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ERIC J. SCHNEIDEWIND

E-MAIL ejschneidewind@varnumlaw.com

July 9, 2009

Ms. Mary Jo Kunkle Michigan Public Service Commission 6545 Mercantile Way P.O. Box 30221 Lansing, MI 48909

Re: <u>Case No. U-15768</u>

Dear Ms. Kunkle:

Attached for paperless electronic filing is Direct Testimony of Alexander J. Zakem on Behalf of Energy Michigan, Inc.. Also attached is the original Proof of Service indicating service on counsel.

Thank you for your assistance in this matter.

Very truly yours,

VARNUM

Eric J. Schneidewind

EJS/mrr

cc: ALJ parties

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of) THE DETROIT EDISON COMPANY) for authority to increase its rates, amend) its rate schedules and rules governing the) distribution and supply of energy.)

Case No. U-15768

DIRECT TESTIMONY

OF

ALEXANDER J.ZAKEM

ON BEHALF OF

ENERGY MICHIGAN

	Q.	Please state your name and business address.
1	А.	My name is Alexander J. Zakem and my business address is 46180 Concord,
2	Plym	outh, Michigan 48170
3	Q.	On whose behalf are you testifying in this proceeding?
4	А.	I am testifying on behalf of Energy Michigan.
5	Q.	Please state your professional experience.
6	А.	Since January of 2004 I have been an independent consultant providing services
7	to Int	egrys Energy Services, Inc., Quest Energy (a wholly-owned affiliate of Integrys
8	Energ	gy Services), and other clients. Integrys Energy Services is a member of Energy
9	Mich	igan.
10		
11		From March 2002 to December 2003, I was Vice President of Operations for
12	Ques	t. My responsibilities included the overall direction and management of Quest's
13	powe	r supply to its retail customers. This included power supply planning, development
14	of cu	stomized products, negotiation with suppliers, planning and acquiring transmission
15	rights	s, and scheduling and delivery of power. It also included managing risk with respect
16	to ma	rket price movements and variation of customer loads.
17		
18		Prior to retiring from Detroit Edison in 2001, from 1998 I was the Director of
19	Powe	r Sourcing and Reliability, responsible for purchases and sales of power for mid-
20	term	and long-term periods, planning for generation capacity and purchase power needs,

1	strateg	gy for and acquisition of transmission rights, and related support for regulatory
2	procee	edings.
3		
4		Additional experience, qualifications, and publications are contained in Exhibit
5	AJZ-1	(EM-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	Michi	gan Public Service Commission ("Commission"), on topics such as standby rates,
10	retail	rates and regulations, and the effects of rate restructuring. I have also testified
11	before	e the Federal Energy Regulatory Commission. Case citations are in Exhibit AJZ-1
12	(EM-1	1).
13	Q.	What is the purpose of your testimony?
14	A.	The purpose of my testimony is to recommend three particular factors that should
15	be inc	luded in the design of a "revenue decoupling mechanism" (RDM) if the
16	Comn	nission orders such a mechanism in this proceeding.
17		
18	Q.	Are you sponsoring any exhibits?
19	A.	Yes. I am sponsoring the following exhibits:
20		Exhibit AJZ-1 (EM-1) Qualifications.
21		Exhibit AJZ-2 (EM-2) Examples of adjusting rates with a sales decrease.
22		Exhibit AJZ-3 (EM-3) Examples of adjusting rates with a sales increase.

1	Exhibit AJZ-4 (EM-4) Discovery responses EMDE-1.07/21 and EMDE
2	1.08/22 from Detroit Edison.
3	
4	Q. Do you favor or oppose an RDM?
5	A. I view an RDM as part of policy issues that should be decided by the
6	Commission. I am neither favoring nor opposing an RDM. A utility must be able to
7	collect the reasonable and prudent costs for used and useful investment in facilities, from
8	customers who use those facilities, via rates for service. When costs change or customer
9	use changes, then naturally rates have to change as well.
10	
11	An RDM affects the <i>timing</i> of such rate changes and the <i>evidence</i> that must be presented
12	to effect such changes. These are the policy issues that will be before the Commission, to
13	be decided in light of other aspects of the revenue recovery process, such as (1) the
14	timing of rate changes or recovery of costs required or allowed under the recent Public
15	Act 286 of 2008, (2) the speed and complexity of the utility's ability to otherwise change
16	rates via a general case, (3) other true-up mechanisms such as Power Supply Cost
17	Recovery, Choice Incentive Mechanism, Pension Equalization Mechanism, restoration
18	expense reconciliation, and the proposed Uncollectible Expense True-Up Mechanism,
19	and (4) the effect on the risk premium in the utility's rate of return in light of such various
20	rate adjustment mechanisms. An RDM merely mechanizes part of the rate-setting
21	process.
22	

1	My testimony in this proceeding is focused on the question of <i>if</i> there is to be an RDM,
2	then what are the important design factors to make sure that the resulting changes in rates
3	are equitable. Just as any other rate-setting process, an RDM should result in fair and
4	non-discriminatory charges for customers.
5	
6	Q. What are the factors that the Commission should include in the design of an
7	RDM if it orders such a mechanism in this proceeding?
8	A. Detroit Edison has proposed an RDM through the testimony and exhibits of Mr.
9	Don M. Stanczak. With that proposal in mind, there are three factors that the
10	Commission should consider in an RDM:
11	
12	1. There should be separate adjustments for recovery of revenue related to
13	power supply and related to distribution. The utility's bundled customers
14	would be subject to both adjustments, and the utility's retail choice
15	distribution customers would be subject only to the distribution
16	adjustment.
17	
18	2. The adjustments should be calculated on a total company basis, not on a
19	rate class basis. Otherwise, the rates to customers revised via the RDM
20	method will diverge from rates revised in a general rate case. This occurs
21	because "fixed costs" are fixed for the company in total, but are not
22	"fixed" for rate classes because costs are allocated to customer classes
23	based on energy use characteristics – and the RDM is supposed to adjust

for changes in energy use. I will explain this in more detail later in my testimony.

- 3. 4 *The sales increase or decrease upon which an RDM rate adjustment is* 5 based should be limited by the actual increase or decrease in sales that 6 the utility has experienced. Although this factor may appear to be too 7 obvious to even mention, it is important to keep in mind that in an Energy 8 Optimization (EO) program, the effectiveness of the EO program may be 9 judged by computer modeling of energy use or other "but for" estimations 10 of what would have occurred without the EO program, rather than by the 11 difference between rate case forecast sales and actual metered sales. Consequently, it is quite possible that the modeled or estimated effect of 12 13 the EO program – when used to adjust the design sales level from the 14 previous rate case – results in a sales level different from what the utility actually has metered. In this situation, actual metered sales over a defined 15 16 time period should be the boundary for sales changes that would be used 17 to revise rates in an RDM.
- 18

1

2

3

19Q. Regarding the first factor to be considered in an RDM, why should there be20separate RDM surcharges or credits for recovery of power supply and distribution21costs?

A. The purpose of an RDM is to recover the fixed costs of the utility regardless of
the level of actual sales. Detroit Edison has fixed costs related to the supply of power to

1	its customers – primarily from its generation plants. It also has fixed costs related to the
2	delivery of energy over its distribution facilities to customers. Detroit Edison has a Retail
3	Open Access (ROA) program whereby some customers take – and pay for – distribution
4	service only, while traditional utility customers take – and pay for – both distribution
5	service and power supply service.
6	
7	Thus, (a) the total amount of energy sales for distribution service is different from the
8	total amount of energy sales for power supply service; and (b) if total sales change, the
9	amount of short or excess revenues to cover fixed distribution costs and fixed power
10	supply costs will be different.
11	
12	Therefore, it follows obviously that if there is an RDM to true up recovery of fixed costs,
13	then those customers that take distribution should be trued up to only distribution costs
14	based on distribution sales, and those customers that take power supply service should be
15	trued up to power supply costs based on power supply sales.
16	
17	Since an RDM is used to charge or credit customers the difference between the utility's
18	authorized fixed charges at a specified sales level and the amount of fixed charges
19	collected at a different sales level, the charge or credit needed to fully recover distribution
20	costs will be different from the charge or credit needed to fully recover power supply
21	costs. Therefore, separate charges/credits are required for distribution and for power
22	supply.
23	

1	Q.	What is your recommendation regarding the separation of distribution costs
2	and po	ower supply costs in an RDM?

A. First, in the determination of the authorized amount of revenue that should be collected, distribution costs should be separated from power supply costs. Second, the RDM surcharge or credit for distribution should be calculated using sales to distribution customers, and the RDM surcharge or credit for power supply should be calculated using sales to power supply customers. Third, the same distribution surcharge or credit should apply to all distribution customers, both ROA and utility bundled customers. Fourth, the power supply surcharge or credit should apply only to utility bundled customers.

10

Q. Does Detroit Edison's proposed RDM address the need for a separate surcharge/credit calculation for distribution and power supply components?

A. As proposed, no. The example that Detroit Edison illustrates in Exhibit A-19,
Schedule K1, does not separate "net revenue requirement" into distribution and power
supply components. However, from responses to Energy Michigan discovery questions
(EMDE-1.07/21 and 1.08/22), it does appear that Detroit Edison is aware of the need for
such a separation. In that response, Detroit Edison states that "Electric Choice customers
would only be surcharged or credited amounts based on distribution."

19

- 20 I am submitting two discovery questions and answers, EMDE-1.07/21 and EMDE-
- 21 1.08/22, as my Exhibit AJZ-4 (EM-4).

1	Q. Regarding the second factor to be considered in an RDM, you have
2	recommended that the adjustments in an RDM should be calculated on a total
3	company basis, not on a rate class basis. Would you explain?

4 A. Yes. The fundamental, underlying reason is that the "fixed" costs that an RDM is 5 intended to recover (or refund) are not in fact "fixed" for individual rate classes. Rather, 6 such costs are fixed for the company in total, and then are *allocated* to rate classes by the 7 relative, proportional energy use characteristics of each class, such as proportion of total 8 sales or proportion of total peak demand. The great majority of the fixed costs represent 9 facilities, such as generation plants and distribution lines and equipment, that are used 10 jointly by all rate classes at different times, and so are joint economic costs that must be 11 allocated by some reasonable, but not unique, method. The methods of allocation have 12 been established by Michigan law and Commission past orders, and are based primarily 13 on energy use characteristics.

14

Therefore, if the energy use characteristics of a rate class change, then the *proportion* of total costs for which the rate class will be *deemed responsible* will also change. To assume that the class will be responsible for the same dollar share of total company fixed costs regardless of the amount of class sales is contrary to the concept of allocation of fixed costs, which is fairly straightforward arithmetic.

- 20
- 21 Q. Are the rate adjustments in the RDM proposed by Detroit Edison based on 22 customer rate classes or on total company?

1	A. The rate adjustments in the RDM proposed by Detroit Edison are based on
2	customer rate classes, as explained in the testimony of Mr. Stanczak (on page 13, lines
3	17-19) and in Exhibit A-19, Schedule K1.
4	
5	Q. Would you provide an example of the difference in effect on rates if an RDM
6	bases adjustments on rate classes versus total company sales?
7	A. Yes. I have prepared two exhibits to illustrate the different effects. Exhibit AJZ-
8	2 (EM-2) shows the effects if there is a decrease in sales compared to the original rate
9	case forecast sales. Exhibit AJZ- 3 (EM-3) shows the effects if there is an increase in
10	sales. For simplicity, the examples show two rate classes, Class A and Class B, that
11	begin with the same forecast sales.
12	
13	On page 1 of Exhibit AJZ- 2 (EM-2), Lines 6 through 10 show the method that Detroit
14	Edison has proposed (in Exhibit A-19, Schedule K1), which begins with a total revenue
15	requirement for each class and determines a "net average approved price" to be used for
16	RDM true up.
17	
18	Q. Does beginning with the total revenue requirement reveal the problem?
19	No. What must be understood first are the elements that lead up to the total revenue
20	requirement. These are shown on Lines 1-5 of page 1 Exhibit AJZ- 2 (EM-2). Total
21	company fixed costs (line3) are in fact <i>allocated</i> to rate classes via the relative,
22	proportional energy use characteristics of each class. For simplicity, the exhibit uses
23	forecast sales on line 1 as the allocation parameter.

1	
2	Thus, the "total approved revenue requirement" on line 5 depends on the relative,
3	proportional energy use characteristics of each class – in this example, sales. Because the
4	sales for each class are the same, each class initially is allocated the same proportion of
5	fixed charges, as is shown on Line 3.
6	
7	Q. What would happen to class rates in your example under the RDM method
8	proposed by Detroit Edison if there is a decrease in sales?
9	A. Lines 11-18 of page 1 of Exhibit AJZ- 2 (EM-2) show the effect on class rates if
10	the RDM adjustment is based on rate classes, as proposed by Detroit Edison.
11	
12	Suppose actual sales for Class A decrease by 20%, as is shown on Line 12. The Detroit
13	Edison method results in a 2.5 cent -25% – increase in rates for Class A, as is shown on
14	Line 17. However, Class B receives no rate increase, while total company rates increase
15	by 1.1 cents.
16	
17	Q. Does the RDM method proposed by Detroit Edison reasonably reflect what
18	rate changes would occur in a rate case if Class A sales decreased by 20%?
19	A. No. The rate case result would be significantly different. In a rate case, the
20	proportion of total costs allocated to Class A would also decrease if Class A sales were
21	20% lower. I have illustrated this on Page 2 of Exhibit AJZ- 2 (EM-2).
22	

1	The effect on rates in a rate case is shown on Page 2 of Exhibit AJZ- 2 (EM-2), Lines 11-
2	21. Note that the total company fixed costs on Line 12 remain the same (\$200).
3	However, the allocation of the total dollars to rate classes A and B changes, as is shown
4	on Line 13. Class A now has a lower proportion of sales than Class B, and so is allocated
5	a lower share (\$89) of the total fixed costs. Class B now has a higher proportion of sales
6	than Class A, and so is allocated a higher share (\$111) of total fixed costs.
7	
8	As a result, the "net average approved price" for Class A shown as 11.1 cents on Line 20,
9	while higher than the 10.0 cents in the previous rate case, is lower than the RDM result of
10	12.5 cents. Conversely, the "net average approved price" for Class B shown as 11.1
11	cents on Line 20, while higher than the 10.0 cents in the previous rate case, is higher than
12	the RDM result of 10.0 cents.
13	
14	Therefore, the RDM method proposed by Detroit Edison does not reasonably reflect what
15	rate changes would occur in a rate case if Class A sales decreased.
16	
17	Q. How would an RDM based on change in total company sales work?
18	A. Page 3 of Exhibit AJZ- 2 (EM-2), Lines 11-18, shows how an adjustment in rates
19	would be calculated using total company sales, under a scenario of a 20% decrease in
20	sales to Class A.
21	
22	First, the actual recovered net revenue from each class would be calculated from the class
23	sales and "net average approved price," the same as Detroit Edison has proposed. Then

22	rate class were to increase?
21	Q. Would using the total company method in an RDM also work if sales for a
20	
19	a rate case (Line 5), and the RDM method based on total company (Line 6).
18	method by rate class as proposed by Detroit Edison (Line 3), the result of a rate change in
17	A. Yes. Exhibit AJZ-2 (EM-2), Page 4, shows the effects on rates of: the RDM
16	rate class versus by total company?
15	Q. Would you summarize the results of the comparison of the effects of RDM by
14	
13	be much closer to, if not exactly the same as, what would occur in a rate case.
12	The result of the total company method in an RDM is that the effect on class rates would
11	
10	would be applied to all rate classes. This is shown on Line 17 as a surcharge of 1.1 cents.
9	(or over-recovery) dollars by the actual total company sales. The single surcharge/credit
8	Finally, a single surcharge or credit would be calculated by dividing the under-recovery
7	
6	be determined for the total company (shown as -\$20 on Line 16).
5	amount for the total company (\$200), and the under-recovery (or over-recovery) would
4	Then, the actual total company amount (\$180) would be compared to the intended
3	
2	recovered amount. This is shown on Line 14 as \$180.
1	the sum of class decreases or increases would determine the actual total company

1	A. Yes. I have prepared Exhibit AJZ- 3 (EM-3) to show the comparative effects of
2	Detroit Edison's rate class method, the outcome of a rate case, and the total company
3	method. The illustrations and explanation are the same as Exhibit AJZ- 2 (EM-2), except
4	the change scenario assumes a 20% increase, rather than a 20% decrease.
5	
6	Q. What method are you recommending?
7	A. If the Commission orders an RDM in this proceeding, then I recommend that the
8	total company method be used, with an equal surcharge to all affected rate classes. The
9	result will be much closer to what would happen in a general rate case and will reduce the
10	volatility of rate changes for customers – up and down, or down and up – between rate
11	cases, due to the RDM. The total company method will collect or refund the exact same
12	amount of dollars, in total, as the rate class method proposed by Detroit Edison, but it
13	will do so more equitably among the various customer classes.
14	
15	Q. Regarding the third factor to be considered in an RDM, you have stated that
16	the sales increase or decrease upon which an RDM rate adjustment is based should
17	be limited by the actual increase or decrease in sales that the utility has experienced.
18	Would you explain?
19	A. The intent of the RDM as proposed by Detroit Edison, as stated by Mr. Stanczak
20	on page 11, lines 2-3, is to "eliminate any disincentive associated with its EO program."
21	"EO" refers to Energy Optimization, a program initiated by PA 295 of 2008 to reduce the
22	use of electricity. If energy sales are reduced as a result of the program, the utility will
23	not collect the amount of revenue to cover fixed costs as authorized in its preceding rate

1	case, all else being equal. Thus Detroit Edison proposes that the difference between the
2	sales used in the design of rates in the previous rate case and actual sales over a specified
3	calendar year be used in the RDM for true up of revenues.
4	
5	Q. If Detroit Edison is proposing to use actual sales for true up of revenues, then
6	what is the relevance of considering a "limit" on actual increase or decrease in sales
7	in the RDM?
8	A. If Detroit Edison's method of using actual sales is approved by the Commission,
9	the concept of a "limit" is irrelevant. Detroit Edison's method of using actual sales will
10	provide the correct adjustment to total revenues in the RDM.
11	
12	However, it is possible that there might be other proposals in this proceeding that
13	constrain the use of an RDM only to decreases caused by the utility's EO program.
14	The difficulty then becomes to determine what difference in actual sales was "caused" by
15	the EO program, because such a difference cannot be directly metered. Rather, such a
16	difference is a comparison of what would have happened "but for" the EO program, and
17	what did happen with the EO program. Therefore, under an EO-specific RDM, it is
18	likely that computer modeling or other estimating techniques will be used to determine
19	the separate effect of the EO program. For example, in the Consumers Energy rate case
20	U-15645, the Commission Staff recommended an "EO Lost Revenue Tracker," which
21	would estimate and compute annual lost sales using data bases, program participation
22	rates, and imputed energy savings based on annual spending.
23	

1	It is quite possible – if not extremely likely – that the estimated effect of the EO program
2	will be different from the change in sales between rate case forecast and actual utility
3	metering. In this circumstance, it makes sense to "true up" to no more than the change
4	the utility actually experiences. The intent of "revenue decoupling" is to collect the fixed
5	costs as authorized in the previous rate case given the actual sales level that has
6	subsequently occurred – to collect for any actual under-recovery and to refund any actual
7	over-recovery. The intent is not to collect fixed costs commensurate with an estimated or
8	imputed sales level that would have occurred in the absence of an EO program.
9	
10	Q. Would you give an example of how the limit would work under an EO-
11	specific RDM?
12	A. Yes. Suppose the utility's previous rate case designed rates to recover the utility's
13	fixed costs at a sales level of 50,000 units. Suppose for a subsequent year the utility's
14	sales were 48,000 units – a decrease of 2,000 units – but the modeling/estimating of the
15	effect of the EO program indicated that the EO program should have decreased sales by
16	5,000 units. The utility's actual under-recovery of costs is from the actual decrease of
17	2,000 units, not from the estimated 5,000 units. And, therefore, the RDM method should
18	limit the sales decrease used to calculate the surcharge to 2,000 units, or equivalently to
19	the actual sales level of 48,000 units. Otherwise, the utility will collect via the RDM
20	more revenue than was authorized in the previous rate case.
21	

22 Q. What is your recommendation?

1	A.	If the Commission implements an RDM in this proceeding that is based upon
2	sales	decreases attributed to an EO program, then the sales decrease upon which an RDM
3	rate a	djustment is based should be limited by the actual decrease in sales that the utility
4	has e	xperienced.
5		
6	Q.	Does this conclude your Direct Testimony?
7	A.	Yes, it does.

Case No. U-15768 Exhibit AJZ-1 (EM-1) Page 1 of 4

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 POSITONS : 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>
Director, Special Projects	Customer Energy Solutions	Apr 97 to May 98

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.

Director, Risk Management Huron Energy (temp affiliate) Jan 97 to Apr 97

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.

Case No. U-15768 Exhibit AJZ-1 (EM-1) Page 3 of 4

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 DirectorExecutive Council StaffJan 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

Sr	ecial 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 8
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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.

Case No. U-15768 Exhibit AJZ-1 (EM-1) Page 4 of 4

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-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.

		Revenue Decoupling Mechanism <u>Effect of DE Proposed Reconciliation</u> (Sales Decrease)		Case No. U-157 Exhibit AJZ-2 (E Page 1 of 4	'68 :M-2)
Line	(a)	(b)	(c) Total	(d) Rate	(e) Rate
<u>NO.</u>	<u>Reference</u>	Description	<u>Company</u>	<u>Class A</u>	<u>Class B</u>
		I. Example Assume from previous rate case of	order		
1	example	<i>Shows allocation of fixed costs</i> Forecast sales (kWh)	2,000	1,000	1,000
2 3	example example	Total fixed costs Allocated fixed costs	\$200 \$200 \$40	\$100 \$20	\$100 \$20
5	L3 +L4	Total approved revenue requirement	<u>\$40</u> \$240	\$120	<u>\$20</u> \$120
6 7 8	L5 L4 L6-L7	DE method starts with revenue requirement Total approved revenue requirement Less fuel & variable costs "Net revenue requirement" = same as L3 = allocated fixed costs	\$240 <u>-\$40</u> \$200	\$120 <u>-\$20</u> \$100	\$120 <u>-\$20</u> \$100
9 10	L1 L8 / L9	Approved sales forecast (kWh) "Net average approved price" (¢/kWh)	2,000 <u>10.0</u> c	1,000 <u>10.0</u> c	1,000 <u>10.0</u> c
		II. What if sales for Class A decrease by 20% ? DE Proposed RDM Reconciliation by Class *			
11	L8	"Recoverable net revenue requirement"	\$200	\$100	\$100
12 13 14	example L10 L12 x L 13	Actual sales "Net average approved price" (¢/kWh) Actual recovered net revenue requirement	1,800 <u>10.0c</u> \$180	800 <u>10.0c</u> \$80	1000 <u>10.0c</u> \$100
15 16	L8 L14 - L15	"Recoverable net revenue requirement" Net over / -under recovery	<u>\$200</u> -\$20	<u>\$100</u> -\$20	<u>\$100</u> \$0
17	L16 / L12	Proposed surcharge / -credit	1.1c	2.5c	0.0c
		III. New "net average approved price"			
18	L10 + L17	"Net average price" after RDM reconciliation	<u>11.1</u> c	<u>12.5</u> c	<u>10.0</u> c

* Note -- DE reconciliation changes the sales level by class from the original energy forecast, but retains the fixed costs allocated to classes by the original energy and demand forecasts.

		Decrease in Sales <u>Effect of New Rate Case</u> (Sales Decrease)		Case No. U-15 Exhibit AJZ-2 (I Page 2 of 4	768 EM-2)
Line	(a)	(b)	(c) Total	(d) Rate	(e) Rate
<u>No.</u>	<u>Reference</u>	Description	<u>Company</u>	<u>Class A</u>	<u>Class B</u>
		I. Example Assume from previous rate cas	se order		
1	ovample	Shows allocation of fixed costs	2 000	1 000	1 000
I	елатріе	Torecast sales (KWII)	2,000	1,000	1,000
2	example	Total fixed costs	\$200	• • • • •	• · · · ·
3	example	Allocated fixed costs	\$200	\$100	\$100
4	example	Fuel & variable costs	<u>\$40</u>	<u>\$20</u>	<u>\$20</u>
5	L3 +L4	l otal approved revenue requirement	\$240	\$120	\$120
		Starts with revenue requirement			
6	L5	Total approved revenue requirement	\$240	\$120	\$120
7	L4	Less fuel & variable costs	<u>-\$40</u>	<u>-\$20</u>	<u>-\$20</u>
8	L6-L7	"Net revenue requirement" = same as L3 = allocated fixed costs	\$200	\$100	\$100
9	L1	Approved sales forecast (kWh)	2,000	1,000	1,000
10	L8 / L9	"Net average approved price" (¢/kWh)	<u>10.0</u> c	<u>10.0</u> c	<u>10.0</u> c
		II. What if sales for Class A decrease by 20%	in a rate case	e?	
		Shows allocation of fixed costs	4 000	000	4 000
11	example	Forecast sales (KWN)	1,800	800	1,000
12	example	Total fixed costs	\$200		
13	example	Allocated fixed costs *	\$200	\$89	\$111
14	example	Fuel & variable costs	<u>\$36</u>	<u>\$16</u>	<u>\$20</u>
15	L13 +L14	Total approved revenue requirement	\$236	\$105	\$131
		Starts with revenue requirement			
16	L15	Total approved revenue requirement	\$236	\$105	\$131
17	L14	Less fuel & variable costs	<u>-\$36</u>	<u>-\$16</u>	<u>-\$20</u>
18	L16-L17	"Net revenue requirement" = same as L13 = allocated fixed costs	\$200	\$89	\$111
19	L11	Approved sales forecast (kWh)	1,800	800	1,000
20	L18 / L19	"Net average approved price" (¢/kWh)	<u>11.1</u> c	<u>11.1</u> c	<u>11.1</u> c
		III. New "net average approved price"]	
21	L20	"Net average price" after new rate case	<u>11.1</u> c	<u>11.1</u> c	<u>11.1</u> c

* Note -- Assumes reduction in on-peak sales and demands are proportional
to total sales.

		Revenue Decoupling Mechanism <u>Effect of Adjustment by Total Company</u> (Sales Decrease)	(Case No. U-157 Exhibit AJZ-2 (E Page 3 of 4	68 M-2)
Line	(a)	(b)	(c) Total	(d) Rate	(e) Rate
<u>NO.</u>	<u>Reference</u>	Description	<u>Company</u>	<u>Class A</u>	<u>Class B</u>
		I. Example Assume from previous rate case	order		
		Shows allocation of fixed costs			
1	example	Forecast sales (kWh)	2,000	1,000	1,000
2	example	Total fixed costs	\$200		
3	example	Allocated fixed costs	\$200	\$100	\$100
4	example	Fuel & variable costs	<u>\$40</u>	<u>\$20</u>	<u>\$20</u>
5	L3 +L4	Total approved revenue requirement	\$240	\$120	\$120
		Starts with revenue requirement			
6	L5	Total approved revenue requirement	\$240	\$120	\$120
7	L4	Less fuel & variable costs	<u>-\$40</u>	<u>-\$20</u>	<u>-\$20</u>
8	L6-L7	"Net revenue requirement" = same as L3 = allocated fixed costs	\$200	\$100	\$100
9	L1	Approved sales forecast (kWh)	2,000	1,000	1,000
10	L8 / L9	"Net average approved price" (¢/kWh)	<u>10.0</u> c	<u>10.0</u> c	<u>10.0</u> c
		II. What if sales for Class A decrease by 20%	?		

		Adjust all rates by equal surcharge based on total company *				
11	L8	"Recoverable net revenue requirement"	\$200			
12 13 14	example L10 L12 x L 13	Actual sales "Net average approved price" (¢/kWh) Actual recovered net revenue requirement	1,800 <u>10.0c</u> \$180	800 <u>10.0c</u> \$80	1,000 <u>10.0c</u> \$100	
15 16	L8 L14 - L15	"Recoverable net revenue requirement" Net over / -under recovery	<u>\$200</u> -\$20			
17	L16 / L12	Proposed surcharge / -credit	1.1c	1.1c	1.1c	
		III. New "net average approved price"				
18	L10 + L17	"Net average price" after RDM reconciliation	<u>11.1</u> c	<u>11.1</u> c	<u>11.1</u> c	

19 * Note -- Surcharge is calculated on a total company basis,

20 such that total fixed costs are recovered from total sales.

Summary of Results	Case No. U-15768		
	Exhibit AJZ-2 (EM-2)		
(Sales Decrease)	Page 4 of 4		

	(a)	(b)	(C)	(d)	(e)
Line <u>No.</u>	<u>Reference</u>	Description	Net Aver Total <u>Company</u>	rage Price (¢/k Rate <u>Class A</u>	(Wh) Rate <u>Class B</u>
1	P1, L10	Assume from previous rate case order	10.0c	10.0c	10.0c
2		What if Class A sales decrease by 20%?			
3 4	P1, L18	DE proposed RDM reconciliation adjusting rates by class. *	11.1c	12.5c	10.0c
5	P2, L21	After a rate case.	11.1c	11.1c	11.1c
6	P3, L18	Adjust all rates by equal surcharge based on total company. **	11.1c	11.1c	11.1c

7 Notes:

8

* DE reconciliation changes the sales level by class from the original energy forecast, but retains the fixed costs allocated to classes by the original energy and demand forecasts. 9

** Surcharge is calculated on a total company basis, 10

11 such that total fixed costs are recovered from total sales.

	Revenue Decoupling Mechanism Effect of DE Proposed Reconciliation		Case No. U-15768 Exhibit AJZ-3 (EM-3)		
		(Sales Increase)		Page 1 of 4	
Line	(a)	(b)	(c) Total	(d) Rate	(e) Rate
<u>No.</u>	<u>Reference</u>	Description	<u>Company</u>	<u>Class A</u>	<u>Class B</u>
		I. Example Assume from previous rate case of	orde	l	
		Shows allocation of fixed costs			
1	example	Forecast sales (kWh)	2,000	1,000	1,000
2	example	Total fixed costs	\$200		
3	example	Allocated fixed costs	\$200	\$100	\$100
4	example	Fuel & variable costs	<u>\$40</u>	<u>\$20</u>	<u>\$20</u>
5	L3 +L4	Total approved revenue requirement	\$240	\$120	\$120
		DE method starts with revenue requirement			
6	L5	Total approved revenue requirement	\$240	\$120	\$120
7	L4	Less fuel & variable costs	<u>-\$40</u>	<u>-\$20</u>	<u>-\$20</u>
8	L6-L7 "Net revenue requirement"= same as L3 \$200 \$100 \$ = allocated fixed costs				\$100
9	L1	Approved sales forecast (kWh)	2.000	1.000	1.000
10	L8 / L9	"Net average approved price" (¢/kWh)	<u>10.0</u> c	<u>10.0</u> c	<u>10.0</u> c
		II. What if sales for Class B increase by 20% for DE Proposed RDM Reconciliation by Class			
11	L8	"Recoverable net revenue requirement"	\$200	\$100	\$100
12	example	Actual sales	2,200	1,000	1,200
13	L10	"Net average approved price" (¢/kWh)	<u>10.0c</u>	<u>10.0c</u>	<u>10.0c</u>
14	L12 x L 13	Actual recovered net revenue requirement	\$220	\$100	\$120
15	L8	"Recoverable net revenue requirement"	<u>\$200</u>	<u>\$100</u>	<u>\$100</u>
16	L14 - L15	Net over / -under recovery	\$20	\$0	\$20
17	L16 / L12	Proposed surcharge / -credit	-0.9c	0.0c	-1.7c
		III. New "net average approved price'			
18	L10 + L17	"Net average price" after RDM reconciliation	<u>9.1</u> c	<u>10.0</u> c	<u>8.3</u> c

* Note -- DE reconciliation changes the sales level by class from the original energy forecast,
 but retains the fixed costs allocated to classes by the original energy and demand forecasts.

		Decrease in SalesCaseEffect of New Rate CaseExh(Sales Increase)Page		Case No. U-15768 Exhibit AJZ-3 (EM-3) Page 2 of 4	
Line	(a) Reference	(b)	(c) Total	(d) Rate	(e) Rate Class B
<u>no.</u>	Kelelence	I. Example Assume from previous rate case	e orde	<u>Cid55 A</u>	<u>Class D</u>
		Shows allocation of fixed costs			
1	example	Forecast sales (kWh)	2,000	1,000	1,000
2	example	Total fixed costs	\$200		
3	example	Allocated fixed costs	\$200	\$100	\$100
4	example	Fuel & variable costs	<u>\$40</u>	<u>\$20</u>	<u>\$20</u>
5	L3 +L4	Total approved revenue requirement	\$240	\$120	\$120
		Starts with revenue requirement			
6	L5	Total approved revenue requirement	\$240	\$120	\$120
7	L4	Less fuel & variable costs	<u>-\$40</u>	<u>-\$20</u>	<u>-\$20</u>
8	L6-L7	"Net revenue requirement" = same as L3 \$200 \$100 = allocated fixed costs			
9	L1	Approved sales forecast (kWh)	2.000	1.000	1.000
10	L8 / L9	"Net average approved price" (¢/kWh)	<u>10.0</u> c	<u>10.0</u> c	<u>10.0</u> c
		II. What if sales for Class B increase by 20% i	n a rate case'		
		Shows allocation of fixed costs			
11	example	Forecast sales (kWh)	1,800	1,000	1,200
12	example	Total fixed costs	\$200		
13	example	Allocated fixed costs *	\$200	\$91	\$109
14	example	Fuel & variable costs	<u>\$44</u>	<u>\$20</u>	<u>\$24</u>
15	L13 +L14	Total approved revenue requirement	\$244	\$111	\$133
		Starts with revenue requirement			
16	L15	Total approved revenue requirement	\$244	\$111	\$133
17	L14	Less fuel & variable costs	<u>-\$44</u>	<u>-\$20</u>	<u>-\$24</u>
18	L16-L17	"Net revenue requirement" = same as L13 = allocated fixed costs	\$200	\$91	\$109
19	L11	Approved sales forecast (kWh)	2,200	1.000	1.200
20	L18 / L19	"Net average approved price" (¢/kWh)	<u>9.1</u> c	<u>9.1</u> c	<u>9.1</u> c
		III. New "net average approved price'			
21	L20	"Net average price" after new rate case	<u>9.1</u> c	<u>9.1</u> c	<u>9.1</u> c

^{*} Note -- Assumes reduction in on-peak sales and demands are proportional

to total sales.

		Revenue Decoupling Mechanism <u>Effect of Adjustment by Total Company</u> (Sales Increase)	C E F	Case No. U-157 Exhibit AJZ-3 (E Page 3 of 4	68 M-3)
Line <u>No.</u>	(a) <u>Reference</u>	(b) Description	(c) Total <u>Company</u>	(d) Rate <u>Class A</u>	(e) Rate <u>Class B</u>
		I. Example Assume from previous rate case	e orde		
1	example	Shows allocation of fixed cost Forecast sales (kWh)	2,000	1,000	1,000
2 3 4 5	example example example L3 +L4	Total fixed costs Allocated fixed costs Fuel & variable costs Total approved revenue requirement	\$200 \$200 <u>\$40</u> \$240	\$100 <u>\$20</u> \$120	\$100 <u>\$20</u> \$120
6 7 8	L5 L4 L6-L7	Starts with revenue requirement Total approved revenue requirement Less fuel & variable costs "Net revenue requirement" = same as L3 = allocated fixed costs	\$240 <u>-\$40</u> \$200	\$120 <u>-\$20</u> \$100	\$120 <u>-\$20</u> \$100
9 10	L1 L8 / L9	Approved sales forecast (kWh) "Net average approved price" (¢/kWh)	2,000 <u>10.0</u> c	1,000 <u>10.0</u> c	1,000 <u>10.0</u> c
		II. What if sales for Class B increase by 20% Adjust all rates by equal surcharge based of	ົາ on total compa	ny	
11	L8	"Recoverable net revenue requirement"	\$200		
10	ovomnlo	Actual color	2 200	1 000	1 200

example	Actual sales	2,200	1,000	1,200
L10	"Net average approved price" (¢/kWh)	<u>10.0c</u>	<u>10.0c</u>	<u>10.0c</u>
L12 x L 13	Actual recovered net revenue requirement	\$220	\$100	\$120
L8	"Recoverable net revenue requirement"	<u>\$200</u>		
L14 - L15	Net over / -under recovery	\$20		
L16 / L12	Proposed surcharge / -credit	-0.9c	-0.9c	-0.9c
	example L10 L12 x L 13 L8 L14 - L15 L16 / L12	exampleActual salesL10"Net average approved price" (¢/kWh)L12 x L 13Actual recovered net revenue requirementL8"Recoverable net revenue requirement"L14 - L15Net over / -under recoveryL16 / L12Proposed surcharge / -credit	exampleActual sales2,200L10"Net average approved price" (¢/kWh)10.0cL12 x L 13Actual recovered net revenue requirement\$220L8"Recoverable net revenue requirement"\$200L14 - L15Net over / -under recovery\$20L16 / L12Proposed surcharge / -credit-0.9c	exampleActual sales2,2001,000L10"Net average approved price" (¢/kWh)10.0c10.0cL12 x L 13Actual recovered net revenue requirement\$220\$100L8"Recoverable net revenue requirement"\$200L14 - L15Net over / -under recovery\$20L16 / L12Proposed surcharge / -credit-0.9c-0.9c

	III. New "net average approved price'			
L10 + L17	"Net average price" after RDM reconciliation	<u>9.1</u> c	<u>9.1</u> c	<u>9.1</u> c

19 * Note -- Surcharge is calculated on a total company basis,

18

20 such that total fixed costs are recovered from total sales.

Summary of Results	Case No. U-15768
	Exhibit AJZ-3 (EM-3)
(Sales Increase)	Page 4 of 4

	(a)	(b)	(c)	(d)	(e)
			Net Ave	rage Price (¢/I	«Wh)
Line <u>No.</u>	<u>Reference</u>	Description	Total <u>Company</u>	Rate <u>Class A</u>	Rate <u>Class B</u>
1	P1, L10	Assume from previous rate case order	10.0c	10.0c	10.0c
2		What if Class B sales Increase by 20%?			
3 4	P1, L18	DE proposed RDM reconciliation adjusting rates by class. *	9.1c	10.0c	8.3c
5	P2, L21	After a rate case.	9.1c	9.1c	9.1c
6	P3, L18	Adjust all rates by equal surcharge based on total company. **	9.1c	9.1c	9.1c

<u>Notes:</u> * DE reconciliation changes the sales level by class from the original energy forecast, but retains the fixed costs allocated to classes by the original energy and demand forecasts.

** Surcharge is calculated on a total company basis,

such that total fixed costs are recovered from total sales.

MPSC Case No.:	U-15768
Respondent:	D. M. Stanczak
Requestor:	Energy Michigan
Question No.:	EMDE-1.07/21
Page:	1 of 1

- **Question:** Is it correct that the resulting class specific RDM credits or surcharges would apply equally to full service and Electric Choice customers?
- Answer: The credits or surcharges would apply to both full service and Electric Choice customers, but not <u>equally</u>. Credit or surcharges would be applied to class specific customers based on the actual recovered revenue requirement compared to the net revenue requirement approved in Detroit Edison's last approved rates.

Case No. U-15768 Exhibit AJZ-4 (EM-4) Page 2 of 2

MPSC Case No.:	<u>U-15768</u>
Respondent:	D. M. Stanczak
Requestor:	Energy Michigan
Question No.:	EMDE-1.08/22
Page:	<u>1 of 1</u>

- Question: If the answer to the preceding question is yes, would the resulting class specific credit or surcharge result in Electric Choice customers paying the costs of or receiving benefits from the electric generation assets of Detroit Edison?
- Answer: No. Electric Choice customers would only be surcharged or credited amounts based on distribution.

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of) The Detroit Edison Company for) authority to increase its rates,) amend its rate schedules and rules) governing the distribution and) supply of electric energy.)

Case No. U-15768

PROOF OF SERVICE

Monica Robinson, duly sworn, deposes and says that on this 9th day of July, 2009 she served a copy of the Direct Testimony of Alexander J. Zakem on Behalf of Energy Michigan, Inc. upon those individuals listed on the attached service list by e-mail and regular mail at their last known addresses.

Monica Robinson

Subscribed and sworn to before me this 9th day of July, 2009

Eric J. Schneidewind, Notary Public Eaton County, Michigan Acting in Ingham County, Michigan My Commission Expires: April 24, 2012.

SERVICE LIST U-15768

Administrative Law Judge

Hon. Barbara Stump (Discovery - Proof of Service Only) <u>stumpb1@michigan.gov</u>

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