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August 23, 2017

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-18239

Dear Ms. Kale:

Attached for electronic filing in the above-referenced matter, pursuant to Judge Eyster's order at the August 2, 2017 Motion Hearing, please find the Revised Direct Testimony of Alexander J. Zakem on behalf of Energy Michigan Inc., as well as the 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 docket to implement the provisions of)	
Section 6w of 2016 PA 341 for)	Case No. U-18239
CONSUMERS ENERGY COMPANY'S)	
service territory.)	
_____)	

REVISED DIRECT TESTIMONY OF
ALEXANDER J. ZAKEM
ON BEHALF OF
ENERGY MICHIGAN, INC.

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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. Please state your professional experience.**

9 A. Since January of 2004, I have been an independent consultant providing services to
10 various clients, including members of Energy Michigan.

11
12 From March 2002 to December 2003, I was Vice President of Operations for Quest
13 Energy, an alternative energy supplier in Michigan. My responsibilities included the
14 overall direction and management of Quest’s power supply to its retail customers. This
15 included power supply planning, development of customized products, negotiation with
16 suppliers, planning and acquiring transmission rights, and scheduling and delivery of
17 power. It also included managing risk with respect to market price movements and
18 variation of customer loads.

19
20 Prior to joining Quest, I was employed by Detroit Edison from 1977 to 2001, where from
21 1998 to 2001 I was the Director of Power Sourcing and Reliability, responsible for
22 purchases and sales of power for mid-term and long-term periods, planning for

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1 generation capacity and purchase power needs, strategy for and acquisition of
2 transmission rights, and related support for regulatory proceedings.

3
4 Additional experience, qualifications, and publications are provided in Exhibit EM-1
5 (AJZ-1).

6
7 **Q. Have you testified as an expert witness in prior proceedings?**

8 A. Yes. I have testified as an expert witness in several proceedings before the Michigan
9 Public Service Commission (“Commission”), on topics such as standby rates, retail rates
10 and regulations, recovery and allocation of costs and revenues, and the effects of rate
11 restructuring. I have also testified before the Federal Energy Regulatory Commission
12 (“FERC”). Case citations are provided in Exhibit EM-1 (AJZ-1).

13
14 **Q. Are you sponsoring any exhibits?**

15 A. Yes. I am sponsoring the following exhibits:

- 16 • Exhibit EM-1 (AJZ-1) Qualifications
- 17 • Exhibit EM-2 (AJZ-2) Collective Reliability
- 18 • Exhibit EM-3 (AJZ-3) Example Cost Sharing
- 19 • Exhibit EM-4 (AJZ-4) Excerpts from 2017 OMS MISO Survey
- 20 • Exhibit EM-5 (AJZ-5) Cost Sharing Calculations

21

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1 **Q. What is the purpose of your testimony?**

2 A. On behalf of Energy Michigan, I am proposing and explaining a solution for
3 implementing a state reliability mechanism (“SRM”) as described in Section 6w of 2016
4 PA 341, considering also the provisions of the Commission’s orders in Case Nos. U-
5 18239 *et al.* and U-18197 *et al.* I will also be addressing specific, additional issues
6 regarding Consumers Energy’s (“Consumers” or “Company”) various recommendations
7 of several aspects of the SRM.

8
9 Implementation of the SRM can be complex, as I will explain later. Our proposed
10 solution to implementing the SRM operates under present – not past – reliability
11 procedures and “boundary conditions” of constraints that have to be considered, which I
12 will explain first. Consequently, for ease of explanation, my testimony is separated into
13 the following sections:

- 14 I. Purpose and Scope
- 15 II. Factual Foundation of Present Reliability
- 16 III. Boundary Conditions to Consider
- 17 IV. Faults of Consumers Energy’s Filing
- 18 V. Principles and Criteria for a Workable Solution
- 19 VI. Energy Michigan’s Proposed SRM Solution
- 20 VII. Benefits of Energy Michigan’s Proposal
- 21 VIII. Example of SRM Capacity Charge
- 22 IX. Additional Issues

23

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I. PURPOSE AND SCOPE

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Q. What are you proposing in your testimony for an SRM solution?

A. On behalf of Energy Michigan, I will propose and explain a solution for implementing the SRM called for in Section 6w of 2016 PA 341, considering the provisions of the Commission’s orders in Case Nos. U-18239 *et al.* and U-18197 *et al.*, considering also reasonable application of current reliability procedures of the Midcontinent Independent System Operator (“MISO”), and considering other Michigan statutes and Commission orders that may affect various choices in implementing the SRM.

Q. Will you be offering a legal interpretation of PA 341 or of other relevant Michigan statutes?

A. No, not at all. I am not a lawyer, and am not offering legal interpretations. Nevertheless, the SRM is called for in a new statute, and it is necessary to cite that statute, as did Consumers in its Application and testimony, in order to ensure that Energy Michigan’s proposal is responsive to it. So I will recognize and explain the practical effect of implementation choices presented to the Commission under Section 6w and other Michigan statutes that affect the setting of electric rates.

Q. What aspects of implementing Section 6w are you addressing?

A. The SRM is complex because so many aspects are interrelated. Attempts to address them one at a time can prove unworkably complicated or unduly harmful to various parties. So instead, I am proposing a total solution to implementation, covering the four main aspects of Section 6w:

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- 1 1. local capacity obligation;
- 2 2. demonstration of capacity;
- 3 3. pricing of the SRM capacity charge; and
- 4 4. four year ahead look.

5

6 Once these four main aspects of SRM implementation are solved, many of the minor or

7 ancillary questions, such as due dates, customer switching, and duration of SRM charge,

8 either go away or have simple solutions.

9

10 **II. FACTUAL FOUNDATION OF PRESENT RELIABILITY**

11

12 **A. The MISO Reliability Construct**

13

14 **Q. What is MISO’s current process for reliability?**

15 A. The concepts in MISO’s current process for reliability are often susceptible to

16 interpretation as casual language, rather than as precisely defined procedural and

17 operational concepts. The following information is being offered to make

18 communications more efficient and more accurate by ensuring a common understanding

19 of key terms and concepts.

20

21 Since the beginning of the MISO Market on April 1, 2005, MISO’s basic principle of

22 market operation and reliability has been referred to as “collective reliability.” Collective

23 reliability is embodied in two main principles:

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- a. *MISO uses all resources to serve all load.*
- b. *MISO buys all energy and capacity and sells all energy and capacity.*

This began with energy at the start of the MISO Midwest Market in April of 2005, and then expanded to capacity when capacity requirements were instituted. According to the MISO Independent Market Monitor,

MISO launched its markets for energy and financial transmission rights (FTRs) in 2005, its ancillary services market in 2009, and its most recent capacity market in 2013. These markets coordinate the planning, commitment, and dispatch of generation to ensure that resources are meeting system demand reliably and at the lowest cost.¹

Q. Don't individual Load Serving Entities ("LSEs") use their own capacity and energy resources to serve their own customers?

A. No, they do not. That concept has been obsolete since 2005. We are in the 13th year of “collective reliability,” where the pool of all resources serves the pool of all load. Exhibit EM-2 (AJZ-2) illustrates this concept. It would be a mischaracterization of present MISO operations for an LSE to claim that “our generation serves our load.”

Using all resources to serve all load is more efficient, cheaper, and provides more reliability with fewer resources than the old way where each LSE required separate resources to serve the LSE's separate load.

¹ “2016 State of the Market Report for the MISO Electricity Markets,” prepared by Potomac Economics, Independent Market Monitor for MISO, June 2017, p. vi.
<https://www.misoenergy.org/Library/Repository/Report/IMM/2016%20State%20of%20the%20Market%20Report.pdf>

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Q. What are the implications of collective reliability – that MISO uses all resources to serve all load?

A. There are several implications that will be important in designing a solution for implementing the SRM:

1. Which LSE owns which resources where does not affect reliability.
2. Customer switching does not affect reliability.
3. “Our resources serve our load” has been obsolete since 2005.
4. All customers in MISO receive the same reliability, provided there are no binding transmission constraints; and all customers in a zone (regardless of who their LSE is) receive the same reliability regardless of whether or not there are binding transmission constraints.
5. Excess capacity in one zone does not increase the reliability within the zone, but rather supplies other zones.

Q. The MISO tariff requires a showing of capacity. What is MISO’s definition of capacity?

A. MISO’s definition is – *“Capacity: The instantaneous rate at which Energy can be delivered, received or transferred, including Energy associated with Operating Reserve, Up Ramp Capability, and Down Ramp capability, measured in MW.”* [MISO Tariff, Module A]

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1 **Q. What is capacity, in plain language?**

2 A. Capacity is the *rate* at which energy can be converted from one form to another, ending
3 with electricity, such as from coal to heat to mechanical energy to electricity. The rate at
4 which energy is converted is called *power*, and electric power is expressed in Watts. A
5 megawatt (MW) is one million Watts.

6

7 **Q. How is capacity different from energy?**

8 A. Capacity is not the energy itself, but a measure of the *ability* to convert the energy into
9 electricity. Casually, we may use the terms “power” and “energy” interchangeably, but
10 they are different things.

11

12 **Q. Is capacity the same as the physical generation facility?**

13 A Capacity is an *attribute* of a physical generation facility, but it is not the same as the
14 facility itself. An analogy would be to the horsepower of an automobile engine –
15 horsepower is an *attribute* of the engine, not the engine itself.

16

17 **Q. What is MISO’s definition of a Zonal Resource Credit (“ZRC”)?**

18 A. MISO’s definition is – “**Zonal Resource Credit (ZRC):** A MW unit of Planning Resource
19 which has been converted from a MW of Unforced Capacity to a credit in the MECT,
20 which is eligible to be offered by a Market Participant into the PRA, to be sold
21 bilaterally, and /or to be submitted through a Fixed Resource Adequacy Plan.” MISO
22 Tariff, Module A.

23

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1 **Q. In plain language, what is a ZRC?**

2 A. A ZRC represents one megaWatt of “unforced” capacity that has been qualified, tested,
3 and quantified according to MISO rules under the MISO tariff, and then dedicated to
4 MISO’s use for one Planning Year. MISO’s quantification includes a discount for
5 historical random outages (“forced” outages), so ZRC capacity is specified as “unforced
6 capacity,” or UCAP.

7
8 **Q. Is a ZRC identified with a specific facility?**

9 A. Yes. It is the facility itself, called a Planning Resource, that is qualified, tested, and
10 quantified for the amount of capacity – number of ZRCs – that MISO will grant it. The
11 owner of a Planning Resource has the ability to designate all or some of the resource’s
12 qualified capacity as ZRCs.

13
14 **Q. When a ZRC is sold or bought, what actually is the product being sold or bought?**

15 A. The product consists of *financial rights* in the MISO resource adequacy construct. The
16 purchase of a ZRC means:

17 a. The buyer has the *right to designate the prices* at which the ZRC will be
18 offered in to the MISO Planning Resource Auction (“PRA”) for the
19 Planning Year for which the ZRC qualifies.

20 b. The buyer has the *right to receive the Auction Clearing Price* (“ACP”)
21 from the MISO PRA, provided the ZRC clears in the auction.

22

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1 c. The buyer has the *right to re-sell* the ZRC to another market participant in
2 MISO.

3 d. The buyer has the *right to include the ZRC in a Fixed Resource Adequacy*
4 *Plan (“FRAP”)*, subject to additional rules and procedures of MISO, in
5 lieu of offering the ZRC into the MISO auction.

6

7 **Q. Is the buyer of a ZRC responsible for the physical performance of the underlying**
8 **facility?**

9 A. No. That responsibility remains with the owner of the facility that created the ZRC. The
10 purchase of a ZRC does not give a buyer a share of ownership or control over the
11 operation of a generating resource.

12

13 **Q. You have said that MISO buys all capacity and sells all capacity. What are the**
14 **implications?**

15 A. MISO buys all and sells all, with one exception that I will explain later. The implications
16 for designing a solution for implementing the SRM are:

17 1. Satisfaction of MISO’s capacity requirement is done with money, not with
18 ZRCs (with one exception to be explained later).

19 2. A LSE pays to MISO the MISO Auction Clearing Price (“ACP”) for the
20 LSE’s Planning Reserve Margin Requirement (“PRMR”), which is based
21 on the LSE’s forecast peak MWs.

22 3. The owner of a ZRC will receive the ACP if the ZRC “clears” – meaning
23 is selected on the basis of lowest cost – in the MISO auction.

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- 1 4. Thus, an LSE who owns ZRCs can financially offset the cost of satisfying
2 its capacity obligations to MISO, because it will:
- 3 - pay the ACP for each MW of PRMR, and
 - 4 - receive the ACP for each MW of ZRC.

5

6 Thus, even if and when an LSE owns a ZRC, the LSE satisfies its MISO obligations with
7 money – paying the ACP – not with ownership of that ZRC. Paying the ACP for load
8 and receiving the ACP for ZRCs is a two-way transaction. Since the owner of a ZRC has
9 the right to specify the price of the ZRC offered into the MISO auction, it is possible that
10 the ZRC will not “clear,” in which situation the LSE still has to pay MISO the ACP but
11 will receive nothing for its ZRCs.

12

13 **Q. What is the MISO “Local Clearing Requirement”?**

14 **A.** MISO determines a Local Clearing Requirement (“LCR”) for each zone. Transmission
15 of energy into a zone is limited by the capabilities of the transmission equipment.
16 Considering the load in the zone and the characteristics of the portfolio of existing
17 resources in the zone, the LCR represents the number of ZRC MWs that must be located
18 within a zone in order that the internal zonal resources plus imports over transmission
19 lines will be sufficient to maintain the MISO reliability standard of no more than 24 “loss
20 of load” hours in 10 years.

21

22 MISO defines LCR as:

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1 *Local Clearing Requirement (LCR)*: The minimum amount of Unforced
2 Capacity that is physically located within an LRZ that is required to meet the
3 LOLE while fully using the Capacity Import Limit for such LRZ. [Module A,
4 Section 36.0.0, Definitions L.]
5

6 PA 341 defines LCR as:

7
8 “Local Clearing Requirement” means the amount of capacity resources required
9 to be in the local resource zone in which the electric provider’s demand is served
10 to ensure reliability in that zone as determined by the appropriate independent
11 system operator for the local resource zone in which the electric provider’s
12 demand is served and by the commission under subsection (8).” [MCL
13 460.6w(12)(d).]
14

15 **Q. Is not the MISO reliability standard cited as “one day in 10 years”?**

16 A. That citation is jargon, a handy expression if one knows what it means. A loss of load
17 hour means that there are insufficient generation resources to serve firm load in that hour.
18 MISO determines the LCR through a statistical modeling process. Given that a loss of
19 load event may last more than one hour – perhaps 3-6 hours during the peak hours of a
20 day – the MISO standard means that the statistically expected loss of load events may be
21 on the order of 4 to 8 days in a 10-year period.

22
23 So the oft-cited “one day in 10 years” does not mean one loss of load event in 10 years,
24 but rather statistically 24 loss of load hours in 10 years (10 years comprises 87,600
25 hours).
26

1 **B. Satisfying MISO Capacity Obligations**

2
3 **Q. How can an LSE satisfy its capacity obligations to MISO?**

4 A. An LSE’s capacity obligation to MISO is called its “Planning Resource Margin
5 Requirement (“PRMR”). The PRMR is a MW number that includes the LSE’s forecast
6 peak at the time of the MISO peak, distribution losses, transmission losses, and a
7 Planning Reserve Margin (“PRM”) percentage. To satisfy its PRMR, an LSE must
8 provide MISO with either or a combination of:

9 (a) money, or

10 (b) ZRCs

11
12 Using money and/or ZRCs, there are four ways for an LSE to meet its PRMR obligations,
13 in the MISO tariff:

14 *“LSEs will meet their PRMR by:*

15 (i) *submitting a Fixed Resource Adequacy Plan;*

16 (ii) *Self-Scheduling ZRCs;*

17 (iii) *purchasing ZRCs through the Planning Resource Auction process;*

18 *and/or*

19 (iv) *paying the Capacity Deficiency Charge.”*

20 MISO Tariff, Module E-1, section 69A.

21
22 *“All LSEs will be required to meet their PRMR through the PRA process, unless*
23 *they have opted out of the PRA pursuant to Section 69A.9 [FRAP] and/or have*

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1 *decided to pay the Capacity Deficiency Charge. LSEs can Self-Schedule ZRCs to*
2 *meet their PRMR, consistent with the Self-Scheduling Option in Section 69A.7.8.”*

3 MISO Tariff, Module E-1, section 69A.7.1.b.

4
5 Thus, there are three ways the LSE can use money to satisfy its PRMR – (ii), (iii), and
6 (iv) above – and one way it can use ZRCs, (i) above.

7
8 **Q. Has Consumers explained how it would provide capacity to meet the capacity**
9 **obligation of the portion of an AES load that is covered by the SRM charge, as**
10 **specified in Section 6w(7)?**

11 A. No, it has not explained. As will be explained in Part III of my testimony, the utility
12 cannot reassign a forecast PRMR from one LSE to another, nor can MISO reassign a
13 PRMR obligation to from one LSE to another. Consequently, under an SRM charge and
14 under the situation that the utility would receive the SRM charge and given that the AES
15 would still be responsible to MISO for capacity, there are only two possible procedures:
16 (1) The utility gives the AES money so that the AES can pay its capacity bill to MISO,
17 which is based on the ACP; and (2) the utility gives the AES sufficient ZRCs to submit
18 to MISO and be paid the ACP and thus compensate the AES for paying its capacity bill.
19 Both of these procedures appear to raise legal issues and will be addressed by Energy
20 Michigan in its brief.

21

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1 **Q. What is a Fixed Resource Adequacy Plan, known as a “FRAP”?**

2 A. A FRAP is the exception to paying money that I have mentioned previously. A FRAP is
3 the exclusion of an amount of PRMR and a commensurate amount of ZRCs from the
4 auction process.

5
6 The FRAP concept came about because certain types of LSEs – primarily municipalities
7 – were not allowed by their city charters to take market-price risk. Even though selling a
8 ZRC to the auction at the Auction Clearing Price and paying the same ACP to cover the
9 PRMR load results in zero net costs, under some accounting rules the municipals
10 considered that as putting assets at market price risk. Consequently, MISO developed a
11 procedure, the FRAP, that technically kept the assets and the payments outside of the
12 auction pricing process.

13
14 It is important to note that the resources and the load of the LSE submitting a FRAP are
15 still accounted for in the auction process because MISO has to account for all load and all
16 resources. It is also important to note that in actual operation, MISO uses all resources to
17 serve all load, and that includes resources and loads submitted in FRAPs.

18

19 **Q. What does “Self-Scheduling ZRCs” mean?**

20 A. Self-Scheduling is the practice of submitting ZRCs into the auction at zero price. This
21 ensures that the ZRCs will clear, and so the LSE is certain to receive the ACP. Since
22 MISO also bills the LSE the ACP for its PRMR obligation, the result is that the LSE
23 receives the ACP for its ZRCs and pays the ACP for its PRMR capacity obligations, and

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1 the net result is that the revenue from the ZRCs covers the same amount of PRMR
2 obligation.

3
4 **Q. What does “purchasing ZRCs through the Planning Resource Auction process”**
5 **mean? Does an LSE actually buy a ZRC in the auction?**

6 A. “Purchasing in the auction” means simply that the LSE pays MISO the ACP, and MISO
7 pays out the ACP to owners of ZRCs who have submitted ZRCs into the auction. An
8 LSE does not take title to ZRCs in the auction, nor are specific ZRCs assigned to a
9 specific LSE in the auction. *MISO uses all resources to serve all load.* “Purchasing in
10 the auction” is a term of art that means paying the ACP to MISO – in effect paying a
11 share of the total cost of all the ZRC-qualified capacity that MISO acquires in the auction
12 to cover the total projected load.

13
14 **Q. What is the Capacity Deficiency Charge?**

15 A. The Capacity Deficiency Charge is 2.748 times the Cost of New Entry (“CONE”).
16 CONE is the highest price that the Auction Clearing Price can be. If an LSE refuses to
17 participate in the auction, fails to submit a FRAP, and fails to self-schedule, then it is
18 assessed the Capacity Deficiency Charge as a penalty. It makes no business sense for an
19 LSE to go down this path, but there has to be some action in the MISO tariff to cover the
20 situation of refusal to participate.

21

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1 **Q. Is the cost of or value of “capacity” or of a “capacity related” resource the same as**
2 **the “fixed costs” of that resource?**

3 A. No. “Fixed costs” is an accounting label for the expenses of a facility that do not vary
4 with the output of the facility. Capacity is a speed rating, an attribute of the facility, not
5 the facility itself. As far as satisfying MISO’s capacity requirements, 1 MW of a
6 qualified ZRC from a nuclear unit is the same as 1 MW of a qualified ZRC from a
7 combustion turbine, although the fixed costs of the nuclear unit may be much higher than
8 the fixed costs of a combustion turbine.

9
10 In this context, it is useful to remember that MISO’s resource adequacy construct requires
11 the existence of a certain number of ZRCs to ensure resource adequacy, but does not
12 require any particular kind or type of facility. Thus, a facility’s accounting fixed costs of
13 the facility are not the costs of the resource adequacy benefits that facility may provide.
14 Section 6w(3)(A) of PA 341 specifies “capacity-related generation costs” be included in
15 the SRM charge, not “fixed costs.” However, Section 6w does not define “capacity” or
16 “capacity-related.”

17
18 **Q. How well does Section 6w of PA 341 accord with MISO’s current procedures**
19 **governing supply/demand reliability?**

20 A. My assessment of Section 6w is that its wording does not always indicate an
21 understanding of current MISO reliability procedures. It assumes that a LSE’s capacity
22 obligation to MISO is satisfied by ownership of physical capacity or capacity rights,
23 when in fact such obligation is satisfied with money, as discussed above.

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At the same time, Section 6w does specify meaningful standards that have to be observed. For example, it requires that an Alternative Electric Supplier (“AES”) can demonstrate capacity through, “*owned or contractual rights to any resource that the appropriate independent system operator [i.e., MISO] allows to meet the capacity obligation of the electric provider.*” Section 6w(6). And Section 6w does mandate that the demonstration of capacity be in accordance with the MISO tariff, stating that the resource requirements for demonstrating capacity, “*shall not be applied in any way that conflicts with a federal resource adequacy tariff.*” Section 6w(6). Energy Michigan’s proposal, therefore, must fit within these parameters.

III. BOUNDARY CONDITIONS TO CONSIDER

Q. What are “boundary conditions”?

A. A “boundary condition” is a label for a fact or event which must not be violated by a solution to a problem. For example, in the implementation of PA 341, a boundary condition would be that the MISO tariff remains unchanged. Consequently, a proposed solution to implementation, tested against the boundary condition, cannot ignore the current MISO tariff, and it cannot assume that the MISO tariff will be changed to accommodate the proposal.

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1 **Q. What are the boundary conditions to be considered in the implementation of Section**
2 **6w of PA 341?**

3 A. Five main boundary conditions are relevant to any implementation of Section 6w.:

4 1. Michigan’s cost of service statute, MCL 460.11(1), applies to rates set by the
5 Commission.

6 2. A retail customer is not a MISO market participant or a MISO LSE.

7 3. Consumers will have to procure additional capacity if it takes on the responsibility
8 for satisfying additional PRMR of an AES under Section 6w.

9 4. Under the MISO tariff, an AES still has to pay MISO to satisfy its PRMR, even if
10 Consumers Energy claims to take responsibility.

11 5. Under the MISO tariff, Consumers Energy as a Local Distribution Company
12 (“LDC”) in MISO cannot reassign forecast load or PRMR from one LSE to
13 another, including from an AES to Consumers Energy.

14

15 **Q. Would you explain each?**

16 A. Yes, I will explain each briefly.

17 1. *Michigan’s cost of service statute, MCL 460.11(1), applies to rates set by the*
18 *Commission. PA 341 is not the only law that applies to setting a capacity charge*
19 *under Section 6w. Because the capacity charge becomes part of the rate structure*
20 *for the utility, then MCL 460.11(1) also applies. How the Commission will*
21 *harmonize Section 6w and MCL 460.11(1) is open to legal argument. Here, I will*
22 *simply outline the principle provisions of MCL 460.11(1) that I believe will have*

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1 a practical effect on the determinations to be made in this proceeding. MCL
2 460.11(1) states in part:

3 Except as otherwise provided in this subsection, the commission shall
4 ensure the establishment of electric rates equal to the cost of providing
5 service to each customer class.

6
7 In establishing cost of service rates, the commission shall ensure that each
8 class, or sub-class, is assessed for its fair share and equitable use of the
9 electric grid. [. . .]

10
11 [. . .] The commission shall ensure that the cost of providing service to
12 each customer class is based on the allocation of production-related costs
13 based on using the 75-0-25 method of cost allocation and transmission
14 costs based on using the 100% demand method of cost allocation. [. . .]
15 *[MCL 460.11(1) emphasis added.]*
16

- 17 **2. A retail customer is not a MISO market participant or a MISO LSE.** A retail
18 customer has no PRMR obligation to MISO. A retail customer cannot be charged
19 for any service under the MISO wholesale tariff.
- 20 **3. CE will have to procure additional capacity if they take on the responsibility for**
21 **satisfying additional PRMR of an AES under Section 6w.**

22 As Consumers Energy explained in its filed testimony, its plan in the short term is
23 to buy additional needed capacity in the auction, which is what it does now to
24 provide for its current load [See Case No. U-18382, Consumers' request to
25 purchase 525 MW from the MISO PRA to meet its Planning Year 2018 PRMR].
26 According to Consumers, this could continue for three or four years.

27
28 Once the Company does know how much AES retail load it will need to
29 provide capacity for, Consumers Energy will pursue the best feasible
30 option available for each given year. This could include pursuing new
31 PPAs, increasing its energy optimization or demand response programs, or
32 building new generation capacity. However, those options will take time

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1 to effectuate. Building a new generation facility could take three to four
2 years.

3
4 During such a gap period, Consumers Energy may have no other option
5 but to buy capacity from the MISO annual PRA.

6
7 In particular, the short period of time between AES capacity resource
8 demonstrations in February and the beginning of the first SRM Planning
9 Year on June 1, 2018, would likely leave Consumers Energy with no other
10 option than buying additional needed capacity in the MISO auction, which
11 is not prohibited as an option available to utilities in Section 6w of Act
12 341, and would be consistent with the Company’s existing practices for
13 serving new load.

14
15 [Direct Testimony of David F. Ronk, Jr., p. 13, line 19, to p. 14, line 8.
16 Emphasis added.]
17

18 **4. Under the MISO tariff, an AES still has to pay MISO to satisfy its PRMR,**
19 **regardless if Consumers Energy claims to take responsibility.** Under the MISO
20 tariff, all LSEs are obligated to satisfy their PRMR obligation by either paying
21 MISO money or assigning ZRCs to a FRAP. Without a change in its tariff, MISO
22 cannot choose to reassign forecast load from one LSE to another, such as
23 reassigning responsibility from an AES to Consumers Energy. MISO did propose
24 a change in its tariff in its Competitive Retail Solution (“CRS”) application which
25 would have allowed such reassignment, but the FERC denied the application on
26 February 2, 2017.

27 **5. Under the MISO tariff, Consumers Energy as an Electric Distribution**
28 **Company (“EDC”) in MISO cannot reassign forecast load or PRMR from one**
29 **LSE to another, including from an AES to Consumers Energy.** The MISO tariff
30 specifies the exact methodology that an EDC in a retail choice area, such as
31 Consumers Energy, must follow in providing a load forecast for each of the LSEs

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1 in the EDC's distribution area. Consumers Energy determines the load forecast
2 for each of the AESs in its distribution area following the methodology prescribed
3 in the MISO tariff. Without a change in that MISO tariff, neither MISO nor
4 Consumers Energy as an EDC can choose to reassign responsibility to another
5 party, such as reassigning responsibility from an AES to Consumers Energy. As
6 noted above, MISO did propose such a change in its tariff in its CRS application
7 filed with the Federal Energy Regulatory Commission on November 1, 2016,
8 which would have allowed such reassignment, but the FERC denied the
9 application on February 2, 2017.

10
11 **Q. From assessing these boundary conditions, what are your conclusions?**

12 A. I draw two conclusions:

13 First, two laws – not one – appear to govern setting the price of the SRM charge if the
14 Commission considers applying the SRM charge as part of the retail electric rate. I
15 believe that a practical application of MCL 460.6w under PA 341 versus the existing
16 cost-of-service statute at MCL 460.11(1) would result in different rate outcomes, and
17 consequently the two laws will somehow have to be harmonized by the Commission.

18
19 Further, an SRM charge to LSEs operating within the wholesale market, such as AESs,
20 municipal electric utilities, and cooperatives, raises jurisdictional issues involving
21 wholesale versus retail authority. I am not addressing the legal consequences of that in
22 this testimony, nor opining as to the legality of one approach over another.

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1 Second, the SRM capacity charge should be forward looking, based on the costs that
2 Consumers Energy would actually incur if providing capacity in return for receiving
3 payment of the SRM charge. Consumers Energy states that it would have to acquire
4 additional capacity from various possible sources. The cost of such acquisition is
5 forward looking, not dependent on previous investments in existing resources that are not
6 going to provide additional capacity. Thus, the focus should be on the costs of acquiring
7 capacity, and not on Consumers' fixed costs for existing facilities that provide capacity.

IV. FAULTS OF CONSUMERS ENERGY'S FILING

11 **Q. Consumers Energy has submitted a proposal for implementing Section 6w in its**
12 **direct testimony. Are there faults in its proposal?**

13 A. Consumers is certainly knowledgeable about its historic costing methods and how the
14 electric grid operates. Yet there are faults in the sense that certain of the boundary
15 conditions are either not met or not addressed in Consumers' proposals. In addition, there
16 are conclusions that do not appear to align with the requirements of Section 6w.

17
18 Consumers' testimony does not consider the cost-of-service statute in calculating its
19 proposed SRM charge. ~~Consumers justifies its conclusion that Section 6w requires a~~
20 ~~local capacity obligation to be imposed through a simple assertion of an analogy to a~~
21 ~~FRAP, not a reasoned explanation from Section 6w.~~ Consumers does not explain or even
22 address how it, as both an Electric Distribution Company and Load Serving Entity
23 subject to the MISO tariff will be able to remove a MISO PRMR obligation for another

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1 LSE and transfer that obligation to itself, in apparent violation of MISO's tariff. Certain
2 aspects of Consumers' submittal, such as a 30-year obligation for paying historic
3 embedded costs; a 4-year return-to-service-notice; and a separation in provision of energy
4 and capacity, where a retail customer could have one LSE providing capacity and another
5 providing energy, are excessively complicated, violate just and reasonable ratemaking
6 practices, and are unneeded under Energy Michigan's proposal.

7
8 **Q. Please explain how you see the State's cost-of-service requirement relating to**
9 **Consumers' proposal.**

10 A. A major fault is that Consumers ignores cost-of-service principles and the requirements
11 of the cost-of-service statute. Thus, while Consumers states that it will have to acquire
12 additional capacity to meet any capacity requirements that it must take on under Section
13 6w, it still seeks to determine the cost of such additional capacity from the costs of
14 historical investment in facilities that would not be providing the capacity service. Under
15 cost-of-service principles, the costs to be paid should be the costs imposed by those
16 customers – that is, the cost of the additional capacity that Consumers states it would
17 have to acquire to cover the MISO capacity obligations for customers paying the SRM
18 charge..

19
20 The cost of acquiring additional capacity will be quite visible. Whether buying from the
21 market, purchasing through the MISO capacity auction, or building new resources, the
22 cost will be incremental, not historical. Consumers' proposal ascribes historical
23 embedded costs of facilities that do not provide the additional capacity to the value of

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1 additional capacity being provided, and thus violates Michigan’s established cost-of-
2 service principles.

3
4 **Q. Does not Section 6w require that the SRM charge be based on historical embedded**
5 **costs?**

6 A. Section 6w(3)(a) does specify the inclusion of “the capacity-related generation costs
7 included in the utility’s base rates, surcharges, and power supply cost recovery factors”
8 (emphasis added). But, as explained previously, there is another clause in Michigan law
9 that also specifies how electric rates are to be set – the cost-of-service statute cited
10 previously. The commission will have to sort out how to apply both of these laws at the
11 same time in a reasonable way.

12
13 Section 6w does not include a definition of “capacity related.” Nor does Section 6w
14 include the term “fixed costs.” Even if one were to believe that historical embedded costs
15 should be used in the method of calculation, Consumers does not consider the
16 requirement that production costs be allocated according to the 75-0-25 method that is in
17 the cost-of-service statute. Electric Choice customers do not take energy service from
18 Consumers, so the 25% of production costs should not be allocated to them based on
19 energy. Without taking energy, Electric Choice customers do not contribute to the
20 monthly peak demands during the summer months, so the 75% of production costs
21 should not be allocated to them based on peak demand.

22

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1 Energy Michigan’s witnesses Mr. Rupert R. Jennings and Mr. Ralph C. Smith are
2 addressing cost-of-service issues in the determination of the SRM capacity charge for
3 AES customers, under the situation that the SRM charge for additional capacity resources
4 would be determined by traditional historical embedded cost of service for utility full-
5 service customers, as Consumers has proposed.

6
7 Based on the fact that Consumers will be acquiring incremental capacity, my
8 recommendation to the Commission is that the cost of “capacity-related generation costs”
9 be the cost of the capacity-related costs of the incremental capacity that would have to be
10 acquired if AES customers pay the SRM charge. This would be a reasonable way to set
11 the SRM capacity charge and to ensure that Consumers’ charge complies with the State’s
12 cost-of-service principles and law.

13
14 ~~Q.— How does Consumers arrive at the conclusion that Section 6w requires an obligation~~
15 ~~to own or have contractual rights to capacity resources within the local MISO zone,~~
16 ~~which is Zone 7 in lower Michigan?~~

17 A.— In its direct testimony, Consumers asserts:

18 ~~The tariff rules governing the MISO PRA only require LCR to be met on a zone-~~
19 ~~wide basis.~~

20
21 ~~However, if a Load Serving Entity (“LSE”) in MISO submits a Fixed Resource~~
22 ~~Adequacy Plan (“FRAP”), rather than purchasing capacity through the PRA, then~~
23 ~~it must meet its load ratio share of the zone wide LCR in that FRAP.~~

24
25 ~~The SRM is more similar to the FRAP than to the PRA, in that it is a process~~
26 ~~designed to ensure enough local capacity is available on a forward basis, rather~~
27 ~~than a short term annual auction designed to supplement long term capacity~~
28 ~~resources.~~

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1
2 ~~In order to ensure that enough capacity is located locally without relying on an~~
3 ~~auction mechanism to clear enough aggregate capacity across all LSEs to meet the~~
4 ~~entire zone's LCR, the SRM must include a requirement that each AES and utility~~
5 ~~meet its load ratio share of the zone-wide LCR and the zone-wide PRMR. When~~
6 ~~all of these load ratio shares are totaled up (i.e., for all AESs and utilities in~~
7 ~~Michigan), it will ensure that the overall zone-wide LCR is met.~~

8
9 ~~If such a requirement is not included in the determination of AES resource~~
10 ~~adequacy, then there will be no effective way to ensure that enough capacity is~~
11 ~~located in Michigan to maintain system reliability.~~

12 ~~[Direct Testimony of David F. Ronk, Jr., page 9, lines 8-22. Emphasis added.]~~
13

14 **Q. — Does Section 6w specifically impose a local capacity requirement?**

15 ~~A. — I cannot see where it does. There simply is no wording imposing a local requirement in~~
16 ~~the demonstration of capacity and Consumers does not cite any. In earlier versions of~~
17 ~~Senate Bill 437, there was a local requirement, but that was removed by the time the final~~
18 ~~version was passed as PA 341. Whether or not local capacity is required under Section~~
19 ~~6w is a legal question that will be addressed in Energy Michigan's brief. Practically,~~
20 ~~there is nothing in the Section 6w that provides any information on how and to whom~~
21 ~~such a local requirement should be applied. Section 6w(8)(C) contains the wording "...~~
22 ~~the commission shall set any required local clearing requirement and planning reserve~~
23 ~~margin requirement, consistent with federal reliability requirements." From a practical~~
24 ~~perspective, what would the Commission do if there is no "required local clearing~~
25 ~~requirement"?. It would seem that the construction here is circular.~~

26
27 ~~— Also, "any required local clearing requirement" must be set "consistent with federal~~
28 ~~reliability requirements," and as Mr. Ronk has noted in his testimony, federal reliability~~
29 ~~requirements are on a zone-wide basis, not imposed on individual LSEs within a zone.~~

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1 ~~Nevertheless, Consumers' proposal is not consistent with MISO's tariff rules, which~~
2 ~~"only require LCR to be met on a zone wide basis." Thus, Consumers' proposal does not~~
3 ~~appear to be consistent with the requirements of Section 6w.~~

4
5 ~~**Q. If the Commission were to set a local requirement on its own authority, what factors**~~
6 ~~**should the Commission consider?**~~

7 ~~A. MISO appears to overstate the LCR significantly, and if as a result capacity in the state is~~
8 ~~overbuilt, this has the potential to cost the citizens of Michigan a substantial amount of~~
9 ~~money.~~

10
11 ~~The illustration of how the overstatement happens and the total quantification are~~
12 ~~straightforward. MISO's calculation of the LCR can be expressed as:~~

13
14 ~~(Eq. 1) $LCR = LRR - CIL - \text{non-pseudo tied exports}$~~

15
16 ~~where LRR is the Local Reliability Requirement and CIL is the Capacity Import Limit,~~
17 ~~and non-pseudo tied exports are zero for Zone 7.~~

18
19 ~~LRR is the amount of resources that a zone would need if the zone had no import~~
20 ~~transmission capability at all. LRR is generally higher than the actual total of the PRMR~~
21 ~~of the LSEs in the zone, since the resources in the single zone are not as diversified as the~~
22 ~~resources in the MISO region. The subtraction of the CIL accounts for the fact that a~~
23 ~~zone is not isolated but rather can import a specified amount of power.~~

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~~The values for the variables in Eq. 1 for Zone 7 are shown in MISO's report of the 2017-2018 Planning Resource Auction.² LRR is 24,429 MW, CIL is 3,320 MW, non-pseudo-tied exports is 0 MW, and the resulting LCR is 21,109 MW:~~

~~(Eq. 2) $LCR = 24,429 - 3,320 - 0 = 21,109$ MW~~

~~Consider the situation where the CIL is as large as the PRMR—that is, Zone 7 could import all the capacity required for all the LSEs in the zone. Zone 7 PRMR is 22,295 MW.³ Suppose the CIL is also 22,295 MW. Then the LCR is:~~

~~(Eq. 3) $LCR = 24,429 - 22,295 - 0 = 2,134$ MW~~

~~Eq. 3 means that if Zone 7 could import all the capacity to meet all the PRMR in the zone, MISO's formula would still require an additional 2,134 MW within the zone. This makes absolutely no engineering sense. MISO's determination of LCR for zones is substantially overstated.⁴~~

~~Considering that Zone 7 has a Capacity Import Limit of 3,320 MW, not 22,295 MW, the practical overstatement of LCR for Zone 7 is about 300 MW, not the full 2,134 MW. An~~

² MISO, "2017/2018 Planning Resource Auction Results," May 10, 2017, page 14.
³ MISO, "2017/2018 Planning Resource Auction Results," *op. cit.*, page 14.
⁴ The LCR calculation issue was addressed in the FERC docket ER13-2298. MISO stated it would take up the issue with stakeholders subsequently, but did not do so.

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1 ~~imposition of a local capacity obligation would result in 300 MW of excess capacity in~~
2 ~~the state, costing Michigan customers about \$180 million (= \$600/kW x 300 MW) of~~
3 ~~excess investment in new generation, with no benefit of increased reliability.~~

4
5 ~~**Q. Do you agree that “the SRM is more similar to the FRAP than to the PRA” (MISO**~~
6 ~~**Planning Reserve Auction) as Consumers asserts?**~~

7 ~~A. I don’t see a logical connection to either. This is merely an assertion, not a fact upon~~
8 ~~which further conclusions and recommendations should be made.~~

9
10 ~~**Q. Is there something wrong with “relying on an auction mechanism to clear enough**~~
11 ~~**aggregate capacity across all LSEs to meet the entire zone’s LCR”?**~~

12 ~~A. I don’t see anything unreliable about that process. That is how MISO has been working~~
13 ~~since the beginning of the annual capacity auction, and according to the recent~~
14 ~~MISO/OMS survey and the recent Annual Capacity Auction for 2017-2018, there is~~
15 ~~ample capacity all across MISO and every zone has met its LCR.~~

16
17 ~~**Q. Do you agree with Consumers’ assertion that, “if such a requirement is not included**~~
18 ~~**in the determination of AES resource adequacy, then there will be no effective way**~~
19 ~~**to ensure that enough capacity is located in Michigan to maintain system**~~
20 ~~**reliability”?**~~

21 ~~A. No. In Energy Michigan’s proposal discussed below, we propose an effective way to~~
22 ~~ensure that enough capacity is located in Michigan to maintain system reliability.~~

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1 **Q. Does Consumers explain or address how it, as both an Electric Distribution**
2 **Company and Load Serving Entity subject to the MISO tariff will be able to remove**
3 **a MISO PRMR obligation for another LSE and transfer such obligation to itself?**

4 A. No, it does not. As I have explained above, the MISO tariff would need to be changed
5 for Consumers to accomplish these two tasks, and such a proposed tariff change has
6 already been denied by the FERC. Thus, Consumers' proposal appears to be inconsistent
7 with the MISO tariff.

8

9 **V. PRINCIPLES AND CRITERIA FOR A WORKABLE SOLUTION**

10

11 **Q. Is the implementation of the SRM like a rate case?**

12 A. It is quite different from a typical rate case. A rate case may have a large number of
13 issues, but most of these issues are separate from each other and so are proposed, argued,
14 and resolved separately. The SRM is different – it is a “mechanism” which, like a
15 machine, should have all parts – the four main aspects listed above – working together.
16 To assess how well the parts of an SRM solution work together, it is helpful to establish a
17 set of principles or criteria by which to judge the merit of any proposed solution.

18

19 **Q. What principles and criteria should the Commission use in assessing how to**
20 **implement the SRM?**

21 A. I am offering the principles and criteria that guided Energy Michigan's proposal herein.
22 The solution should be:

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- 1 a. ***Holistic and integrated*** – A single, unified proposal, not something where
2 opponents pick and choose what they like or don't like, to their advantage.
- 3 b. ***Implementable*** – Straightforward, understandable and able to be applied in a
4 uniform way; not requiring complex new systems or pages of special rules,
5 special cases, or exemptions.
- 6 c. ***Recognize current and practical reliability goals*** – Work in concert with MISO's
7 current tariff requirements, not create new rules that surpass MISO's requirements
8 or are inconsistent with them.
- 9 d. ***Not harmful to any party*** – Implementation should not be a “zero sum game,”
10 where one party benefits at the expense of another. For example, if Solution A
11 benefits party X but harms party Y, while Solution B benefits both parties, then
12 Solution B should be the solution of choice.
- 13 e. ***Preserve Electric Choice*** – PA 341 preserves the Electric Choice market in
14 Michigan. Electric competition is based on (i) continued access to reasonably
15 market-priced electric products, (ii) continued freedom to contract innovatively
16 with customers, and (iii) continued ability to assess and manage future risk.
17 Proposals that price customers out of the market, interfere with customer
18 contracts, and create unquantifiable future risks do not follow this principle.
- 19 f. ***Avoid “re-negotiation” of PA 341 under the guise of “implementation”*** – The
20 legislative process behind SB 437/PA 341 was long, but the battle is over. Some
21 things were removed in the final version of the Senate Bill, and some things were
22 added in. On reviewing Consumers Energy's filing, it appears that the Company

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1 wants to implement requirements that are not consistent with the final version of
2 Section 6w found in PA 341.

3
4 **Q. Is preserving or eliminating Electric Choice an issue in implementing the SRM?**

5 A. Electric Choice has been in existence under Michigan law and Commission rules for 17
6 years. While its survival or demise ought not be a focus in implementing the SRM, my
7 observation is that the survival of Electric Choice was a main factor in the legislative
8 debate concerning the provisions in Section 6w of PA 341, and that it is still a significant
9 factor in the contests over SRM implementation. Section 6w at times separates “electric
10 utilities” from “alternative electric suppliers” (“AESs”), and these distinctions will have
11 to be analyzed carefully in this proceeding. In the Staff technical conferences, I have
12 heard utility representatives describe full-service customers as those who “did the right
13 thing” and “played by the rules,” implying that Electric Choice customers somehow did
14 not. There ought not to be such a bias against Electric Choice when implementing
15 Section 6w. SRM implementation should not present utilities with an opportunity to
16 eliminate or constrain Electric Choice.

17
18 **VI. ENERGY MICHIGAN’S PROPOSED SRM SOLUTION**

19
20 **Q. What are the elements of implementation of an SRM under Section 6w that a**
21 **solution must address?**

22 A. As noted previously, there are four main aspects to address in implementing the SRM
23 under Section 6w:

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- 1 1. Local capacity obligation.
- 2 2. Demonstration of capacity.
- 3 3. Pricing of the SRM capacity charge.
- 4 4. Four year ahead look.

5

6 **Q. What is the current situation in local Zone 7, lower Michigan?**

7 A. Several factors relevant to the current situation in Zone 7 are pertinent to potential
8 solutions for SRM implementation:

- 9 • Zone 7 currently meets its LCR amply.
- 10 • Zone 7's future electric growth is virtually zero.
- 11 • Utilities have sufficient capacity for full-service customers but do not have
12 excess capacity.
- 13 • Utilities intend to replace retiring capacity, for full-service customers only.

14

15 **Q. What do you conclude from reviewing this situation?**

16 A. My conclusions are:

- 17 • Zone 7 will continue to meet its LCR with no additional capacity other
18 than what is needed for replacement of retiring resources.
- 19 • The normal utility planning process and current utility plans – which
20 consider future retirements – are consequently sufficient to meet future
21 LCR.
- 22 • Without a sharing of future costs under implementation of PA 341, full-
23 service customers only would pay for replacement of retiring units.

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- 1 • Since the LCR can be covered by normal utility capacity planning, the
2 LCR issue reduces to a question of financial responsibility, not electric
3 reliability.
- 4 • In prior stranded cost and securitization proceedings, Electric Choice
5 customers paid approximately \$550 million for utility resources that did
6 not provide any services to Electric Choice customers but have provided
7 capacity and energy for full-service customers.

8

9 **Q. What does this imply for the implementation of Section 6w under PA 341?**

10 **A.** The implications are:

- 11 • ***Forward Look:*** Maintaining LCR is a forward looking process because it
12 depends on the acquisition of new resources to replace existing resources.
- 13 • ***Fairness:*** All customers in Zone 7 benefit from maintaining LCR.
- 14 • ***Equity:*** All customers in Zone 7 should contribute to the cost of maintaining
15 future LCR in proportion to the benefits they receive.
- 16 • ***Practicality:*** Although zone-wide (nearly lower peninsula-wide) cost sharing
17 may be theoretically optimal for sharing costs, in my opinion it would end up
18 being excessively complex, contested, and difficult if not impossible to put into
19 place, especially in a timely manner. Implementing cost sharing of future
20 resources on a utility by utility basis would be reasonable and workable,
21 considering that the two large utilities in the state, Consumers Energy and DTE
22 Electric, have visible capacity plans for the future.
- 23

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1 **Q. Would you summarize Energy Michigan’s proposal for implementing the SRM?**

2 A. The proposal is straightforward and based on the preceding principles and observations,
3 as well as on the principles for a solution and the foundations of reliability explained
4 earlier.

5 a. Because (i) the LCR is currently met, (ii) Michigan is a virtually no-electric-
6 growth area, and (iii) utilities are planning to maintain their current level of
7 resources, normal utility capacity plans will preserve zonal reliability. Therefore,
8 zonal reliability becomes a financial issue, not a reliability one. Consumers does
9 not have to do anything different from continuing to replace retiring capacity as it
10 has stated it plans to do in various filings to the Commission. Under Energy
11 Michigan’s proposal, the cost of the new replacement resources would be shared
12 by all of the LSEs in Consumers distribution area, rather than borne only by
13 Consumers as under present Commission rules.

14

15 b. Once the zonal LCR issue is solved by (a) above, reliability will be maintained by
16 MISO in accordance with its present tariffs, and as a result having the
17 “demonstration of capacity” rules be in accordance with the MISO tariff will
18 maintain reliability.

19

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1 **Q. What is Energy Michigan’s proposal for implementing the SRM under Section 6w**
2 **of PA 341?**

3 A. Energy Michigan’s proposal addresses the four critical aspects of implementation. It
4 incorporates an equitable sharing of costs of replacement resources and provides rules for
5 demonstration of capacity.

6
7 First, I will explain our proposal for equitable cost sharing for maintaining Local
8 Capacity Requirements in the zone. This includes (a) a definition of what resources
9 qualify for cost sharing, (b) the valuation of capacity that would be charged to LSEs, and
10 (c) how the charge would be apportioned to LSEs. Second, I will describe how LSEs can
11 demonstrate capacity, thereby preserving reliability after the LCR is met. Third, I will
12 recommend an SRM capacity charge for those LSEs who do not demonstrate sufficient
13 capacity. Fourth, I will address how the above three aspects should be implemented over
14 a four-year outlook that Section 6w specifies.

15
16 **Q. What resources would qualify for cost sharing?**

17 A. The resources that would qualify for cost sharing are those that would count toward the
18 maintenance of meeting the MISO zonal LCR – which was explained previously in my
19 testimony) in Zone 7. This would include new resources built within Zone 7, including
20 plant improvement projects that increase capacity, new demand resources, and new
21 energy optimization resources. All new resources eligible for cost sharing must be
22 qualified as ZRCs by MISO. In addition, with the exception of PURPA QFs that
23 Consumers is relying on for its capacity needs, the new resources must be approved by

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1 the Commission through the Certificate of Necessity process, which affords a review of
2 the prudence and need for the resource.

3
4 Excluded would be the purchase of an existing resource or the output of an existing
5 resource that is already functioning in Zone 7, because the purchase does not add any
6 capacity to Zone 7, but rather is merely a change of ownership. Also excluded would be
7 a new resource built outside of Zone 7 or the purchase of an existing resource or the
8 output of an existing resource from outside of Zone 7. Obviously, any resource outside
9 of Zone 7 by definition cannot satisfy the LCR for Zone 7.

10
11 **Q. How would the value of capacity from the new resource be determined for the**
12 **purpose of cost sharing?**

13 A. The cost to be shared is the cost of the capacity of the new resource, not the total cost.
14 The total cost may be much larger to gain benefits such as lower fuel costs, lower
15 emissions, greater reliability, *etc.* MISO, with approval by the FERC, has determined
16 that the cost of new capacity is represented by the Cost of New Entry (“CONE”). This is
17 an annualized cost of a combustion turbine, without subtraction for sales of capacity,
18 energy, or ancillary services. The cost is determined by zone in MISO, and MISO files
19 an update with the FERC each year. Calculation of Cone is governed by the MISO
20 Tariff, Module E-1, section 69A.8. At present, the CONE in Zone 7 is \$94,900 per MW
21 per year.⁵

⁵ FERC Docket No. ER16-2662, filing September 23, 2016, Attachment B.

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As described previously, MISO pays the Auction Clearing Price for each MW of ZRC to the owner of the ZRC. Consequently, if a utility builds a new resource, it will receive the ACP for the ZRC capability of the resource. The ACP may be well under the CONE, as it has been consistently for the last several years.

Energy Michigan’s proposal is that fair compensation for the capacity value of the qualified new resource should be the CONE. Since the building utility will receive the ACP from MISO, Energy Michigan proposes that the cost to be shared among the LSEs in the utility distribution area be the difference between the ACP and the CONE, or the quantity $CONE - ACP$ for each ZRC MW, per year. This is an annualized cost, and the $CONE - ACP$ charge would begin when the resource is first placed in service and would continue for as long as the new resource is in service. For PURPA QFs, the compensation would be the greater of (a) the Commission-determined avoided cost of capacity that the utility is paying to the QF minus ACP or (b) zero and would continue for the length of the power purchase agreement.

Q. Would the applicable CONE and ACP prices change over time?

A. I recommend that the CONE remain fixed at the level it is at the time the resource is placed in service. CONE changes very little from year to year. A static CONE applied to the ZRC MWs of the new resource thus establishes a stable total capacity cost of the resource.

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1 The ACP has varied widely from year to year. Since the recovery of the capacity cost is
2 in two parts – ACP from MISO and CONE – ACP from the LSEs in the distribution area
3 – recovery of total capacity costs under the proposal must recognize that MISO will be
4 paying the utility a different amount each time the ACP changes, each Planning Year. So
5 the ACP used in the cost sharing price CONE – ACP should also change each year as the
6 MISO Zone 7 ACP changes.

7
8 **Q. How would the CONE – ACP charge be apportioned to LSEs in the utility**
9 **distribution area?**

10 **A.** The apportionment would be pro-rata on the basis of relative PRMR. An “apples to
11 apples” perspective is required. MISO discounts the MW output of the new resource by
12 the historical – or estimated, for new units – forced outage rate to determine the ZRC
13 rating on an unforced capacity, or “UCAP” basis. MISO also requires the PRMR to be
14 satisfied on a UCAP basis. Therefore the proration should be on the basis of the relative
15 PRMR of the LSEs in the distribution area, applied to the ZRC rating of the new
16 resource. While this is complicated to say in words, part VIII of my testimony along with
17 Exhibit EM-3 (AJZ-3) shows an example of the proration.

18
19 In the proration, an LSE other than the utility builder of the new resource will receive a
20 subtractive credit for owned or contracted resources that already qualify for meeting the
21 LCR. This aspect is also shown in the example.

22

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1 **Q. Why should not the utility builder receive a credit for owned or contracted**
2 **resources that already qualify for meeting the LCR?**

3 A. The proposal here is that the utility is building new resources to replace retiring
4 resources, for the purpose of covering capacity requirements for its full-service
5 customers. If the utility were to get a subtractive credit for existing resources, then it
6 would not pay for any of the cost of the new resource, and consequently the entire ZRC
7 value of the new resource would be apportioned to other LSEs. With a MW credit to
8 other LSEs prorated on the ACP (which I will explain later), this would leave the utility
9 in the position of not having sufficient replacement ZRCs. Thus, the utility would have
10 to go through the build cycle again and again, each time with insufficient additional
11 ZRCs, which would not make any sense.

12
13 **Q. Realizing that you will have a more complete example later, can you give a short**
14 **and simplified example of the pro-ration method?**

15 A. Yes. Assume that the distribution area PRMR is 1,000 MW, with the utility PRMR at
16 900 MW and an AES PRMR at 100 MW. Assume that the zonal LCR is 95% of the total
17 zone PRMR, or 950 MW. Then the utility share of the LCR is $900 \times .95 = 855$ MW, and
18 the AES share of the LCR is $100 \times .95 = 95$ MW.

19
20 Assume that the utility builds a new unit of 50 MW to replace a retiring 50 MW unit.
21 Then the utility will receive a pro-ration of $855/950 = .90$ of the capacity cost of the new
22 unit to be shared, and the AES will receive a pro-ration of $95/950 = .10$ of the capacity
23 cost of the new unit.

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The annual “capacity cost of the new unit to be shared” is $50 \text{ MW} \times (\text{CONE} - \text{ACP})$. Assume CONE is \$90,000 and the ACP is \$20,000. Then the cost of the new unit to be shared is $50 \times (\$90,000 - 20,000) = \$3,500,000$ per year. The utility would pay .90 of that, or \$3,150,000, and the AES would pay the utility .10 of that, or \$315,000 per year.

In short, if the AES represents 10% of the distribution area load, then it will pay 10% of the annual capacity cost of the new unit to be shared – *i.e.*, cost that is not covered by MISO paying the ACP. Thus, the utility builder is guaranteed to receive the MISO CONE for the capacity of the new resource.

Q. In this situation, what happens to the LCR for the zone?

A. For the zone, 50 MW are being retired, and 50 MW are being added. Thus, there is no change in the amount of resources that satisfy the LCR, and consequently no change in the reliability of Zone 7.

Q. Does the AES get any benefits from the energy or ancillary services from the new resource?

A. No. The AES pays only for its share of the capacity. The utility retains full rights to the energy and ancillary services value of the full 50 MW.

Q. Does the AES receive a capacity credit?

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1 A. Yes, the AES would receive a percentage capacity credit based on the level of its CONE
2 – ACP prorated contribution compared to full CONE.

3
4 In this example, $(\text{CONE} - \text{ACP})/\text{CONE} = 78\%$. Therefore the AES would receive a
5 capacity credit of $50 \text{ MW} \times .10 \times 78\% = 3.9 \text{ ZRC MW}$.

6
7 **Q. Why doesn't the AES receive a fixed capacity credit of 10% of the 50 MW, or 5**
8 **MW?**

9 A. As the CP draws closer to CONE, the amount of money based on the ACP that the utility
10 receives from MISO increases, and commensurately the amount based on CONE – ACP
11 that the AES pays decreases. If the capacity credit were fixed, then the amount that the
12 AES pays to the utility would not reflect the capacity value of the MWs credited – the
13 capacity value received would be greater than the MW credit. So determining the
14 capacity credit based on relative prices of CONE and ACP results in a proper credit.

15
16 **Q. Why does the AES pay a share of the cost based on its 5 MW PRMR but receive a**
17 **capacity credit of only 3.9 MW?**

18 A. “Based on its 5 MW PRMR” is only part of determining the AES’s share of cost. The
19 other part is the level of the ACP.

20 The higher the ACP,
21 the more the utility receives from MISO,
22 the less the AES has to pay to reach CONE,
23 the less the ZRC MW credit.

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1 All ends up fair for both utility and AES. Neither is harmed.

2

3 **Q. This sounds complicated for a difference of a 1.1 MW credit. Is it workable?**

4 A. It may seem complicated to explain in words, but the arithmetic is very short and simple
5 in actual application: $MW\ Credit = 50\ MW \times .10 \times (CONE-ACP)/CONE$.

6 That's all there is to it.

7

8 As noted earlier, the principles of Energy Michigan's proposed solution are that it be
9 holistic and integrated, and implementable. The obligations of each affected entity must
10 be clear, and an allocated credit of ZRCs is part of the proposal.

11

12 **Q. What is the final outcome of the cost sharing proposal?**

13 A. The utility ends up with 50 MW of ZRCs less a small capacity credit to the AES, plus the
14 capacity, energy, and ancillary services value of the full 50 MW, plus a payment of
15 (CONE – ACP) from the AES's pro rata share of the cost. The utility is more than whole
16 financially, while at the same time the local reliability of the zone is maintained.

17

18 ~~Q. Will you explain the second aspect of Energy Michigan's proposal, how LSEs can~~
19 ~~demonstrate capacity, preserving reliability after the LCR is met?~~

20 ~~A. Once the zonal LCR is met, supply/demand reliability depends on the entire MISO~~
21 ~~region. As explained previously, MISO uses all resources to serve all load, and once~~
22 ~~zonal LCR is met MISO has no constraints on who owns which ZRCs where. Further,~~
23 ~~all ZRCs that clear the MISO auction are dedicated to MISO for the Planning Year.~~

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1 ~~Consequently, MISO has control of all capacity resources no matter who owns the rights~~
2 ~~to the ZRCs from those resources.~~

3
4 ~~— This implies that — again, once zonal LCR is met — ownership of, contract with, or ability~~
5 ~~to acquire any ZRC in MISO makes no difference to local reliability.~~

6
7 ~~— Section 6w(6) states:~~

8 ~~(6) A capacity charge shall not be assessed for any portion of capacity obligations~~
9 ~~for each planning year for which an alternative electric supplier can demonstrate~~
10 ~~that it can meet its capacity obligations through owned or contractual rights to any~~
11 ~~resource that the appropriate independent system operator allows to meet the~~
12 ~~capacity obligation of the electric provider. The preceding sentence shall not be~~
13 ~~applied in any way that conflicts with a federal resource adequacy tariff, when~~
14 ~~applicable. [Section 6w(6), emphasis added.]~~
15

16 ~~— As explained previously in Part II-B of my testimony, the MISO resource adequacy tariff~~
17 ~~allows four ways for LSEs to meet capacity obligations:~~

18 ~~*“LSEs will meet their PRMR by:*~~

19 ~~(i) — *submitting a Fixed Resource Adequacy Plan;*~~

20 ~~(ii) — *Self Scheduling ZRCs;*~~

21 ~~(iii) — *purchasing ZRCs through the Planning Resource Auction process; and/or*~~

22 ~~(iv) — *paying the Capacity Deficiency Charge.”*~~

23 ~~MISO Tariff, Module E-1, section 69A.~~

24
25 ~~— Energy Michigan proposes that the demonstration of capacity in the implementation of~~
26 ~~the SRM under Section 6w be allowed to use (i), (ii), and (iii) of the above — submitting a~~

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1 ~~FRAP, self-scheduling ZRCs, and purchasing ZRCs through the Planning Resource~~
2 ~~Auction. Any and all of these three methods will neither increase nor decrease reliability.~~
3 ~~None of them “conflicts with a federal resource adequacy tariff” because each is in the~~
4 ~~MISO resource adequacy tariff.~~

5
6 ~~Energy Michigan’s proposal eliminates the illogical and contradictory situation that an~~
7 ~~LSE will be able to meet its resource adequacy needs to MISO according to the MISO~~
8 ~~tariff but not able to use the same resources to meet its “demonstration” of capacity under~~
9 ~~PA 341. It thus accords with PA 341’s requirement that the SRM not conflict with the~~
10 ~~MISO resource adequacy tariff. See Section 6w(6).~~

11
12 **Q. The third aspect of Energy Michigan’s proposal is a recommended capacity charge**
13 **for those LSEs who do not demonstrate sufficient capacity. What is your proposal?**

14 A. My proposal for an SRM capacity charge for those LSEs who do not demonstrate
15 sufficient capacity is the zonal Cost of New Entry, the CONE.

16
17 **Q. Why do you think that CONE is the appropriate price?**

18 A. CONE represents the cost of a newly built capacity product that MISO defines as meeting
19 capacity requirements. It is also the highest cost that can be seen in the MISO auction.
20 As shown previously in my testimony, Consumers has stated that if it has to acquire
21 capacity for deficient LSEs, it will either buy in the MISO auction or build new. Thus,
22 the CONE is in accordance with cost of service principles.

23

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1 Theoretically, if Consumers were to buy in the auction, the cost of service price would be
2 the Auction Clearing Price, which is less than or equal to CONE. Practically, however,
3 pricing the SRM capacity charge for a deficient LSE at the ACP would make the
4 deficient LSE financially indifferent to meeting its capacity requirement by paying the
5 ACP to MISO or being deficient under PA 341 and paying the ACP to the utility.
6 Therefore, charging CONE would provide an incentive to the LSE to meet its
7 requirements through MISO while at the same time following Michigan’s cost of service
8 principles should the LSE fail to meet its requirements through MISO.

9
10 **Q. Consumers has submitted an historical embedded cost approach to determining the**
11 **SRM capacity charge, relying on language in PA 341, Sub-sections 6w(3)(a) and (b).**
12 **Would this approach be reasonable?**

13 A. As discussed previously, there are two laws that will affect the implementation of the
14 SRM charge – Section 6w(3), which is MCL 460.6w(3), and MCL 460.11(1), which is
15 the cost of service statute. The Commission will have to determine the SRM charge in
16 light of both laws. Energy Michigan will address this legal issue in briefs.

17
18 In this context, “cost of service” does not mean “the Excel file the utility normally uses in
19 its rate case.” Instead, it means discerning the principles of reasonably allocating a
20 number of individual and joint costs, fixed and variable, to the customers or classes that
21 affect the incurrence of such costs. If it has to take on additional capacity obligations
22 under PA 341, Consumers has stated it intends to buy from the MISO auction or build

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1 new. It is not going to use its existing resources to provide for additional capacity
2 obligations, and therefore the cost of existing resources may not be relevant.

3
4 Further, PA 341 can be ambiguous. Section 6w(3) speaks to “capacity-related” and
5 “non-capacity-related” electric generation costs, yet gives no definition of those terms.
6 The section also specifies the subtraction of “all energy market sales.” Since all the
7 output of all generation is sold to the MISO energy market, and all energy delivered to
8 LSEs is bought from the MISO energy market, face-value interpretation of “all energy
9 market sales” means all energy sales, not energy sales less energy purchases. It would be
10 incorrect to net MISO sales against purchases from MISO and subtract the net, as
11 Consumers has done in its proposed calculation of the SRM charge. As noted previously,
12 Energy Michigan witnesses Mr. Jennings and Mr. Smith will address the practical
13 application of pricing methods in their testimonies.

14
15 ~~Q. The fourth aspect of Energy Michigan’s proposal is how to implement its proposals~~
16 ~~over the four-year outlook that Section 6w calls for. What is your recommendation?~~

17 ~~A. Various requirements and procedures in the MISO tariff apply only to the current~~
18 ~~Planning Year and the next upcoming Planning Year, in MISO jargon called the “prompt~~
19 ~~year.” Section 6w, however requires a four year look ahead, for which MISO does not~~
20 ~~have an equivalent.~~

21
22 ~~Under Energy Michigan’s proposal, some of the otherwise problematic issues of~~
23 ~~extending requirements four years ahead either go away or become much simpler to~~

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1 ~~solve. For example, under the proposal for cost sharing of new intra zonal utility~~
2 ~~resources, the cost sharing is an annual amount that extends over the life of the asset, and~~
3 ~~this eliminates the issue of the obligation and the method to pay for maintaining the LCR~~
4 ~~four years ahead.~~

5
6 ~~As for the demonstration of capacity, MISO creates ZRCs and defines a FRAP only one~~
7 ~~year ahead. MISO also allows “purchasing ZRCs through the Planning Resource~~
8 ~~Auction process” as noted previously. Because MISO’s tariff constructs and PA 341 do~~
9 ~~not coincide, and yet the statute requires that PA 341 “not be applied in any way that~~
10 ~~conflicts” with the MISO rules, the Commission will have to determine how to~~
11 ~~reasonably interpret the requirements of PA 341 so that they can be met by normal~~
12 ~~business processes, whether utility or AES. See Section 6w(6).~~

13
14 ~~Energy Michigan’s proposal is that normal business processes that work for the current~~
15 ~~and prompt year in MISO be allowed to work four years ahead also, with accommodation~~
16 ~~for the practicalities of time. A utility or AES that owns rights to ZRCs in the current or~~
17 ~~prompt year should be able to attest to and/or present a contract for delivery of future~~
18 ~~year ZRCs in the out years. Since ZRCs are not defined until the prompt year,~~
19 ~~demonstration by contract would also involve a second step of attesting to the actual~~
20 ~~“delivery” of ZRC rights when available for the prompt year, supported by MISO reports.~~
21 ~~Buying and selling ZRCs goes on all the time, and therefore demonstration by a utility or~~
22 ~~AES should be able to be updated each year, using the mix of FRAP, ZRC contracts, and~~
23 ~~planned purchases from the MISO auction.~~

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~~Energy Michigan's proposal is that future auction purchases can be used for demonstration in the out years. MISO will have access to and control of all resources. It makes no difference to reliability who owns which resources. "Buying in the auction" means paying MISO money that MISO will deliver to the owners of all ZRCs. Whether an LSE "buys in the auction" or owns a contract for future ZRCs is strictly a financial business decision. The zonal location of ZRCs in the auction is irrelevant, because specific ZRCs are not assigned to specific LSEs. Again, MISO ends up buying all capacity and using all capacity.~~

~~Consumers sees no problem with it, "buying additional needed capacity in the auction, which is not prohibited as an option available to utilities in Section 6w of Act 341, and would be consistent with the Company's existing practices for serving new load." Direct Testimony of Mr. Ronk, p. 14, lines 5-8. Buying in the auction is not prohibited to AESs either under the Act and should be allowed by the Commission.~~

~~Wording in Section 6w for demonstration of capacity is identical for utility and for AES:~~

~~... each electric utility demonstrate ... the electric utility owns or has contractual rights to sufficient capacity to meet its capacity obligations as set by [MISO], or commission, as applicable. [6w.(8)(A)]~~

~~... each alternative electric supplier ... demonstrate ... the alternative electric supplier ... owns or has contractual rights to sufficient capacity to meet its capacity obligations as set by [MISO], or commission, as applicable. [6w.(8)(B)]~~

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1 ~~Therefore, it would be a contradiction for the Commission to exclude from~~
2 ~~“demonstration” criteria the ability for an AES to use the MISO auction when the remedy~~
3 ~~that Consumers proposes for failure to demonstrate is for Consumers to buy “additional~~
4 ~~needed capacity” in that same auction.~~

VII. BENEFITS OF ENERGY MICHIGAN’S PROPOSAL

8 **Q. What are the benefits of Energy Michigan’s proposal?**

9 A. The benefits of Energy Michigan’s proposal for implementing Section 6w of PA 341 are:

10 **Maintains LCR:** The cost sharing maintains the current quantity of local resources –
11 which is ample for maintaining reliability. Zone 7 is a no-electric-growth area. Thus, as
12 present resources are retired and replaced, sufficient LCR resources are maintained. All
13 LSEs pay a share of the capacity value of the new resources, according to benefits
14 received.

15
16 **Follows COS:** The proposal harmonizes the cost-of-service statute with PA 341 because
17 AESs pay only for services they receive. Utilities assert they do not have capacity to
18 provide for ROA customers and that any services will either be from new resources or the
19 MISO auction.

20
21 **Visible Price:** CONE is a visible cost of the capacity product that MISO has determined
22 meets its capacity requirements. Use of CONE eliminates arguing over allocations,
23 embedded nuclear costs, etc.

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Utility Freedom: Utility is free to build any type of generation it chooses. Only the cost of the pure capacity attribute gets into the SRM, not all the fixed costs of the generating facility. The utility retains the value of low energy costs, ancillary services revenue, etc.

Solves Customer Switching Problem: MISO customer switching presently involves the transfer of a customer’s Peak Load Contribution (“PLC”) priced at ACP from the old LSE to the new. SRM switching can follow the same method, using the “LCR charge” instead of the ACP, and switching the charge from the old AES to the new AES.

Simplifies Duration: CONE is an annualized charge, continuing for the life of the asset. Eliminates “30-year duration” issue because all customers would be paying on any new capacity investment for the life of that asset.

Simplifies “Return to Service”: Eliminates need for changes in return-to-service rules. There is no longer a “before” or “after” demonstration-of-capacity issue because the AES is always (a) paying its share of cost of LCR provided by the utility and (b) paying its capacity obligation to MISO through either ZRCs submitted or the annual auction.

Eliminates “Interruptible” Discrimination: Utility and AESs pay pro-rata proportion, so customers of both should receive the same zonal reliability.

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1 **Eliminates Discrimination:** All LSEs in the utility service area pay for the benefits of
2 new resources that meet the zonal LCR. All LSEs receive the same reliability.
3 Opportunities for discrimination between full-service and Choice customers are thereby
4 removed as all are treated the same under the Energy Michigan proposal.

5
6 **Follows Used-and-Useful Principle and Cost-of-Service:** Energy Michigan’s proposal
7 accords well with utility ratemaking principles such as used-and-useful and cost-of-
8 service. The utility is paid for new plant in service and does not collect money in
9 advance without any commensurate costs. Customers do not pay for zero benefits, and
10 only incur charges for costs that they impose on the system.

11
12 **Allows Regulatory Review Under Existing Structures:** In Michigan, a utility is free to
13 build or not build resources – regulation governs only the recovery of costs. The existing
14 Certificate of Necessity process provides a review of the prudent investment in new
15 resources, preventing the utility from overbuilding and collecting excessive SRM
16 charges. Energy Michigan’s proposal relies on existing regulatory structures to ensure
17 fair implementation of the charge.

18
19 **Incremental Pricing for Demonstration:** The SRM charge for failure to demonstrate
20 capacity is the CONE, and thus uses incremental cost-of-service elements that are in
21 accordance with Consumers’ stated method of acquiring any additional needed capacity –
22 *i.e.*, via the MISO auction or a newly built resource.

23

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1 **Q. What if there is not enough capacity in MISO?**

2 A. That is an often-asked question. At the outset, the question implies that if there is “not
3 enough capacity,” that something catastrophic and intolerable is going to happen. There
4 are four perspectives from which to answer the question – practical, legal, statistical, and
5 logical.

6
7 Considering practicality, we have to look at the evidence that the situation in the question
8 has a realistic potential to exist, and therefore requires an answer that incorporates a
9 remedy. The observable evidence at present is outlined below.

10

11 **1. *Something is working that is providing more capacity, even if we don’t***
12 ***understand why.*** MISO has been underreporting future capacity for 10 years.
13 That is why in previous MISO reports, there was generally an image of a shortfall
14 of capacity from a few to several years out, but when those years actually arrived,
15 there was excess capacity. There is a large amount of capacity under
16 development in MISO. In the past, almost all of this capacity under development
17 was excluded from survey results, but starting this year, a realistic portion of it is
18 now included. As a result, there is no longer a projected shortfall. The latest
19 MISO/OMS report shows reserve margins of about 20% through 2022. Exhibit
20 EM-4 (AJZ-4) shows two pages from the recent MISO/OMS study illustrating
21 this.⁶

⁶<https://www.misoenergy.org/Library/Repository/Meeting%20Material/Stakeholder/RASC/2017/20170712/20170712%20RASC%20Item%2002%20OMS%20Survey%20Results.pdf>

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So if the question is asked in the context of what will happen if more capacity is not built to meet an expected shortage, then the answer is that there not only exists ample capacity for several years out, but also capacity is under development now that will meet demand decades out.

2. MISO uses all to serve all. Thus, when a customer moves from one supplier to another, the capacity used to serve that customer still exists in the market place. From MISO’s perspective, total load stays the same, and total supply stays the same. Consequently, no additional capacity is needed, only a change in financial responsibility to pay for that capacity. So if the question is asked in the context of a customer switching to a different supplier and the underlying assumption is that somehow the new supplier has to “go out and get capacity,” the answer is that the capacity already exists and the supplier need only pay for it. Energy Michigan’s proposal provides how that supplier will pay for it.

3. Low growth means no surprises. Michigan is a no-electric growth area and MISO is a very low growth region. Consequently, there is not going to be a need for a large amount of additional capacity that is unanticipated. So if the question is asked in the context of “all of sudden we will have to do something,” then the answer is that at least for the one to four years required to build new physical capacity, there is no need to plan additional capacity, and so no need to do

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1 something right now for a situation that has not emerged as an immediate
2 problem. And, point 2 above addresses longer term concerns.

3
4 **Q. What about legally?**

5 A. By “legal perspective” I mean the role of agencies and rules that govern electric
6 reliability. For Zone 7 in Michigan MISO governs reliability. MISO states its mission
7 as: “Maintaining and managing reliability is MISO’s most important job,”⁷ which
8 includes both transmission and supply reliability. MISO’s rules are approved by the
9 Federal Regulatory Energy Commission, mostly in contested proceedings.

10
11 MISO is part of the North American Electric Reliability Corporation (“NERC”). NERC
12 describes its responsibilities as:

13 The North American Electric Reliability Corporation (NERC) is a not-for-profit
14 international regulatory authority whose mission is to assure the reliability and
15 security of the bulk power system in North America. NERC develops and
16 enforces Reliability Standards; annually assesses seasonal and long-term
17 reliability; monitors the bulk power system through system awareness; and
18 educates, trains, and certifies industry personnel. NERC’s area of responsibility
19 spans the continental United States, Canada, and the northern portion of Baja
20 California, Mexico. NERC is the electric reliability organization for North
21 America, subject to oversight by the Federal Energy Regulatory Commission and
22 governmental authorities in Canada. NERC’s jurisdiction includes users, owners,
23 and operators of the bulk power system, which serves more than 334 million
24 people.⁸ [Emphasis added.]
25

⁷ <https://www.misoenergy.org/WhatWeDo/Pages/Reliability.aspx>

⁸ <http://www.nerc.com/Pages/default.aspx>

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1 So if the question is asked in the context of “who is paying attention to reliability,” then
2 the answer is that there are regional, national, and federal organizations whose
3 responsibility is to maintain electric reliability. Now, a follow up question might be,
4 “Can they be trusted to do the job?”, but that is a question that can always be asked of
5 any entity. For MISO under NERC, the track record for supply/demand reliability has
6 been flawless since the establishment of MISO in the early 2000s and, from the recent
7 MISO/OMS survey, there is no reason to expect that not to continue for the foreseeable
8 future.

9
10 **Q. What about statistically?**

11 A. Reliability is a statistical measure, and thus the test of situations against reliability
12 standards should be considered on a statistical basis. The unqualified question of, “What
13 if there is not enough capacity?” is a discrete event. By the standard metric used by
14 MISO of 24 loss of load hours in 10 years, as I have explained previously, the answer to
15 the question is that “not enough capacity” is expected to occur on perhaps 4-8 days over a
16 10-year period statistically, and that has been the social and economic decision-point
17 reached in trading off higher reliability against higher cost. “Not enough capacity” is not
18 an event that is never expected to happen or that never should happen, as ensuring that it
19 never could possibly happen is cost-prohibitive. “Not enough capacity” is a scenario that
20 is considered in and expected to occur in reliability modeling, although the likelihood of
21 such an event happening is extremely low. Testing a discrete event against a statistical
22 method does not mean that the discrete event will never happen. The reliability standard
23 is “1 day in 10,” not “never in forever.”

ALEXANDER J. ZAKEM
REVISED DIRECT TESTIMONY

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Q. What about logically?

A. The question, “What if there is not enough capacity?” assumes an outcome contrary to any proposal to maintain reliability, and thus can be used as a debating tactic to rebut any proposal by merely assuming it will fail. That is, logically it assumes an end state contrary to the objective of the proposal, and then uses that assumption to rebut the proposal.

An example might be, “MISO operates from Carmel, Indiana. What if an asteroid falls on Carmel, Indiana?” The answer might be, “MISO also has a back up facility in Minneapolis.” Yet then another question could be, “What if a second asteroid fell on Minneapolis?” And so on.

While the above is facetious, the point here is to distinguish a legitimate question regarding the potential for insufficient capacity – which can be addressed by facts and analysis – from a debate technique for which there is no meaningful answer. In short, the logical answer is that there is no reason to believe that, given what we know today, there is any basis for acting as if there will not be enough capacity in MISO to ensure resource adequacy for the foreseeable future.

VIII. EXAMPLE OF SRM CAPACITY CHARGE

Q. Would you provide an example of how the cost sharing of the SRM capacity charge is calculated?

ALEXANDER J. ZAKEM
REVISED DIRECT TESTIMONY

1 A. Yes. I have prepared Exhibit EM-5 (AJZ-5) to illustrate the calculation of the SRM
2 charge, proration to utility and two AESs, annual cost for each AES, and the capacity
3 credit for each AES. While the numbers are for example purposes only, I have used
4 values that are approximately what would be seen in Zone 7 and in the Consumers
5 Energy area. One exception is the Zone 7 Auction Clearing Price, where the value is
6 close to the 2016-2017 value, rather than the current 2017-2018, so that the effect of the
7 ACP would be more visible.

8
9 Page 1 of Exhibit EM-5 (AJZ-5) sets up a scenario of an example current status, with a
10 hypothetical addition of a new 350 MW plant within the zone. Page 2 shows the
11 calculation of the charge for the pro rate sharing of capacity costs of the new plant, where
12 each LSE pays a share because the plant would maintain the Local Capacity Requirement
13 in the zone under Energy Michigan's proposal. Page 2 shows how much each AES
14 would pay Consumers, and what each AES would receive as a capacity credit, again
15 under Energy Michigan's proposal.

IX. ADDITIONAL ISSUES

16
17
18
19 **Q. Consumers' witness Ms. Laura M. Collins, on page 12 of her Direct Testimony, is**
20 **proposing a change to Consumers' return to service tariff. Do you agree with the**
21 **Company's concerns and proposed tariff change?**

22 A. The concerns are unfounded. If an ROA customer returns to full service, then that
23 customer should receive "full service" the same as any other new utility customer.

ALEXANDER J. ZAKEM
REVISED DIRECT TESTIMONY

1 Motivation is irrelevant. Consumers is assuming that (a) a customer “returns to full
2 service” automatically when the AES is unable to demonstrate sufficient capacity
3 resources and (b) the ROA cap is unaffected when an ROA customer is subject to the
4 SRM charge. Consumers cannot have it both ways. Either the customer returns to true
5 “full service” and thus there is an opening under the ROA cap, or the customer does not
6 return to full service, and there is no opening under the ROA cap.

7
8 Allegations of potential – not actual – “gaming” are not supported by Consumers’
9 testimony. It is not even clear what the “game” might be, other than an unsupported
10 assumption by Consumers.

11
12 Electric Choice has been in effect for over 16 years, and the return-to-service rules the
13 Commission approved back in 2001 have worked well. If such rules are to change, the
14 Commission should require documented evidence of a problem with the existing rules.

15
16 Under Energy Michigan’s proposal, Consumers’ proposed tariff change is not necessary.
17 As explained above, Energy Michigan’s proposal eliminates the need for such changes
18 because AESs will always be paying to Consumers their shares of the cost of any new
19 capacity built or obtained by Consumers within the zone. Thus, any concerns that
20 customers may avoid paying for capacity by switching providers are unsupported.

21

ALEXANDER J. ZAKEM
REVISED DIRECT TESTIMONY

1 **Q. Consumers' witness, Mr. Ronk, on pages 11-12 of his Direct Testimony, asserts that**
2 **a customer paying the SRM charge must continue to pay it for a 30-year period "in**
3 **order to prevent gaming." What is your assessment of this assertion?**

4 A. Energy Michigan is opposed to Consumers' proposed 30-year SRM charge. First, as
5 discussed above, under Energy Michigan's proposal, AESs would provide payment on
6 any new capacity investment for the life of that asset, thus eliminating the need for any
7 minimum SRM term. The concept of cost recovery is valid, but a separate duration rule
8 for a particular customer is not. The 30-year duration is certainly not necessary under
9 Energy Michigan's proposal, because Energy Michigan is proposing that pro rata
10 payment for new intra-zonal capacity be for the life of the new resource. Energy
11 Michigan has recognized that the utility needs reasonable cost recovery for new
12 investment, and our proposal provides that. Consumers' proposed 30-year duration goes
13 further, however, because it places the 30-year obligation on a specific customer, not on
14 the time of overall cost recover, thus limiting the customers future choice of suppliers. I
15 know of no other example of such a charge that would be placed on a customer for such a
16 protracted period of time. On its face, such an extended duration, rather than preventing
17 alleged gaming, would be punitive to the customer by limiting the customer's choice of
18 suppliers and would not represent just and reasonable ratemaking under cost of service
19 principles.

20 .

21 **Q. Do you agree with Mr. Ronk's position, on page 6 of his testimony, that the SRM**
22 **should set a term of indefinite length, and order that the SRM shall be in effect**
23 **permanently until directed otherwise by further legislative action?**

ALEXANDER J. ZAKEM
REVISED DIRECT TESTIMONY

1 A. No. Section 6w(1) states, “If the commission implements the prevailing state
2 compensation mechanism, it shall implement the prevailing state compensation
3 mechanism for a minimum of 4 consecutive planning years **unless such period conflicts**
4 **with the federal tariff.” Section 6w(1) emphasis added.** There could be an argument
5 that 4 years of any state-imposed obligation conflicts with the federal tariff, since MISO
6 only has a one-year prompt planning year, and the three years that was envisioned with
7 the attempted passage of the Competitive Retail Solution ("CRS") three year forward
8 capacity market was denied by the FERC, as mentioned previously. Consumers points to
9 Section 6w(2) specifying a minimum term of 4 years for the SRM, but it does not appear
10 on plain reading in Section 6w(2) that the Commission is given the authority to do what
11 Consumers proposes, which is “The MPSC should set of term of indefinite length, and
12 order that the SRM shall be in effect permanently until directed otherwise by further
13 legislative action.” Mr. Ronk Direct Testimony, page 6, lines 4-5. This would in effect
14 bind future Commission decisions, a legal question. If there is no federal tariff for an
15 indefinite capacity requirement, then the Commission creating one, as Consumers
16 suggests, would violate the statute, as it would clearly conflict with the federal (MISO)
17 tariff.

18

19 **Q. Do you agree with the Consumers’ proposal in Mr. Ronk’s testimony, pages 7-8,**
20 **that an AES should be able to use the MISO PRA for only 5% of its capacity**
21 **obligations, and that the remainder must be be from (i) owned existing generation**
22 **unit(s), or (ii) firm, executed power purchase agreements for capacity?**

ALEXANDER J. ZAKEM
REVISED DIRECT TESTIMONY

1 A. As explained previously, all LSEs except those who submit a FRAP pay the Auction
2 Clearing Price to MISO to satisfy their PRMR capacity obligations. Those who own
3 ZRCs sell those ZRCs to MISO in the auction, and receive payment from MISO. To
4 MISO, owning or not owning ZRCs simply determines who MISO pays, not how much
5 capacity is submitted into the auction. MISO ends up with all the capacity regardless.
6 That is why the MISO tariff does not place restrictions on how many MW that an LSE
7 can pay for at the ACP without selling ZRCs into the auction.

8
9 As Section 6w(6) states, and Energy Michigan has proposed, an AES should be allowed
10 to “demonstrate that it can meet its capacity obligations through owned or contractual
11 rights to any resource that the appropriate independent system operator allows to meet the
12 capacity obligation of the electric provider. The preceding sentence shall not be applied
13 in any way that conflicts with a federal resource adequacy tariff.”

14
15 Energy Michigan’s proposal is in accord with the MISO tariff. Consumers’ proposal is
16 not.

17
18 Section 6w.(8)(B) speaks to auction requirements for cooperative and municipally owned
19 electric utilities, but there are no restrictions on electric utilities or AESs.

20

21 ~~Q. Do you agree with Mr. Ronk's suggestion on page 7 of his direct testimony that the~~
22 ~~format for an AES's demonstration of capacity should be on an individual,~~
23 ~~contested case for each AES?~~

ALEXANDER J. ZAKEM
REVISED DIRECT TESTIMONY

1 A. ~~Energy Michigan's proposal, explained above, is that the Commission should allow~~
2 ~~common business procedures in the demonstration of capacity. As explained, this would~~
3 ~~involve the AES attesting or submitting under confidentiality forward contracts, and then~~
4 ~~validating those contracts when the associated ZRCs are identified through MISO~~
5 ~~systems for the upcoming or "prompt" year. This is similar to how the Commission has~~
6 ~~been conducting the 5 year reliability assessments. Under Energy Michigan's proposal,~~
7 ~~the Commission does not have to create novel proceedings, let alone a separate contested~~
8 ~~proceeding for each LSE that has to demonstrate capacity.~~

9

10 **Q. Does this conclude your Direct Testimony?**

11 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 docket to implement the provisions of)
Section 6w of 2016 PA 341 for) **Case No. U-18239**
CONSUMERS ENERGY COMPANY'S)
service territory.)
_____)

PROOF OF SERVICE

STATE OF MICHIGAN)
) ss.
COUNTY OF INGHAM)

Kimberly Champagne, the undersigned, being first duly sworn, deposes and says that she is a Legal Secretary at Varnum LLP and that on the 23rd day of August, 2017, she served a copy of the Revised Direct Testimony of Alexander J. Zakem on behalf of Energy Michigan Inc., as well as this Proof of Service upon those individuals listed on the attached Service List via email at their last known addresses.

Kimberly Champagne

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