



201 N. Washington Square • Suite 910  
Lansing, Michigan 48933  
Telephone 517 / 482-6237 • [www.varnumlaw.com](http://www.varnumlaw.com)

**Timothy J. Lundgren**

Direct: 616 / 336-6750  
[tjlundren@varnumlaw.com](mailto:tjlundren@varnumlaw.com)

April 24, 2015

Ms. Mary Jo Kunkle  
Michigan Public Service Commission  
7109 W. Saginaw Highway  
P.O. Box 30221  
Lansing, Michigan 48909

**Re: MPSC Case No. U-17735**

Dear Ms. Kunkle:

Attached for filing in the above-referenced matter, please the Qualifications, Direct Testimony and Exhibits of Alexander J. Zakem on behalf of Energy Michigan, Inc. Also attached is a Proof of Service indicating service on the parties.

Thank you for your assistance in this matter.

Sincerely yours,

VARNUM

Timothy J. Lundgren

TJL/kc

c. ALJ  
Parties

9369239\_1.DOCX

STATE OF MICHIGAN  
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

\*\*\*\*\*

In the matter of the application of )  
CONSUMERS ENERGY COMPANY )  
for authority to increase its rates for )  
the generation and distribution of )  
electricity and for other relief. )  
\_\_\_\_\_ )

Case No. U-17735

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

**Q. Please state your name and business address.**

A. My name is Alexander J. Zakem and my business address is 46180 Concord,  
Plymouth, Michigan 48170.

**Q. On whose behalf are you testifying in this proceeding?**

A. I am testifying on behalf of Energy Michigan, Inc. ("Energy Michigan").

**Q. Please state your professional experience.**

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

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

Prior to retiring from Detroit Edison in 2001, from 1998 to 2001, I was the  
Director of Power Sourcing and Reliability, responsible for purchases and sales of  
power for mid-term and long-term periods, planning for generation capacity and

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

3  
4 Additional experience, qualifications, and publications are contained in Exhibit  
5 EM-1 (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  
9 Michigan Public Service Commission (“Commission”), on topics such as standby  
10 rates, retail rates and regulations, recovery and allocation of costs and revenues,  
11 and the effects of rate restructuring. I have also testified before the Federal  
12 Energy Regulatory Commission. Case citations are 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) Separation of Senior Citizen and  
18 Income Assistance Discounts

19 Exhibit EM-3 (AJZ-3) Chart Analysis of Load Profiles

20 Exhibit EM-4 (AJZ-4) Excerpt of Testimony on Uncollectibles  
21 Expense from Case No. U-17688  
22

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

2       A.     Consumers Energy functions as both an electric distribution company (“EDC”)  
3       and a load serving entity (“LSE”). As an EDC, it should treat all customers – both Retail  
4       Open Access (“ROA”) customers in the Electric Choice program and its own full-service  
5       customers – equally and fairly regarding rules, distribution services, and charges  
6       affecting ROA customers.

7  
8             The purpose of my testimony is to identify and explain the Consumers Energy  
9       proposals and rules that advantage or disadvantage certain groups of customers, including  
10      ROA customers, and recommend changes that make the proposals more equitable and  
11      fair.

12  
13      **Q.     What proposals and rules are you going to address?**

14      A.     I will address the following:

- 15             1.     Incentive Performance Measures – proposed incentive compensation  
16                   to be paid for by customers.
- 17             2.     Separation of the allocated discounts for Senior Citizens and Income  
18                   Assistance.
- 19             3.     Separation of the uncollectible amounts included in rates.
- 20             4.     Revenue Adjustment Mechanism.
- 21             5.     Investment Recovery Mechanism.
- 22             6.     Change in wording of the ROA tariff.
- 23             7.     Cost of service for educational institutions.
- 24             8.     Interpretation of rate class peaks and base loads.

- 1  
2 9. Revised line loss study.  
3  
4 10. Michigan capacity “shortfall.”  
5  
6

7 **1. Incentive Performance Measures**  
8

9 **Q. What is your opinion on the Company’s incentive compensation proposal?**

10 A. The Company’s incentive compensation proposal (“Employee Incentive  
11 Compensation Plan” or “EICP”) is shown in Exhibit A-24 (AMC-1), and the proposed  
12 electric share of expenses is shown on Exhibit A-26 (AMC-3). The inclusion of  
13 incentive compensation in rates – and how much should be included – is a policy issue  
14 for the Commission that has been argued, re-argued, ordered, and re-ordered for many  
15 years.  
16

17 There is nothing inherently good or bad with inclusion of “incentive  
18 compensation” in rates for utility services. My perspective is that if incentive  
19 compensation is going to be included in rates and tied to utility performance, then rate  
20 recovery should be allowed only in the rates of customers that are specifically affected by  
21 specific performance criteria, and in an amount that reflects a reasonable sharing of the  
22 benefits of superior performance that would not have occurred without the incentive.  
23

1       **Q.     Does the proposal in Exhibit A-24 (AMC-1) reasonably reflect the sharing of**  
2       **benefits of superior performance, if it were to be included in the rates of ROA**  
3       **customers for distribution services?**

4       A.     No, in several areas it does not. The two main deficiencies are (a) failure to tie  
5       performance to benefits to customers – which affects all customers, not just ROA – and  
6       (b) failure to separate distribution service benefits from power supply service benefits  
7       that ROA customers do not receive – which affects ROA customers.

8  
9             Regarding the failure to tie performance to customer benefits, Exhibit A-24  
10       (AMC-1) shows that 50% of the incentive payout is tied to financial goals – earnings per  
11       share and operating cash flow. For any rate-paying customer to pay a bonus to a utility  
12       for increasing earning per share is illogical and violates the principle of paying for a  
13       shared benefit. Such a system forces ratepayers to reward the utility for making them pay  
14       more, as the earning are earned on the ratepayers backs, so to speak. Moreover,  
15       increased earning per share benefits stockholders, not customers. Therefore, if there is to  
16       be a shared benefit, the share should come out of stockholder earnings, not customer  
17       rates.

18  
19             In contrast, if the increased earnings per share were to required come from some  
20       other business venture, so that the increased earnings in fact *reduce* the rates paid by  
21       customers, then some type of recovery of a bonus, on the grounds of shared savings,  
22       could make sense. That is, if the utility were to save the customer \$10 by extraordinary  
23       performance that would not have occurred without an incentive compensation plan, then

1 the customer might be willing to return part of that savings to utility shareholders as an  
2 incentive payment. But in this proposal, it is simply the shareholders that benefit, and the  
3 more they earn, the more the customers pay. It is not an equitable sharing of benefits,  
4 and makes no sense from a ratepayer's perspective.

5  
6 Consequently, my recommendation is that if the Commission chooses to approve  
7 an incentive compensation mechanism, then the "financial" portion shown on Exhibit A-  
8 24 (AMC)-1 should be excluded.

9  
10 **Q. The other portion of Exhibit A-24 (AMC-1) relates to safety, reliability, and**  
11 **customer value. How would you assess these parts of the proposal?**

12 A. First, electric and gas incentives should be separated and only the incentive  
13 expenses for electric should be included in this proceeding. Consumers Energy witness  
14 Ms. Amy M. Conrad asserts that this has been done:

15 Q. How was the electric portion of the incentive compensation expense  
16 determined?

17  
18 A. The allocation percentages were supplied by the Accounting Department.  
19 *[Conrad direct testimony, page 31, lines 3-4.]*  
20

21 However, the Commission should ensure that separation of gas and electric has  
22 been applied to the measures "Gas Leak Response," "Competitive Price – Gas and  
23 Electric," "Call Center Response," "Productivity Improvement," and "Quality  
24 Improvement" on Exhibit A-24 (AMC-1). The Company's testimony is not clear on this



1 point, only identifying the department that supplied the allocation percentages rather than  
2 offering evidence that the allocations were reasonable and justified,  
3

4 Second, as I noted above, Consumers Energy has failed to separate distribution  
5 service benefits from power supply service benefits. Specifically, regarding “reliability,”  
6 there are three measures of reliability in that category on Exhibit A-24 (AMC-1). Two of  
7 the measures pertain to distribution performance (“Repetitive Electric Outages” and  
8 “Distribution Reliability”), and one pertains to the forced outage rate of generation  
9 performance (“Generation Reliability (EFOR)” ). Full service customers take both power  
10 supply service and distribution service, while ROA customers take only distribution  
11 service. Full service customers benefit from improved EFOR because (a) when  
12 generation is running or can run, the full service customers are better hedged against  
13 Midcontinent Independent System Operator (“MISO”) market energy prices including  
14 the costs of ancillary services, and (b) the generation has a higher capacity rating when  
15 Consumers Energy applies the generation to satisfy the MISO planning resource  
16 requirements. But ROA customers do not see these benefits. Therefore, if there is a  
17 reliability component in the incentive compensation mechanism, ROA customers should  
18 pay only for the performance in distribution reliability.  
19

20 In regard to the “customer value” category on Exhibit A-24 (AMC-1), the same  
21 separation between full service and distribution service should be applied. ROA  
22 customers should pay only for the improvements in distribution service, not power supply  
23 service, that are deemed to be the result of the incentive compensation plan, and again

1       only if the Commission were to approve an incentive compensation plan. To accomplish  
2       this, the measures of “Competitive Price – Gas & Electric.” “Call Center Response,”  
3       “Productivity Improvement,” and “Quality Improvement” should be separated into power  
4       supply and delivery components.

5  
6                               **2. Separation of the allocated discounts**  
7                               **for Senior Citizens and Income Assistance**

8  
9       **Q.     Why is the separation into power supply and delivery components of the**  
10       **Senior Citizen and Income Assistance discounts a significant issue?**

11       A.     The Senior Citizen and Income Assistance discounts total \$26.4 million. At  
12       present, the allocation of these costs is based on total cost of service, which includes both  
13       power supply costs and delivery costs. However, recovery of these costs is included  
14       entirely in the delivery component of rates. Thus, there are costs recovered in delivery  
15       rates that instead should be recovered in power supply rates.

16  
17               In short, the company allocates about 70% of nearly \$26.4 million of discounts –  
18       approximately \$18 million – to rate classes based on power supply costs, but erroneously  
19       puts the recovery into delivery charges rather than into power supply charges.

20  
21       **Q.     How does Consumers Energy allocate the Senior Citizen and Income**  
22       **Assistance rate discounts to customers for rate design purposes?**

1 A. Allocation of the Senior Citizen, Income Assistance, and Economic Development  
2 rate discounts is displayed on Exhibit A-11 (LMC-2), Schedule F-2.1, and is explained in  
3 the testimony of company witness Ms. Laura M Collins:

4 The proposed discounts for Senior Citizens and Income Assistance customers are  
5 allocated to each rate class based on the total costs to serve. PA 286 allows for  
6 rate discounts for senior citizens and for customers with low income. The  
7 Company believes that the costs for any discounts should be allocated to  
8 customers consistent with the manner in which total costs are allocated to  
9 customers. By using this approach, no single customer group is unfairly burdened  
10 with the responsibility of these discounts. [*Collins Direct Testimony, page 6,*  
11 *lines 15-20. Emphasis added.*]  
12  
13

14 **Q. Is this a proper way to allocate such discounts?**

15 A. The discounts end up being paid by customers in other rate classes. Therefore,  
16 there are two aspects to consider: (1) allocation of the discount to the classes, and (2)  
17 how the discount is designed into the rates that other customers pay.  
18

19 The method of allocating these discounts by total costs in the cost-of-service  
20 study, which Ms. Collins describes and that is shown on Exhibit A-11, Schedule F-2.1,  
21 would be reasonable assuming that power supply and delivery costs of service are treated  
22 separately.  
23

24 The problem with Consumers Energy's method is not the allocation, but how the  
25 costs are paid in the rates designed for the other rate classes.  
26

27 **Q. Would you explain?**

1 A. The cost of service model, both in the computer model and as reflected on Exhibit  
2 A-11, Schedule F-2.1, does not break out full service customers and ROA customers  
3 within a rate category – the columns shown on the exhibit. So, “Total Cost-of-Service”  
4 for a class (line 14 of the exhibit) includes *both* total power supply costs (line 10) *and*  
5 total delivery costs (line 113). Thus, a rate class gets an allocation of discount dollars  
6 based on *both* power supply and delivery costs.

7  
8 But there are two types of customers in a rate class – full service and ROA. Full  
9 service customers are responsible for *all* of the power supply costs, and both full service  
10 customers and ROA customers jointly are responsible for all of the delivery costs. ROA  
11 customers are not responsible for any of the power supply costs.

12  
13 In the actual design of the rates, however, recovery of *all of the discount* is put  
14 into the delivery rates, and none into the power supply rates. This means that ROA  
15 customers are paying, in their delivery rates, a portion of the allocated discount that is  
16 based on power supply costs, which is not commensurate with their cost responsibility.

17  
18 **Q. How should the discounts be allocated?**

19 A. The fix is straightforward: allocation to rate classes for purposes of rate design  
20 should be separated into total cost of power supply and total cost of delivery. Practically,  
21 via an arithmetic equivalent, the fix is even simpler and can be accomplished without  
22 changing the company’s initial allocation to the rate classes. A second step should be  
23 added, which takes the dollars initially allocated to a rate class by total cost-of-service

1 and divides them up within the rate class pro-rata by power supply cost-of-service and  
2 delivery cost-of-service. Then, the power supply portion of the discount should be  
3 included in the power supply rate design for the rate class and the delivery portion of the  
4 discount should be included in the delivery rate design.

5  
6 This second step is arithmetically equivalent to a separate initial allocation, and  
7 offers the benefit of no change in the allocations to the rate classes – just a simple  
8 separation within a class prior to rate design.

9  
10 **Q. Can you illustrate the separation within rate classes?**

11 A. Yes. Exhibit EM-2 (AJZ-2) shows what should be done to separate the Senior  
12 Citizen and Income Assistance discounts into power supply and delivery portions. Power  
13 supply, delivery costs, and total cost-of-service from the Company's costs of service  
14 study are shown on lines 1-3. The relative portions of power supply and delivery for  
15 each rate class to which the discounts have been allocated are shown on lines 5 and 6, in  
16 percentages.

17  
18 Lines 9 and 10 take the Senior Citizen discount allocated to each rate class and  
19 divide them up pro-rata according to the power supply and delivery percentages for the  
20 class; lines 13 and 14 do the same for the Income Assistance discount.

21  
22 Then, the power supply portions are added to the rate design target for power  
23 supply (line 17), and the delivery portions are added to the rate design target for delivery

(line 18). The total rate design target for each class is preserved, as line 19 equals line 22.

**Q. What is the result of separating the discounts that have been allocated to rate classes, as described in Exhibit EM-2 (AJZ-2)?**

A. The discounts allocated to each rate class were initially based on total cost of service, both power supply and delivery combined. The result of reallocation within each rate class is that the rate design for power supply will reflect a responsibility for the discounts that is commensurate with the power supply cost of service for the rate, and the rate design for delivery will reflect a responsibility for the discounts that is commensurate with the delivery cost of service.

Consequently, both full service customers and ROA customers will end up paying a fair share of the discounts, commensurate with their costs.

**Q. What is the magnitude of the issue of separating the allocation of discounts into power supply and delivery components?**

A. From Exhibit A-11 (LMC-2), schedule F-2.1, "Total Cost-of-Service" in column (a), line 14, is \$4,123,010; and "Total Power Supply" in column (a), line 10, is \$2,903,216. Dividing Total Power Supply by Total Cost-of-Service equals 70.4%; and the combined Senior Citizens and Income assistance discounts equal \$26,433 (Exhibit A-11 (LMC-3), schedule F-3, page 1, column (f), lines 10-11, and page 2, column (f), lines

1 11-12). Consequently, \$18.6 million annually ( $= 70.4\% \times \$26.433 \text{ m}$ ) of discounts is  
2 being mistakenly included in delivery rates, instead of in power supply rates.

3  
4 Thus, misallocation of discounts is a large issue financially and results in an  
5 undercharge for power supply service and an overcharge for delivery service, compared  
6 to a consistent cost-of-service study. Having the ability to recognize and quantify the  
7 inequity, the Commission should fix the problem.

8  
9 **Q. Has such a separation of an allocated discount been done before?**

10 A. Yes. In the last Consumers Energy rate case, Case No. U-17087, the allocated  
11 discount for the E-1 Economic Development was separated within rate classes by power  
12 supply and delivery – the same method that I am proposing in this proceeding – and the  
13 discount is now being recovered in that manner in current rates. Case No. U-17087 was  
14 resolved by a settlement, which was approved by the Commission.

15  
16 **Q. Does the separation of the Senior Citizen and Income Assistance discounts**  
17 **into power supply and delivery components affect the amount of the discount**  
18 **received by customers?**

19 A. No, it does not. It has no effect on the amount of the discount received by  
20 customers.

1       **Q.     Does the separation of the Senior Citizen and Income Assistance discounts**  
2       **into power supply and delivery components affect the total revenues received by**  
3       **Consumers Energy as designed in rates?**

4       A.     No, it does not. Consumers Energy receives exactly the same amount of revenues  
5       in its rate designs.

6  
7       **Q.     Does the separation of the Senior Citizen and Income Assistance discounts**  
8       **into power supply and delivery components affect the revenues allocated to rate**  
9       **classes?**

10      A.     No, it does not. There is no change in the revenues allocated to rate classes. The  
11      separation just fairly apportions the allocated costs *within* each rate class.

12  
13      **Q.     What is your recommendation to the Commission?**

14      A.     I recommend that the Commission direct Consumers Energy to separate the  
15      allocated discounts for Senior Citizens and Income Assistance into a power supply  
16      portion and a delivery portion within each rate class, as described in Exhibit EM-2 (AJZ-  
17      2), and include the separate portions in the respective power supply and delivery rate  
18      design targets.

19  
20             The result of such allocation is that each class of customers, regardless of rate  
21      class, whether full service or ROA, will pay a fair share of the discounts commensurate  
22      with its costs in the cost of service study, which is the stated goal of Consumers Energy.



1                   **3. Separation of the uncollectible amounts included in rates.**

2  
3           **Q. Are there other allocated costs that should be separated into power supply**  
4           **and delivery components?**

5           A. Yes. The expense for uncollectibles is allocated within the cost of service study,  
6           rather than added afterward as are the Senior Citizen and Income Assistance discounts.  
7           However, the issue of separation of allocated amounts into power supply and delivery is  
8           the same. How uncollectibles expense should be recovered is in contention in the  
9           Consumer Energy cost of service case, Case No. U-17688, and my testimony in that case  
10          addresses the issue of separating the recovery of uncollectibles expense according to  
11          power supply and delivery. Rather than repeat that testimony here, I have included an  
12          excerpt from my testimony in that case as Exhibit EM-4 (AJZ-4). I recommend that the  
13          Commission require Consumers Energy to split the uncollectibles expense allocated to  
14          each rate class into delivery and power supply components by the same method as I have  
15          explained for the Senior Citizen and Income Assistance discounts, as discussed in Exhibit  
16          EM-4 (AJZ-4).

17  
18                   **4. Revenue Adjustment Mechanism**

19  
20          **Q. Consumers Energy is proposing a Revenue Adjustment Mechanism. Do you**  
21          **favor or oppose such a mechanism?**

22          A. I view the existence or non-existence of adjustment mechanisms such as the  
23          proposed Revenue Adjustment Mechanism as a policy issue that should be decided by the

1 Commission. I am neither favoring nor opposing the existence of a Revenue Adjustment  
2 Mechanism. A utility must be able to collect the reasonable and prudent costs for used  
3 and useful investment in facilities, from customers who use those facilities, via rates for  
4 service. When costs change or customer use changes, then naturally rates have to change  
5 as well. An adjustment mechanism merely establishes a procedure for a change in rates  
6 due to specified factors.

7  
8 In addition to being a policy issue, the proposed Revenue Adjustment Mechanism  
9 may also be a legal issue, in light of the past decision by the Michigan Court of Appeals  
10 that the Commission did not have the authority to implement a “Revenue Decoupling  
11 Mechanism.”

12  
13 **Q. Apart from policy and legal issues, do you have any concerns or**  
14 **recommendations regarding the company’s proposal in this proceeding?**

15 A. Yes, there are two concerns about the implementation of the proposed  
16 mechanism. The first is that any such adjustment mechanism should separate the  
17 adjustments for power supply and delivery revenues. The adjustment for power supply  
18 revenues would be charged or credited to full-service customers, and the adjustment for  
19 delivery revenues would be charged or credited to all delivery service customers, both  
20 full-service and ROA.

21  
22 **Q. Is the company proposing to separate power supply from delivery revenues?**

1 A. Yes, it is. Company witness Ms. Laura M. Collins shows the separation in the  
2 four pages of Exhibit A-22 (LMC-12) and explains in her testimony:

3 The Company is proposing a symmetrical Revenue Adjustment Mechanism that  
4 compares the nonfuel rate revenues approved by the Commission in the most  
5 recent proceeding to the nonfuel revenue generated through actual sales for the  
6 period of time under evaluation.

7  
8 This comparison will be performed by rate class.

9  
10 The Company proposes to compare actual total delivery revenues (less customer  
11 charges) to the approved rate case delivery revenues (less customer charges),  
12 which would apply to all customers, and to compare actual nonfuel power supply  
13 revenues to the approved power supply revenues, which would apply only to Full  
14 Service customers. *[Collins Direct Testimony, page 3, lines 11-18.]*  
15

16 If there is to be a Revenue Adjustment Mechanism, I agree with Ms. Collins's  
17 separation of power supply and delivery.  
18

19 **Q. What is your second concern with the proposed Revenue Adjustment**  
20 **Mechanism?**

21 A. My second concern is that the company proposes to make the revenue  
22 adjustments by rate class revenues, rather than by total company revenues. Ms. Collins  
23 states: "This comparison will be performed by rate class." *[Collins Direct Testimony,*  
24 *page 30, line 14.]*  
25

26 **Q. What is the disadvantage with adjusting by rate class?**

27 A. The disadvantage is that, according to the mechanism, the *less* energy a rate class  
28 uses, the *higher* its effective adjusted rate will be, because it has to cover the approved

1 revenues. Consequently, the rate class ends up paying a fixed dollar amount regardless of  
2 how much energy the class uses.

3  
4 In contrast, in a general rate case – which in part the Revenue Adjustment  
5 Mechanism replaces – if a rate class uses less or more energy and/or demand, then the  
6 *cost of service* for that class goes down or up, *in the same direction*, and thus the dollar  
7 responsibility of that class under cost of service rates also goes down or up, in the same  
8 direction. The price per kWh may not move in the same direction, but at least there will  
9 be a *reduction or increase in the total dollars to be paid by the class*, in the same  
10 direction as the class’s responsibility for costs, rather than a fixed dollar amount.

11  
12 Under the company’s proposal to adjust by class, there is no commensurate  
13 adjustment for cost responsibility. This is completely the opposite of what would happen  
14 in a general rate case. As a result, under the company’s proposal, the adjustment in  
15 prices for rate classes would be *more volatile* than in a general rate case; and in the next  
16 general rate case, prices would have to move in the *opposite* direction of the adjustment  
17 to match the cost of service.

18  
19 Further, the amount of surcharge or credit in the reconciliation is also affected by  
20 transfers of customer in or out of the rate class, which has nothing to do with the amount  
21 of revenues that Consumers Energy would collect over all. Yet, the “transfer out” rate  
22 class would pay more by the adjustment, and the “transfer in” rate class would pay less.

1 In effect, the Revenue Adjustment Mechanism would create subsidies among rate classes,  
2 which would have to be undone in the next rate case.

3  
4 **Q. What is your recommendation to the Commission?**

5 A. If the Commission approves a Revenue Adjustment Mechanism, then the  
6 adjustments should be done in two steps: first, *determination of the amounts over-*  
7 *collected or under-collected* should be done by rate class, separated into power supply  
8 and delivery revenues; second, *implementation of a surcharge or credit* should be done  
9 on a *total company* basis – one surcharge/credit for all power supply customers and a  
10 separate surcharge/credit for all delivery customers.

11  
12 A total company surcharge/credit for each of power supply and delivery will  
13 mimic more closely what would occur in a general rate case, and reduce the volatility of  
14 rate changes.

15  
16 **5. Investment Recovery Mechanism**

17  
18 **Q. What is your perspective on Consumers Energy's proposed Investment**  
19 **Recovery Mechanism?**

20 A. The Investment Recovery Mechanism creates another policy decision for the  
21 Commission, by asking the Commission to approve today proposed future expenditures  
22 that customers must pay for later.

1           The Investment Recovery Mechanism functions similarly to the Certificate of  
2           Necessity in Michigan statutes. Whether or not the Commission can implement the  
3           proposed Investment Recovery Mechanism may be a legal question.  
4

5           Regarding the rate-making implications of the proposed Investment Recovery  
6           Mechanism, there are two concerns. First, without a demonstrated working facility, the  
7           Commission will have difficulty assessing whether or not a proposed investment ends up,  
8           in practice, used and useful; and customers will not have the opportunity to scrutinize the  
9           outcome of utility's actions in a contested case before paying for the utility's investments.  
10

11           Second, in this proceeding Consumers Energy is requesting a return on common  
12           equity of 10.70%, which includes compensation for stockholder risk. With the Power  
13           Supply Cost Recovery mechanism removing risk of fuel prices, purchased power prices,  
14           market sales prices, transmission costs, and environmental credit costs, and self-  
15           implementation of rate increases removing some of the risk of regulatory lag, and now  
16           the Revenue Adjustment Mechanism removing risk of sales volatility, and the Incentive  
17           Recovery Mechanism removing some of the regulatory risk of new investment, the  
18           Commission may want to review the appropriate risk adder in the return on common  
19           equity.  
20

21                           **6. Change in wording of the ROA tariff**

22  
23           **Q.     What change in the wording of the ROA tariff are you addressing?**

1 A. Consumers Energy has proposed adding a sentence to tariff Sheet No. E-7.00,  
2 which sheet appears as Exhibit A-18 (LMC-8), Schedule F-5, page 90 of 93. The  
3 sentence is:

4 It is the customer's responsibility to notify the Company of any telephonic  
5 communications issues that may inhibit the Company's ability to access meter  
6 data electronically. [*Exhibit A-18 (LMC-8), Schedule F-5, page 90 of 93.*]  
7

8 **Q. Is the reason for or purpose of this addition explained?**

9 A. I cannot find an explanation in the testimony of the sponsoring witness. The list  
10 of tariff changes that appears in Exhibit A-11 (LMC-7), page 4 of 4, states only: "To  
11 clarify the customer's responsibility in the event that the customer experiences telephonic  
12 communication issues that will prevent access to meter data electronically." This is  
13 merely a restatement of the added sentence, not an explanation.  
14

15 **Q. What is your assessment of this added sentence?**

16 A. First, there is no definition of "issues," and of course the word does not have a  
17 clear meaning when applied to "telephonic communications." "Failure" or "non-  
18 functioning" would be more meaningful.  
19

20 In addition, the sentence does not accomplish anything. If Consumers Energy  
21 does not have "access to meter data electronically," it will be the first to know. The  
22 customer does not know whether or not Consumers Energy can access the meter – only  
23 Consumers Energy knows. Consequently, the customer should not have an obligation to  
24 communicate to the utility something that the utility knows but the customer may not.

1  
2 **Q. What is your recommendation?**

3 A. The sentence serves no useful purpose nor does it make operational sense.  
4 Consumers Energy has not provided a rationale. I recommend that the proposed sentence  
5 be deleted.  
6

7 **7. Cost of service for educational institutions**  
8

9 **Q. Did Consumers Energy perform a cost of service study on educational**  
10 **institutions?**

11 A. Yes, as explained in the testimony of Company witness Collins:

12 Q. How is the Company proposing to establish Educational Institution rates that  
13 comply with PA 286 that ensures public and private schools, universities, and  
14 community colleges are charged retail rates that reflect the actual cost of  
15 providing service to those customers?  
16

17 A. The Company attempted to split education institutions into their own cost  
18 class in order to determine their specific "costs-to-serve. The Company then  
19 established credits (or charges) that are applied to the bills for educational  
20 institution customers (as they were billed at the standard rate) to get their  
21 billing at the cost-to-serve level. *[Collins direct testimony, page 20, lines 14-*  
22 *20.]*  
23

24 **Q. What was the result of the cost of service study for educational institutions?**

25 A. Consumers Energy compared the results to the general service class cost of  
26 service. Sometimes the schools paid more, sometimes less.

27 However, this approach resulted in inconsistent Power Supply and Delivery  
28 charges for these customers. In some cases, Educational Institution customers  
29 pay more than the other general service customers served at the same voltage  
30 and in some cases less. *[Collins direct testimony, page 20, lines 20-23.]*  
31



1  
2 **Q. What did Consumers Energy decide to do, and why?**

3 A. Consumers Energy decided to include educational institution customers within the  
4 general service cost of service study, and then give them a credit to offset the Income  
5 Assistance and Senior Citizen subsidies. Company witness Collins explains why:

6 This would ensure that Education Institution customers never pay a cost-based  
7 rate that is higher than other general service customers served at the same voltage  
8 level, and they would always receive a credit to remove any obligation to pay rate  
9 subsidies. *[Collins direct testimony, page 21, lines 5-8.]*  
10

11 **Q. What is your recommendation to the Commission?**

12 A. The Commission will have to decide if Consumers Energy's construction of the  
13 educational institution rate is in accordance with PA 286. Consumers Energy's action  
14 shows that there can be quite a wide range of rate-making actions that can be argued as  
15 being "cost of service." The present example illustrates that Consumers Energy is willing  
16 to argue for "cost of service" based on the outcome, rather than on the input. That is,  
17 Consumers Energy did not like the outcome, so it changed the cost of service procedure  
18 to get a "cost based rate" that it preferred, without the appearance of a subsidy. The  
19 principle of "cost of service" is that a methodology is deemed reasonable by assessing the  
20 way it apportions utility costs to customers in accordance to customer use characteristics,  
21 not that a methodology is deemed reasonable by assessing how close the end results are  
22 to a predetermined outcome.  
23

24 Consumers Energy in its testimony has cited several times the effects of its cost of  
25 service and rate design proposals on "energy intensive" customers to make their rates

1 “more competitive.” I recommend that the Commission not assess Consumers Energy’s  
2 cost of service methods and proposals judged by the outcome that the Company prefers  
3 based on some other criterion.  
4

5 **8. Interpretation of rate class peaks and base loads**  
6

7 **Q. Consumers Energy has offered Exhibit A-65 (MHR-4). What is the purpose**  
8 **of this exhibit?**

9 A. Consumers Energy witness Mr. Michael H. Ross explains the exhibit in his  
10 testimony:

11 Q. Can you explain Exhibit A-65 (MHR-4)?  
12

13 A. Exhibit A-65 (MHR-4) is a graphical depiction of the 2013 peak  
14 demand load profiles for the Residential, Secondary, and Primary  
15 classes, as well as the Company’s four summer coincident peak  
16 dates. The purpose of this exhibit is to illustrate the typical class  
17 contributions to Consumers Energy’s system peak and base loads.  
18 As the graph depicts, the Company’s capacity requirements are set in  
19 the summer months, with the Residential class contributing most  
20 significantly to summer peak and system capacity requirements.  
21 [Ross direct testimony, page 13, line 19, through page 14, line 2.  
22 Emphasis added.]  
23

24 **Q. What information is used for the Exhibit?**

25 A. Exhibit A-65 uses the daily peak loads for each of the Residential, Secondary, and  
26 Primary classes, for calendar year 2013. Consumers Energy provided the data as part of  
27 a discovery response in Case No. U-17688.  
28

29 **Q. What charting technique does this exhibit use?**

1 A. The loads for each class are stacked on one another, in the order shown on the  
2 exhibit. Primary is on the bottom, Secondary in the middle, and Residential on top.

3  
4 **Q. What is the visual result of this charting technique?**

5 A. By stacking the rate class data, the profile of the class at the *top* of the stack  
6 obviously will take on the cumulative variation of *all the classes beneath it*.  
7 Consequently, the Residential class (green on Exhibit A-65) will visually appear to be  
8 much more volatile than it actually is. The Secondary class (red on Exhibit A-65) will  
9 also appear to be more volatile than it actually is. Only the Primary rate class on the  
10 bottom (blue on Exhibit A-65) will appear visually to have volatility correlated with its  
11 daily class data.

12  
13 **Q. How could the data on rate class daily peaks become more meaningful?**

14 A. Looking at rate class daily peaks indicates how the class usage varies during the  
15 course of a year. For the chart in Exhibit A-65 to be more meaningful, the class usage  
16 should be viewed from more than one perspective. My Exhibit EM-3 (AJZ-43 shows  
17 how this can be done.

18  
19 The three figures on Exhibit EM-3 (AJZ-3) each have a *different* rate class on the  
20 bottom. Figure 1 shows the Primary class in blue on the bottom, the same as Consumers  
21 Energy's Exhibit A-65. To the eye, the Primary class on the bottom looks the most stable  
22 of the three classes, with a noticeable weekly cycle. The Secondary class in red in the  
23 middle appears to have more variation, with an apparent weekly up-and-down cycle that

1 appears greater than the Primary class. The Residential class in green on the top *appears*  
2 the most volatile, with a weekly variation greater than Primary, plus pronounced spikes in  
3 the summer months. As noted previously, the class at the top of the stack shows the  
4 variation of the entire three classes together, not just its own variation.

5  
6 Figure 2 of Exhibit EM-3 (AJZ-3), however, which places Primary on the top and  
7 Residential on the bottom, looks quite different. During non-summer months, Residential  
8 (in green on the bottom), has much *less* weekly variation than did the Primary in Figure  
9 1, rather than greater weekly variation. There are still pronounced spikes in the summer,  
10 but visually they do not appear as high as the Residential spikes in Figure 1.

11  
12 In Figure 2, the Primary class (in blue on the top) appears to have significantly  
13 greater weekly variation than in Figure 1. The Primary class now also appears to have  
14 noticeable spiking peaks in the summer, which did not appear in Figure 1. The  
15 Secondary class (in red in the middle) appears with much less weekly variation and with  
16 more spiking, compared to Figure 1. The change in the visual characteristics of the rate  
17 classes between Figure 1 and Figure 2 are due simply to the order of the stacking. The  
18 underlying daily peak data is exactly the same.

19  
20 Finally, Figure 3 puts the Secondary class (in red) on the bottom. Compared to  
21 the Primary class on the bottom in Figure 1, the Secondary class exhibits *less* weekly  
22 variation rather than *more*, and only slightly elevated peaks in the summer months.

1       **Q.     What are your conclusions from the three figures on Exhibit EM-3 (AJZ-3)?**

2       A.     The rate class daily peak *numbers* used in the three figures are all *exactly the*  
3       *same*. It is the *visual representation that appears quite different* to the eye. Charts are  
4       very useful in analyzing numerical data because the eye often can pick up patterns more  
5       easily and quickly than can the mind in looking at a long sequence of numbers such as  
6       365 daily peaks. But the charts should be drawn such that the visual patterns are not  
7       deceptive. Consequently, my first conclusion is that making any judgements on rate class  
8       energy use characteristics based on a *single* drawing can be very misleading. Several  
9       perspectives, rather than one, give a better indication of systematic variation.

10  
11           My second conclusion is that a series of charts can provide information on what to  
12       pursue analyzing numerically – essentially narrowing and focusing attention on patterns  
13       that may turn out to have a systematic underlying cause. For example, the weekly cycle  
14       of the Primary class, the stability of the Secondary class compared to the primary class,  
15       the non-summer stability of the Residential class, and summer volatility are all clearly  
16       observable – with the proper charts.

17  
18       **Q.     Can you give an example of numerical analysis prompted by the three figures**  
19       **in Exhibit EM-3 (AJZ-3)?**

20       A.     Yes. For example, using data provided by Consumers Energy, I calculated the  
21       mean, the average absolute value of deviation from the mean, and the percentage of the  
22       average deviation compared to the mean, for each class. The results were:

	Mean <u>MW</u>	Avg Absolute Deviation <u>MW</u>	AAD / Mean <u>%</u>
Residential	1,910	282	14.8%
Secondary	1,077	155	14.4%
Primary	1,539	225	14.6%

The significant finding here is that the Secondary class exhibits less variation in daily peaks than the Primary class, both in MW deviation – 155 MW compared to 225 MW – and in proportion of that deviation to the average peak – 14.4% for Secondary and 14.6% for Primary. Another significant finding is that the proportional variation of the Residential class – 14.8% -- is very close to that of the Secondary and Primary classes.

**Q. How would additional perspectives on rate class load shapes apply to the cost of service and rate design changes that Consumers Energy has proposed in this proceeding?**

A. Consumers Energy's proposals appear to be based on the assumption that residential customers impose relatively higher capacity costs on the system than do large industrial customers, as expressed by Company witness Ms. Patricia K. Poppe:

The new cost allocation recognizes that while large industrial customers use more energy than other customers, they generally have more consistent demands throughout the year. In contrast, residential usage spikes in the summer months and set system peak demands, which is a primary driver of capacity costs. [*Poppe direct testimony, page 23, lines 16-20.*]

1           This statement, however, does not accurately reflect the complete situation. First,  
2           as can be seen by comparing Figure 3 to Figure 1 on Exhibit EM-3 (AJZ-3), and  
3           quantified by the calculations shown above, it is not the primary rate class – which  
4           includes large industrial customers – that have “more consistent demands throughout the  
5           year,” but rather the secondary class. Second, residential contribution to system peak  
6           demands may be an important driver of capacity *megaWatts*, but it is not necessarily a  
7           driver of greater capacity costs in *dollars*, as I will explain below.

8  
9           **Q.     What conclusions can be drawn from the figures in Exhibit EM-3 (AJZ-3)**  
10          **and the findings?**

11          A.     While these are very preliminary findings, used as an example, and more work  
12          should be done before taking any actions based on the findings, they indicate that (a) the  
13          type of capacity -- base, intermediate, and peaking – needed to supply all the classes may  
14          be very similar for all except the summer months, and (b) that the Residential spiking  
15          peaks in the summer might be met by cheaper peaking generation.

16  
17          Consequently, it may not be true that the Residential class should get a greater  
18          share of production *costs* simply because of the class peaks in the summer. It is true that  
19          the Residential class requires proportionately more *MWs* in the summer, but it is also true  
20          that the *dollar cost* of those *MWs* might be much less than the cost of base generation.

21  
22          As cited previously, Consumers Energy witness Mr. Ross states, “As the graph  
23          [Exhibit A-65] depicts, the Company’s capacity requirements are set in the summer

1 months, with the Residential class contributing most significantly to summer peak and  
2 system capacity requirements.” [Ross direct testimony, page 13, line 22, through page  
3 14, line 2.]

4  
5 While the Residential class does contribute significantly to the summer peak  
6 and system capacity requirements – *in MWs* – it does not follow that such responsibility  
7 *in dollars* is in the same proportion to the *dollars* allocated to the class by the using only  
8 the four summer peaks to allocate productions costs. Therefore, using a 4CP allocation  
9 method may overstate the cost responsibility of the Residential class.

10  
11 My recommendation to the Commission is to order Consumers Energy to  
12 present more evidence justifying a 4CP method for rate class capacity responsibility, in  
13 light of the misleading presentation of information in the single chart in Consumers  
14 Energy’s Exhibit A-65.

15  
16 **9. Revised line loss study**

17  
18 **Q. Has Consumers Energy revised the system real power loss percentages?**

19 A. Yes. Consumers Energy testimony also refers to these losses as “line losses.”  
20 They are losses that occur within Consumers Energy’s distribution system, and they vary  
21 by voltage level. All of the percentages increased, both primary and secondary, and the  
22 secondary voltage level increased substantially, from 9.062% to 11.869%, an increase of



1 2.807%. The old and new percentage line losses are shown on Exhibit A-18 (LMC-8),  
2 page 93 of 93.

3  
4 **Q. What is the effect of the new line loss percentages on Consumers Energy's**  
5 **rates?**

6 A. Company witness Mr. Ross states:

7 Q. What impact does the updated line loss study have on the 2016 100/0/0 Test  
8 Year Study?

9  
10 A. The higher relative secondary distribution line loss factor produces higher  
11 relative generation sales and demands for the Residential and Secondary rate  
12 classes, resulting in large cost allocations when using demand or energy  
13 weighted allocators.

14  
15 Q. What impact does this change have on the different rate classes?

16  
17 A. Updating the 2016 100/0/0 Test Year Study line loss factors results in  
18 increases to the revenue requirements for Residential and Secondary classes of  
19 \$15 million and \$9 million respectively, and reduces the revenue requirement  
20 for the Primary class by \$24 million.

21  
22 *[Ross direct testimony, page 17, line 18, through page 18, line5.]*  
23

24 **Q. Are there other cost or rate effects?**

25 A. Yes. The services provided by the Midcontinent ISO ("MISO") are billed using  
26 quantities that include distribution losses. Consequently, the quantities for such items as  
27 energy withdrawn, transmission billing, and capacity requirements will be increased. The  
28 line loss increases will be applied the same to all customers in the Consumers Energy  
29 distribution area. Both full service customers and ROA customers will be affected.  
30

1       **Q.     How does Consumers Energy Support the new line loss study in its testimony**  
2       **and exhibits?**

3       A.     Company witness Mr. Ross states that a 2004 study was updated in 2014 [*Ross*  
4       *direct testimony, page 17, lines 7-9.*] and says, “Company witness Mary P. Palkovich  
5       discusses the results of the new study in her direct testimony” [*Ross direct testimony,*  
6       *page 17, lines 14-15.*].

7  
8             Company witness Ms. Palkovich replies to the question “In his direct testimony  
9       Company witness Michael H. Ross discusses the most recent Line Loss Study conducted  
10      by the Company. Are you familiar with that study? [*Palkovich direct testimony, page*  
11      *46, line 4-5.*] Ms. Palkovich states that the new study was done within her organization.  
12      [*Palkovich direct testimony, page 46, lines 6-7.*] Ms. Palkovich describes in general and  
13      brief terms the components of the study. [*Palkovich direct testimony, page 46, lines 9-*  
14      *17.*]

15  
16             Exhibit A-56 (MPP-6) shows various output loss percentages of the study, which  
17      Ms. Palkovich says that Mr. Ross used. [*Palkovich direct testimony, page 46, lines 17-*  
18      *18.*] Exhibit A-11 (LMC-7), page 4 of 4, item 48, describes the change to the tariff as  
19      “Updated Real Power Loss Percentages.”

20  
21       **Q.     What is your conclusion about Consumers Energy’s support in this**  
22       **proceeding for the new line loss study?**

1       A.       There is not much “discussion” and there is little support for the new line loss  
2       study that is in evidence. I am not questioning that Consumers Energy has the  
3       engineering expertise to perform a line loss study of its distribution system. However,  
4       when a new study results in such a large transfer of costs among rate classes as stated by  
5       Mr. Ross – \$24 million out of Primary and into Residential and Secondary – and also has  
6       implications for future energy, transmission, and capacity costs, then the new study  
7       should be justified by the party proposing it, Consumers Energy. All of the primary  
8       voltage loss percentages have increased (Exhibit A-18 (LMC-8), page 93 of 93), yet the  
9       dollars for Primary losses have decreased. The Company is proposing a \$61 million rate  
10      decrease for the Primary class (Exhibit A-11 (LMC-1), page 1 of 3, column (d), line 18),  
11      and \$24 million of that – 39 percent – is due to the change in line losses (Company  
12      witness Mr. Ross’s testimony cited above).

13  
14             To justify the merit of the new study, the choices of methods used in the study  
15      and the criteria for assessing the outcome of the study must be explained. An open  
16      question is: were methods chosen based on the desired outcome, as in the cost of service  
17      study for educational institutions discussed above? Consumers Energy has not explained.

18  
19             The Company merely mentions that the study was done. It does not offer  
20      evidence that the revisions to the line loss percentage are reasonable and can be  
21      reasonably applied to cost of service, terms and conditions of the tariff, and future power  
22      supply expenses, and MISO costs. It does not offer evidence that the study methods were  
23      not influenced by the outcome desired.

1  
2 **Q. What is your recommendation to the Commission?**

3 A. I recommend that the Commission defer the acceptance of the new line losses  
4 study to a future proceeding, where Consumers Energy will have an opportunity to offer  
5 sufficient justification for the study.  
6

7 **10. Michigan capacity “shortfall”**  
8

9 **Q. Consumers Energy mentions a “shortfall” of capacity in Michigan. What is**  
10 **your perspective?**

11 A. Consumers Energy appears to have misinterpreted evidence of the capacity  
12 supply/demand situation, both availability of physical supply in Michigan and market  
13 prices, and consequently to have overstated the existence, if any, of a “shortfall.”  
14

15 Company witness Ms. Poppe states:

16 The Midcontinent Independent System Operator, which is responsible for  
17 reliability of the electric grid, is predicting a capacity shortfall in the lower  
18 peninsula of Michigan as early as 2016. It is critical that we have a solution for  
19 Michigan, made in Michigan, so that there is enough energy for all of us. [*Poppe*  
20 *direct testimony, page 4, lines 19-23.*]  
21  
22

23 MISO did create a summary presentation comparing forecasted load to presently  
24 known capacity, by zone, dated June 5, 2014. However, more recently, MISO has  
25 modified its characterization of the “shortfall” in lower Michigan. MISO explained the  
26 situation to its board of directors at the October 22, 2014 meeting of the board’s System

1 Planning Committee. Slides similar to those in the MISO June 5, 2014, report were  
2 presented at the meeting. The publication *MW Daily* reported:

3 “Michigan is where there is the most turbulence in terms of generation committed  
4 to the MISO market,” Claire Moeller, MISO executive vice president of  
5 transmission and technology, said during the meeting. To address that shortfall,  
6 Moeller stressed, does not necessarily mean a fresh spate of generation  
7 construction is necessary in the next couple of years.

8  
9 “At this point, it’s not a lack of physical capacity but a lack of commercial deals  
10 to contract for that capacity,” he said. “In the short run, the notion that Michigan  
11 has to build 3,000 MW of capacity is not the impression I want to leave you  
12 with.”

13  
14 [MW Daily, October 22, 2014. Emphasis added. [http://www.platts.com/latest-](http://www.platts.com/latest-news/electric-power/louisville-kentucky/lower-michigan-electric-power-capacity-deficit-21437818)  
15 [news/electric-power/louisville-kentucky/lower-michigan-electric-power-capacity-](http://www.platts.com/latest-news/electric-power/louisville-kentucky/lower-michigan-electric-power-capacity-deficit-21437818)  
16 [deficit-21437818](http://www.platts.com/latest-news/electric-power/louisville-kentucky/lower-michigan-electric-power-capacity-deficit-21437818)]  
17

18 **Q. Does lower Michigan currently have a “shortfall” of capacity?**

19 A. No. For the MISO Planning Year 2015-2016, which extends from June 1, 2015,  
20 through May 31, 2016, there is no “shortfall” in MISO Zone 7, which is the MISO area in  
21 the lower peninsula of Michigan. In fact, there is excess of capacity such that Zone 7 is  
22 actually exporting capacity for credit to other zones in MISO, as evidenced from MISO’s  
23 recent capacity auction.

24  
25 The MISO Planning Reserve Auction (“PRA”) for 2015-2016 was completed and  
26 results published on April 14, 2015, subsequent to Consumers Energy filing testimony in  
27 this proceeding. The MISO report is entitled “2016/2016 Planning Resource Auction  
28 Results” (“MISO PRA Report”).

29 [Link:[https://www.misoenergy.org/Library/Repository/Report/Resource%20Adequacy/Au](https://www.misoenergy.org/Library/Repository/Report/Resource%20Adequacy/AuctionResults/2015-2016%20PRA%20Results.pdf)  
30 [ctionResults/2015-2016%20PRA%20Results.pdf](https://www.misoenergy.org/Library/Repository/Report/Resource%20Adequacy/AuctionResults/2015-2016%20PRA%20Results.pdf) ]

1  
2 **Q. What does the MISO PRA Report show?**

3 A. The MISO PRA Report shows a capacity excess in lower Michigan.  
4

5 For Zone 7, lower Michigan, the MISO PRA Report page 8 shows that 23,559  
6 MW within Zone 7 were accounted for in the PRA auction, the sum of 14,103 MW offers  
7 submitted and 9,456 Fixed Resource Adequacy Plans.  
8

9 Zone 7 needs only 21,442 MW of capacity within the zone, the Local Clearing  
10 Requirement shown on page 6. Any additional capacity required to cover forecast load  
11 plus reserves can come from either within or outside Zone 7. This is the economic  
12 benefit provided by Zone 7's Capacity Import Limit of 3,813 MW, also shown on page 6.  
13 From the results of the MISO auction, Zone 7 lower Michigan presently has 2,117 MW  
14 more ( $=23,559 - 21,442$ ) than what MISO requires to be within Zone 7.  
15

16 Further, Zone 7 lower Michigan presently has 881 MW more than the 22,678  
17 MW required (Planning Reserve Margin Requirement) to cover all the load in Zone 7.  
18

19 Finally, the MISO PRA Report shows that Zone 7 is actually *exporting* 837 MW  
20 of capacity, which is credited to fulfilling the capacity requirements of other zones in  
21 MISO.  
22

23 **Q. What do the PRA results imply for the next year 2016/2017?**

1 A. The PRA results indicate an excess of about 1,000 MW for 2016/2017, not a  
2 “shortfall.”

3  
4 For 2015/2016, Zone 7 has 2,117 MW excess capacity compared to what MISO  
5 requires to be within Zone 7. Consumers Energy and DTE Electric plan to retire about  
6 1,100 MW combined. That leaves about 1,000 MW excess capacity within Zone 7 for  
7 2016/2017, not a “shortfall.”

8  
9 **Q. Must Michigan have all capacity within Michigan in order to have “enough**  
10 **energy for all of us”?**

11 A. No, not at all. That would be not only unnecessary, but also very costly.

12  
13 It is the Local Clearing Requirement established by MISO that determines how  
14 much capacity must be physically located in Michigan. The Local Clearing Requirement  
15 accounts for the capability of the transmission system to import energy into zones. In  
16 MISO, all capacity is used to serve all load – no capacity is earmarked for specific loads.  
17 Less total capacity is required when all zones share all capacity, compared to each zone  
18 building capacity to serve load within the zone without transmission interconnections. It  
19 would be a serious economic and engineering error to ignore the value of transmission  
20 interconnections among the zones in MISO.

21  
22 For example, if a state energy policy required capacity within Michigan to cover  
23 the Planning Reserve Margin Requirement of 22,678 MW, the difference of 1,236 MW

1 above the present Local Clearing Requirement represents capacity that does not have to  
2 be built at all. At nominal cost between \$1,000 per MW for natural gas combined cycle  
3 and \$5,000 per MW for nuclear, the unneeded cost for Michigan ratepayers is between  
4 \$1.2 billion and \$6.2 billion.

5  
6 If a state energy policy required Zone 7 lower Michigan to have internal capacity  
7 sufficient to serve all the load inside the zone *without* transmission interconnections,  
8 MISO would require 25,255 MW to be in the zone (MISO PRA Report, page 8, Local  
9 Clearing Requirement of 21,442 MW plus Capacity Import Limit of 3,813 MW). This  
10 would add an additional 2,546 MW above the Planning Reserve Margin Requirement  
11 presently required, representing unneeded costs for Michigan ratepayers of an additional  
12 \$2.5 billion to \$12.7 billion. Thus, total unneeded costs compared to the amount required  
13 by the Local Clearing Requirement would be about \$3.7 billion to \$18.9 billion.

14  
15 If a state energy policy were to be predicated on a MISO “shortfall” of 3,000 MW  
16 compared to an actual excess of 1,000 MW, the difference of 4,000 MW represents  
17 unneeded costs of between approximately \$4 billion and \$20 billion.

18  
19 **Q. Has Consumers Energy made other misinterpretations of the amount and**  
20 **value of capacity available now and in the future?**

21 A. Yes. While Consumers Energy’s forecast of capacity prices appears to match up  
22 with its perspective of a “shortfall,” actual prices are quite different, reflecting the  
23 absence of a “shortfall.”



1  
2 In its PSCR Plan case, Case No. U-17678, filed on September 30, 2014,  
3 Consumers Energy predicted a capacity price for 2015 of \$19,640 per MW-year for  
4 purchase of MISO Zonal Capacity Credits (\$12,275,000, Exhibit A-24 page 3 of 3,  
5 column c, line 35, divided by 625 ZRCs, Exhibit A-20, page 1 of 1, column a, line13).  
6 \$19640 per MW-year is equivalent to \$53.81 per MW-day (divide by 365).  
7

8 The MISO PRA clearing price for 2015 for Zone 7 was \$3.48. So, the Company  
9 predicted a capacity price for 2015 that was 15 times the actual price.  
10

11 **Q. What is your recommendation to the Commission?**

12 A. The above shows that Consumers Energy's conventional wisdom about capacity  
13 supply and prices has been shown to be mistaken. Policy actions based on the  
14 Company's perceptions could impose very large unneeded costs on Michigan ratepayers.  
15

16 I recommend that prior to any policy decisions that may be affected by a  
17 perception that there is or will be a shortage of capacity in Michigan, that the  
18 Commission undertake a thorough study of the supply/demand situation both in MISO  
19 and in Michigan.  
20

21  
22 **Q. Does this conclude your Direct Testimony?**

23 A. Yes, it does.

**ALEXANDER J. ZAKEM**

46180 Concord  
Plymouth, Michigan 48170  
734-751-2166  
ajzakem@umich.edu

**CONSULTANT – MERCHANT ENERGY AND UTILITY REGULATION**

Provide strategies and technical expertise on competitive market issues, transmission issues, state and federal regulatory issues involving the electricity business, and associated legal filings. Scope includes the Midwest ISO Energy Market and Resource Adequacy, FERC proceedings on transmission and market tariffs, state rules for competitive supply, and negotiation of settlements.

**PRIOR POSITIONS: Quest Energy, LLC – a subsidiary of Integrys Energy Services**

**Vice President, Operations**

**March 2002 to December 2003**

Responsible for the planning, acquisition, scheduling, and delivery of annual power supply and transmission, to serve competitive retail electric customers.

- ***Power Planning*** -- Designed and negotiated customized long-term power contracts, to reduce power costs and exposure to spot energy prices.
- ***Transmission*** -- Revamped transmission strategy to reduce transmission costs.
- ***Load Forecasting*** -- Instituted formal short-term forecasting process, including weather normalization.
- ***Risk Management*** -- Developed summer supply strategy including call options to minimize physical supply risk at least cost. Instituted probabilistic assessment of forecast uncertainty to minimize transmission imbalance costs.
- ***Contract Management*** -- Negotiated and recovered liquidated damages for power supply contracts. Included cost of transmission losses into customer contracts.
- ***Operations Capability*** -- Expanded the Operations staff. Oversaw daily activity in spot market purchases. Instituted back-up capability, including equipment and processes, enabling the company to schedule and deliver virtually all power during the August 2003 blackout in the Midwest.

**PRIOR POSITIONS : DTE Energy / Detroit Edison — 1977 to 2001**

**Director, Power Sourcing and Reliability**

**May 1998 to April 2001**

Director of group responsible for monthly, annual, and long-term purchases and sales of power for Detroit Edison, including procuring power for the summer peak season.

- **Planning** -- Planned summer power requirements for Detroit Edison, including mix of generation, option contracts, hub purchases, load management, and transmission, which balanced and optimized physical risk and financial risk.
- **Contract Management** – Established decision, review, and approval process for evaluation and execution of power transactions, including mark-to-market valuation.
- **Execution** -- Executed summer plans, contracting annually for purchased power and transmission services. Directed negotiations for customized structured contracts to provide the company with increased operating flexibility, dispatch price choices, and delivery reliability.
- **Risk Management** – Developed an optimizing algorithm using load shapes to minimize corporate exposure to volatile power prices. Developed a hedging strategy to fit power purchases to the corporation's risk tolerance level.
- **Acquisitions** -- Team leader for acquisition of new peakers.
- **Settlements** -- Negotiated and settled liquidated damages claims.

**Relevant prior positions within Detroit Edison**

<u>Position</u>	<u>Organization</u>	<u>Time Period</u>
-----------------	---------------------	--------------------

<b>Director, Special Projects</b>	<b>Customer Energy Solutions</b>	<b>Apr 97 to May 98</b>
-----------------------------------	----------------------------------	-------------------------

Leader of several special projects involving the transformation of the corporation's merchant energy functions into competitive business units, including merger explorations and the start up of DTE Energy Trading (DTE's power marketing affiliate).

Directed filings to the Federal Energy Regulatory Commission to establish DTE Energy Trading as a power marketer and to gain authority for sales, brokering, and code of conduct. The FERC used DTE's flexible utility/affiliate code of conduct as precedent for rulings for other power marketers.

<b>Director, Risk Management</b>	<b>Huron Energy (temp affiliate)</b>	<b>Jan 97 to Apr 97</b>
----------------------------------	--------------------------------------	-------------------------

Leader of team responsible for competitive pricing of wholesale structured contracts and for acquiring risk management hardware and software to support risk management policy. Prepared Board resolutions to implement risk management policy.

**Director, Contract Development      Customer Energy Solutions      Jan 96 to Dec 96**

Leader of team that formulated a business strategy for the corporation in competitive power marketing. Team leader on project evaluating an existing steam and electricity contract, recommending and gaining Board approval for revamping the corporation's Thermal Energy business and strategy.

**Project Director      Executive Council Staff      Jan 91 to Dec 95**  
**& Corporate Strategy Group**

Project leader for competitive studies, including business risk, generation pooling, and project financing in the merchant generation industry. Team member and/or team leader for analyses of merger and acquisition opportunities

**Special Assignment      Executive Council Staff      Mar 90 to Dec 90**

Special assignment related to long-term industry strategies and mergers and acquisitions.

**Pricing Analyst      Marketing / Rate      Aug 82 to Mar 90**

Developed, negotiated, and implemented an innovative standby service tariff. Testified as an expert witness in regulatory proceedings and in state legislative hearings.

**Engineer      Resource Planning      Aug 79 to Dec 81**

Member of the company's electric load forecasting team, responsible for SE Michigan energy and peak demand forecasting, and for risk analysis. Developed the company's first residential end-use forecast model.

**PRIOR POSITIONS: Prior to DTE Energy**

Lear Siegler Corporation, ACTS Computing division, systems analyst and programmer from January 1973 to July 1977.

**EDUCATION:** M. A. in mathematics, University of Michigan, 1972  
B. S. in mathematics, University of Michigan, 1968

**MILITARY:** U. S. Army, September 1968 to June 1970.  
Viet Nam service from June 1969 to June 1970.  
Honorably discharged.

**PROFESSIONAL:** Member, Engineering Society of Detroit (1979-present)

**PUBLICATIONS & PAPERS:**

- "Competition and Survival in the Electric Generation Market," published in *Public Utilities Fortnightly*, December 1, 1991.
- "Measuring and Pricing Standby Service," presented at the Electric Power Research Institute's "Innovations in Pricing and Planning" conference, May 3, 1990.
- "Assessing the Benefits of Interruptible Electric Service," presented at the 1989 Michigan Energy Conference, October 3, 1989.
- "Principles of Standby Service," published in *Public Utilities Fortnightly*, November 24, 1988.
- "Progress in Conservation," a satirical commentary published in *Public Utilities Fortnightly*, October 27, 1988.
- "Comparing Utility Rates," published in *Public Utilities Fortnightly*, November 13, 1986.
- "Uncertainty in Load Forecasting," with co-author John Sangregorio, published in *Approaches to Load Forecasting*, Electric Power Research Institute, July 1982.

**PREVIOUS TESTIMONY:**

- Michigan Public Service Commission, U-17689
- Michigan Public Service Commission, U-17688
- Michigan Public Service Commission, U-17429
- Michigan Public Service Commission, U-17087
- Michigan Public Service Commission, U-17032
- Michigan Public Service Commission, U-16794
- Michigan Public Service Commission, U-16566
- Michigan Public Service Commission, U-16472
- Michigan Public Service Commission, U-16191
- Michigan Public Service Commission, U-15768.
- Michigan Public Service Commission, U-15744.
- Federal Energy Regulatory Commission, Docket No. EL04-135 & related dockets.
- Michigan Public Service Commission, U-12489.
- Michigan Public Service Commission, U-8871.
- Michigan Public Service Commission, U-8110 part 2.
- Michigan Public Service Commission, U-8110, part 1.
- Michigan Public Service Commission, U-7930 rehearing.
- Michigan Public Service Commission, U-7930.

**Separation of Senior Citizen and Income Assistance Discounts  
into  
Power Supply and Delivery**

<b>Line No.</b>	<b>Description</b>	<b>RS</b>	<b>RT</b>	<b>GS</b>	<b>GSD</b>	<b>GP</b>	<b>GPD</b>	<b>EIP/MMPP</b>	<b>Source</b>
1	COS Total Power Supply	\$1,235,931	\$4,193	\$328,933	\$356,539	\$109,516	\$640,307	\$20,523	Exh A-11, F-2.1, line 10
2	COS Total Delivery	<u>721,274</u>	<u>2,144</u>	<u>192,910</u>	<u>140,386</u>	<u>21,693</u>	<u>82,231</u>	<u>1,070</u>	Exh A-11, F-2.1, line 14
3	Total Cost-of-Service	1,957,205	6,337	521,843	496,925	131,209	722,538	21,593	= L1 + L2
4									
5	% Power Supply	63.15%	66.17%	63.03%	71.75%	83.47%	88.62%	95.04%	= L7 / L9
6	% Delivery	36.85%	33.83%	36.97%	28.25%	16.53%	11.38%	4.96%	= L8 / L9
7									
8	Senior Citizen Discount	<u>(9,955)</u>	<u>27</u>	<u>2,668</u>	<u>2,621</u>	<u>731</u>	<u>3,801</u>	<u>107</u>	Exh A-11, F-2.1, line 15
9	Allocate to Power Supply	(6,286)	18	1,682	1,881	610	3,368	102	= L8 x L5
10	Allocate to Delivery	(3,669)	9	986	740	121	433	5	= L8 x L6
11									
12	Income Assistance Discount	<u>(3,415)</u>	<u>8</u>	<u>915</u>	<u>899</u>	<u>251</u>	<u>1,304</u>	<u>37</u>	Exh A-11, F-2.1, line 16
13	Allocate to Power Supply	(2,156)	5	577	645	210	1,156	35	= L12 x L5
14	Allocate to Delivery	(1,259)	3	338	254	41	148	2	= L12 x L6
15									
16	<b>Revised Rate Design Targets</b>								
17	<b>Power Supply</b>	<b>1,227,488</b>	<b>4,216</b>	<b>331,191</b>	<b>359,065</b>	<b>110,336</b>	<b>644,831</b>	<b>20,660</b>	= L1 + L9 + L13
18	<b>Delivery</b>	<b><u>716,347</u></b>	<b><u>2,156</u></b>	<b><u>194,235</u></b>	<b><u>141,380</u></b>	<b><u>21,855</u></b>	<b><u>82,812</u></b>	<b><u>1,077</u></b>	= L2 + L10 + L14
19	<b>Total Revised Target *</b>	<b>1,943,835</b>	<b>6,372</b>	<b>525,426</b>	<b>500,445</b>	<b>132,191</b>	<b>727,643</b>	<b>21,737</b>	= L17 + L18
20									
21									
22	CE Total Rate Design Target *	1,943,836	6,373	525,427	500,445	132,191	727,643	21,737	Exh A-11, F-2.1, line 18
23									
24									
25	<b>* Check: Line 19 = Line 22</b>								

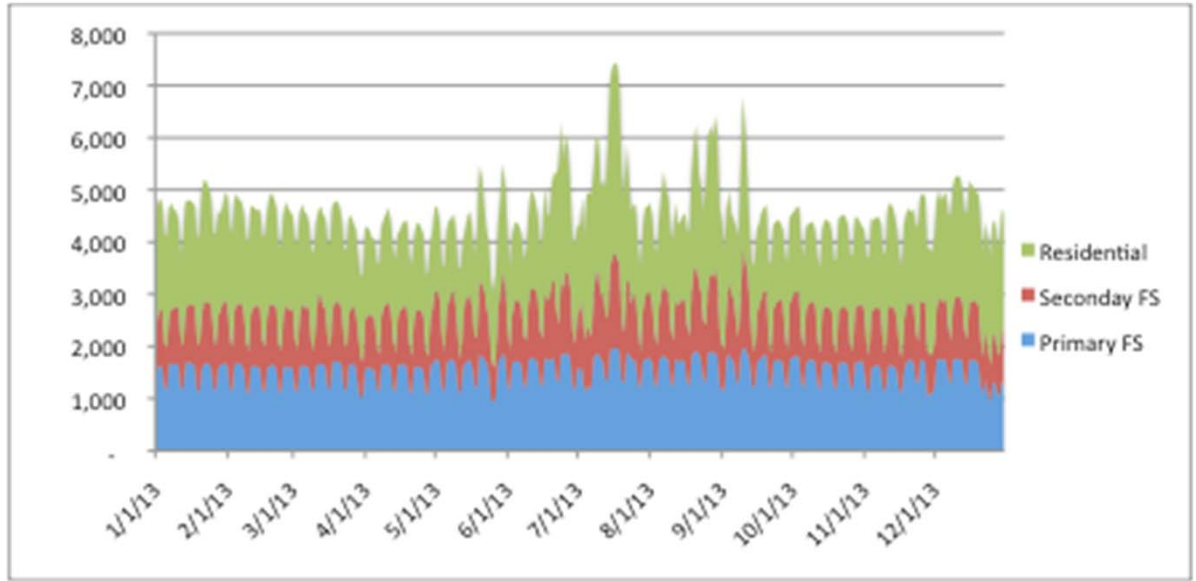
Chart Analysis  
of Load Profiles

Case No. U-17735  
Exhibit EM-3 (AJZ-3)  
Page 1 of 1

**Figure 1.**

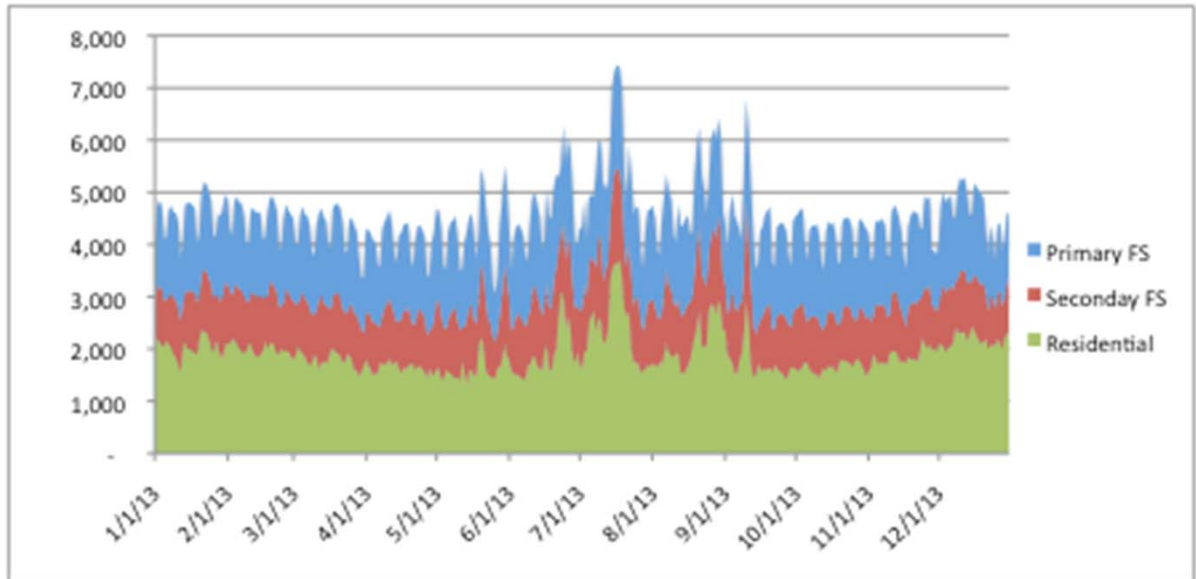
**Primary  
on bottom**

-- same as  
CE Exh A-65



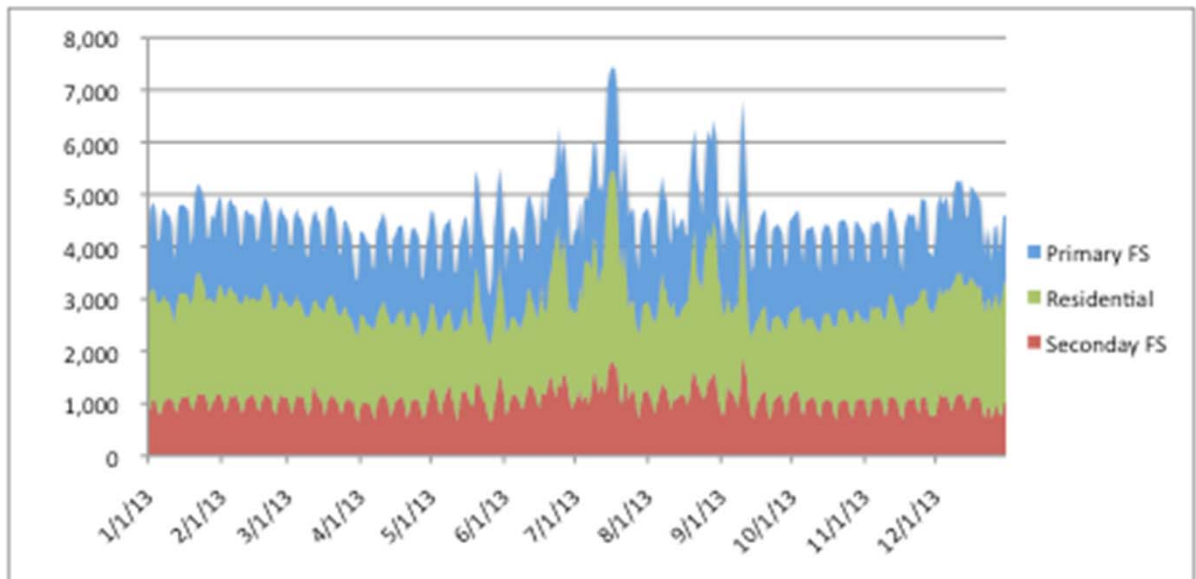
**Figure 2.**

**Residential  
on bottom**



**Figure 3.**

**Secondary  
on bottom**





ALEXANDER J. ZAKEM

DIRECT TESTIMONY

U-17688 626

1 the MPSC Staff, the Attorney General, and intervenor MEC/CARE/NRC –  
2 recommended that the method of allocating uncollectibles by cost-of-service  
3 remain unchanged.

4  
5 I recommend that the Commission apply the same allocation method in this  
6 proceeding, based on total cost-of-service, as that method would be both fair and  
7 consistent.

8  
9 **2. *Separate Uncollectibles by Distribution and Power Supply***

10  
11 **Q. How are uncollectibles presently included in rates?**

12 A. At present, *all* uncollectibles are included in the *distribution* part of CE's rates. As  
13 cited previously, uncollectibles are included in CE's distribution expenses, shown  
14 in CE's workpapers as part of "Customer Accounts Expense." Exhibit EM-2  
15 (AJZ-2) is an excerpt from CE's workpapers, from the distribution tab.  
16 Uncollectibles expense is on line 5.

17  
18 **Q. Do uncollectibles include only distribution costs?**

19 A. No. Obviously, if a customer does not pay a bill, that bill includes *both*  
20 distribution *and* power supply charges. As a result, total uncollectibles include  
21 compensation to the utility for both distribution and power supply costs.

ALEXANDER J. ZAKEM

DIRECT TESTIMONY

U-17688 627

1       **Q.     Should all uncollectibles be included only in the distribution part of CE's**  
2       **rates?**

3       A.     No. Because uncollectibles include both distribution and power supply charges,  
4             uncollectibles should be separated in a reasonable way into a distribution portion  
5             and a power supply portion. The distribution portion should be included in  
6             distribution rates, and the power supply portion should be included in power  
7             supply rates.

8  
9             Distribution customers should pay a fair share of uncollectibles in their  
10            distribution rates, and power supply customers should pay a fair share of  
11            uncollectibles in their power supply rates. Dividing up total uncollectibles into a  
12            distribution portion and a power supply portion, a simple task, is an equitable way  
13            to charge customers for uncollectibles.

14  
15            Including all uncollectibles only in distribution rates, as CE does presently, is  
16            unfair to both bundled and ROA customers. It means that bundled customers are  
17            not being charged fairly for the separate distribution and power supply services;  
18            and it means that customers of other power suppliers – Alternate Electric  
19            Suppliers – who take only distribution service from CE are compensating CE for  
20            CE's power supply customers who do not pay their power supply charges.

21            Distribution and power supply are *separate services* with separate costs and  
22            separate charges, and the components of those charges should not be mixed. In

**ALEXANDER J. ZAKEM**

**DIRECT TESTIMONY**

**U-17688 628**

1 fact, proper separation of distribution and power supply costs is one of the reasons  
2 for doing a careful cost of service study.

3  
4 **Q. Has a similar separation been done before?**

5 A. Yes. In Consumers Energy's last general rate case U-17087, the subsidy for the  
6 E-1 rate was allocated to various rate classes, and then separated within each rate  
7 class into a distribution portion and power supply portion, which were then  
8 included in the respective components of the rate design revenues. I am  
9 proposing a similar method for the CE uncollectibles.

10  
11 **Q. How would the separation of uncollectibles into distribution and power**  
12 **supply components be done for CE?**

13 A. The method is straight forward, and obviously the information on the two  
14 components is available to CE, although the method should be refined by CE in  
15 finer detail to rate classes.

16  
17 **Q. Do you have an exhibit that shows how the uncollectibles should be separated**  
18 **into distribution and power supply components?**

19 A. Yes. Exhibit EM-3 (AJZ-3) shows how to separate the uncollectibles into  
20 distribution and power supply components and how to include the components  
21 into the rate design targets for the major rate classes.

ALEXANDER J. ZAKEM

DIRECT TESTIMONY

U-17688 629

1 The top box of Exhibit EM-3 (AJZ-3), labeled “Proposed by CE,” lines 1-7,  
2 shows source numbers from CE – distribution revenues, power supply revenues,  
3 and uncollectibles as CE is currently allocating to rate classes. Sources are noted  
4 on the exhibit.

5  
6 The second box, labeled “Rev w/o uncollectibles,” lines 8-14, accomplishes two  
7 tasks: (1) it backs out the uncollectibles from the distribution rates and (2) it  
8 calculates the percent of distribution and power supply revenues.

9  
10 The third box, labeled “Allocations,” determines two allocations.

11  
12 First, CE’s present method allocates total uncollectibles across all major rate  
13 classes based on number of customers. Consequently, the uncollectibles revenue  
14 that is allocated to a *particular* class by the present method does not reflect the  
15 distribution and power supply proportions of only the particular class to which the  
16 revenue is allocated, but rather reflects the proportions that are in total  
17 uncollectibles.

18  
19 However, since the uncollectibles for each class are known to CE, CE can  
20 calculate a weighted average of the distribution and power supply proportions in  
21 each rate class and then apply the weighted average to the uncollectibles allocated  
22 to each class. Lines 17-18 show an estimated weighted average of the split of

**ALEXANDER J. ZAKEM**

**DIRECT TESTIMONY**

U-17688 630

1 uncollectibles between delivery and power supply. Again, CE can determine  
2 these percentages more precisely.

3  
4 Second, as I have proposed, the total uncollectibles should be allocated to rate  
5 classes by “total cost-of-service,” the same allocation method that CE uses for  
6 Senior Citizen and Income Assistance discounts. Line 20 shows the total cost-of-  
7 service allocation factor, and the source. Line 22 allocates the total uncollectibles  
8 of \$30,505 across the major classes by the total cost-of-service allocation factor.

9  
10 The fourth box, labeled “Split new uncollectibles,” lines 24-26, splits the  
11 uncollectibles allocated to the rate classes into distribution and power supply  
12 components, using the weighted averages determined for uncollectibles.

13  
14 The fifth box on the bottom, labeled “Revised: w/Distr & P-S Split,” lines 29-31,  
15 adds back the distribution and power supply splits of uncollectibles to the  
16 distribution and power supply components of the rate designs without  
17 uncollectibles.

18  
19 The result, on lines 29-30, is the revised revenues that should be recovered via  
20 distribution and power supply charges for each rate class.

21  
22 Again, I have shown these for the major rate classes, and CE can refine into more  
23 detail rate class breakdowns for rate design purposes.

**ALEXANDER J. ZAKEM**

**DIRECT TESTIMONY**

U-17688 631

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27

**Q. What is your recommendation to the Commission?**

A. First, as discussed previously, I recommend that the total uncollectibles be allocated to rate classes by CE's "total cost-of-service" method, the same method used for allocating Senior Citizen and Income Assistance discounts and, at present, the E-1 subsidy.

Second, given that the uncollectibles are allocated to rate classes, I recommend that the uncollectibles be split between distribution charges and power supply charges in the same proportion as the overall weighted average of distribution and power supply costs that the total uncollectibles represent.

***3. Illustrate a More Meaningful Interpretation of  
Rate Class Peaks and Base Loads***

**Q. Consumers Energy has offered Exhibit A-11 (MHR-3). What is the purpose of this exhibit?**

A. CE witness Mr. Michael H. Ross explains the exhibit in his testimony:

Q. Can you explain Exhibit A-11 (MHR-3)?

A. Exhibit A-11 (MHR-3) is a graphical depiction of the 2013 peak demand load profiles for the Residential, Secondary, and Primary classes, as well as the Company's four summer coincident peak dates. The purpose of this exhibit is to illustrate the typical class contributions to Consumers Energy's system peak and base loads. As the graph depicts, the Company's capacity requirements are set in

**Uncollectibles Allocated by Cost of Service  
and  
Split of Uncollectibles  
to Power Supply & Distribution**

Case No. U-17688  
Exhibit EM-3 (AJZ-3)  
Page 1 of 1

Line No.	(A)	(B) <u>Total</u>	(C) <u>Residential</u>	(D) <u>Secondary</u>	(E) <u>Primary</u>	(F) <u>Other</u>	(G) <u>Source</u>
1	<b><u>Proposed by CE:</u></b>						
2	Distribution rev	\$1,046,280	\$638,180	\$290,326	\$90,950	\$26,824	Exh. A-3, page 3, col (c)
3	Power Supply rev	<u>2,872,396</u>	<u>1,158,262</u>	<u>679,305</u>	<u>1,021,580</u>	<u>13,249</u>	Exh. A-3, page 2, col (c)
4	Total revenues	3,918,676	1,796,442	969,631	1,112,530	40,073	= line(2) + line(3)
5							
6	Uncollectibles in CE Dist rev	30,505	26,862	3,578	65	0	Exh EM-2, line 5, cols(c-f)
7							
8	<b><u>Rev w/o uncollectibles</u></b>						
9	Distribution rev	\$1,015,775	\$611,318	\$286,748	\$90,885	\$26,824	= line(2) - line(6)
10	Power Supply rev	<u>2,872,396</u>	<u>1,158,262</u>	<u>679,305</u>	<u>1,021,580</u>	<u>13,249</u>	= line(3)
11	Total revenues	3,888,171	1,769,580	966,053	1,112,465	40,073	= line(9) + line(10)
12							
13	Distr rev w/o uncollect %		34.5459%	29.6824%	8.1697%	66.9378%	= line(9) / line(11)
14	Pow Sup rev w/o uncollect %		65.4541%	70.3176%	91.8303%	33.0622%	= 1 - line(13)
15							
16	<b><u>Allocations</u></b>						
17	Weighted avg split Dist %	30.0000%					Estimate
18	Weighted avg split Pow Sup %	70.0000%					Estimate
19							
20	Allocation total cost of service	0.9999	0.4846	0.2594	0.2559	0.0000	Exh A-4, Note A2,
21							aggregated by major rate class.
22	New allocation of uncollectibles	\$30,505	\$14,783	\$7,913	\$7,806	\$0	= line(22) col(B) * line(20)
23	<b><u>Split new uncollectibles:</u></b>						
24	for Distr rate	\$9,151	\$4,435	\$2,374	\$2,342	\$0	= line(22) * line(17) col(B)
25	for Pow Sup rate	<u>21,351</u>	<u>10,348</u>	<u>5,539</u>	<u>5,464</u>	<u>0</u>	= line(22) - line(24)
26	Total uncollectibles	30,502	14,783	7,913	7,806	0	= line(24) + line(25)
27							
28	<b><u>Revised: w/Distr &amp; P-S Split:</u></b>						
29	Distribution rev	\$1,024,926	\$615,753	\$289,122	\$93,227	\$26,824	= line(9) + line (24)
30	Power Supply rev	<u>2,893,747</u>	<u>1,168,610</u>	<u>684,844</u>	<u>1,027,044</u>	<u>13,249</u>	= line(10) + line(25)
31	Total revenues	3,918,673	1,784,363	973,966	1,120,271	40,073	= line(29) + line(30)
32							

33 Checks: line(4) col(B) = line(31) col (B); line(6) col(B) = line(26) col(B); line(22) = line(26); all within rounding.

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

\* \* \* \* \*

In the matter of the application of                    )  
CONSUMERS ENERGY COMPANY                    )  
for authority to increase its rates for                    )  
the generation and distribution of                    )  
electricity and for other relief.                    )  
\_\_\_\_\_)

**Case No. U-17735**

**PROOF OF SERVICE**

STATE OF MICHIGAN        )  
                                      ) ss.  
COUNTY OF KENT        )

Barbara Allen, the undersigned, being first duly sworn, deposes and says that she is a Legal Secretary at Varnum LLP and that on the 24th day of April 2015, she served a copy of the Qualifications, Direct Testimony and Exhibits of Alexander J. Zakem upon those individuals listed on the attached Service List via email at their last known addresses.

\_\_\_\_\_  
Barbara Allen



**SERVICE LIST**  
**MPSC CASE NO. U-17735**

**Administrative Law Judge**

Honorable Mark E. Cummins  
Michigan Public Service Commission  
4300 W. Saginaw Hwy.  
Lansing, MI 48917  
[Cumminsm1@michigan.gov](mailto:Cumminsm1@michigan.gov)

**Counsel for the Attorney General,  
Bill Schuette**

Michael E. Moody  
John A. Janiszewski  
Assistant Attorney General  
Environment, Natural Resources,  
and Agriculture Division  
6th Floor Williams Building  
525 W. Ottawa Street  
Lansing, MI 48909  
[moodym2@michigan.gov](mailto:moodym2@michigan.gov)  
[janiszewskij2@michigan.gov](mailto:janiszewskij2@michigan.gov)

**Counsel for ABATE**

Robert A.W. Strong  
Leland Rosier  
Clark Hill, PLC  
151 S. Old Woodward Ave., Ste. 200  
Birmingham, MI 48009  
[rstrong@clarkhill.com](mailto:rstrong@clarkhill.com)  
[lrosier@clarkhill.com](mailto:lrosier@clarkhill.com)

**Counsel for the Michigan Public  
Service Commission Staff**

Lauren D. Donofrio  
Amit T. Singh  
Graham Filler  
Bryan A. Brandenburg  
7109 W. Saginaw Hwy., 3rd Floor  
Lansing, MI 48917  
[donofriol@michigan.gov](mailto:donofriol@michigan.gov)  
[singha9@michigan.gov](mailto:singha9@michigan.gov)  
[fillerg@michigan.gov](mailto:fillerg@michigan.gov)  
[brandenburgb@michigan.gov](mailto:brandenburgb@michigan.gov)

**Counsel for Consumers Energy Company**

H. Richard Chambers  
Raymond E. McQuillan  
Bret A. Totoraitis  
Robert W. Beach  
Kelly M. Hall  
Anne Uitvlugt  
One Energy Plaza  
Jackson, MI 49201  
[Rick.chambers@cmsenergy.com](mailto:Rick.chambers@cmsenergy.com)  
[Raymond.mcquillan@cmsenergy.com](mailto:Raymond.mcquillan@cmsenergy.com)  
[Bret.totoraitis@cmsenergy.com](mailto:Bret.totoraitis@cmsenergy.com)  
[Robert.beach@cmsenergy.com](mailto:Robert.beach@cmsenergy.com)  
[Kelly.hall@cmsenergy.com](mailto:Kelly.hall@cmsenergy.com)  
[Anne.uitvlugt@cmsenergy.com](mailto:Anne.uitvlugt@cmsenergy.com)

**Counsel for the Kroger Company**

Kurt J. Boehm  
Jody Kyler Cohn  
Boehm, Kurtz & Lowry  
36 East Seventh Street, Suite 1510  
Cincinnati, Ohio 45202  
[KBoehm@BKLawfirm.com](mailto:KBoehm@BKLawfirm.com)  
[JKylerCohn@BKLawfirm.com](mailto:JKylerCohn@BKLawfirm.com)

**Counsel for MEC**

Christopher M. Bzdok  
Emerson Hilton  
Olson, Bzdok & Howard, P.C.  
420 E. Front St.  
Traverse City, MI 49686  
[chris@envlaw.com](mailto:chris@envlaw.com)  
[emerson@envlaw.com](mailto:emerson@envlaw.com)

**Counsel for the Municipal Coalition**

Roderick S. Coy  
Leland R. Rosier  
Clark Hill PLC  
212 E. Grand River Ave.  
Lansing, MI 48906-4328  
[rcoy@clarkhill.com](mailto:rcoy@clarkhill.com)  
[lrosier@clarkhill.com](mailto:lrosier@clarkhill.com)

**Counsel for Michelle Rison and Residential Customer Group**

Brian W. Coyer  
Don L. Keskey  
University Office Place  
333 Albert Avenue, Suite 425  
East Lansing, MI 48823  
[bwcoyer@publiclawresourcecenter.com](mailto:bwcoyer@publiclawresourcecenter.com)  
[donkeskey@publiclawresourcecenter.com](mailto:donkeskey@publiclawresourcecenter.com)

**Counsel for NRDC**

Christopher M. Bzdok  
Emerson Hilton  
Olson, Bzdok & Howard, P.C.  
420 E. Front St.  
Traverse City, MI 49686  
[chris@envlaw.com](mailto:chris@envlaw.com)  
[emerson@envlaw.com](mailto:emerson@envlaw.com)

**Counsel for Citizens Against Rate Excess**

John R. Liskey  
John R. Liskey Attorney at Law PLLC  
921 N. Washington Ave.  
Lansing, MI 48906  
[john@liskeypllc.com](mailto:john@liskeypllc.com)

**Counsel for Wal-Mart Stores East, LP and Sam's Club, Inc.**

Tyler Tennent  
Dawda, Mann, Mulcahy & Sadler, PLC  
39533 Woodward Ave., Ste. 200  
Bloomfield Hills, MI 48304  
[ttennent@dmms.com](mailto:ttennent@dmms.com)

**Counsel for Hemlock Semiconductor Corporation**

Jennifer Utter Heston  
David E.S. Marvin  
Fraser Trebilcock Davn & Dunlap PC  
124 West Allegan Street, Suite 1000  
Lansing, MI 48933  
[jheston@fraserlawfirm.com](mailto:jheston@fraserlawfirm.com)  
[dmartin@fraserlawfirm.com](mailto:dmartin@fraserlawfirm.com)

**Counsel for Midland Cogeneration Venture Limited Partnership**

Ford J.H. Turrell  
900 Fifth Third Center  
111 Lyon Street NW  
Grand Rapids, MI 49503  
[fturrell@wnj.com](mailto:fturrell@wnj.com)

**Counsel for Michigan State Utility Workers Council, Utility Workers Union of America, AFL-CIO**

John R. Canzano  
400 Galleria Officentre  
Southfield, MI 48034  
[jcanzano@michworklaw.com](mailto:jcanzano@michworklaw.com)

**Counsel for Michigan Cable Telecommunications Association**

Michael S. Ashton  
Fraser, Trebilcock, Davis & Dunlap, PC  
124 W. Allegan, Ste. 1000  
Lansing, MI 48933  
[mashton@fraserlawfirm.com](mailto:mashton@fraserlawfirm.com)