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February 16, 2018

Ms. Kavita Kale Executive Secretary Michigan Public Service Commission 7109 W. Saginaw Highway P.O. Box 30221 Lansing, Michigan 48909

Re: MPSC Case No. U-18444

Dear Ms. Kale:

Attached for electronic filing in the above-referenced matter, please find the Rebuttal Testimony of Alexander Zakem on behalf of Energy Michigan, Inc., as well as Proof of Service. Thank you for your assistance in this matter.

Sincerely yours,

VARNUM

Timothy J. Lundgren

TJL/kc Enclosures c. ALJ

All parties of record.

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter, on the Commission's own motion,)	
to open a contested case proceeding for)	
determining the process and requirements for a)	Case No. U-18444
forward locational requirement under)	
MCL 460.6w.)	
	_)	

REBUTTAL TESTIMONY OF

ALEXANDER J. ZAKEM

ON BEHALF OF

ENERGY MICHIGAN, INC.

REBUTTAL TESTIMONY

1	Q.	Please state your name and business address.
2	A.	My name is Alexander J. Zakem and my business address is 46180 Concord, Plymouth,
3		Michigan 48170.
4		
5	Q.	On whose behalf are you testifying in this proceeding?
6	A.	I am testifying on behalf of Energy Michigan, Inc. ("Energy Michigan").
7		
8	Q.	Are you the same Alexander J. Zakem who provided direct testimony in this
9		proceeding?
10	A.	Yes, I am.
11		
12	Q.	Are you sponsoring any exhibits in your rebuttal testimony?
13	A.	No, I am not.
14		
15	Q.	What is the purpose of your testimony?
16	A.	The Commission opened this docket as a contested case proceeding for determining the
17		process and requirement for a forward locational requirement under MCL 460.6w. The
18		Commission Staff, in direct testimony, proposed and explained an incremental approach
19		for a forward locational requirement. Energy Michigan, DTE Electric, Consumers
20		Energy, and other parties subsequently submitted direct testimony with proposals and
21		recommendations. In the rebuttal testimony herein, I will address aspects of the DTE
22		Electric and Consumers Energy proposals.
23		

REBUTTAL TESTIMONY

1	Q.	What are you addressing in your testimony?
2	A.	I am addressing two aspects:
3		I. Consumers Energy's characterization of the Midcontinent Independent System
4		Operator's ("MISO's") Fixed Resource Adequacy Plan ("FRAP") as a basis for
5		allocation of a forward locational requirement.
6		II. DTE Electric's invention of what it calls the Effective Capacity Import Limit
7		("ECIL") as a basis for allocation of a forward locational requirement
8		
9		I. FRAP
10	Q.	What is a FRAP – a Fixed Resource Adequacy Plan?
11	A.	A FRAP is a voluntary process by which a Load Serving Entity ("LSE") in MISO can opt
12		out of the annual Planning Resource Auction ("PRA"). An LSE can opt out of the PRA
13		for a portion or all of its Planning Reserve Margin Requirement ("PRMR") by specifying
14		the quantity of PRMR and identifying a commensurate quantity of Zonal Resource
15		Credits ("ZRCs"). MISO's tariff states:
16 17 18		An LSE that submits a FRAP for an LRZ will be <u>able to opt out of the PRA</u> for such Planning Year for such LRZ, to the extent that the LSE's ZRCs satisfy the LSE's PRMR.
19 20 21 22 23 24		To the extent that an LSE that has opted out of the PRA: (1) the <u>LSE will not have an obligation to make ZRC Offers</u> for the ZRCs included in the FRAP into the PRA, or otherwise participate in the PRA for such Planning Year; and (2) the LSE <u>will not have an obligation to pay the applicable ACP</u> for the LSE's PRMR within such LRZ that is covered by the FRAP.
25 26 27 28 29 30		The Transmission Provider will consider all PRMR and ZRCs, including PRMR and ZRCs in FRAPs, as part of the Transmission Provider's reliability assessment when conducting the PRA. [MISO Module E-1, section 69A.9.b. Emphasis added.]

REBUTTAL TESTIMONY

Case No. U-18444

1 Q. Is submitting a FRAP volunta	ıry?
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setting process in the PRA.

2 A. Yes, it is.

3

4 Q. Why did MISO create a FRAP process as an opt out to the PRA?

A. A number of stakeholders, primarily municipalities, were not able to or did not want to put their generation assets at risk to market-based prices in the PRA. Even though an LSE receives the same auction-clearing price for a ZRC that it pays for its PRMR – an thus is effectively neutral – technically it was deemed by some as exposure to market risk, which might be prohibited by, for example, a city charter. As a response, MISO created the FRAP, by which both ZRCs and PRMR can be excluded from the price-

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A.

Q. Are the ZRCs submitted in a FRAP dedicated by MISO to serve the LSE that submitted the FRAP?

No, they are not dedicated to the LSE that has submitted the FRAP. Since the beginning of the Midwest Market on April 1, 2005, MISO uses all resources to serve all loads. Thus, the idea that the resources owned by a particular LSE are used to serve and to provide supply/demand reliability to that particular LSE has been obsolete for over 12 years. The MISO annual auction process is a method to allocate financial responsibility to LSEs for the total cost of all resources, not to allocate specific resources to specific LSEs. MISO charges all loads the zonal Auction Clearing Price ("ACP") for the zone the loads are in, and pays all resources that clear in the auction the zonal ACP for the zone

REBUTTAL TESTIMONY

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1		the resources are in. As explained in the excerpt above from the MISO tariff, loads and
2		resources submitted in a FRAP are excluded from such payments.
		resources submitted in a FRA if the excluded from such payments.
3		
4	Q.	How are the FRAP resources used?
5	A.	FRAP resources are used to serve all loads, just like any resource that clears in the PRA.
6		An important difference is that, as explained above, FRAP resources do not clear through
7		the PRA. Rather, by the fact that they are accepted by MISO in a FRAP, the resources
8		automatically become part of the portfolio that MISO uses to serve all loads. Automatic
9		inclusion of FRAP resources in the MISO portfolio offers potential strategies to LSEs
10		and is the reason for additional MISO rules regarding the FRAP process.
11		
12	Q.	Can you give an example?
12 13	Q. A.	Can you give an example? Suppose an LSE's load is in a zone where the zonal ACP is expected to be high. The
13		Suppose an LSE's load is in a zone where the zonal ACP is expected to be high. The
13 14		Suppose an LSE's load is in a zone where the zonal ACP is expected to be high. The LSE could buy ZRCs in a zone where the zone ACP is expected to be low, submit the
13 14 15		Suppose an LSE's load is in a zone where the zonal ACP is expected to be high. The LSE could buy ZRCs in a zone where the zone ACP is expected to be low, submit the load and ZRCs in a FRAP, and thus "pay" for its more expensive load by cheaper
13141516		Suppose an LSE's load is in a zone where the zonal ACP is expected to be high. The LSE could buy ZRCs in a zone where the zone ACP is expected to be low, submit the load and ZRCs in a FRAP, and thus "pay" for its more expensive load by cheaper resources. Obviously, this is not a situation where the LSE intends use a FRAP to
13 14 15 16 17		Suppose an LSE's load is in a zone where the zonal ACP is expected to be high. The LSE could buy ZRCs in a zone where the zone ACP is expected to be low, submit the load and ZRCs in a FRAP, and thus "pay" for its more expensive load by cheaper resources. Obviously, this is not a situation where the LSE intends use a FRAP to remove risk of market prices – just the opposite, the LSE intends to use market prices to
13 14 15 16 17		Suppose an LSE's load is in a zone where the zonal ACP is expected to be high. The LSE could buy ZRCs in a zone where the zone ACP is expected to be low, submit the load and ZRCs in a FRAP, and thus "pay" for its more expensive load by cheaper resources. Obviously, this is not a situation where the LSE intends use a FRAP to remove risk of market prices – just the opposite, the LSE intends to use market prices to
13 14 15 16 17 18		Suppose an LSE's load is in a zone where the zonal ACP is expected to be high. The LSE could buy ZRCs in a zone where the zone ACP is expected to be low, submit the load and ZRCs in a FRAP, and thus "pay" for its more expensive load by cheaper resources. Obviously, this is not a situation where the LSE intends use a FRAP to remove risk of market prices – just the opposite, the LSE intends to use market prices to its advantage.
13 14 15 16 17 18 19 20		Suppose an LSE's load is in a zone where the zonal ACP is expected to be high. The LSE could buy ZRCs in a zone where the zone ACP is expected to be low, submit the load and ZRCs in a FRAP, and thus "pay" for its more expensive load by cheaper resources. Obviously, this is not a situation where the LSE intends use a FRAP to remove risk of market prices – just the opposite, the LSE intends to use market prices to its advantage. Both the LSE submitting a FRAP and other LSEs should be neutral with respect to the

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REBUTTAL TESTIMONY

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One effect of the MISO resource adequacy construct is that all LSEs in a zone should

Q. What are those restrictions?

3	receive the same supply/demand reliability and be subject to the same prices.
4	Consequently, if there is cheaper capacity outside the zone that can meet the PRMR for
5	the zone, then <u>all</u> LSEs in the zone should benefit equally via the PRA, not just the LSE
6	that owns the rights to the capacity in the other zone. As a result, MISO instituted a rule
7	requiring that the resources submitted in a FRAP be in the same zone as the load in the
8	FRAP, in proportion to a load ratio share of the zonal Local Clearing Requirement
9	("LCR").1 Consumers Energy witness Mr. David F. Ronk, Jr. notes this on page 7 of his
10	direct testimony.
11	
12	The reason for the load-ratio-share rule is that the LSE submitting the FRAP should not
13	be able to benefit from outside resources greater than the proportion of its load with
14	respect to other LSEs in the same zone. Within a zone, resources and load are a wash,
15	whether in the PRA or not, because resources will be paid the same zonal ACP as the
16	load will pay. But across zones, as explained in the example above, prices may be

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A.

The second restriction on a FRAP is that the load in the FRAP is subject to a Zonal Deliverability Charge ("ZDC").² In short, the ZDC is an additional charge on the FRAP

different. Certainly, an LSE can speculate with zonal prices, but not use a FRAP to favor

such speculation.

¹ MISO, Module E-1, section 69A.9.a.

² MISO, Module E-1, section 69A.7.6.b.

REBUTTAL TESTIMONY

Coco No	U-18444
Case No.	U-10 444

23	Q.	What is Effective Capacity Import Limit ("ECIL")?
21 22		II. ECIL
20		
19		resources submitted in a FRAP are used to serve all loads.
18		does not imply that somehow MISO is using specific resources for specific loads. All
17		of the zonal Local Clearing Requirement protects the benefits of the PRA for all LSEs. It
16		prevent the FRAP process from being gamed. The FRAP's restriction on load ratio share
15		market price risk in the MISO annual Planning Reserve Auction – and instituted rules to
14	A.	MISO created the FRAP process to solve a specific situation – assets technically put at
13		establishment of a forward locational requirement?
12	Q.	What is your conclusion regarding the relationship of the FRAP process to the
11		
10		Zonal Deliverability Charge, which is imposed only on load that is part of a FRAP.
9		disadvantage to submitting a FRAP, which is that the load becomes subject to a possible
8		cannot see any other reason for an LSE to submit a FRAP. And, there is at least one
7	A.	Avoidance of the appearance of market price risk was the intent of the FRAP process. I
6		appearance of market price risk?
5	Q.	Is there any reason for an LSE to submit a FRAP other than to avoid the
4		
3		the PRMR that is not met by resources from within the same zone as the FRAP load.
2		ACP than the ACP in the zone where the load is. The ZDC is imposed on the amount of
I		load, imposed if the zone where the FRAP's resources are located has a cheaper zonal

REBUTTAL TESTIMONY

1	A.	ECIL is a term invented by DTE Electric in the direct testimonies of its witnesses, Ms.
2		Irene M. Dimitry and Ms. Angela P. Wojtowicz. DTE Electric represents this term as
3		follows:
4 5 6 7 8 9		DTE refers to this difference as the Effective Capacity Import Limit (ECIL), which is mathematically represented as ECIL = PRMR – LCR. <u>ECIL is not a term defined by MISO</u> , but is a direct result of MISO's reliability processes within the PRA. [Ms. Wojtowizc, direct testimony, page 6, lines 21-24. Emphasis added.]
10	Q.	What is the meaning of ECIL?
11	A.	Although ECIL has an arithmetic meaning, the Commission may want to consider its
12		effective meaning within the context of establishing a forward locational requirement
13		under PA 341. MISO defines PRMR (Planning Reserve Margin Requirement). MISO
14		defines LCR. LCR = Local Reliability Requirement ("LRR") - Capacity Import Limit
15		("CIL"). Thus, within the confines of MISO definitions, the result is:
16		ECIL = PRMR - (LRR - CIL),
17		so $ECIL = PRMR - LRR + CIL$.
18		
19	Q.	What does this imply?
20	A.	If the LRR is greater than the PRMR by more than the CIL – which is possible – then the
21		ECIL becomes a negative number. If the Commission accepts the ECIL rationale, then
22		the Commission will have to figure out what to do in this situation.
23		
24	Q.	Are there other difficulties in combining MISO definitions to get a new term, ECIL?
25	A.	First, the three terms used to define the ECIL are all different:

ALEXANDER J. ZAKEM REBUTTAL TESTIMONY

1	
2	PRMR is a statistical result. It is based on forecast demand in aggregate in
3	MISO at the time of the MISO annual peak. It is based on the entire portfolio
4	of resources in MISO. It is based on the <u>load shape for MISO</u> as a whole.
5	
6	LRR is a statistical result. It is based on forecast demand for a specified zone
7	at the time of the annual zonal peak, which may occur at a different time than
8	the MISO peak. It is based only on the resources within the zone. It is based
9	on the <u>load shape for the zone</u> .
10	
11	CIL is a result of load flow analysis.
12	
13	In this proceeding, DTE Electric has proposed:
14 15 16 17 18 19	In defining capacity obligations under the SRM, the MPSC should establish limits on the amount of capacity that each electric supplier can plan to import as part of its capacity demonstration such that the collective amount of planned imports do not exceed the forecasted ECIL for that planning year. [Ms. Dimitry, direct testimony, page 10, lines 12-15. Emphasis added.]
20	In Case No. U-18419, DTE Electric stated:
21 22 23 24 25 26	The resources that clear in the MISO PRA and are shown as imports/exports from LRZs are simply the result of an economic solution of all offers in the PRA to meet the PRMR of all LRZs. There is no connection between the PRA results and what LSEs may actually be using on a planning horizon basis to meet their resource adequacy requirements.

³ MPSC Case No. U-18419, rebuttal testimony of Ms. Angela P. Wojtowicz, page 14, lines 1-5. Emphasis added.

REBUTTAL TESTIMONY

1		If the Commission wants to combine the unlike terms in DTE Electric's definition of
2		ECIL as a basis for establishing a forward locational requirement, then I believe the
3		Commission ought to have evidence that the combination is meaningful in application,
4		not just an arithmetic association with the numbers in the MISO PRA.
5		
6		Second, PA 341 contains requirements with respect to the Commission's implementation
7		of that Act regarding consistency with and conflicts with MISO rules and federal tariffs.
8		While this raises legal issues that will be addressed in briefs, a proposal based on a
9		definition that admittedly does not appear in the MISO tariff, such as DTE's, brings these
10		legal issues to the forefront, and the Commission will need to resolve them should it
11		choose to adopt the DTE proposal.
12		
13	Q.	Does this complete your rebuttal testimony?
14	A.	Yes, it does.
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STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

**** In the matter, on the Commission's own motion, to open a contested case proceeding for determining the process and requirements for a Case No. U-18444 forward locational requirement under MCL 460.6w. **PROOF OF SERVICE** STATE OF MICHIGAN) ss. COUNTY OF INGHAM Kimberly J. Champagne, the undersigned, being first duly sworn, deposes and says that she is a Legal Secretary at Varnum LLP and that on the 16th day of February, 2018, she served a copy of the Rebuttal Testimony of Alexander J. Zakem on behalf of Energy Michigan Inc. upon those individuals listed on the attached Service List via email at their last known addresses. Kimberly J. Champagne

SERVICE LIST MPSC CASE NO. U-18444

Administrative Law Judge

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