this scenario is \$7419, with
19		DTE Electric Company coming in higher than average at \$13,020. DTE Electric
20		Company does not impose Power Supply Capacity Charges when an outage takes place

<sup>&</sup>lt;sup>8</sup> MPSC Staff Standby Rate Working Group Supplemental Report, June 2017, at p. 9, citing see <u>Standby Rates for</u> <u>Combined Heat and Power Systems</u>, Prepared by Brubaker & Associates, Inc. and the Regulatory Assistance Project for Oak Ridge National Laboratory, 2014.

<sup>&</sup>lt;sup>9</sup> Energy and Environmental Analysis, Inc. Final Report: <u>Distributed Generation Operational Reliability and</u> <u>Availability Database</u>, submitted to Oakridge National Laboratory, January 2004, attached as Exhibit MCA-4.

1		entirely during off-peak times. Therefore, these charges are again primarily driven by the
2		Company's Reservation Fee and high Delivery Capacity Charges. Under the current and
3		proposed Rider 3, Delivery Capacity Charges are not-prorated and do not differentiate
4		between on-peak and off-peak standby use.
5	Q.	Based on your "apples to apples" analysis of DTE Electric Company's proposed
6		revisions to Rider 3, what are your observations as to the estimated standby bill for
7		a DTE Electric Company customer experiencing the Scheduled Outage 16-hours
8		On-Peak scenario?
9	A.	Estimated standby bills for a month with a Scheduled 16-hour On-Peak Outage are
10		reflected in Table 4 of Exhibit MCA-3. The average bill for this scenario is \$9051, with
11		DTE Electric Company coming in as the highest at \$20,880. Here, DTE Electric
12		Company's Daily On-Peak Standby Demand Charges kick in for capacity, displacing the
13		reservation fee. Even though these capacity demand charges are pro-rated based on the
14		number of on-peak days of an outage, they nonetheless result in unusually high charges.
15		As discussed above, if Rider 3 customers are entitled to reduced charges under the
16		Company's own cost of service study and revenue numbers, Rider 3 should be adjusted
17		accordingly.
18	Q.	Based on your "apples to apples" analysis of DTE Electric Company's proposed
19		revisions to Rider 3, what are your observations as to the estimated standby bill for
20		a DTE Electric Company customer experiencing the Scheduled Outage 8 Hours On-
21		Peak/8 Hours Off-Peak scenario?
22	A.	Estimated standby bills for a month with a Scheduled Outage 8 Hours On-Peak/8 Hours
23		Off-Peak are reflected in Table 5 of Exhibit MCA-3. The average bill for this scenario is

1		\$8089, with DTE Electric Company coming in higher than average at \$15,041. The
2		Company differentiates between on-peak and off-peak outages both in terms of Daily On-
3		Peak Standby Demand Charges and Energy Charges, which is best practice for standby
4		rate design. However, this very high charge again suggests an area for further review. If
5		Rider 3 customers are entitled to reduced charges under the Company's own cost of
6		service study and revenue numbers, Rider 3 should be adjusted accordingly.
7	Q.	Based on your "apples to apples" analysis of DTE Electric Company's proposed
8		revisions to Rider 3, what are your observations as to the estimated standby bill for
9		a DTE Electric Company customer experiencing the Scheduled Outage 32-hours
10		On-Peak scenario?
11	A.	Estimated standby bills for a month with a Scheduled Outage 32-hours On-Peak are
12		reflected in Table 6 of Exhibit MCA-3. The average bill for this scenario is \$12,988, with
13		DTE Electric Company coming in as <u>the highest</u> at \$33,626.
14	Q.	Based on your "apples to apples" analysis of DTE Electric Company's proposed
15		revisions to Rider 3, what are your observations as to the estimated standby bill for
16		a DTE Electric Company customer experiencing the Unscheduled Outage 8 Hours
17		On-Peak/8 Hours Off-Peak scenario?
18	A.	Estimated standby bills for a month with an Unscheduled Outage 8 Hours On-Peak/8
19		Hours Off-Peak are reflected in Table 7 of Exhibit MCA-3. The average bill for this
20		scenario is \$17,954 with DTE Electric Company coming in slightly higher than average
21		at \$19,401.

1		Scheduled and unscheduled outages should be treated differently in standby rates to
2		promote efficient use and proactive maintenance of the cogeneration system. In line with
3		this best practice, DTE Electric Company differentiates between scheduled and
4		unscheduled outages by using a higher daily on-peak backup demand charge rate for
5		unscheduled outages (5.02 for unscheduled outages vs. 2.84 for scheduled outages).
6		Importantly, while the Company's differentiation between scheduled and unscheduled
7		outage charges is sound, it is nonetheless important to note that DTE Electric Company's
8		Unscheduled Outage charges are higher than average under the "apples-to-apples"
9		analysis. Therefore, the level of these charges should be scrutinized to ensure that they
10		are based on cost-of-service.
11	Q.	In the MPSC Staff Standby Rate Working Group Supplemental Report issued in
12		June 2017, the staff recommended "that the Commission develop a cost-of-service-
12 13		June 2017, the staff recommended "that the Commission develop a cost-of-service- based, standardized framework for standby service tariffs where possible. Staff
13		based, standardized framework for standby service tariffs where possible. Staff
13 14		based, standardized framework for standby service tariffs where possible. Staff recognizes there may be reason to deviate from the standard. Any differences
13 14 15	А.	based, standardized framework for standby service tariffs where possible. Staff recognizes there may be reason to deviate from the standard. Any differences should be justified and supported by the company." Do you agree with this
13 14 15 16	A.	based, standardized framework for standby service tariffs where possible. Staff recognizes there may be reason to deviate from the standard. Any differences should be justified and supported by the company." Do you agree with this recommendation?
13 14 15 16 17	A.	based, standardized framework for standby service tariffs where possible. Staff recognizes there may be reason to deviate from the standard. Any differences should be justified and supported by the company." Do you agree with this recommendation? Yes. While I recognize there may be reasons to deviate from a standard, I agree that a
13 14 15 16 17 18	A.	based, standardized framework for standby service tariffs where possible. Staff recognizes there may be reason to deviate from the standard. Any differences should be justified and supported by the company." Do you agree with this recommendation? Yes. While I recognize there may be reasons to deviate from a standard, I agree that a standardized framework for tariffs would be helpful in encouraging efficiency, ensuring
13 14 15 16 17 18 19	A.	based, standardized framework for standby service tariffs where possible. Staff recognizes there may be reason to deviate from the standard. Any differences should be justified and supported by the company." Do you agree with this recommendation? Yes. While I recognize there may be reasons to deviate from a standard, I agree that a standardized framework for tariffs would be helpful in encouraging efficiency, ensuring fairness in standby rates, and making these tariffs more understandable from the

23 lessens their burden to the utility; flexible rates, to allow the customer to avoid charges

when not using service; and rates that promote economically efficient consumption, to
discourage the wasteful use of utility services while promoting all that is economically
justified in terms of private and social costs incurred and benefits received.<sup>10</sup> The
framework should emphasize the pro-ration of charges to reflect standby customers'
partial use of the system in order to fairly reflect these customers' contribution to utility
costs.

7 Finally, it is vital that any standardized framework be cost-of-service based. For example, in this proceeding, there exists confusion around whether DTE Electric Company's 8 proposed changes to Rider 3 are in fact cost-of-service based, as there have been errors 9 identified and revisions filed related to the Company's cost of service studies and revenue 10 targets as relate to Rider 3 customers. Specifically, on August 8, 2017, the Company filed 11 revisions to their "Present and Proposed Revenue" numbers in Exhibit A-14 in order "to 12 correct an error in the capacity-related billing determinants associated with voltage level 13 14 discounts resulting in inaccurate rates associated with Generation Reservation Fee, Daily Demand, and Maintenance Demand on Rider No. 3."11 These corrections should be 15 16 carried through the Company's rate design for Rider 3. Importantly, if Rider 3 customers are entitled to reduced charges under the Company's own cost of service study and 17 18 revenue numbers, Rider 3 should be adjusted accordingly.

### 19 Q. In the MPSC Staff Standby Rate Working Group Supplemental Report issued in

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June 2017, the staff recommended "To assist with standby service tariff

<sup>&</sup>lt;sup>10</sup> See Energy Resources Center, Analysis of Standby Rates and Net Metering Policy Effects on Combined Heat and Power (CHP) Opportunities in Minnesota, prepared for the Minnesota Department of Commerce Division of Energy Resources, April 2014, p. 10-11, attached as Exhibit MCA-6.

<sup>&</sup>lt;sup>11</sup> Jon P. Christinidis, General Counsel, DTE Electric Company, August 8, 2017 (p. 1 of letter accompanying DTE Electric Company Revised Direct Testimony of Mr. Cooper and Revised Exhibits of Mr. Lacey Mr. Bloch and Mr. Farrell along with Proof of Service).

transparency, a clear and concise description of the tariff structure and each term
 used should be included with the tariff." Do DTE Electric Company's proposed
 <u>revisions</u> to Rider 3 address this recommendation?

A. No, not meaningfully. While it appears that DTE Electric Company made some effort to
add additional descriptive detail to Rider 3, it still lacks a <u>clear and concise</u> description of
the tariff structure and each term used. Without an effort to present the information in a
clear and concise manner, the effect of the additional language is an even lessdecipherable Rider 3.

As addressed in Company witness Bloch's testimony,<sup>12</sup> the Company has added an
"executive summary" paragraph that defines both standby and supplemental services and
distinguishes between the two, adding, "The point of separation between standby and
supplemental service is based on the customer's standby contract capacity for the facility,
measured in kW. Any service provided by the Company up to and including the standby
contract capacity level is standby service, and any service provided above the standby
contract capacity level is supplemental service."

The Company has also added language reciting: "The Company provides rate impact studies for customers considering on-site generation in addition to online resources and answers to frequently asked questions." However, these rate impact studies, online resources and answers to frequently asked questions are not disclosed to potential standby customers in an open and transparent manner; instead, outreach to a Company representative is required. Further, in response to Discovery Request U-18255 ELPCDE-1(c): "How, if at all, does the Company document and catalog these questions, the

<sup>&</sup>lt;sup>12</sup> See Bloch Testimony, Page 19, Lines 11-22.

1	Company's responses thereto, and the outcomes of customer inquiries about standby
2	service?" the Company responded: "The Company does not document and catalog
3	standby service questions." This raises questions as to the existence and/or quality of the
4	"frequently asked questions" information referenced in the proposed changes to Rider 3.
5	While the Company's current approach to "frequently asked questions" falls short, the
6	concept of providing an FAQ document is a good one; the Company should be urged to
7	document and catalog standby service questions and present clear and concise answers in
8	an open and transparent manner (e.g., on the Company website).
9	The proposed changes to Rider 3 also provide additional description around two terms in
10	the definition section of the tariff: the Generation Reservation Fee and the Daily Demand
11	Cap. The Generation Reservation Fee is listed under 'Power Supply Charges' in DTE's
12	Rider 3 currently-in-effect, but it was not defined. The proposed changes to Rider 3
13	described the Generation Reservation Fee as the "charge to recover costs of the Company
14	having generating resources available to serve load that is normally served by the
15	customer's generator." The proposed changes to Rider 3 also add language describing
16	how the Daily Demand Cap sets a limit on the amount of Daily Demand Charges to be
17	applied in a billing period. While this language adds richer description of the Company's
18	rationale behind the charges, it does nothing to assist a potential standby customer in
19	more readily and accurately calculating estimated standby bills for a potential CHP
20	project.
21	The Company has also expanded the Daily Demand Charge definition, distinguishing
22	between the daily demand charge rates for maintenance periods and demand charge rates
23	for daily demand occurring during periods other than maintenance. This distinction is

1		somewhat helpful, as it clarifies how a potential standby customer should proceed in
2		modeling out various scheduled and unscheduled outage scenarios in order to estimate a
3		project's standby charges.
4		Finally, according to the method described in witness Bloch's testimony, <sup>13</sup> the Company
5		has also separated energy charges into capacity and non-capacity components,
6		necessitating the addition of a duplicate description of energy charges under the 'Non-
7		Capacity' heading. While this structural separation may have been necessary, the
8		presentation of the changes could have been accomplished in a clearer, more concise
9		fashion.
10		In light of this complex rate structure, the Company should provide potential standby
11		customers with a means of readily calculating estimated standby bills, without the need to
12		contact a Company representative. For example, AEP Ohio helpfully provides bill
13		calculation spreadsheets on its website:
14		https://www.aepohio.com/account/bills/rates/AEPOhioRatesTariffsOH.aspx.
15	Q.	Does the Company provide any supplemental educational materials to customers to
16		explain how to properly apply Rider 3 to a potential CHP project?
17	A.	No. In response to Discovery Request U-18255 ELPCDE-1(d): "Does DTE have
18		templates its employees or contractors use in responding to inquiries about standby
19		service? If so, please provide these templates," the Company responded: "No. The
20		Company does not have templates." In response to Discovery Request U-18255
21		MCADE-1(a): "Please include a description of how the Company identifies prospective

<sup>&</sup>lt;sup>13</sup> Witness Bloch describes the method used by witness Lacey to determine capacity and non-capacity charges for the primary rate schedules. See Bloch Testimony Page 10, Line 10 through Line 23.

standby service customers, who generally initiates the customer interaction, the steps 1 involved in the customer interaction, customers' frequently asked questions, and 2 information generally provided to such customers," the Company responded: "Customers 3 normally initiate a request for standby service information through their assigned account 4 representative from the Company's Marketing department. The account representative is 5 6 the primary point of contact with the customer and is responsible for addressing customer questions regarding supplemental and standby service tariff options and requirements, 7 rate analysis, and interconnection and metering requirements associated with on-site 8 9 generation. Standby rate analysis and tariff questions are normally directed internally to the Regulatory Affairs- Pricing & Rate Design Group. Interconnection and metering 10 questions are normally directed to DTE Electric's Energy Distribution department." 11 It is clear from these responses that DTE Electric Company does not provide potential 12 standby customers with educational materials on how to properly apply Rider 3. Instead, 13 14 all questions go through Company representatives, and all analysis is done internally, by Company representatives, rather than educating the customer on how to properly perform 15 16 the needed calculations independently. By maintaining absolute control of the process by which a potential standby customer can accurately estimate its standby charges, the 17 18 Company keeps in place a significant barrier to CHP deployment, as potential standby 19 customers, regulators and other stakeholders grapple with the task of how to accurately apply Rider 3 to a potential CHP project. 20

# Q. Based on your experience performing the "apples to apples" analysis as to other utilities and across other states beyond Michigan, are there examples of best

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### practices as to transparency, clarity and straightforwardness that you would point to as a recommendation in this proceeding?

Yes. In addition to AEP Ohio providing bill calculation spreadsheets on its website, I 3 A. recommend that the Commission order DTE Electric Company to provide a succinct 4 "Summary of Charges" table either in the tariff itself or on its webpage. This is a good 5 practice for all standby tariffs, but is particularly needed here given the complexity of the 6 Company's tariff. As an example, I invite the Commission to review the summary of 7 charges table which is included in the Otter Tail Power tariff I have attached to my 8 testimony (see Exhibit MCA-7). This table provides a clear, concise overview of charge 9 10 rates and the proper method for calculating total charges.

Both AEP Ohio and Otter Tail Power have taken steps to provide customers with enough clear instruction to allow them to independently calculate reasonably accurate estimates of standby charges. Efforts to increase transparency and make tariffs more easily understandable are in line with best practices for standby rate design. According to the

15 Energy Resources Center, "Standby rates should be transparent, concise and easily

16 understandable. Potential CHP customers should be able to accurately predict future

17 standby charges in order to assess their financial impacts on CHP feasibility."<sup>14</sup>

18 Q. Does this conclude your testimony?

19 A. Yes.

<sup>&</sup>lt;sup>14</sup> Energy Resources Center, <u>Analysis of Standby Rates and Net Metering Policy Effects on Combined Heat and</u> <u>Power (CHP) Opportunities in Minnesota</u>, prepared for the Minnesota Department of Commerce Division of Energy Resources, April 2014, p. 11, attached as Exhibit MCA-6.